



Jaynic Properties Ltd

Geo-Environmental Investigation Report

Land at Hornbrook Farm, Brighton Road, Horsham

17th February 2026

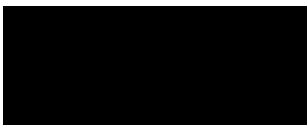


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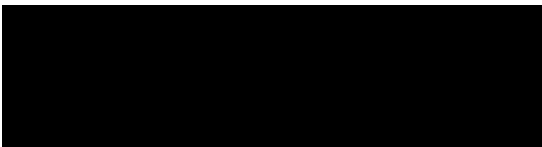
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Drawings

24-1979-P/01/A	Site Location Plan
24-1979-P/02/A	Exploratory Hole Location Plan
7416-101-G	Site Location Plan

Appendices

Appendix A	Photographs
Appendix B	Exploratory Hole Records
Appendix C	Chemical Laboratory Analysis Results
Appendix D	Geotechnical Laboratory Analysis Results
Appendix E	OB-Screen Human Health Screening Assessment
Appendix F	Ground Gas Monitoring Results
Appendix G	Soakaway Test Results



1 Introduction

Obsidian Geo-Consulting Ltd (Obsidian) was commissioned by Jaynic Properties Ltd (the Client) to carry out a Geo-Environmental Ground Investigation and Assessment for a proposed development at Land at Hornbrook Farm, Brighton Road, Horsham.

The site currently comprises a larger arable field in the east, a central, grassed field grown commercially on rotation for silage and a further grassed field in the west. We understand that the development proposals include an outline planning application for up to 180 dwellings, open space, and associated works and infrastructure with all matters reserved apart from access.

The client has also provided Obsidian with the following drawings:

- Site Location Plan (ref. 7416-101-G dated February 2025)
- Utilities Report (ref. 221810 dated April 2024)

Obsidian have previously undertaken a Geo-Environmental Desk Study for the site as detailed in the Obsidian Geo-Environmental Desk Study Report Ref. 24-1979-P-R1-A, initially issued in September 2024 and revised in February 2026.

This Geo-Environmental Ground Investigation and Assessment report is a revision to the originally issued version in December 2024 and includes an updated site boundary and text.

1.1 Objective

The objective of this assessment is to support the planning application for the development of the site by identifying any potentially significant constraints to future proposed developments associated with the likely ground conditions prevalent beneath the site and the surrounding area and to identify any potential areas of environmental liability or geotechnical constraints associated with the site.

1.2 Scope

This assessment was carried out to an agreed brief as set out in Obsidian's proposal (ref. SD/24-1979-Q/L001, dated 21st July 2024). The instructed scope of works includes the following:

- Four days of window sampling using a tracked window sampling rig.
- Four days of Trial Pitting and Soakaway Testing.
- Installation of eight gas/groundwater monitoring wells and six return gas monitoring visits.
- Chemical laboratory analysis of selected soil samples.
- Geotechnical laboratory analysis of selected soil samples.
- Production of a geo-environmental interpretative report.

1.3 Limitations

This report has been prepared by Obsidian with all reasonable skill, care and attention within the terms of the Contract with the Client and taking account of the information made available by the Client, as well as the manpower and resources devoted to it by agreement with the Client. Obsidian disclaims any responsibility to the Client and others in respect of any matters outside the scope of the above Contract.

This report has been produced on behalf of the Client, and no responsibility is accepted to any Third Party for all or any part. This report should not be relied upon or transferred to any other parties



without the express written authorisation of Obsidian. If any unauthorised Third Party comes into possession of this report, they rely on it at their own risk and the authors owe them no duty of care or skill.

Any plans appended to this report should not be used for scaling purposes.

2 The Site

2.1 Site Location

The site is approximately 9.23 hectares in area and is irregular in shape. The site is located to the north of Brighton Road, Horsham and is shown on the appended Site Location Plan (24-1979-P/01/A), centred on national grid reference: 518880, 129780.

2.2 Site Description

The site comprises a large parcel of agricultural land divided into three fields, one larger piece of arable land in the east, a central grassed field grown for silage on arable rotation and a further grassed field in the west. The site is accessed via Doomsday Lane to the east of the site, with further field access off Brighton Road. The topography of the site is broadly sloping from the south-east to the north-west, down to the adjacent water course.

The northern boundary of the site is defined by a tree line and a mature hedgerow with various mature trees that separates the site from a significant slope into Horn Brook, the site's namesake stream. The eastern boundary of the site is separated from Doomsday Lane with a hedgerow and multiple mature oak trees that are characteristic of the site. The south of the site is separated from Brighton Road by a mature hedgerow and several mature trees, with houses (the original farmhouse and several barn-conversions/outbuildings) found to the central south, however the site boundary is contoured around these, and they are not included in the development. The three fields that make up the wider site are divided by mature hedgerows, with large mature oak trees found to the south of the hedgerow that separates the eastern-most large arable field and the central grassed field.

Some significant features across site initially identified are the large, mature oak present in the east of the site, approximately 75m from the access gate on Doomsday Lane, and the disused concrete trough found central to the large arable field. Through anecdotal evidence, this trough was identified to demarcate a historical field boundary that divided the larger, eastern-most field into two, smaller parcels.

3 Review of Previous Desk Study Report

The site has been the subject of a previous Geo-Environmental Desk Study:

- Obsidian Geo-Consulting Limited, Geo-Environmental Desk Study Report Ref. 24-1979-P-R1 dated September 2024.

The salient points of the Desk Study are detailed within the following sections.

3.1 Site History

A review of the available historic maps from 1879 onwards has identified that the site has been utilised as agricultural land from the earliest dated record to the present day.



3.2 Geology, Hydrogeology and Hydrology

3.2.1 Geology

The mapped superficial and bedrock geological succession is summarised in Table 3.1 below:

Table 3.1: Geology

Geology	Age	Stratigraphic Name	Description
Bedrock	Valanginian Age (KV)	Upper Tunbridge Wells Sand - Sandstone, Mudstone and Siltstone	The unit comprises a complex succession of interbedded deposits with both upward-fining and upward-coarsening cycles. Thinly bedded silty mudstones, siltstones, silty sandstones and fine-grained sandstones.

It is possible that Made Ground will be present on site in the footprint of the 'Hornbrook bungalow' plot that is no longer present and near field entrances.

3.2.2 Hydrogeology

The bedrock geology throughout site is designated as unproductive strata in the south-east and in a band that runs from the south-west to the north-east, however a significant proportion of the central and northern areas of the site are designated as high vulnerability secondary 'A' aquifers. There are no groundwater abstraction points within 1km of the site. The site is not within a source protection zone.

3.2.3 Hydrology

The nearest surface water feature, Horn Brook, is mapped as running through the north of the site adjacent to the site boundary. There are 20 OS water network lines mapped within 500m of site, the closest being Horn Brook. There are no surface water abstractions within 500m of the site.

3.3 Environmental Considerations from Desk Study

Potential, predominantly, low-level risks have been identified at the site relating to identified receptors. Potential risks are posed by the presence of localised metals, PAH, TPH, herbicides, pesticides and asbestos within near surface strata.

There is potential for elevated pH and water-soluble sulphate within near surface natural soils, and any made ground recorded on-site. There is a low-level risk identified for ground gases associated with organic materials within natural strata and possible Made Ground. These risks cannot be removed through a desk-based risk assessment alone and hence it is recommended that these potential risks are assessed further through an appropriate intrusive investigation which should be sufficient in scope to assess the potential risks and enable development of a remedial strategy for the site if required.

3.4 Geotechnical Considerations from Desk Study

In view of the published geology and the expected ground conditions, it is considered necessary to establish the depth and variability of any topsoil on site and the depth to competent, natural strata. It is not considered that considerable thicknesses of Made Ground will be recorded on site, however some depth of Made Ground may be present in localised areas.

It is considered likely that conventional strip, pad or trench fill foundations will be viable for any future foundations due to the expected shallow bedrock.



There is the potential for elevated water-soluble sulphate concentrations to be present in both Made Ground and natural strata. The concrete classification required for any foundation solution should therefore be assessed accordingly.

3.5 Preliminary Conceptual Site Model

Table 3.1: Preliminary Source-Pathway-Receptor Relationships

Source Material/Activity	Potential Contaminant	Pathways	Receptor	Risk
Made Ground and Historical Activities On-site	Metals PAH TPH Herbicides Pesticides	Inhalation Ingestion Dermal contact	Future Site Residents Maintenance Workers Construction Workers	Low
	Asbestos	Inhalation	Future Site Residents Maintenance Workers Construction Workers	Low
	PAH TPH	Direct Contact	Drinking Water Pipes	Low
	Metals PAH TPH	Migration of mobile contaminants.	Controlled Waters	Low - Negligible
Made ground and Natural Strata on-site	Water-Soluble Sulphate.	Aggressive attack	Buried concrete	Low
	Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide.	Migration of Ground Gas/Vapours	Future Site Residents Maintenance Workers Construction Workers	Low
Historical Activities and Made Ground Off-site	Metals, PAH, TPH.	Inhalation Ingestion Dermal contact	Future Site Residents Maintenance Workers Construction Workers	Low
	Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide.	Migration of Ground Gas/Vapours	Future Site Residents Maintenance Workers Construction Workers	Low
Natural Strata Off-site	Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide.	Migration of Ground Gas/Vapours	Future Site Users Maintenance Workers Construction Workers	Low

4 Investigation Methodology

4.1 Objective

The objective of this assessment is to support the planning application for the development of the site by identifying any potentially significant constraints to future proposed developments associated with the likely ground conditions prevalent beneath the site and the surrounding area and to identify any potential areas of environmental liability or geotechnical constraints associated with the site.

4.2 Clearance of Underground Services

All exploratory holes were positioned to avoid known services, observe agreed easements and oriented to avoid known land drainage. In addition, all exploratory hole locations were scanned on site by Obsidian using a cable avoidance tool (CAT) and signal generator (Genny). Upon



commencing the investigation, an uncharted service was identified through use of a CAT. This service was located to be running through the south of the site, and its approximate location has been demarcated on the appended Exploratory Hole Location Plan 24-1979-P/02/A.

4.3 Exploratory Holes

Twenty-five window sample boreholes (WS01-WS25) and twenty-six machine excavated trial pits (TP01-TP26) were advanced across the site between 2nd and 12th September 2024. The window sample boreholes were advanced to depths of up to 4.00m bgl, terminating due to SPT refusals and the machine excavated trial pits were excavated to depths of up to 2.25m bgl. Soakaway tests were undertaken within six of the trial pits (TP05, TP06, TP14, TP16, TP21 and TP25) in general accordance with BRE Digest 365 'Soakaway Design'.

Eight gas and groundwater monitoring wells were installed within WS02, WS05, WS11, WS13, WS19, WS20, WS21 and WS24 to depths of up to 3.00m bgl. The wells were constructed using 50mm HDPE plain pipe in a bentonite seal from existing ground level to depths of between 0.50m and 1.00m bgl and 50mm HDPE slotted pipe in a gravel surround to the base of the wells. The wells were fitted with a gas tap assembly at ground level suitable for connection to proprietary gas monitoring equipment and a lockable cover at ground level to provide protection. The other exploratory holes were backfilled with arisings and reinstated at surface.

The approximate locations of the exploratory holes are shown on the appended Exploratory Hole Location Plan (24-1979-P/02/A).

A photographic record of the investigation is included within Appendix A.

Exploratory holes were typically positioned to provide a general site coverage with exploratory holes TP20 and WS20 targeting the historic footprint of the 'Hornbrook Bungalow', to explore potential geo-environmental risks identified within the desk study.

4.4 Logging and Sampling

Engineer's logs of the strata encountered were developed in accordance with BS EN ISO 14688 and BS EN 14689 and copies are presented as Appendix B.

Standard Penetration Tests (SPT's) were taken at regular intervals within the window sample boreholes to provide 'N' values for empirical assessment of strength and density parameters of the strata.

Environmental soil samples and small disturbed soil samples were taken at selected depths in all exploratory holes, placed in appropriate containers and submitted for chemical and geotechnical laboratory testing.

4.5 Chemical Laboratory Analysis

Selected soil samples were subjected to appropriate chemical testing at the MCERTS and UKAS accredited laboratory of i2 Analytical for a suite of potential contaminants taking account of the Preliminary Conceptual Site Model and site observations. The scheduled chemical laboratory analysis is summarised in Table 4.1 below:

Table 4.1: Scheduled Chemical Laboratory Analysis

Analysis Type	Number of Samples
Metals	22
PAH	22
Asbestos Screen	22
TPH CWG inc. BTEX	8



Analysis Type	Number of Samples
Soil Organic Matter	10
Organochlorine Pesticides	6
Triazine Herbicides	6

The results of the chemical laboratory analysis are presented in Appendix C.

4.6 Geotechnical Laboratory Analysis

Selected soil samples were subjected to appropriate geotechnical testing at the UKAS accredited laboratories of Geolabs and i2 Analytical. The scheduled geotechnical laboratory analysis is summarised in Table 4.2 below:

Table 4.2: Scheduled Geotechnical Laboratory Analysis

Analysis Type	Number of Samples
pH	44
Water Soluble Sulphate	44
Plasticity Index	16
Moisture Content	16
Particle Size Distribution	9

The results of the pH and water-soluble sulphate testing are included with the chemical testing results presented in Appendix C. The results of the plasticity index, moisture content and particle size distribution testing undertaken are presented in Appendix D.

5 Results of Investigation

5.1 Recorded Strata

The ground conditions encountered in the exploratory holes across the site initially comprised topsoil, overlain by grass in the western fields of the site. This topsoil was underlain by stiff, friable, slightly sandy clay, more predominantly in the central and eastern areas of the site, with sandy to very sandy, slightly gravelly clay and gravelly, clayey sand that was more prevalent moving into the northwest of the site. Beneath this, shallow bedrock of locally clayey interbedded mudstone and sandstone was encountered.

5.1.1 Topsoil

Topsoil was encountered in all exploratory hole locations across the site in thicknesses of between 0.22m bgl and 0.60m bgl. Topsoil generally comprised locally gravelly, slightly silty, slightly clayey sand. Gravel within the Topsoil typically comprised mudstone and sandstone, with chert and quartzite locally. The topsoil in the central and western fields of the site were overlain by grass.

5.1.2 Made Ground

Made Ground was encountered within TP20, positioned to target the footprint of the historic 'Hornbrook bungalow'. This consisted of reworked natural strata, recovered as light brown, sandy, slightly clayey gravel of sandstone and rare chert to 0.75m bgl. No anthropogenic inclusions were noted.

5.1.3 Upper Tunbridge Wells Sand

Throughout the site, the encountered strata underlying the topsoil consisted of a mixture of firm to stiff friable, slightly sandy clay, more predominantly in the central and eastern areas of the site, with sandy to very sandy, slightly gravelly clay and gravelly, clayey sand that was more prevalent moving into the northwest of the site. Generally, these strata were encountered from 0.20m bgl and 2.00m bgl, and reflect the weaker, weathered upper layers of the underlying bedrock. The deeper, more cohesive strata of the Upper Tunbridge Wells Sand commonly consisted of an interbedded



combination of sandstone and locally clayey mudstone, leading to the refusal of all exploratory holes excluding TP03, which reached the maximum depth of the excavator. Refusal on this bedrock was encountered as shallow as 1.00m bgl in WS15.

5.2 Standard Penetration Tests (SPT's)

SPT's were undertaken within the window sample boreholes at regular intervals. The recorded, uncorrected SPT 'N' Values are summarised in Table 5.1 below:

Table 5.1: Uncorrected SPT 'N' Values

Depth (m) bgl	Exploratory Hole							
	WS01	WS02	WS03	WS04	WS05	WS06	WS07	WS08
1.00	46	28	26	>50	26	18	15	16
1.90 - 2.00	>50	>50	>50	>50	29	>50	>50	27
3.00	-	-	-	-	>50	-	-	44
3.60	-	-	-	-	-	-	-	>50

Depth (m) bgl	Exploratory Hole							
	WS09	WS10	WS11	WS12	WS13	WS14	WS15	WS16
0.80 - 1.00	42	30	50	>50	35	36	>50	16
1.50 - 2.00	>50	>50	>50	-	>50	33	-	24
2.60 - 3.00	-	-	-	-	-	39	-	>50
4.00	-	-	-	-	-	>50	-	-

Depth (m) bgl	Exploratory Hole								
	WS17	WS18	WS19	WS20	WS21	WS22	WS23	WS24	WS25
1.00	39	18	13	21	18	28	15	16	37
1.60 - 2.00	>50	8	32	>50	20	>50	26	18	>50
3.00	-	26	>50	-	>50	-	>50	>50	-
4.00	-	>50	-	-	-	-	-	-	-
5.00	-	-	-	-	-	-	-	-	-

The 'N' Values highlight the presence of consistently competent natural strata beneath the site from 1.00m bgl, increasing significantly in strength and density with depth. All boreholes were terminated at their respective depths due to SPT refusals.

5.3 Groundwater Observations

No groundwater was recorded during the intrusive investigation.

Groundwater levels were recorded within the monitoring wells during the six subsequent monitoring visits. Standing groundwater was encountered within five of the wells on at least two occasions. Given that the boreholes were dry when drilled, it is considered that the groundwater recorded is perched within the wells which have created a sump effect given they are set within predominantly cohesive material. The groundwater levels from the six visits are presented in Table 5.2 below:

Table 5.2: Recorded Standing Groundwater Levels



Monitoring Well	Recorded Water Depth (m)					
	13/09/2024	27/09/2024	2/10/2024	10/10/2024	17/10/2024	25/10/2024
WS02	NGW	0.71	0.69	0.65	0.57	0.53
WS05	NGW	NGW	2.90	2.95	NGW	NGW
WS11	NGW	1.19	1.02	0.99	1.10	1.09
WS13	NGW	NGW	NGW	NGW	NGW	NGW
WS19	NGW	NGW	NGW	NGW	NGW	NGW
WS20	NGW	NGW	NGW	NGW	1.60	NGW
WS21	NGW	NGW	2.55	2.68	2.44	2.79
WS24	NGW	NGW	2.15	2.95	1.92	2.99

NGW = No Groundwater encountered

5.4 Chemical Laboratory Analysis Results

The results of the chemical laboratory analysis have been reviewed and screened in line with the current legislative framework and criteria to assess the risk to human health.

The screening has been undertaken using the Obsidian OB-Screen Human Health Screening Tool which compares the recorded concentrations to the DEFRA 'Category 4 Screening Levels' (C4SL's) and the LQM/CIEH 'Suitable 4 Use Levels' (S4UL's) to be protective of human health. Where C4SL's and S4UL's are not available, the EIC/AGS/CL:AIRE Generic Assessment Criteria (GAC's) have been used. Given the proposals, the residential with homegrown produce end use scenario has been adopted.

Soil Organic Matter (SOM) analysis has been undertaken to determine the most appropriate screening values for organic contaminants. Screening values relating to 2.5% have been adopted for the screening assessment.

The results of the screening assessment are presented in Appendix E.

5.4.1 Metals

Twenty-two samples have been analysed for metals. None of the recorded concentrations exceed their adopted screening values.

5.4.2 Total Cyanide and Phenol

Twenty-two samples have been analysed for total cyanide and phenol. None of the recorded concentrations exceed their adopted screening values.

5.4.3 PAH's

Twenty-two samples were analysed for a suite of speciated PAHs. Five of the recorded concentrations marginally exceeded their adopted screening values as detailed in Table 5.3.

Table 5.3: PAH Exceedances

Sample Ref.	Determinand	Threshold Concentration (mg/kg)	Recorded Concentration (mg/kg)
WS04/0.20m	Benzo(b)fluoranthene	3.3	4.1
	Benzo(a)pyrene	2.7	3.3
WS15/0.10m	Benzo(b)fluoranthene	3.3	4.3
	Benzo(a)pyrene	2.7	3.6
	Dibenz(a,h)anthracene	0.28	0.39

Only marginal PAH exceedances have been recorded in exploratory holes WS04 and WS15. Low level concentrations have been detected elsewhere although not at elevated levels. The detected profile and locations would suggest that the PAH's may be derived from additives used in the current and historical arable activities within the eastern area of the site.



5.4.4 TPH CWG, BTEX & MTBE

Eight samples were analysed for TPH CWG, BTEX and MTBE. None of the fractions were recorded at concentrations above their adopted screening values.

5.4.5 Asbestos

Twenty-two samples were screened for the presence of fibrous asbestos materials. No asbestos materials were detected in any of the screened samples.

5.4.6 Organochlorine Pesticides

Six samples were analysed for Organochlorine Pesticides. None of the recorded concentrations exceed the lower laboratory limit of detection.

5.4.7 Triazine Herbicides

Six samples were analysed for Triazine Herbicides. None of the recorded concentrations exceeded the lower laboratory limit of detection.

5.5 Geotechnical Laboratory Analysis Results

A total of forty-four samples were tested for pH and water-soluble sulphate. In addition, sixteen samples of cohesive soils were tested for natural moisture content and plasticity index, and nine samples were submitted for particle size distribution analysis.

5.5.1 pH and Water-Soluble Sulphate

Of the forty-four samples tested, twenty-two were from Topsoil, one was from Made Ground and twenty-one were from the natural strata. The results are summarised in Table 5.4.

Table 5.4: pH and Water-Soluble Sulphate Results Summary

Analysis	Topsoil		Made Ground	Natural Strata	
	Min Value	Max Value	Value	Min Value	Max Value
pH	5.4	8.1	7.9	5.5	8.5
Water-Soluble Sulphate	3.22 mg/l	13.1 mg/l	9.02 mg/l	2.06 mg/l	83.5 mg/l

The results of the pH and water-soluble sulphate testing indicate that the risk posed to future buried concrete structures is negligible.

5.5.2 Plasticity Index and Moisture Content

A total of sixteen samples were scheduled for plasticity index and moisture content analysis. The results of the plasticity index and moisture content analysis are summarised within Table 5.5:

Table 5.5: Plasticity Index Test and Moisture Content Results Summary

Location	Depth (m) bgl	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Percentage Passing 425um (%)	Modified Plasticity Index
WS01	0.50	18.6	35	21	14	100	14
WS03	0.50	19.8	49	21	28	100	28
WS08	1.00	16.4	46	20	26	98	25.48
WS10	0.50	19.2	35	20	15	100	15
WS11	0.50	20.5	39	21	18	100	18
WS12	0.50	24.0	59	24	35	100	35
WS14	0.60	13.0	35	17	18	99	17.82
WS15	0.50	22.8	61	23	38	100	38
WS16	0.50	14.3	32	18	14	85	11.9
WS17	1.00	13.7	28	17	11	95	10.45
WS18	0.50	16.4	46	19	27	97	26.19
TP02	0.80	19.5	40	19	21	100	21
TP03	0.50	21.1	45	19	26	100	26
TP07	0.50	19.9	47	21	26	100	26



Location	Depth (m) bgl	Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Percentage Passing 425um (%)	Modified Plasticity Index
TP08	1.60	17.9	38	20	18	96	17.28
TP15	1.20	19.9	53	20	33	100	33

The plasticity index analysis has highlighted variable low to high plasticity within the encountered cohesive strata across the site, with modified plasticity index values of between 10.45 and 38, indicating variably low to medium volume change potential.

5.5.3 Particle Size Distribution

The results of the nine particle size distribution analyses undertaken granular strata are summarised in Table 5.6:

Table 5.6: Particle Size Distribution Summary

%	Location	TP02	TP05	TP06	TP06	TP09	TP10	TP16	TP18	TP25
	Depth (m)	0.50	0.30- 0.65	1.10	1.90	0.60	0.45- 1.20	1.00	1.00	0.75- 1.00
Particle Size Distribution	Fines	27.4	48	86.3	77.9	55.8	29.5	32.1	32.4	71.2
	Sand	37.3	16.7	4.5	11.7	23.2	19.5	12.3	22.6	22.6
	Gravel	35.3	35.3	9.2	10.4	21.0	51.0	47.7	45.0	6.2
	Cobbles	0	0	0	0	0	0	7.9	0	0

The particle size distribution analysis has highlighted the variable nature of the heavily weathered bedrock material which typically comprise very sandy clays and clayey sands, with localised pockets of granular strata with low fines content. These findings correlate with site observations and show that some areas on site have higher fines content than initial field descriptions determined.

5.6 Ground Gas Monitoring Results

Eight gas and groundwater monitoring wells were installed during the ground investigation. Gas monitoring results have been compared to guidance presented in CIRIA Report C665, Assessing Risks Posed by Hazardous Ground Gases to Buildings, 2007.

CIRIA C665 indicates that ground gas protection measures may be necessary in new buildings on sites where methane concentrations exceed a threshold value of 1% v/v and/or where carbon dioxide concentrations exceed a threshold value of 5% v/v. The gas flow rate is also considered in the required level of protection.

Maximum methane (CH₄) and carbon dioxide (CO₂) concentrations, as percentage volume in air (%v/v), minimum oxygen (O₂) concentrations (%v/v), maximum carbon monoxide (CO) and hydrogen sulphide (H₂S) concentrations, in parts per million (ppm), and gas flow rates in litres per hour (l/hr) have been monitored in the eight monitoring wells over six monitoring rounds.

The gas monitoring results are presented in Appendix F and are summarised in Table 5.7 below.

Table 5.7: Ground Gas/Groundwater Monitoring Results Summary

Well	Oxygen Concentration (% v/v)	Methane Concentration (% v/v)	Carbon Dioxide concentration (% v/v)	Flow Rate (l/hr)
WS02	16.5 – 20.5	Not Detected	0.6 – 3.4	< 0.1
WS05	15.1 – 20.2	Not Detected	0.5 – 4.2	< 0.1
WS11	10.3 – 20.2	Not Detected	0.5 – 3.9	< 0.1
WS13	11.5 – 18.2	Not Detected	3.1 – 3.8	< 0.1
WS19	13.7 – 19.6	Not Detected	1.6 – 4.5	< 0.1
WS20	6.5 – 19.4	Not Detected	0.9 – 3.6	< 0.1
WS21	14.2 – 19.4	Not Detected	1.7 – 2.8	< 0.1
WS24	15.2 – 19.6	Not Detected	1.4 – 4.6	< 0.1



During the monitoring visits atmospheric pressures ranged between 989mb and 1010mb.

6 Environmental Assessment

6.1 Soil

Representative soil samples from across the site have been scheduled for a suite of analyses. The analysis has included a suite comprising Metals, Cyanide, Phenol, PAH's, Asbestos, TPH, Triazine Herbicides and Organochlorine Pesticides.

The results of the analysis have been reviewed and compared against appropriate screening criteria for Human Health within a Residential end use scenario.

None of the recorded concentrations of Metals, Cyanide, Phenol, TPH and Triazine Herbicides exceeded their respective screening values. Additionally, no asbestos was recorded within any of the samples screened across the site.

Exceedances of PAHs detailed in table 5.3 were accompanied by background levels of PAH across the site, hypothesised to be related to the current and historical, arable activity in the east of the site. Whilst these exceedances are neither extensive nor common, as they are in two distal locations of the eastern arable field, combined with the background levels of PAHs recorded, additional elevated levels across the site cannot be ruled out.

The topsoil identified across the site for the most part is considered suitable for retention on site for use in potential gardens and public open space areas with the exception of the topsoil in the areas of WS04 and WS15. In the areas of WS04 and WS15, an initial 5.00m by 5.00m area should be excavated, centred on the exploratory hole positions with the topsoil isolated and removed from site. The topsoil is present to depths of 0.40m bgl (WS04) and 0.25m bgl (WS15).

Although PAH's have been detected within the topsoil, following the removal of the identified areas in WS04 and WS15, we consider there to be no credible risk posed to PE drinking water pipes. However, we advise that the local water supply authority is consulted to confirm there is no requirement for the use of barrier pipe.

The results of the pH and water-soluble sulphate testing indicate that the risk posed to future buried concrete structures is low. This is further discussed in Section 7.4.

6.2 Topsoil Commodity

We understand that the outlined proposals are likely to include a large housing development spanning the majority of the site, however, at the time of writing this report, no detailed proposals have been made available. It is likely that the eventual site layout will include house footprints, roadways, external parking and access areas. As a result, it is likely that significant quantities of material may be surplus to requirements, including quantities of Topsoil.

Typically, where there are significant quantities of Topsoil available from site stripping and earthworks, the material will be a highly sought after commodity to be utilised on other, offsite developments which can range from other commercial developments with soft landscaping requirements, to the capping of landfills, right through to residential gardens. It is beyond the scope of this investigation to assess the suitability of any material for reuse off-site as this would be typically done by the receiving site/project and would need to comply with whatever importation criteria have been set and also be compliant with current materials management guidance and best practice, such as the 'Definition of Waste' or CL:AIRE Code of Practice.



This process would typically involve representatives for the receiving site being provided the laboratory analysis results contained within this report.

As discussed above, it may be the case that the surplus Topsoil could become a commodity for reuse off-site on residential or commercial developments, but its usage will be subject to a full suitability assessment, to ensure compliance with regulatory waste classification guidance and legislation.

6.3 Ground Gas Risk Assessment

The preliminary risk assessment from the Desk Study identified the ground gas risk to be low for the site. Six gas monitoring visits have been undertaken.

A maximum carbon dioxide concentration of 4.6% v/v has been recorded across the six monitoring visits. Flow has been below the limit of detection for the gas monitor (<0.1).

The maximum carbon dioxide concentration of 4.6% v/v and a gas flow rate of 0.1l/hr have been selected to calculate an initial Gas Screening Value (GSV) for the site in accordance with CIRIA Report C665 to determine the required level of carbon dioxide protection measures for the proposed future site development.

The GSV is calculated as follows:

$$\text{GSV} = (\text{Gas Concentration}/100) \times \text{Flow Rate}$$

In line with the recommendations provided in CIRIA Report C665, a GSV of 0.0046l/hr has been calculated for carbon dioxide. The GSV would classify the site as 'Characteristic Situation 1' (Very Low Risk) in accordance with CIRIA Report C665 and Green in accordance with NHBC, whereby no gas protection measures are required.

As the site is located within a lower probability Radon area, it is suggested that no Radon protection is required.

6.4 Revised Conceptual Site Model

The revised Conceptual Site Model based on the information obtained from the intrusive investigation, the Human Health Risk Assessment and Ground Gas Risk Assessment has confirmed that most of the potential pollutant linkages have been broken with respect to the proposed residential end use scenario, however linkages in relation to PAH's remain to some limited extent.

Table 6.1: Updated Source-Pathway-Receptor Relationships

Source Material/Activity	Potential Contaminant	Pathways	Receptor	Risk
Historical Agricultural Activities On-site	PAH's	Inhalation Ingestion Dermal contact	Future Site Residents Maintenance Workers Construction Workers	Low
	PAH's	Direct Contact	Drinking Water Pipes	Negligible

6.5 Health and Safety

The Principal Contractor should provide an assessment of the appropriate procedures required to protect site workers from the materials likely to be encountered at the site.

The following basic health and safety measures should be adopted as a minimum during the site development works:



- Basic Personal Protective Equipment (PPE) including hard hats, gloves, coveralls and steel toe-capped boots to be worn at all times.
- Eating, drinking and smoking to be forbidden except in designated mess areas.

If ground conditions should differ significantly from those encountered during the intrusive investigation, including the discovery of any visible or odorous contamination, site redevelopment works should be suspended until the suspect material has been inspected and assessed by a competent Geo-Environmental Engineer.

6.6 Waste Disposal

The reuse of soils as engineered fill should be undertaken in accordance with an appropriate Environment Agency licence as defined in the statutory guidance on the 'Definition of Waste' or CL:AIRE Code of Practice.

A level 1 waste characterisation of all the recorded chemical laboratory analysis results would indicate that the near surface materials on site would likely be classified as Non-Hazardous Waste if removed from site and disposed of at a waste facility.

Once materials for off-site disposal have been identified following confirmation of proposed layouts and cut and fill exercises, the materials designated for off-site disposal should be subject to further Waste Acceptance Criteria analysis (WAC) prior to their removal from site to a licensed waste management facility as this analysis may confirm that the material could be further classified as Inert Waste, which is a sub-category of Non-Hazardous.

6.7 Regulator Liaison

It is recommended that this report be submitted to the Local Authority Environmental Health Officer for review and comment prior to any irrevocable action taking place.

No specific risk has been identified for proposed water supply pipes; however, it is recommended that the results of this assessment are confirmed with the local water supply authority prior to any water supply pipes being installed.

6.8 Environmental Protection

The following environmental protection measures should be adopted as a minimum during the site redevelopment works:

- Covering or dampening of spoil to prevent the spread of dust.
- Containment of surface water runoff to prevent the pollution of surface water drains, sewers etc.
- Cleaning and washing of boots, vehicle wheels and other equipment at site entry and exit points to prevent the spread of mud.

7 Geotechnical Assessment

7.1 Introduction

Ground conditions across the site are considered to be in line with the anticipated, published geology for the site and surrounding area.

The recorded SPT's, geotechnical soil analyses and borehole descriptions show a relatively variable distribution of soil parameters across the site. Unsuitable founding strata comprising topsoil has been encountered to maximum depths of 0.60m bgl. These deposits are underlain by generally cohesive



strata within the central and eastern sections of the site and increasingly granular strata towards the north-west of the site.

To develop the site to its full extent, in the north and north-west of the site, the sloping ground will require a degree of earthworks and potential terracing. The majority of the remainder of the site is either relatively level or has a gentle slope downwards to the north.

7.2 Foundations

No formal plans detailing the proposed site layout have been made available to Obsidian prior to submission of this report, however it is understood that the majority of the site area will be utilised in the construction of an extensive residential development.

Therefore, it is considered likely that both the slope to the north of the site and the low to medium volume change potential of cohesive strata encountered will need to be considered when selecting an appropriate foundation solution. Additionally heave protection will need to be incorporated into any foundation solution close to the significant, mature trees present across the site.

Given the likely site proposals and in view of the encountered ground conditions and constraints, it is likely that conventional strip and trench fill foundations constructed to depths of 1.00m will be viable for the majority of the site. For indicative purposes only at this stage, for a 0.60m wide, 1.00m deep strip foundation set within the heavily weathered and variable natural strata, a safe allowable bearing capacity of 115KN/m² would be available with greater capacities available at greater depths. In the area of WS18, trench fill foundations to a depth of 2.60m would be required to achieve this bearing capacity.

It should be noted that there is tree and hedgerow coverage along the individual field boundaries with two large Oak trees present in the east of the site. Given the presence of cohesive strata, it is recommended that a tree survey be undertaken so that the required foundation depths for the eventual, proposed layout can be assessed. There will be the need to deepen the foundation beyond 1.00m in proximity to the observed trees, subject to confirmation.

Once a detailed design plan has been adopted, this geotechnical assessment should be revisited and bearing capacities can be derived based on the layout and proposed cut and fill levels.

7.3 Construction

Anticipated excavation depths should be readily achieved using conventional plant within the near surface natural strata. The recorded, heavily weathered and intact bedrock is not anticipated to pose any significant issues with excavation for terracing, foundations or drainage/service runs provided that an adequately sized excavator and buckets are used (circa 20 tonnes).

Support must be provided for all excavations requiring entry by site workers in accordance with guidance presented in CIRIA Report 97 'Trenching Practice'.

Groundwater was observed at particularly shallow depths within WS02, between 0.71 and 0.53m bgl during subsequent monitoring phases; however, typically groundwater sat at between 0.99m bgl and 3.40m bgl. Given the presence of shallow groundwater encountered within 2.00m of ground level, dewatering is likely to be required during the earthworks phase and the excavation of foundations. Traditional dewatering techniques, such as sump pumping will likely be required for shallow groundwater ingress. It is recommended that excavations are not left open for prolonged periods.



7.4 Concrete Specification

The ground conditions, pH values and water-soluble sulphate concentrations have been assessed for potential aggressive attack on concrete in accordance with BRE Special Digest 1 'Concrete in Aggressive Ground (2005)'.

The results indicate that overall, the natural soils beneath the site fall within Design Sulphate Class DS-1 and ACEC (Aggressive Chemical Environment for Concrete) Class AC-1.

The specific concrete mixes for the DS Class to be used at the site will be determined, mindful of the ACEC Class, by the site-specific concrete requirements in terms of the required durability and structural performance. These are assessed in terms of the Structural Performance Level (SPL) and any Additional Protection Measures (APM).

7.5 Soakaway Tests and Results

Soakaway testing in accordance with BRE Digest 365 was attempted at six locations across the site within TP05, TP06, TP14, TP16, TP21 and TP25.

In accordance with the requirements of BRE Digest 365, a total of three repeat tests were attempted within each test pit within a 24-hour period. Each pit was rapidly filled using a towed bulk water tank. The water levels were recorded at appropriate time intervals using a Geosense dip meter with shrouded tip.

In accordance with the requirements of BRE Digest 365, three repeat tests should be completed in full within a 24-hour period, with the water level passing through the 75% and 25% effective depth level in each test.

None of the test locations achieved three repeat tests within a 24-hour period due to the slow infiltration recorded. The tests in TP06 and TP16 failed to pass the 25% effective depth level in their first test.

The results of the soakaway tests are presented within Appendix G, and the infiltration rates are summarised in Table 7.1 below:

Table 7.1: Summary of Soakaway Test Results

Soakaway Test Pit	Calculated Infiltration Rates		
	Test 1	Test 2	Test 3
TP05	2.49x10 ⁻⁶ m/s	24hrs exceeded	24hrs exceeded
TP06	FAIL	-	-
TP14	8.81x10 ⁻⁶ m/s	7.05x10 ⁻⁶ m/s	24hrs exceeded
TP16	FAIL	-	-
TP21	5.19x10 ⁻⁶ m/s	Allocated Site Time Exceeded	Allocated Site Time Exceeded
TP25	2.66x10 ⁻⁵ m/s	4.81x10 ⁻⁵ m/s	Allocated Site Time Exceeded

The results indicate that soakaways constructed the eastern and central areas of the site are unlikely to provide infiltration at an adequate rate and may therefore be unsuitable. The soakaway test results for TP25 located in the west of the site has provided the fastest infiltration rates owing to the predominantly granular strata in the western area of the site.



8 Recommendations

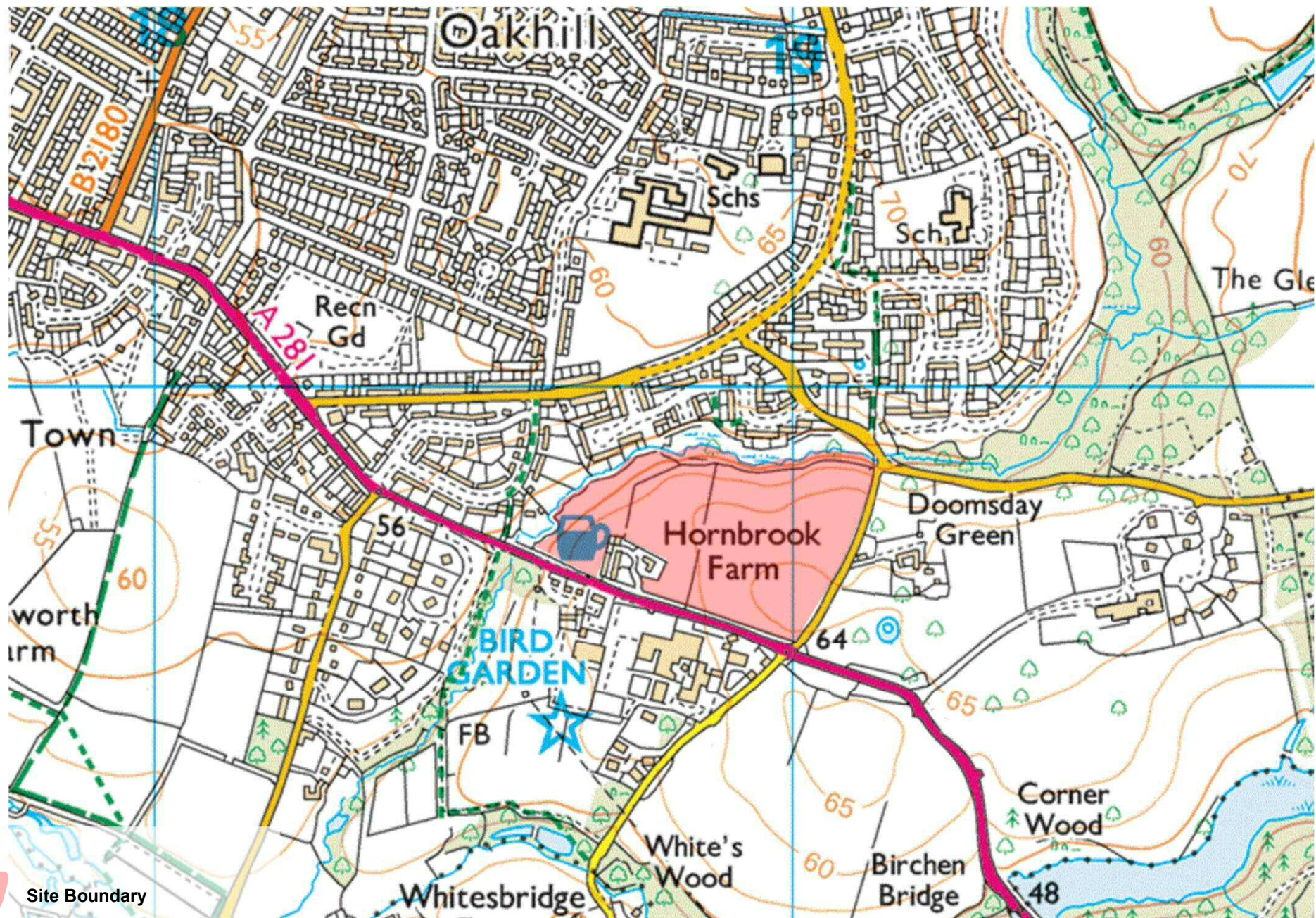
We recommend the following steps be taken to enable the proposed development to progress:

- Submission of this report and assessment to the Local Authority Environmental Health/Contaminated Land Officer and water supply authority.
- Revisit the geotechnical assessment and calculation of anticipated bearing capacities once a proposed layout, tree survey and proposed cut and fill levels have been developed.
- Further assessment of off-site reuse and disposal options for the topsoil from the site once more detailed proposals are available.



Drawings





Key



Site Boundary



OBSIDIAN
GEO-CONSULTING

Jaynic
Properties
Ltd

Project:

Land at Hornbrook Farm, Brighton Road, Horsham

Title:

Site Location Plan

Project No:

24-1979-P

Drawing No:

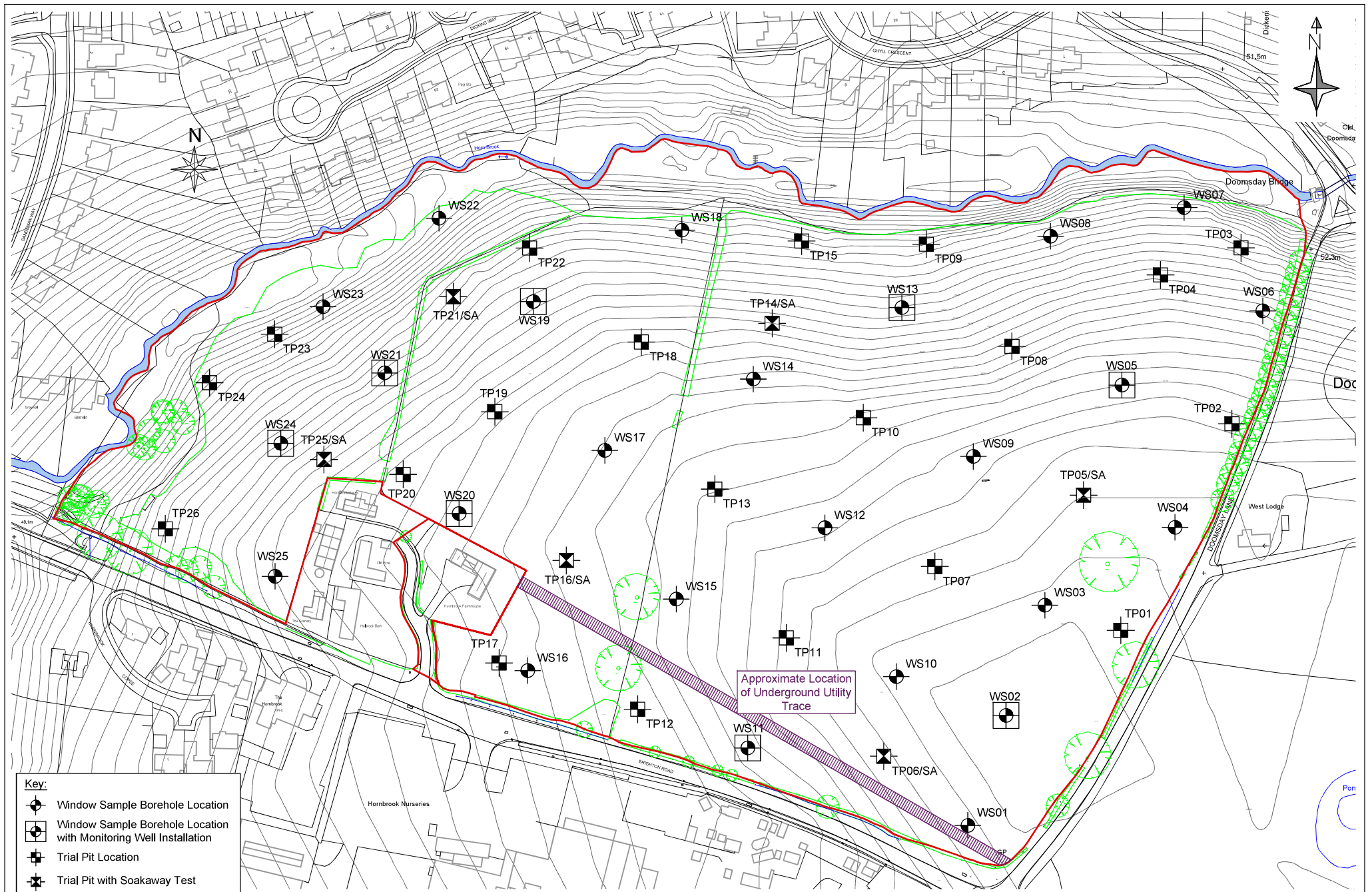
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Revision:

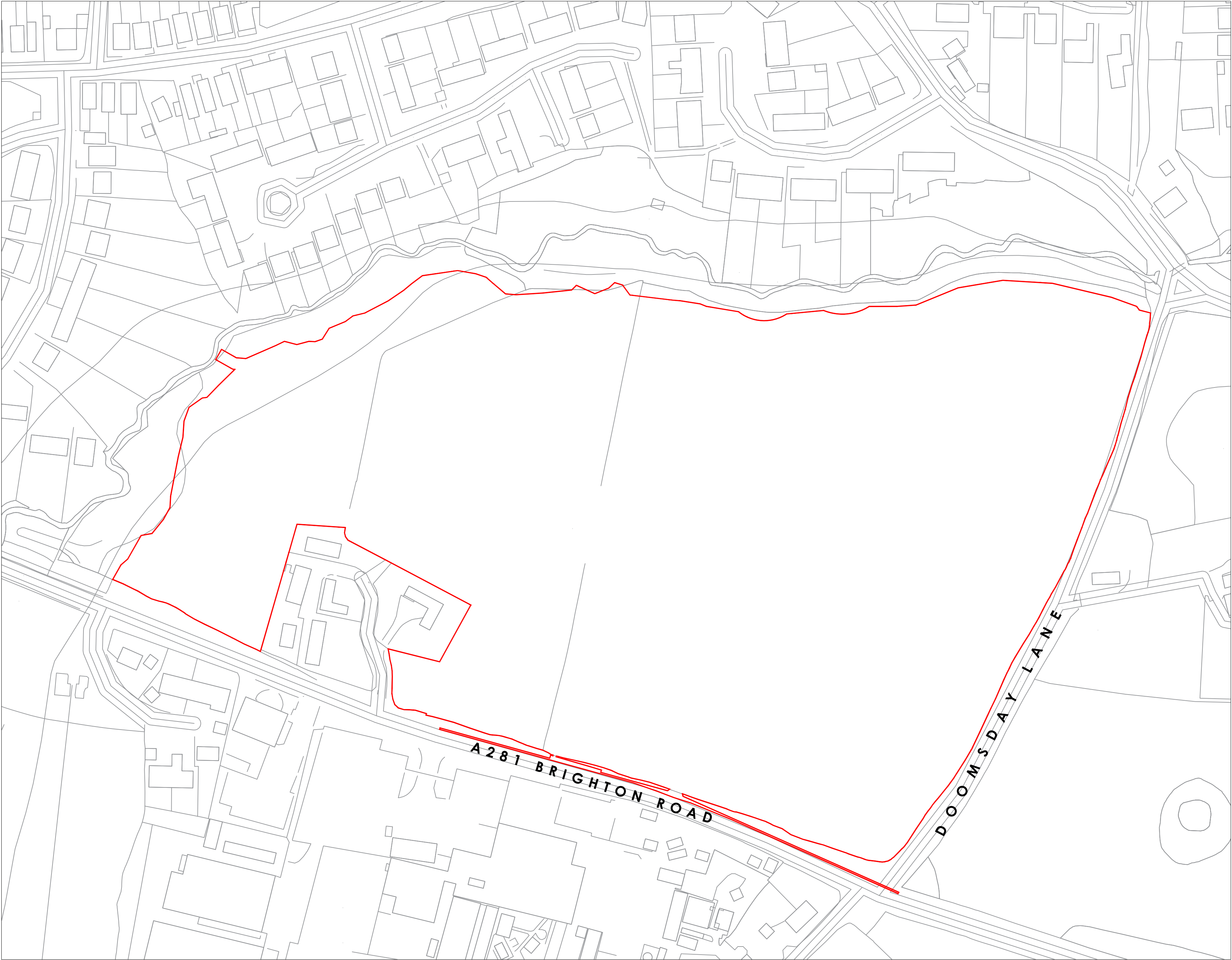
A

Scale:

NTS



Jaynic Properties Ltd



Site boundary: **9.23ha**

Rev	Date	By	Description
-----	------	----	-------------



Dixies Barns, High Street,
Ashwell, Hertfordshire SG7 5NT

t 01462 743647
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w csaenvironmental.co.uk

Project Land at Hornbrook Farm, Brighton
Road, Horsham

Title Site Location plan

Client Jaynic Properties Ltd

Scale 1:1250 @ A2 **Drawn** DF

Date February 2025 **Checked** RR

Drawing No. CSA/7416/101 **Rev** G

Appendix A

Photographs





Photograph 1 – A view of a window sampling rig on position.



Photograph 2 – A view of an extracted window sample core (WS02).



Photograph 3 – A view of a window sampling rig on position.



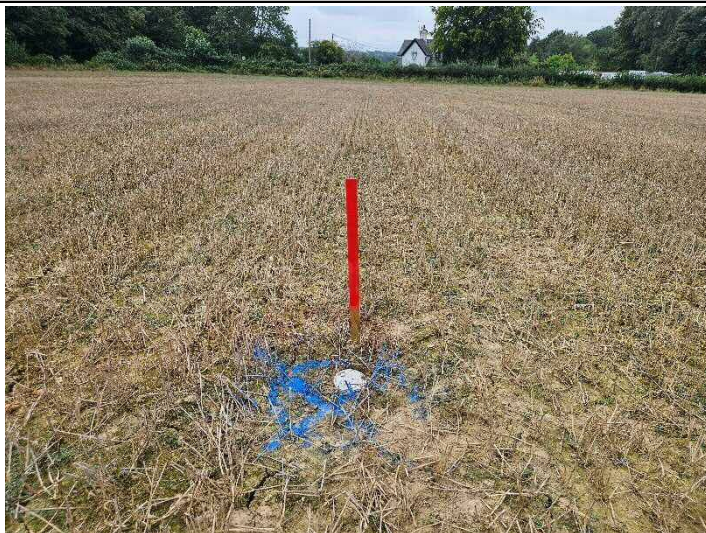
Photograph 4 – A view of an extracted window sample core (WS17).



Photograph 5 – A view of a window sampling rig on position.



Photograph 6 – A view of an extracted window sample core (WS22)



Photograph 7 – An example of a monitoring installation and marker post on site.



Photograph 8 – A typical view of a trial pit on site with stable sides throughout.



Photograph 9 – A typical view of the trial pit arisings.



Photograph 10 – A view of a soakaway test being commenced on site.



Photograph 11 – A view of a soakaway pit being protected and made safe overnight.

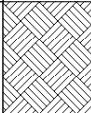


Photograph 12 – A typical view of the trial pit reinstatement.

Appendix B

Exploratory Hole Records



		Percussion Drilling Log											
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 02/09/2024					
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd									
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig					
Borehole Number WS01		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1			
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description					
		Depth (m)	Type	Results									
		0.20	ES	N=46 (7,7/10,13,13,10)	0.45			TOPSOIL: Light brown, slightly silty, fine to medium sand with fine roots and rootlets.		1			
		0.50	D								0.80	Friable, grey mottled light brown, sandy CLAY. UPPER TUNBRIDGE WELLS SAND	
		1.00	D					Very weak, light brown mottled grey, friable, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND					
		1.00	SPT						UPPER TUNBRIDGE WELLS SAND				
		1.50	D									1.70	Very weak, light brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND
		1.80	D										
		2.00	SPT					50 (23,2/50 for 20mm)	2.00		End of Borehole at 2.000m		2
										3			
										4			
										5			
										6			
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation					
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation		
Remarks													
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.													

Percussion Drilling Log

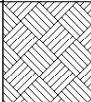
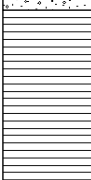
Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 02/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS02	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES	N=28 (8,5/7,7,7,7)	0.20			TOPSOIL: Light brown, slightly silty, fine to medium sand, with fine roots and rootlets.	1
		0.50	D		0.60			Friable, grey mottled light brown, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.00	D					Very weak, light brown mottled grey, friable, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.00	SPT						
		1.50	D	50 (25 for 85mm/50 for 0mm)	1.55			Weak, brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND	2
		1.80	D						
		2.00	SPT		2.00				
								End of Borehole at 2.000m	2

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.

Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 02/09/2024							
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd											
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig							
Borehole Number WS03		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1					
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description							
		Depth (m)	Type	Results											
		0.10	ES	N=26 (3,2/3,4,7,12)	0.20			TOPSOIL: Light brown, slightly silty, fine to medium sand with fine roots and rootlets.		1 –					
		0.50	D		0.60			Stiff, grey mottled light brown, sandy, friable CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND							
							1.00 1.00	D SPT	1.65			Very weak, light brown mottled grey, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND			
		1.50	D		1.85								Weak, light brown, friable, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND		
							1.80	D	2.00				Weak, dark brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND		
		2.00	SPT		N=50 (6,10/50 for 170mm)							2.00		End of Borehole at 2.000m	
												2 –			
												3 –			
										4 –					
										5 –					
										6 –					
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation							
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation				
Remarks															
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.															

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 02/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig			
Borehole Number WS04		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	ES	50 (6,12/50 for 160mm)	0.40			TOPSOIL: Brown, slightly silty, fine to medium sand, with fine roots and rootlets.		1	
		0.50	D					Reddish light brown, gravelly, fine to medium SAND. Gravel is fine to coarse, sub-rounded to sub-angular sandstone.			
		1.00	D					UPPER TUNBRIDGE WELLS SAND			
		1.00	SPT					Very weak, grey mottled light brown, clayey MUDSTONE.			
								UPPER TUNBRIDGE WELLS SAND			
		1.50	D					Very dense, greyish light brown, fine to medium SAND.			
								UPPER TUNBRIDGE WELLS SAND			
		1.70						Very weak, greyish light brown SANDSTONE.			
								UPPER TUNBRIDGE WELLS SAND			
		2.00	D					Weak, grey mottled light brown, friable MUDSTONE.			
2.00	SPT	50 (25 for 95mm/50 for 160mm)	2.00			UPPER TUNBRIDGE WELLS SAND		2			
						End of Borehole at 2.000m					
										3	
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											



Project Name: Land at Hornbrook Farm

Client: Jaynic Properties Ltd

Date: 02/09/2024

Location: Brighton Road, Horsham

Contractor: Obsidian Geo-Consulting Ltd

Project No. : 24-1979-P

Crew Name: Boreworx Ltd

Drilling Equipment: Window Sampling Rig

Borehole Number
WS05

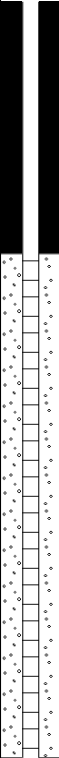
Hole Type
WS

Level

Logged By
DH

Scale
1:30

Page Number
Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.20		TOPSOIL: Light brown, slightly silty, fine to medium sand, with fine roots and rootlets.		
		0.50	D				Brown clayey, gravelly, fine to medium SAND. Gravel is of fine to medium, sub-angular to sub-rounded sandstone. UPPER TUNBRIDGE WELLS SAND		
		1.00	D		1.00		Medium dense, light brown, clayey, gravelly, fine to medium SAND. Gravel is of fine to medium, sub-angular to sub-rounded sandstone. UPPER TUNBRIDGE WELLS SAND	1	
		1.00	SPT	N=26 (9,6/8,6,6,6)					
		1.50	D		1.40		Very weak, grey mottled light brown, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND		
		2.00	D					2	
		2.00	SPT	N=29 (5,4/6,7,7,9)	2.10		Weak, grey mottled light brown, very clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND		
		2.50	D		2.65				
		2.80	D		2.85		Weak, grey mottled light brown MUDSTONE. UPPER TUNBRIDGE WELLS SAND		
		3.00	SPT	50 (8,10/50 for 200mm)	3.00		Very weak, light grey SANDSTONE. UPPER TUNBRIDGE WELLS SAND	3	
End of Borehole at 3.000m									
									4
									5
									6

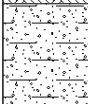
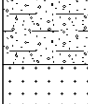
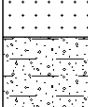
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 3.00m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.



		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 02/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig			
Borehole Number WS06		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.15	ES	N=18 (5,4/5,4,4,5)	0.30			TOPSOIL: Brown, slightly silty, fine to medium sand with fine roots and rootlets.		1	
		0.50	D	50 (25 for 10mm/50 for 20mm)	0.80			Brown, clayey, fine to medium SAND. UPPER TUNBRIDGE WELLS SAND			
		1.00	D	50 (25 for 10mm/50 for 20mm)	1.40			Medium dense, light brown, clayey, very gravelly, fine to medium SAND. Gravel is of fine to coarse, sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND			
		1.00	SPT	50 (25 for 10mm/50 for 20mm)	1.70			Light brown, very clayey, fine to medium SAND. UPPER TUNBRIDGE WELLS SAND			
		1.50	D	50 (25 for 10mm/50 for 20mm)	1.80			Light greyish brown, very gravelly, fine to medium SAND. Gravel is of fine to coarse, sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND			
		1.80	D	50 (25 for 10mm/50 for 20mm)	1.90			Weak, light brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND			
		1.90	SPT	50 (25 for 10mm/50 for 20mm)				End of Borehole at 1.900m			
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 1.90m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											

Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 02/09/2024				
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd								
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig				
Borehole Number WS07		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description				
		Depth (m)	Type	Results								
		0.10	ES	N=15 (5,4/4,3,4,4)	0.25			TOPSOIL: Dark brown, slightly silty, fine to medium sand with fine roots and rootlets.		1		
		0.50	D					Light brown, very clayey, slightly gravelly, slightly silty, fine to medium SAND. Gravel is of fine to coarse, sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND				
									Very weak, dark brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND			
		1.00 1.00	D SPT				50 (6,4/50 for 95mm)		1.20			Medium dense light brown, slightly silty, very clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND
		1.50	D									
		1.90 2.00	D SPT			2.00		End of Borehole at 2.000m			2	
											3	
											4	
											5	
											6	

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

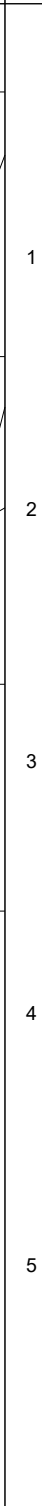
Remarks

1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.



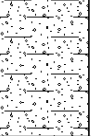
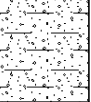
Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 03/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Tracked Window Sampling Rig	
Borehole Number WS08	Hole Type WS	Level	Logged By SD	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.35			TOPSOIL: Dark brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.	
		0.50	D		0.60			Light brown, very clayey, slightly gravelly, slightly silty, fine to medium SAND. Gravel is of fine to coarse, subangular sandstone.	
		1.00	D				UPPER TUNBRIDGE WELLS SAND Stiff, grey, mottled light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND		
		1.00	SPT	N=16 (4,3/3,3,5,5)					
		1.50	D	1.40					
		1.60		Very weak, brown and light grey, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND					
		1.90			D				
		2.00			SPT			N=27 (5,3/5,7,7,8)	
		2.20	D						
		2.80	D				2.70		
3.00	SPT	N=44 (10,7/12,12,11,9)							
3.60	SPT	N=50 (10,9/50 for 275mm)		3.60					
End of Borehole at 3.600m									

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

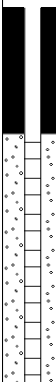
Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 3.60m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 03/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Tracked Window Sampling Rig			
Borehole Number WS09		Hole Type WS		Level		Logged By SD		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.10	ES	N=42 (10,9/10,8,12,12)	0.22			TOPSOIL: Reddish brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.		1	
		0.50	D				Light brown, slightly clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, angular sandstone. UPPER TUNBRIDGE WELLS SAND				
		0.90	D				Stiff, grey, mottled light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND				
		1.00	SPT				Brown, slightly clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, angular sandstone. UPPER TUNBRIDGE WELLS SAND				
		1.10	D				Stiff, grey, mottled light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND				
		1.70	D				Light brown and light grey, clayey, slightly gravelly, fine to coarse SAND. Gravel is of fine to medium, angular sandstone. UPPER TUNBRIDGE WELLS SAND				
		2.00	SPT	50 (15,10/50 for 160mm)	2.00		UPPER TUNBRIDGE WELLS SAND End of Borehole at 2.000m		2		
										3	
										4	
										5	
										6	
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 03/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Tracked Window Sampling Rig			
Borehole Number WS10		Hole Type WS		Level		Logged By SD		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	ES	N=30 (4,5/6,6,8,10)	0.35			TOPSOIL: Brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.		1	
		0.50	D					Stiff, light grey and light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND			
		0.70						Very weak, light brown and light grey, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND			
		1.00	D					Stiff, light grey and light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND			
		1.00	SPT								
		1.70	D					Very weak, brown and light grey, friable MUDSTONE and SANDSTONE. UPPER TUNBRIDGE WELLS SAND			
2.00	SPT	50 (8,12/50 for 125mm)	2.00		End of Borehole at 2.000m		2				
										3	
										4	
										5	
										6	
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											

Percussion Drilling Log

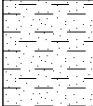
Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 03/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Tracked Window Sampling Rig	
Borehole Number WS11	Hole Type WS	Level	Logged By SD	Scale 1:30	Page Number Sheet 1 of 1

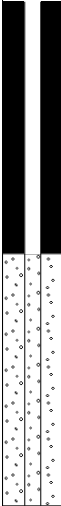
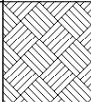
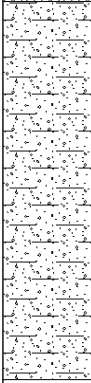
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES		0.25			TOPSOIL: Brown and reddish brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.	
		0.50	D					Stiff, light grey and light brown, friable, sandy CLAY. Sand is fine to medium.	
		1.00	D					UPPER TUNBRIDGE WELLS SAND	1
		1.00	SPT	N=50 (5,4/5,15,15,15)					
		1.50	SPT	50 (25 for 10mm/50 for 20mm)	1.40 1.50			Very weak, light brown and light grey, friable MUDSTONE.	
								UPPER TUNBRIDGE WELLS SAND	
								End of Borehole at 1.500m	2
									3
									4
									5
									6

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 1.50m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.

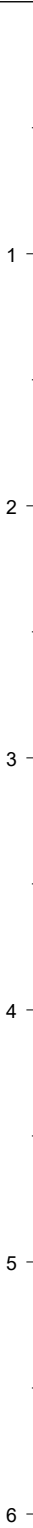


		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 03/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Tracked Window Sampling Rig			
Borehole Number WS12		Hole Type WS		Level		Logged By SD		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	ES	N=50 (10,12/50 for 245mm)	0.35			TOPSOIL: Brown and reddish brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.		1	
		0.50	D				Very stiff, light grey and light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND				
		0.90	D				Very weak, brown and light grey, friable MUDSTONE and SANDSTONE.				
		1.00	SPT				UPPER TUNBRIDGE WELLS SAND End of Borehole at 1.000m				
										2	
										3	
										4	
										5	
										6	
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 1.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 03/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Tracked Window Sampling Rig			
Borehole Number WS13		Hole Type WS		Level		Logged By SD		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.30	ES		0.40		TOPSOIL: Brown and reddish brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.		1		
	0.50	D	Light brown and light grey, clayey, very gravelly, fine to coarse SAND. Gravel is of fine to medium, angular sandstone. UPPER TUNBRIDGE WELLS SAND								
	1.00	SPT	N=35 (4,4/5,7,10,13)				2				
	1.50	D									
	2.00	SPT	50 (25 for 30mm/50 for 50mm)	1.90 2.00	Very weak, reddish brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND End of Borehole at 2.000m		4				
									5		
									6		
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.00m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.											

Percussion Drilling Log

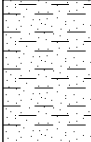
Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 03/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Tracked Window Sampling Rig	
Borehole Number WS14	Hole Type WS	Level	Logged By SD	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30			TOPSOIL: Brown and reddish brown, slightly silty, slightly gravelly, fine to medium sand with fine roots and rootlets.	
		0.60	D		0.60			Light brown, very clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, angular sandstone.	
								UPPER TUNBRIDGE WELLS SAND Stiff, light grey and light brown, friable, sandy CLAY. Sand is fine to medium.	
		1.00	D		0.90			UPPER TUNBRIDGE WELLS SAND Very weak, brown and grey brown SANDSTONE.	
		1.00	SPT	N=36 (5,6/10,9,9,8)	1.00			UPPER TUNBRIDGE WELLS SAND Very stiff, light grey and light brown, friable, sandy CLAY. Sand is fine to medium.	
					1.20			UPPER TUNBRIDGE WELLS SAND Light brown and light grey, very clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, angular sandstone.	
		1.50	D		1.50			UPPER TUNBRIDGE WELLS SAND Very weak, brown and light grey, friable MUDSTONE and SANDSTONE.	
		2.00	SPT	N=33 (6,7/12,7,6,8)	2.00			UPPER TUNBRIDGE WELLS SAND Very weak, brown and grey brown SANDSTONE.	
		2.30	D		2.30			UPPER TUNBRIDGE WELLS SAND Brown, gravelly, fine to medium SAND. Gravel is of fine to coarse, angular sandstone.	
					2.80			UPPER TUNBRIDGE WELLS SAND Weak, dark reddish brown SANDSTONE.	
		3.00	D		3.00			UPPER TUNBRIDGE WELLS SAND Brown and reddish brown, clayey, gravelly, fine to medium SAND. Gravel is of fine to coarse, angular sandstone.	
		3.00	SPT	N=39 (4,6/10,10,10,9)	3.00			UPPER TUNBRIDGE WELLS SAND Weak, dark reddish brown SANDSTONE.	
					3.50			UPPER TUNBRIDGE WELLS SAND Very weak, reddish brown and pale grey, friable MUDSTONE and SANDSTONE.	
		4.00	SPT	N=50 (10,11/50 for 285mm)	4.00			UPPER TUNBRIDGE WELLS SAND End of Borehole at 4.00m	

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 4.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 03/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig			
Borehole Number WS15		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.10	ES	50 (13,11/50 for 50mm)	0.25			TOPSOIL: Light brown, slightly silty, fine to medium sand with fine roots and rootlets. UPPER TUNBRIDGE WELLS SAND Very stiff, grey mottled light brown, friable, sandy CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND Weak, light brown mottled grey, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND		1	
		0.50	D		0.60						
		0.90	D								
		1.00	SPT								
					1.00			End of Borehole at 1.000m			
1 2 3 4 5 6											
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 1.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 03/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig			
Borehole Number WS16		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.15	ES	N=16 (5,4/4,4,4,4)	0.35		TOPSOIL: Grass over light brown, slightly silty, fine to medium sand with fine roots and rootlets.		1		
		0.50	D					Very stiff, grey mottled light brown, friable, sandy CLAY with rare fine rootlets. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND			
		1.00	D							Very weak, dark brown mottled light brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.00	SPT							Very weak, grey mottled light brown, friable, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.50	D					Weak, dark brown mottled light brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND			
		2.00	D					Weak, dark brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND			
		2.00	SPT					Weak, dark brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND			
		2.50	D					End of Borehole at 2.600m			
2.60	SPT	End of Borehole at 2.600m									
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 2.60m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											



Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 03/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS18	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

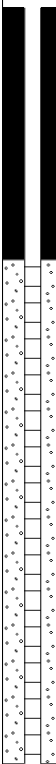
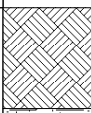
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.10	ES	N=18 (3,3/3,4,5,6)	0.25			TOPSOIL: Grass over light brown, slightly silty, fine to medium sand, with fine roots and rootlets.	1		
		0.50	D		0.80		Stiff, brown, slightly gravelley, sandy CLAY. Sand is fine to medium. Gravel is fine to medium, sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND				
		1.00	D		1.30		Very weak, light brown mottled reddish brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND				
		1.00	SPT		1.50		Medium dense reddish brown, very gravelly, clayey, fine to medium SAND. Gravel is fine to coarse, sub-rounded to sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND				
		2.00	D	N=8 (5,3/2,2,2,2)	2.00			Medium dense, reddish brown, very gravelly, fine to medium SAND. Gravel is fine to coarse, sub-rounded to sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND	2		
		2.00	SPT		2.60		Weak, grey mottled light brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND				
		2.50	D		2.85		Weak, dark brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND				
		3.00	D		3.00		Weak, grey mottled light brown, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND				
		3.00	SPT	N=26 (2,2/2,5,7,12)	3.50			Medium dense reddish brown, gravelly, fine to medium SAND. Gravel is fine to coarse, sub-rounded to sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND	3		
		3.50	D		3.80		Medium dense reddish brown, gravelly, fine to medium SAND. Gravel is fine to coarse, sub-rounded to sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND				
		3.80	D		4.00						
		4.00	SPT								
				N=50 (4,5/50 for 235mm)	4.00				End of Borehole at 4.000m	4	
											5
											6

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 4.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 03/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS19	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

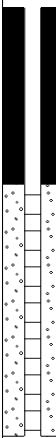
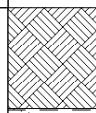
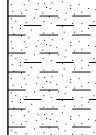
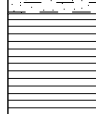
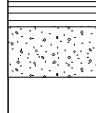
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES					TOPSOIL: Grass over light brown, slightly silty, fine to medium sand with fine roots and rootlets.	
		0.50	D		0.40			Light brown, clayey, fine to medium SAND. UPPER TUNBRIDGE WELLS SAND	
					0.80			Very weak, reddish light brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND	1
		1.00	D					Grey mottled reddish brown, very sandy, friable, CLAY. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.00	SPT	N=13 (4,5/4,3,3,3)	1.10			Very weak, grey mottled reddish light brown, friable, clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.50	D		1.60			Weak, reddish brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND	2
		2.00	D		2.00			Weak, grey, friable MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		2.00	SPT	N=32 (4,5/5,7,9,11)	2.20				
		2.50	D						
		2.80	D						
		3.00	SPT	N=50 (5,3/50 for 235mm)	3.00			End of Borehole at 3.000m	3
									4
									5
									6

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 3.00m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.

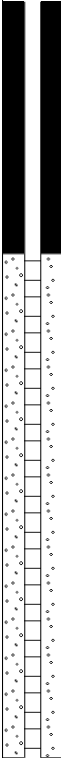
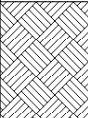
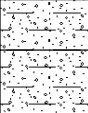
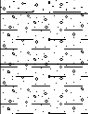
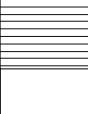
Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 03/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS20	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES					TOPSOIL: Grass over light brown, slightly silty, fine to medium sand with fine roots and rootlets.	
		0.50	D		0.40			Dark brown, very clayey, fine to medium SAND. UPPER TUNBRIDGE WELLS SAND	
		1.00 1.00	D SPT	N=21 (2,3/5,5,5,6)	1.00			Very weak, reddish light brown, very clayey MUDSTONE. UPPER TUNBRIDGE WELLS SAND	1
		1.50	D		1.40 1.50			Very weak, light brown mottled grey MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.70	SPT	N=50 (9,13/50 for 275mm)	1.70			Dense light grey, clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to medium, sub-angular sandstone UPPER TUNBRIDGE WELLS SAND End of Borehole at 1.700m	2
									3
									4
									5
									6

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 1.70m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm					Client: Jaynic Properties Ltd				Date: 03/09/2024		
Location: Brighton Road, Horsham					Contractor: Obsidian Geo-Consulting Ltd						
Project No. : 24-1979-P					Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig		
Borehole Number WS21		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.25	ES					TOPSOIL: Grass over light brown, slightly silty, fine to medium sand, with fine roots and rootlets.			
		0.50	D		0.50			Light brown, gravelly, slightly clayey, fine to medium SAND. Gravel is fine to coarse, sub-angular to angular sandstone.			
		0.70			0.70			UPPER TUNBRIDGE WELLS SAND			
		1.00	D		1.00			Light brown, very gravelly, slightly clayey, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded sandstone.		1	
		1.00	SPT	N=18 (4,3/6,4,4,4)	1.20			UPPER TUNBRIDGE WELLS SAND			
		1.40			1.40			Light brown, very gravelly, very sandy, CLAY. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded sandstone.			
		1.50	D					UPPER TUNBRIDGE WELLS SAND			
		2.00	D					Light brown, very gravelly, sandy, CLAY. Sand is fine to medium. Gravel is fine to coarse, sub-angular to sub-rounded sandstone.			
		2.00	SPT	N=20 (3,4/5,5,5,5)				Weak, dark brown mottled grey MUDSTONE.		2	
		2.50	D					UPPER TUNBRIDGE WELLS SAND			
	2.80	D									
	3.00	SPT	N=50 (5,6/50 for 245mm)	3.00					3		
							End of Borehole at 3.000m				
									4		
									5		
									6		
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 3.00m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.											

Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 06/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS22	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

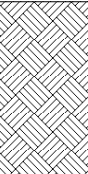
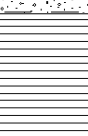
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	ES	N=28 (3,3/4,4,6,14)	0.30			TOPSOIL: Brown, slightly silty, fine to medium sand, with fine roots and rootlets.	1
		0.50	D		0.65			Brown, slightly gravelley, clayey, fine to medium SAND. Gravel is of sub-angular to angular, fine to coarse sandstone.	
					0.90			UPPER TUNBRIDGE WELLS SAND	
		1.00	D		1.20			Light brown, slightly gravelly, clayey, fine to medium SAND. Gravel is of sub-angular to sub-rounded fine to coarse sandstone.	
		1.00	SPT		1.50			UPPER TUNBRIDGE WELLS SAND	
				50 (18,7/50 for 170mm)	1.65			Weak, reddish light brown interbedded SANDSTONE and MUDSTONE.	2
					1.75			UPPER TUNBRIDGE WELLS SAND	
					1.80			Weak, light brown mottled grey, clayey MUDSTONE.	
								UPPER TUNBRIDGE WELLS SAND	
								Medium dense, light brown mottled grey, slightly clayey, fine to medium SAND.	
								UPPER TUNBRIDGE WELLS SAND	3
								Weak, light grey mottled reddish brown SANDSTONE.	
								UPPER TUNBRIDGE WELLS SAND	
								Weak, brown SANDSTONE.	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	4
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	5
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	6
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	
								UPPER TUNBRIDGE WELLS SAND	

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

Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 1.80m bgl due to SPT refusal. 4. Borehole backfilled with arrisings upon completion.

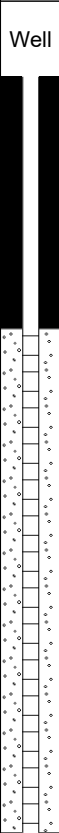
Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 06/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS23	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES					TOPSOIL: Grass over brown, slightly silty, fine to medium sand, with fine roots and rootlets.	
					0.70				
		1.00	D		1.00			Very clayey, slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded sandstone.	1
		1.00	SPT	N=15 (1,2/3,4,4,4)				UPPER TUNBRIDGE WELLS SAND Very weak, light brown mottled grey MUDSTONE.	
					1.50				
		1.50	D		1.50			Very weak, dark brown interbedded SANDSTONE and MUDSTONE.	
					1.70				
		2.00	D		2.20			UPPER TUNBRIDGE WELLS SAND Very weak, light brown mottled grey MUDSTONE.	2
		2.00	SPT	N=26 (3,4/7,6,4,9)				UPPER TUNBRIDGE WELLS SAND	
					2.40			Medium dense light grey, clayey, fine to medium SAND.	
		2.50	D		2.40			UPPER TUNBRIDGE WELLS SAND Weak, light grey, slightly clayey SANDSTONE.	
					2.80			UPPER TUNBRIDGE WELLS SAND	
		2.80	D		2.80			Weak, light brown SANDSTONE.	
					3.00			UPPER TUNBRIDGE WELLS SAND	3
		3.00	SPT	50 (25 for 135mm/50 for 10mm)	3.00			End of Borehole at 3.000m	
									4
									5
									6

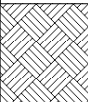
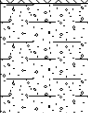
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

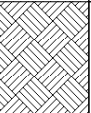
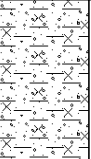
Remarks
 1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 3.00m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

		Percussion Drilling Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 06/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: Boreworx Ltd				Drilling Equipment: Window Sampling Rig			
Borehole Number WS24		Hole Type WS		Level		Logged By DH		Scale 1:30		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.15	ES					TOPSOIL: Grass over light brown, slightly silty, fine to medium sand, with fine roots and rootlets.			
		0.30						Light brown, slightly clayey, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, sub-angular to sub-rounded sandstone.			
		0.50	D					UPPER TUNBRIDGE WELLS SAND			
		0.60						Weak, light brown mottled red SANDSTONE.			
		0.80						UPPER TUNBRIDGE WELLS SAND			
		1.00	D					Very weak, dark brown interbedded SANDSTONE and light brown mottled grey MUDSTONE.		1	
		1.00	SPT	N=16 (3,4/4,4,4,4)	1.00			UPPER TUNBRIDGE WELLS SAND			
								Weak, reddish brown mottled light grey MUDSTONE.			
								UPPER TUNBRIDGE WELLS SAND			
		1.50	D					Medium dense light brown, very clayey, fine to medium SAND.			
		1.60						UPPER TUNBRIDGE WELLS SAND			
		1.70						Weak, reddish brown mottled light grey MUDSTONE.			
		1.90	D					UPPER TUNBRIDGE WELLS SAND		2	
		2.00	SPT	N=18 (6,5/4,4,5,5)	2.00			Weak, reddish dark brown SANDSTONE.			
		2.00						UPPER TUNBRIDGE WELLS SAND			
	2.50	D					Light brown mottled dark brown and grey, slightly sandy MUDSTONE. Sand is fine to medium.				
	2.80	D					UPPER TUNBRIDGE WELLS SAND				
	3.00	SPT	50 (6,13/50 for 180mm)	3.00			Very weak, dark brown SANDSTONE.				
							UPPER TUNBRIDGE WELLS SAND		3		
							End of Borehole at 3.000m				
									4		
									5		
									6		
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with CAT and Genny. 2. No groundwater encountered. 3. Borehole terminated at 3.00m bgl due to SPT refusal. 4. Monitoring well installed as detailed above.											

Percussion Drilling Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 06/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: Boreworx Ltd		Drilling Equipment: Window Sampling Rig	
Borehole Number WS25	Hole Type WS	Level	Logged By DH	Scale 1:30	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES	N=37 (4,6/8,9,9,11)	0.40			TOPSOIL: Light brown, slightly silty, fine to medium sand, with fine roots and rootlets.	1
		0.50	D					Light brown, slightly gravelly, slightly silty, fine to medium SAND, with rare fine roots and rootlets. Gravel is of fine to coarse, sub-angular to sub-rounded sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.00	D		0.85			Very weak, light brown mottled grey SANDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.00	SPT					Very weak, light brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.50	D	50 (25 for 0mm/50 for 5mm)	1.20			Weak, dark brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND	2
		1.80	D		1.40			Weak, dark brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND	
		2.00	SPT		1.70			Weak, dark brown mottled grey SANDSTONE. UPPER TUNBRIDGE WELLS SAND	
				2.00					End of Borehole at 2.000m
									3
									4
									5
									6

		Trial Pit Log							
Project Name: Land at Hornbrook Farm			Client: Jaynic Properties Ltd			Date: 10/09/2024			
Location: Brighton Road, Horsham			Contractor: Obsidian Geo-Consulting Ltd						
Project No. : 24-1979-P			Crew Name: BPH			Equipment: Tracked Excavator			
Location Number TP01		Location Type TP		Level		Logged By SM		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.00 - 0.37	D		0.37			TOPSOIL: Brown, slightly silty, clayey, fine to coarse sand with fine rootlets.	1
		0.50	D					Friable, orange mottled brown, slightly silty, slightly sandy, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
								Friable, grey mottled orange, slightly silty, slightly sandy, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.60	D		1.46			Very weak, greyish orange, slightly clayey, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
						1.67			
									2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.67m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.									

Trial Pit Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 10/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP02	Location Type TP	Level	Logged By SM	Scale 1:25	Page Number Sheet 1 of 1

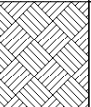
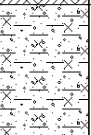
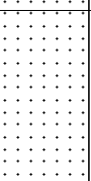
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.31	D		0.31			TOPSOIL: Brown, silty, slightly clayey fine to coarse sand.	1
		0.50	B					Orange, slightly silty, slightly clayey, slightly gravelly, fine to coarse SAND. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone.	
		0.60	D					UPPER TUNBRIDGE WELLS SAND	
		0.80	D		0.72			Very stiff , greyish orange, slightly silty, gravelly CLAY. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone.	
					0.91			UPPER TUNBRIDGE WELLS SAND	
		1.20	D					Weak, orange and grey, slightly clayey, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium.	
					1.40			UPPER TUNBRIDGE WELLS SAND	2
					1.67			Weak, orange, slightly sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium.	
								UPPER TUNBRIDGE WELLS SAND	3
								End of Borehole at 1.670m	
									4
									5

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

Remarks
 1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.67m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.

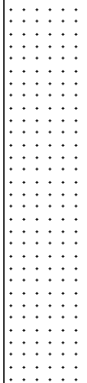
Trial Pit Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 10/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP03	Location Type TP	Level	Logged By SM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D					TOPSOIL: Brown, slightly silty, slightly clayey, slightly gravelly fine to coarse sand. Gravel is fine, sub-angular to angular mudstone and sandstone.	
		0.50	D		0.36			Firm, orange mottled grey, slightly silty, slightly sandy, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
					0.81			Weak, grey mottled orange, slightly clayey, slightly sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	1
					1.12			Weak, grey mottled orange, slightly sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
					1.70			Weak, grey, very clayey, slightly sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.80	D		1.90			Soft, greyish brown, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to angular highly weathered weak mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	2
					2.25			End of Borehole at 2.250m	
									3
									4
									5

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

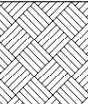
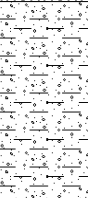
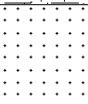
Remarks
 1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit excavated to a maximum depth of 2.25m bgl. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.

Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 10/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator			
Location Number TP04		Location Type TP		Level		Logged By SM		Scale 1:25		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	D		0.34			TOPSOIL: Brown, slightly silty, slightly clayey, slightly gravelly fine to coarse sand. Gravel is fine, sub-angular to angular mudstone and sandstone.		1 -	
		0.40	D					Friable, grey mottled orange, slightly sandy, gravelly CLAY. Gravel is fine to medium, sub-angular to angular mudstone and sandstone.			
								UPPER TUNBRIDGE WELLS SAND			
								Weak, orange, slightly clayey, sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium.			
		1.20	D		0.81			UPPER TUNBRIDGE WELLS SAND Weak, orange, slightly clayey, slightly sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND			
				2.21			End of Borehole at 2.210m		2 -		
									3 -		
									4 -		
									5 -		
Dimensions				Trench Support and Comment				Pumping Data			
Pit Length		Pit Width		Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks	
Remarks											
1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit excavated to a maximum depth of 2.21m bgl. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.											
											

		Trial Pit Log								
Project Name: Land at Hornbrook Farm			Client: Jaynic Properties Ltd			Date: 10/09/2024				
Location: Brighton Road, Horsham			Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P			Crew Name: BPH			Equipment: Tracked Excavator				
Location Number TP05		Location Type TP		Level		Logged By SM		Scale 1:25	Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		0.00 - 0.30	D		0.30			TOPSOIL: Light brown, slightly silty, slightly clayey, slightly gravelly, fine to medium sand. Gravel is fine to medium, sub-angular to angular mudstone, sandstone, and quartz.	1	
	0.30 - 0.65	B					Light brown, slightly silty, slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to angular mudstone, and sandstone. UPPER TUNBRIDGE WELLS SAND			
	0.30 - 0.65	D						Weak, orange, slightly clayey, slightly sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND		
										Weak, orangish brown, slightly silty, slightly clayey, sandy interbedded SANDSTONE and MUDSTONE. UPPER TUNBRIDGE WELLS SAND
										
					0.85				2	
					1.07					
					1.23					
					1.50					
									3	
									4	
									5	
Dimensions		Trench Support and Comment				Pumping Data				
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks	
Remarks										
1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.50m bgl due to refusal. 4. Pit walls stable. 5. Soakaway testing undertaken, see separate sheet. 6. Trial pit backfilled with arisings upon completion.										

Trial Pit Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 10/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP06	Location Type TP	Level	Logged By SM	Scale 1:25	Page Number Sheet 1 of 1

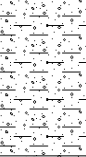
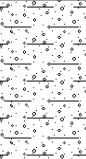
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.25	D		0.34			TOPSOIL: Brown, silty, slightly clayey fine to coarse sand.	1
		0.50	D					Firm, orange mottled grey, slightly sandy, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to angular sandstone and mudstone. UPPER TUNBRIDGE WELLS SAND	
		1.10	B		1.00			Greyish orange, very clayey fine to coarse SAND. UPPER TUNBRIDGE WELLS SAND	
		1.30	D		1.20			Very weak, orange and grey, slightly clayey, very sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.70	D		1.55			Firm, orange mottled grey, sandy, gravelly CLAY. Gravel is fine to medium, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	2
		1.90	B		1.80			Orange, very clayey, slightly gravelly fine to medium SAND. Gravel is fine, sub-angular to angular mudstone and sandstone.	
		2.10	D		2.06			UPPER TUNBRIDGE WELLS SAND	
					2.18			Orange, slightly clayey, very sandy, fine to medium, sub-angular to angular GRAVEL of sandstone and mudstone. UPPER TUNBRIDGE WELLS SAND End of Borehole at 2.180m	3
									4
									5

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

Remarks
 1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 2.18m bgl due to refusal. 4. Pit walls stable. 5. Soakaway testing undertaken, see separate sheet. 6. Trial pit backfilled with arisings upon completion.

Trial Pit Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 10/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP07	Location Type TP	Level	Logged By SM	Scale 1:25	Page Number Sheet 1 of 1

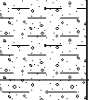
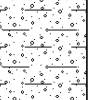
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.34			TOPSOIL: Brown, slightly silty, clayey, fine to coarse sand.	1
		0.50	D					Friable, orange mottled grey, very sandy, slightly gravelly CLAY. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
					0.86			Orange, slightly clayey, very sandy, fine to coarse, sub-angular to angular GRAVEL of very weak, highly weathered sandstone and mudstone. UPPER TUNBRIDGE WELLS SAND	
		1.20	D						
		1.45	D		1.40			Weak, orangish grey, slightly clayey, slightly sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
					1.58			End of Borehole at 1.580m	2
									3
									4
									5

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

Remarks
 1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.58m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.

Trial Pit Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 10/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP08	Location Type TP	Level	Logged By SM	Scale 1:25	Page Number Sheet 1 of 1

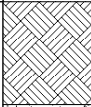
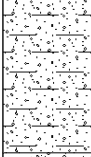
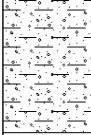
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.32			TOPSOIL: Brown, slightly silty, slightly clayey, slightly gravelly fine to coarse sand. Gravel is fine, sub-angular to angular mudstone and sandstone.	1
		0.50	D					Soft, orangish brown, sandy, gravelly CLAY. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
					0.91			Orange, slightly clayey, very sandy, fine to coarse, sub-angular to angular GRAVEL of mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.20	D						
		1.60	D		1.50			Soft, orange mottled grey, sandy, gravelly CLAY. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.90	D		1.75			Firm, orangish grey mottled brownish orange, slightly sandy, gravelly CLAY. Gravel is fine to medium, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
					2.00			Weak, orange and grey, slightly clayey, slightly sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	2
					2.16			End of Borehole at 2.160m	
									3
									4
									5

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

Remarks
 1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit excavated to a refusal depth of 2.16m bgl.
 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.

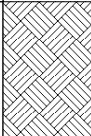
Trial Pit Log

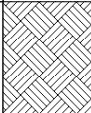
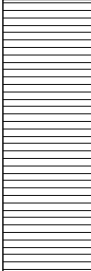
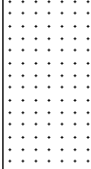
Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 10/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP09	Location Type TP	Level	Logged By SM	Scale 1:25	Page Number Sheet 1 of 1

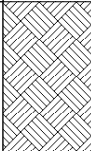
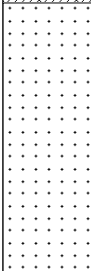
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.34			TOPSOIL: Brown, slightly silty, slightly clayey, slightly gravelly fine to coarse sand. Gravel is fine, sub-angular to angular quartz, flint, mudstone, and sandstone.	1
		0.60	B					Orangish brown, slightly clayey, gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
		0.90	D		0.85			Stiff, orangish grey, slightly sandy, gravelly, CLAY. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.40	D		1.60			Stiff, grey, slightly sandy, gravelly CLAY. Gravel is fine to coarse, sub-angular to angular mudstone and sandstone. UPPER TUNBRIDGE WELLS SAND	
					1.90			Weak, orange, slightly clayey, very sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
								End of Borehole at 1.900m	
									2
									3
									4
									5

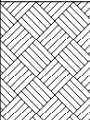
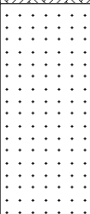
Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

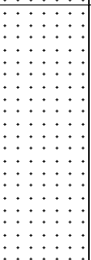
Remarks
 1. Trial Pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.90m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.

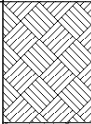
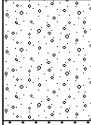
		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 10/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP10		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.45			TOPSOIL: Light brown, slightly silty, fine to medium sand with fine roots and rootlets.	1
		0.45	B					Light brown, slightly silty, gravelly, fine to medium SAND with fine roots and rootlets. Gravel is fine to coarse, sub-angular to angular sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.50	D					1.20	
					1.55			End of Borehole at 1.550m	2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.55m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.									

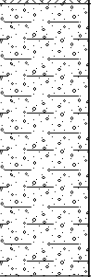
		Trial Pit Log										
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 11/09/2024				
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd								
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator				
Location Number TP11		Location Type TP		Level		Logged By DH		Scale 1:25		Page Number Sheet 1 of 1		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description				
		Depth (m)	Type	Results								
		0.20	D		0.40			TOPSOIL: Light brown, slightly silty, very clayey, fine to medium sand, with fine roots and rootlets.		1		
								Very weak, light brown mottled grey, very clayey, MUDSTONE. UPPER TUNBRIDGE WELLS SAND				
		0.70	D		1.30			Weak, light brown, sandy interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND				
		1.40	D					Weak, dark brown, interbedded SANDSTONE and MUDSTONE. UPPER TUNBRIDGE WELLS SAND				
		2.00	D		1.90							
					2.15		End of Borehole at 2.150m		2			
									3			
									4			
									5			
Dimensions				Trench Support and Comment				Pumping Data				
Pit Length		Pit Width		Pit Stability		Shoring Used		Remarks		Date	Rate	Remarks
Remarks												
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 2.15m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.												

		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 11/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP12		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.25	D		0.50			TOPSOIL: Light brown, slightly silty, fine to medium sand, with fine roots and rootlets.	1
		0.70	D					Weak, reddish light brown interbedded SANDSTONE and MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
		1.50	D					Very weak, clayey, slightly sandy MUDSTONE. UPPER TUNBRIDGE WELLS SAND	
								Weak, dark brown, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
					2.00			End of Borehole at 2.000m	2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 2.00m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.									

		Trial Pit Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 11/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator			
Location Number TP13		Location Type TP		Level		Logged By DH		Scale 1:25		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	D		0.40			TOPSOIL: Dark brown, slightly silty, fine to medium sand, with fine rootlets.		1	
								Weak, dark brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND			
								Weak, light brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND			
							End of Borehole at 1.300m				
		1.00	D		1.10					2	
					1.30						
										3	
										4	
										5	
Dimensions		Trench Support and Comment				Pumping Data					
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks		Date	Rate	Remarks			
Remarks 1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.30m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.											

		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 11/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP14		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.40			TOPSOIL: Light brown, slightly silty, fine to medium sand, with fine rootlets.	1
		0.50	D					Weak, brown, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.00	D					Weak, light brown, sandy Interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.80	D					Weak, brown, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
								Brown, clayey, slightly sandy GRAVEL. Sand is fine to medium. Gravel is fine to medium, sub-angular sandstone. UPPER TUNBRIDGE WELLS SAND	
		2.30						End of Borehole at 2.300m	
									2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 2.30m bgl due to refusal. 4. Pit walls stable. 5. Soakaway testing undertaken, see separate sheet. 6. Trial pit backfilled with arisings upon completion.									

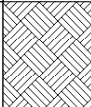
		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 11/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP15		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.40 0.80 1.10 1.40 1.70			TOPSOIL: Brown, slightly silty, fine to medium sand, with fine rootlets.	1
		0.50	D					Light brown, sandy GRAVEL. Sand is fine to medium. Gravel is of fine to coarse, sub-angular sandstone . UPPER TUNBRIDGE WELLS SAND	
		0.90	D					Weak, light brown, slightly sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.20	D					Very stiff, light grey CLAY. UPPER TUNBRIDGE WELLS SAND	
								Weak, light brown, slightly sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
							End of Borehole at 1.700m		
								2	
								3	
								4	
								5	
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.70m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.									

		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 11/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP16		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.40			TOPSOIL: Grass over light brown, slightly silty fine to medium sand with fine rootlets.	1
								Light brown, slightly clayey, sandy GRAVEL. Sand is fine to medium. Gravel is of sub-angular to angular sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.00 1.00 - 1.30	D B					Weak, light brown, slightly sandy, slightly clayey interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND End of Borehole at 1.400m	
					1.30 1.40				2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.40m bgl due to refusal. 4. Pit walls stable. 5. Soakaway testing undertaken, see separate sheet. 6. Trial pit backfilled with arisings upon completion.									

		Trial Pit Log							
Project Name: Land at Hornbrook Farm			Client: Jaynic Properties Ltd			Date: 11/09/2024			
Location: Brighton Road, Horsham			Contractor: Obsidian Geo-Consulting Ltd						
Project No. : 24-1979-P			Crew Name: BPH			Equipment: Tracked Excavator			
Location Number TP17		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D		0.60 0.90 1.15 1.30 1.60			TOPSOIL: Grass over dark brown, slightly silty fine to medium sand, with fine rootlets.	1
		0.70	D					Weak, light brown, slightly sandy, slightly clayey interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.00	D					Weak, greyish light brown, slightly sandy, slightly clayey interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.20	D					Weak, dark brown, sandstone. UPPER TUNBRIDGE WELLS SAND	
								Weak, greyish light brown, slightly sandy, slightly clayey interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
								End of Borehole at 1.600m	
									2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.60m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.									

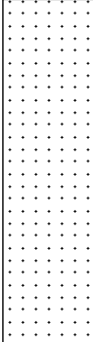
Trial Pit Log

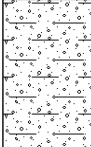
Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 11/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP18	Location Type TP	Level	Logged By DH	Scale 1:25	Page Number Sheet 1 of 1

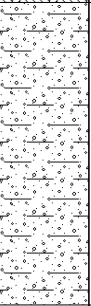
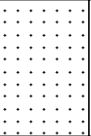
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.35			TOPSOIL: Grass over brown, slightly silty sand with fine rootlets. Sand is fine to medium.	1
		0.50	D					Weak, reddish light brown, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.00 - 1.30	B		0.90			Very weak, light brown, clayey, slightly sandy MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
					1.00			Greyish light brown, slightly gravelly, fine to medium SAND. Gravel is of fine to coarse, sub-angular to angular sandstone and mudstone. UPPER TUNBRIDGE WELLS SAND	
					1.30			Weak, reddish light brown, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
					1.50			End of Borehole at 1.500m	2
									3
									4
									5

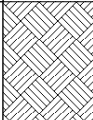
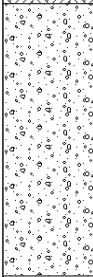
Dimensions		Trench Support and Comment			Pumping Data		
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks	Date	Rate	Remarks

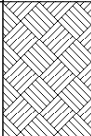
Remarks 1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.50m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.							
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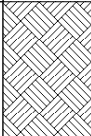
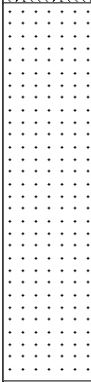
		Trial Pit Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd			Date: 11/09/2024				
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: BPH			Equipment: Tracked Excavator				
Location Number TP19		Location Type TP		Level		Logged By DH		Scale 1:25		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	D		0.35			TOPSOIL: Grass over brown, slightly silty, fine to medium sand with fine rootlets.		1	
		0.50	D					Light brown, sandy, interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND			
		1.00	D		1.50 1.60						
		1.50	D					Dark brown, very sandy, slightly silty interbedded SANDSTONE and MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND End of Borehole at 1.600m			
										2	
										3	
										4	
										5	
Dimensions		Trench Support and Comment				Pumping Data					
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks		
Remarks 1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.60m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.											

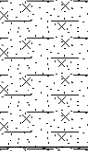
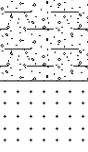
		Trial Pit Log												
Project Name: Land at Hornbrook Farm					Client: Jaynic Properties Ltd					Date: 11/09/2024				
Location: Brighton Road, Horsham					Contractor: Obsidian Geo-Consulting Ltd									
Project No. : 24-1979-P					Crew Name: BPH					Equipment: Tracked Excavator				
Location Number TP20		Location Type TP		Level		Logged By DH		Scale 1:25		Page Number Sheet 1 of 1				
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description						
		Depth (m)	Type	Results										
		0.10	ES		0.25			MADE GROUND: Grass over light brown, very gravelly, fine to medium sand. Gravel is fine to medium, angular sandstone and rare chert.		1				
		0.50	ES					MADE GROUND: Reworked natural strata recovered as light brown, sandy, slightly clayey gravel. Sand is fine to medium. Gravel is fine to coarse, sub-angular to angular sandstone and rare chert.						
		0.75	D						Brown, slightly clayey, sandy GRAVEL. Sand is fine to medium. Gravel is fine to coarse, sub-angular to angular sandstone and rare chert. UPPER TUNBRIDGE WELLS SAND					
		1.00	ES						End of Borehole at 1.250m					
					1.25					2				
										3				
										4				
										5				
Dimensions				Trench Support and Comment				Pumping Data						
Pit Length		Pit Width		Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks			
Remarks														
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.25m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.														

		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 12/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP21		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	D		0.30			TOPSOIL: Grass over dark brown, gravelly, fine to medium sand. Gravel is fine to coarse, sub-angular to angular sandstone.	1
		0.50	D					Light brown, sandy, slightly clayey GRAVEL with high cobble content. Sand is fine to medium. Gravel is fine to coarse, sub-angular to angular sandstone. Cobbles are sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.00	D						
		1.50	D					Weak, light brown, slightly sandy, slightly clayey interbedded MUDSTONE AND SANDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
					1.75			End of Borehole at 1.750m	2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.75m bgl due to refusal. 4. Pit walls stable. 5. Soakaway testing undertaken, see separate sheet. 6. Trial pit backfilled with arisings upon completion.									

		Trial Pit Log							
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 12/09/2024	
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd					
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator	
Location Number TP22		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.40			TOPSOIL: Grass over light brown, slightly gravelly, fine to medium sand. Gravel is fine to coarse, sub-angular to angular sandstone.	1
		0.50	D					Light brown, sandy, slightly silty, GRAVEL with cobbles. Sand is fine to medium. Gravel is fine to coarse sub-angular to angular sandstone. Cobbles are of sandstone. UPPER TUNBRIDGE WELLS SAND	
		1.00	D						
					1.30				
					1.45			Very weak, light brown, slightly sandy SANDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND End of Borehole at 1.450m	
									2
									3
									4
									5
Dimensions		Trench Support and Comment				Pumping Data			
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks									
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.45m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.									

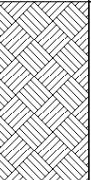
		Trial Pit Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 12/09/2024			
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator			
Location Number TP23		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1		
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	D		0.45			TOPSOIL: Grass over light brown, slightly gravelly sand. Sand is fine to medium. Gravel is fine to coarse, sub-angular to angular sandstone.	1		
		0.50	D					Weak, greyish light brown, very sandy, interbedded MUDSTONE and SANDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND			
		1.00	D		1.65					End of Borehole at 1.650m	2
		1.50	D								
									3		
									4		
									5		
Dimensions		Trench Support and Comment				Pumping Data					
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks		
Remarks											
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.65m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.											

		Trial Pit Log								
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd				Date: 12/09/2024		
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd						
Project No. : 24-1979-P				Crew Name: BPH				Equipment: Tracked Excavator		
Location Number TP24		Location Type TP		Level		Logged By DH		Scale 1:25	Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
		Depth (m)	Type	Results						
		0.20	D		0.45			TOPSOIL: Grass over light brown, slightly gravelley, fine to medium sand. Gravel is fine to coarse, sub-angular to angular sandstone.	1	
		0.50	D					Weak, greyish light brown, sandy, clayey interbedded MUDSTONE AND SANDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND		
		1.00	D		1.70			Weak, greyish light brown, very clayey interbedded MUDSTONE AND SANDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND		2
		1.80	D					End of Borehole at 2.000m		
					2.00				5	
Dimensions		Trench Support and Comment				Pumping Data				
Pit Length	Pit Width	Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks	
Remarks										
1.Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 2.00m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.										

		Trial Pit Log									
Project Name: Land at Hornbrook Farm				Client: Jaynic Properties Ltd			Date: 12/09/2024				
Location: Brighton Road, Horsham				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 24-1979-P				Crew Name: BPH			Equipment: Tracked Excavator				
Location Number TP25		Location Type TP		Level		Logged By DH		Scale 1:25		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.25	D		0.50 0.75 - 1.00 1.00 1.30 1.65			TOPSOIL: Grass over dark brown, slightly silty, fine to medium sand, with fine rootlets.		1	
		0.75 - 1.00	B					Light brown, slightly silty, slightly clayey fine to medium SAND. UPPER TUNBRIDGE WELLS SAND			
								Light brown, very clayey, slightly gravelly fine to medium SAND. Gravel is of fine to coarse sub-angular to angular sandstone. UPPER TUNBRIDGE WELLS SAND			
								Weak, light brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND			
							End of Borehole at 1.650m				
									2		
									3		
									4		
									5		
Dimensions				Trench Support and Comment				Pumping Data			
Pit Length		Pit Width		Pit Stability	Shoring Used	Remarks			Date	Rate	Remarks
Remarks											
1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.65m bgl due to refusal. 4. Pit walls stable. 5. Soakaway testing undertaken, see separate sheet. 6. Trial pit backfilled with arisings upon completion.											

Trial Pit Log

Project Name: Land at Hornbrook Farm		Client: Jaynic Properties Ltd		Date: 12/09/2024	
Location: Brighton Road, Horsham		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 24-1979-P		Crew Name: BPH		Equipment: Tracked Excavator	
Location Number TP26	Location Type TP	Level	Logged By DH	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	D					TOPSOIL: Grass over light brown, slightly gravelly, fine to medium sand, with fine roots and rootlets. Gravel is fine to coarse, sub-angular to angular sandstone.	
					0.60			Weak, reddish light brown SANDSTONE. UPPER TUNBRIDGE WELLS SAND	1
		1.00	D		1.20			Weak, reddish light brown, slightly sandy, slightly silty interbedded MUDSTONE AND SANDSTONE. UPPER TUNBRIDGE WELLS SAND	
					1.40			Very weak, greyish light brown, slightly sandy, slightly silty MUDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	
		1.50	D		1.70			Weak, greyish light brown, slightly sandy, slightly silty interbedded MUDSTONE AND SANDSTONE. Sand is fine to medium. UPPER TUNBRIDGE WELLS SAND	2
					1.90			End of Borehole at 1.900m	
									3
									4
									5

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

Remarks
 1. Trial pit position scanned with CAT and Genny. 2. No groundwater encountered. 3. Trial pit terminated at 1.90m bgl due to refusal. 4. Pit walls stable. 5. Trial pit backfilled with arisings upon completion.

Appendix C

Chemical Laboratory Analysis Results





Obsidian Geo-Consulting Ltd
Unit C4
Castle Vale Enterprise Park
Park Lane
Birmingham
West Midlands
B35 6LJ

t: (07715) 527530

e: steven.dempsey@obsidian-geoconsulting.co.uk

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

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 24-040780

Project / Site name: Hornbrook Farm, Horsham

Samples received on: 06/09/2024

Your job number: 24-1979-P

**Samples instructed on/
Analysis started on:** 06/09/2024

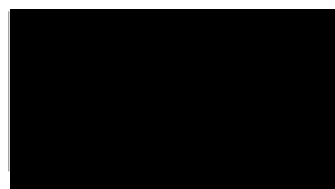
Your order number: 01594

Analysis completed by: 13/09/2024

Report Issue Number: 1

Report issued on: 13/09/2024

Samples Analysed: 35 soil samples



Signed:

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

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

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

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

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310064	310065	310066	310067	310068
Sample Reference				WS01	WS02	WS03	WS04	WS05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.10	0.20	0.10
Date Sampled				02/09/2024	02/09/2024	02/09/2024	02/09/2024	02/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	16	15	13	12
Total mass of sample received	kg	0.1	NONE	1	1.1	1.1	1	1.1

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MMI	MMI	-	MMI	MMI

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.9	7.1	-	6.8	7.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	17	14	-	14	13
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	8.49	6.81	-	6.94	6.5
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Organic Matter (automated)	%	0.1	MCERTS	-	4.4	-	3.1	-

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	0.13	0.07	-	0.11	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.11	-	0.27	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.26	0.63	-	1	0.14
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.15	-	0.25	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.74	1.6	-	5	0.38
Pyrene	mg/kg	0.05	MCERTS	0.64	1.4	-	4.5	0.34
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33	0.78	-	2.5	0.18
Chrysene	mg/kg	0.05	MCERTS	0.48	0.99	-	3.3	0.26
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.54	1.2	-	4.1	0.32
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.24	0.5	-	2	0.14
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.38	0.87	-	3.3	0.19
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.23	0.47	-	1.8	0.12
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.11	-	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.28	0.48	-	2	0.14

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.25	9.4	-	30.1	2.22
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310064	310065	310066	310067	310068
Sample Reference				WS01	WS02	WS03	WS04	WS05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.10	0.20	0.10
Date Sampled				02/09/2024	02/09/2024	02/09/2024	02/09/2024	02/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	9	-	9.5	8.3
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	0.5	-	0.5	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	-	0.2	0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	1.9	6.3	-	2.6	2.8
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	< 1.80	< 1.80	-	< 1.80	< 1.80
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	16	-	15	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	13	-	17	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	51	44	-	57	40
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.8	6.6	-	7	8.4
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	1.3
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	40	-	51	49

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	-	-	< 0.010	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	-	-	< 0.010	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	-	-	< 0.010	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	-	-	< 10	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	-	-	< 0.010	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	-	-	< 0.010	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	< 0.020	-	-	< 0.020	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	-	-	14	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	-	-	38	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	< 10	-	-	51	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	-	-	< 5.0	-
Benzene	µg/kg	5	MCERTS	< 5.0	-	-	< 5.0	-
Toluene	µg/kg	5	MCERTS	< 5.0	-	-	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	-	< 5.0	-
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	< 5.0	-
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	< 5.0	-

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310064	310065	310066	310067	310068
Sample Reference				WS01	WS02	WS03	WS04	WS05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.10	0.10	0.20	0.10
Date Sampled				02/09/2024	02/09/2024	02/09/2024	02/09/2024	02/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	< 10	-	-
Alachlor	µg/kg	10	NONE	-	-	< 10	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	< 10	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	< 10	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	< 10	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	< 10	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Tecnazene	µg/kg	10	NONE	-	-	< 10	-	-
Aldrin	µg/kg	10	NONE	-	-	< 10	-	-
Beta-BHC	µg/kg	10	NONE	-	-	< 10	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	< 10	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	< 10	-	-
Delta-BHC	µg/kg	10	NONE	-	-	< 10	-	-
Dieldrin	µg/kg	10	NONE	-	-	< 10	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	< 10	-	-
Endrin	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	< 10	-	-
Isodrin	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	< 10	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	< 10	-	-
Trifluralin	µg/kg	10	NONE	-	-	< 10	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	< 10	-	-	-	-
Prometryn	µg/kg	10	NONE	< 10	-	-	-	-
Propazine	µg/kg	10	NONE	< 10	-	-	-	-
Trietazine	µg/kg	10	NONE	< 10	-	-	-	-
Atrazine	µg/kg	10	NONE	< 10	-	-	-	-
Cyanazine	µg/kg	10	NONE	< 10	-	-	-	-
Simazine	µg/kg	10	NONE	< 10	-	-	-	-
Terbutylazine	µg/kg	10	NONE	< 10	-	-	-	-

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310069	310070	310071	310072	310073
Sample Reference				WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10	0.20	0.10	0.20
Date Sampled				02/09/2024	02/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	54.3	45.8
Moisture Content	%	0.01	NONE	14	14	13	11	13
Total mass of sample received	kg	0.1	NONE	1.1	1.1	1.1	1	1.1

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MMI	MMI	-	MMI	MMI

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.8	6.8	-	7.4	7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	16	15	-	17	12
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	8.11	7.37	-	8.53	6.02
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	< 1.0
Organic Matter (automated)	%	0.1	MCERTS	-	2.5	-	-	2.3

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.12	0.13	-	0.15	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.32	0.26	-	0.55	0.15
Pyrene	mg/kg	0.05	MCERTS	0.27	0.22	-	0.49	0.12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.17	0.11	-	0.28	0.07
Chrysene	mg/kg	0.05	MCERTS	0.21	0.16	-	0.38	0.12
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.27	0.17	-	0.43	0.11
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	0.09	-	0.19	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.16	0.12	-	0.26	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.11	0.09	-	0.17	0.06
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.13	0.11	-	0.2	0.06

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.83	1.46	-	3.09	< 0.80
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310069	310070	310071	310072	310073
Sample Reference				WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10	0.20	0.10	0.20
Date Sampled				02/09/2024	02/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	9.1	-	7.7	8.8
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	0.4	-	0.4	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.2	-	0.2	< 0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	1.6	5	-	3	< 1.2
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	< 1.80	< 1.80	-	< 1.80	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	17	-	17	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	14	-	13	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	36	47	-	31	29
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.6	8.4	-	15	6.4
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.1	1.4	-	1.7	1.2
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	50	-	62	34

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	< 10	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-	< 0.020	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	< 10	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	< 10	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	< 10	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	< 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	5	MCERTS	-	-	-	< 5.0	-
o-Xylene	µg/kg	5	MCERTS	-	-	-	< 5.0	-

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310069	310070	310071	310072	310073
Sample Reference				WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10	0.20	0.10	0.20
Date Sampled				02/09/2024	02/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	< 10	-	-	< 10
Alachlor	µg/kg	10	NONE	-	< 10	-	-	< 10
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	< 10	-	-	< 10
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	< 10	-	-	< 10
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	< 10	-	-	< 10
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	< 10	-	-	< 10
Hexachlorobutadiene	µg/kg	10	NONE	-	< 10	-	-	< 10
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	< 10	-	-	< 10
Endosulfan sulfate	µg/kg	10	NONE	-	< 10	-	-	< 10
Hexachlorobenzene	µg/kg	10	NONE	-	< 10	-	-	< 10
Pentachlorobenzene	µg/kg	10	NONE	-	< 10	-	-	< 10
Technazene	µg/kg	10	NONE	-	< 10	-	-	< 10
Aldrin	µg/kg	10	NONE	-	< 10	-	-	< 10
Beta-BHC	µg/kg	10	NONE	-	< 10	-	-	< 10
Cis-Chlordane	µg/kg	10	NONE	-	< 10	-	-	< 10
Chlorothalonil	µg/kg	10	NONE	-	< 10	-	-	< 10
Delta-BHC	µg/kg	10	NONE	-	< 10	-	-	< 10
Dieldrin	µg/kg	10	NONE	-	< 10	-	-	< 10
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	< 10	-	-	< 10
Endrin	µg/kg	10	NONE	-	< 10	-	-	< 10
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	< 10	-	-	< 10
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	< 10	-	-	< 10
Isodrin	µg/kg	10	NONE	-	< 10	-	-	< 10
O,p'-DDD	µg/kg	10	NONE	-	< 10	-	-	< 10
O,p'-DDE	µg/kg	10	NONE	-	< 10	-	-	< 10
O,p'-DDT	µg/kg	10	NONE	-	< 10	-	-	< 10
P,p'-DDD	µg/kg	10	NONE	-	< 10	-	-	< 10
P,p'-DDE	µg/kg	10	NONE	-	< 10	-	-	< 10
P,p'-DDT	µg/kg	10	NONE	-	< 10	-	-	< 10
P,p'-Methoxychlor	µg/kg	10	NONE	-	< 10	-	-	< 10
Trans-Chlordane	µg/kg	10	NONE	-	< 10	-	-	< 10
Trifluralin	µg/kg	10	NONE	-	< 10	-	-	< 10

Herbicides

Terbutryn	µg/kg	10	NONE	-	-	< 10	-	-
Prometryn	µg/kg	10	NONE	-	-	< 10	-	-
Propazine	µg/kg	10	NONE	-	-	< 10	-	-
Trietazine	µg/kg	10	NONE	-	-	< 10	-	-
Atrazine	µg/kg	10	NONE	-	-	< 10	-	-
Cyanazine	µg/kg	10	NONE	-	-	< 10	-	-
Simazine	µg/kg	10	NONE	-	-	< 10	-	-
Terbutylazine	µg/kg	10	NONE	-	-	< 10	-	-

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310074	310075	310076	310077	310078
Sample Reference				WS11	WS12	WS13	WS14	WS15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.30	0.20	0.10
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	64.9	41	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	13	16	12	14
Total mass of sample received	kg	0.1	NONE	1.1	1.1	1.1	1.1	1

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	MMI	MMI	MMI	MMI	MMI

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.3	7.3	5.5	7.8	6.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	19	15	22	23	26
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.4	7.43	10.8	11.5	13.1
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	1.4	< 1.0	< 1.0	< 1.0	< 1.0
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	3.3	-

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.06	0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.14	< 0.05	< 0.05	0.12	0.3
Acenaphthene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	< 0.05	0.06
Fluorene	mg/kg	0.05	MCERTS	0.15	< 0.05	< 0.05	< 0.05	0.09
Phenanthrene	mg/kg	0.05	MCERTS	2.2	0.07	0.08	0.51	1.9
Anthracene	mg/kg	0.05	MCERTS	0.35	< 0.05	< 0.05	0.12	0.48
Fluoranthene	mg/kg	0.05	MCERTS	4	0.18	0.25	2.1	6.2
Pyrene	mg/kg	0.05	MCERTS	3.4	0.17	0.23	1.9	5.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.8	0.1	0.11	1.2	3.2
Chrysene	mg/kg	0.05	MCERTS	2.3	0.13	0.18	1.3	3.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.7	0.11	0.25	1.6	4.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.4	0.06	0.07	0.84	1.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.1	0.06	0.15	1.4	3.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.2	< 0.05	0.12	0.7	1.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.24	< 0.05	< 0.05	0.17	0.39
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.4	0.07	0.13	0.79	1.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	23.4	0.94	1.59	12.8	34.5
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310074	310075	310076	310077	310078
Sample Reference				WS11	WS12	WS13	WS14	WS15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.30	0.20	0.10
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.9	8.3	8.7	8.3	8.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	0.8	0.5	0.9	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	0.2	0.2	0.2
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	3.1	< 1.2	5.1	3.7	3.3
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	< 1.80	-	< 1.80	< 1.80	< 1.80
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	19	16	15	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	14	20	15	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	31	43	47	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8	8.4	8	7.5	8.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	1.4	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	42	40	53	51	52

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	< 10

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-	-	< 0.020
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	< 10
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	20
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	20

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	< 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	5	MCERTS	-	-	-	-	< 5.0
o-Xylene	µg/kg	5	MCERTS	-	-	-	-	< 5.0

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310074	310075	310076	310077	310078
Sample Reference				WS11	WS12	WS13	WS14	WS15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	0.30	0.20	0.10
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	< 10	-	-
Alachlor	µg/kg	10	NONE	-	-	< 10	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	< 10	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	< 10	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	< 10	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	< 10	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Tecnazene	µg/kg	10	NONE	-	-	< 10	-	-
Aldrin	µg/kg	10	NONE	-	-	< 10	-	-
Beta-BHC	µg/kg	10	NONE	-	-	< 10	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	< 10	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	< 10	-	-
Delta-BHC	µg/kg	10	NONE	-	-	< 10	-	-
Dieldrin	µg/kg	10	NONE	-	-	< 10	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	< 10	-	-
Endrin	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	< 10	-	-
Isodrin	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	< 10	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	< 10	-	-
Trifluralin	µg/kg	10	NONE	-	-	< 10	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	< 10	-	-	< 10
Prometryn	µg/kg	10	NONE	-	< 10	-	-	< 10
Propazine	µg/kg	10	NONE	-	< 10	-	-	< 10
Trietazine	µg/kg	10	NONE	-	< 10	-	-	< 10
Atrazine	µg/kg	10	NONE	-	< 10	-	-	< 10
Cyanazine	µg/kg	10	NONE	-	< 10	-	-	< 10
Simazine	µg/kg	10	NONE	-	< 10	-	-	< 10
Terbutylazine	µg/kg	10	NONE	-	< 10	-	-	< 10

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310079	310080	310081	310082	310083
Sample Reference				WS16	WS17	WS18	WS19	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.25	0.10	0.20	0.20
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	9.7	10	11	10
Total mass of sample received	kg	0.1	NONE	1	1.1	1.1	1.1	1.1

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	-	MMI	DSO	DSO	DSO

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	-	6.3	8.1	6.2	7.3
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	8.5	6.4	9.9	14
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	4.26	3.22	4.94	6.8
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	-	-	-	-
Sulphide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Organic Matter (automated)	%	0.1	MCERTS	1.6	-	-	2.4	-

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.11	0.17
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.13	0.12	0.69	0.83
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.12	0.17
Fluoranthene	mg/kg	0.05	MCERTS	-	0.28	0.33	1.8	2.9
Pyrene	mg/kg	0.05	MCERTS	-	0.25	0.29	1.6	2.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.16	0.16	0.85	1.5
Chrysene	mg/kg	0.05	MCERTS	-	0.18	0.19	1.1	1.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	0.22	0.23	1.2	2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	0.09	0.08	0.5	1.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.17	0.14	0.94	1.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.14	0.13	0.53	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.13	0.25
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.15	0.16	0.63	1.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	1.78	1.83	10.1	17.5
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310079	310080	310081	310082	310083
Sample Reference				WS16	WS17	WS18	WS19	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.25	0.10	0.20	0.20
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	8.6	9.1	9.2	8.1
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.9	0.4	0.4	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	0.3	0.4
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	-	< 1.2	< 1.2	1.9	2.9
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	-	-	-	< 1.80	< 1.80
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	15	16	17	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	13	13	14	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	89	31	40	67
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	7.1	8.1	9.2	8.7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	1.3	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	50	47	57	69

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	-	-	-	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	-	-	-	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	< 0.010	-	-	-	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	-	-	-	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	-	-	-	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	-	-	-	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	-	-	-	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	-	-	-	< 10

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	-	-	-	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	< 0.010	-	-	-	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	< 0.020	-	-	-	< 0.020
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	-	-	-	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	-	-	-	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	-	-	-	< 10
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	-	-	-	14
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	< 10	-	-	-	14

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	-	-	-	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	-	-	-	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	-	-	-	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	-	-	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	< 5.0

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310079	310080	310081	310082	310083
Sample Reference				WS16	WS17	WS18	WS19	WS20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.25	0.10	0.20	0.20
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	< 10	-	-	-	-
Alachlor	µg/kg	10	NONE	< 10	-	-	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	< 10	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	< 10	-	-	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	< 10	-	-	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	< 10	-	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	< 10	-	-	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	< 10	-	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	< 10	-	-	-	-
Technazene	µg/kg	10	NONE	< 10	-	-	-	-
Aldrin	µg/kg	10	NONE	< 10	-	-	-	-
Beta-BHC	µg/kg	10	NONE	< 10	-	-	-	-
Cis-Chlordane	µg/kg	10	NONE	< 10	-	-	-	-
Chlorothalonil	µg/kg	10	NONE	< 10	-	-	-	-
Delta-BHC	µg/kg	10	NONE	< 10	-	-	-	-
Dieldrin	µg/kg	10	NONE	< 10	-	-	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	< 10	-	-	-	-
Endrin	µg/kg	10	NONE	< 10	-	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	< 10	-	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	< 10	-	-	-	-
Isodrin	µg/kg	10	NONE	< 10	-	-	-	-
O,p'-DDD	µg/kg	10	NONE	< 10	-	-	-	-
O,p'-DDE	µg/kg	10	NONE	< 10	-	-	-	-
O,p'-DDT	µg/kg	10	NONE	< 10	-	-	-	-
P,p'-DDD	µg/kg	10	NONE	< 10	-	-	-	-
P,p'-DDE	µg/kg	10	NONE	< 10	-	-	-	-
P,p'-DDT	µg/kg	10	NONE	< 10	-	-	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	< 10	-	-	-	-
Trans-Chlordane	µg/kg	10	NONE	< 10	-	-	-	-
Trifluralin	µg/kg	10	NONE	< 10	-	-	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	-	-	< 10	-
Prometryn	µg/kg	10	NONE	-	-	-	< 10	-
Propazine	µg/kg	10	NONE	-	-	-	< 10	-
Trietazine	µg/kg	10	NONE	-	-	-	< 10	-
Atrazine	µg/kg	10	NONE	-	-	-	< 10	-
Cyanazine	µg/kg	10	NONE	-	-	-	< 10	-
Simazine	µg/kg	10	NONE	-	-	-	< 10	-
Terbutylazine	µg/kg	10	NONE	-	-	-	< 10	-

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310084	310085	310086	310087	310088
Sample Reference				WS21	WS01	WS03	WS06	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	1.00	1.00	1.00	0.50
Date Sampled				03/09/2024	02/09/2024	02/09/2024	02/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	38.7	64
Moisture Content	%	0.01	NONE	11	16	15	11	7.8
Total mass of sample received	kg	0.1	NONE	1.1	0.7	0.7	0.7	0.7

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	DSO	-	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	5.4	8.4	7.8	8.5	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	15	24	8.7	6.7	7.4
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	7.67	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	11.9	4.33	3.34	3.71
Sulphide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	2.4	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
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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	0.11	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	0.32	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	0.28	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.18	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	0.18	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.23	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.11	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.16	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.15	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.17	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.88	-	-	-	-
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310084	310085	310086	310087	310088
Sample Reference				WS21	WS01	WS03	WS06	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	1.00	1.00	1.00	0.50
Date Sampled				03/09/2024	02/09/2024	02/09/2024	02/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	-	-	-	-
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	3.5	-	-	-	-
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	< 1.80	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	56	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.8	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.9	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	52	-	-	-	-

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-Xylene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310084	310085	310086	310087	310088
Sample Reference				WS21	WS01	WS03	WS06	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	1.00	1.00	1.00	0.50
Date Sampled				03/09/2024	02/09/2024	02/09/2024	02/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	-	-	-
Alachlor	µg/kg	10	NONE	-	-	-	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	-	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	-	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Technazene	µg/kg	10	NONE	-	-	-	-	-
Aldrin	µg/kg	10	NONE	-	-	-	-	-
Beta-BHC	µg/kg	10	NONE	-	-	-	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	-	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	-	-	-
Delta-BHC	µg/kg	10	NONE	-	-	-	-	-
Dieldrin	µg/kg	10	NONE	-	-	-	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	-	-	-
Endrin	µg/kg	10	NONE	-	-	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	-	-
Isodrin	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	-	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	-	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	-	-	-
Trifluralin	µg/kg	10	NONE	-	-	-	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	-	-	-	-
Prometryn	µg/kg	10	NONE	-	-	-	-	-
Propazine	µg/kg	10	NONE	-	-	-	-	-
Trietazine	µg/kg	10	NONE	-	-	-	-	-
Atrazine	µg/kg	10	NONE	-	-	-	-	-
Cyanazine	µg/kg	10	NONE	-	-	-	-	-
Simazine	µg/kg	10	NONE	-	-	-	-	-
Terbutylazine	µg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310089	310090	310091	310092	310093
Sample Reference				WS09	WS10	WS14	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.70	1.00	0.90	1.00
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	29	46.6
Moisture Content	%	0.01	NONE	14	12	9.8	13	13
Total mass of sample received	kg	0.1	NONE	0.7	0.7	0.7	0.7	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	-	-	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.4	5.5	8	7.8	7.5
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	11	5.5	14	10	7.2
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	5.31	2.77	6.95	5.13	3.59
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310089	310090	310091	310092	310093
Sample Reference				WS09	WS10	WS14	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.70	1.00	0.90	1.00
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	-	-	-	-	-
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-Xylene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310089	310090	310091	310092	310093
Sample Reference				WS09	WS10	WS14	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90	1.70	1.00	0.90	1.00
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	-	-	-
Alachlor	µg/kg	10	NONE	-	-	-	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	-	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	-	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Technazene	µg/kg	10	NONE	-	-	-	-	-
Aldrin	µg/kg	10	NONE	-	-	-	-	-
Beta-BHC	µg/kg	10	NONE	-	-	-	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	-	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	-	-	-
Delta-BHC	µg/kg	10	NONE	-	-	-	-	-
Dieldrin	µg/kg	10	NONE	-	-	-	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	-	-	-
Endrin	µg/kg	10	NONE	-	-	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	-	-
Isodrin	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	-	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	-	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	-	-	-
Trifluralin	µg/kg	10	NONE	-	-	-	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	-	-	-	-
Prometryn	µg/kg	10	NONE	-	-	-	-	-
Propazine	µg/kg	10	NONE	-	-	-	-	-
Trietazine	µg/kg	10	NONE	-	-	-	-	-
Atrazine	µg/kg	10	NONE	-	-	-	-	-
Cyanazine	µg/kg	10	NONE	-	-	-	-	-
Simazine	µg/kg	10	NONE	-	-	-	-	-
Terbutylazine	µg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310094	310095	310096	310097	310098
Sample Reference				WS17	WS18	WS19	WS20	WS21
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	1.00	1.00	1.50	1.00
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	38.4	25.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.2	11	11	11	11
Total mass of sample received	kg	0.1	NONE	0.7	0.8	0.8	0.8	0.8

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	-	-	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.4	8.1	6.3	7.4	6.2
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	4.9	4.1	5.2	11	17
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	2.43	2.06	2.62	5.61	8.49
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-	-	-
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Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310094	310095	310096	310097	310098
Sample Reference				WS17	WS18	WS19	WS20	WS21
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	1.00	1.00	1.50	1.00
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	-	-	-	-	-
Chromium (VI) in soil by IC	mg/kg	1.8	NONE	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-Xylene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-040780
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01594

Lab Sample Number				310094	310095	310096	310097	310098
Sample Reference				WS17	WS18	WS19	WS20	WS21
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	1.00	1.00	1.50	1.00
Date Sampled				03/09/2024	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	-	-	-
Alachlor	µg/kg	10	NONE	-	-	-	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	-	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	-	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	-	-
Technazene	µg/kg	10	NONE	-	-	-	-	-
Aldrin	µg/kg	10	NONE	-	-	-	-	-
Beta-BHC	µg/kg	10	NONE	-	-	-	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	-	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	-	-	-
Delta-BHC	µg/kg	10	NONE	-	-	-	-	-
Dieldrin	µg/kg	10	NONE	-	-	-	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	-	-	-
Endrin	µg/kg	10	NONE	-	-	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	-	-
Isodrin	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	-	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	-	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	-	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	-	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	-	-	-
Trifluralin	µg/kg	10	NONE	-	-	-	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	-	-	-	-
Prometryn	µg/kg	10	NONE	-	-	-	-	-
Propazine	µg/kg	10	NONE	-	-	-	-	-
Trietazine	µg/kg	10	NONE	-	-	-	-	-
Atrazine	µg/kg	10	NONE	-	-	-	-	-
Cyanazine	µg/kg	10	NONE	-	-	-	-	-
Simazine	µg/kg	10	NONE	-	-	-	-	-
Terbutylazine	µg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number : 24-040780

Project / Site name: Hornbrook Farm, Horsham

* 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 *
310064	WS01	None Supplied	0.2	Brown sand with gravel and vegetation
310065	WS02	None Supplied	0.1	Brown sand with gravel and vegetation
310066	WS03	None Supplied	0.1	Brown sand with gravel and vegetation
310067	WS04	None Supplied	0.2	Brown sand with gravel and vegetation
310068	WS05	None Supplied	0.1	Brown sand with gravel and vegetation
310069	WS06	None Supplied	0.15	Brown clay and sand with gravel and vegetation
310070	WS07	None Supplied	0.1	Brown sand with gravel and vegetation
310071	WS08	None Supplied	0.2	Brown sand with gravel and vegetation
310072	WS09	None Supplied	0.1	Brown sand with stones
310073	WS10	None Supplied	0.2	Brown sand with stones and vegetation
310074	WS11	None Supplied	0.1	Brown clay and sand with stones
310075	WS12	None Supplied	0.2	Brown sand with stones
310076	WS13	None Supplied	0.3	Brown clay and sand with vegetation
310077	WS14	None Supplied	0.2	Brown clay and sand with vegetation
310078	WS15	None Supplied	0.1	Brown clay and sand
310079	WS16	None Supplied	0.15	Brown loam and clay with gravel and vegetation
310080	WS17	None Supplied	0.25	Brown sand
310081	WS18	None Supplied	0.1	Brown sand
310082	WS19	None Supplied	0.2	Brown clay and sand
310083	WS20	None Supplied	0.2	Brown sand
310084	WS21	None Supplied	0.25	Brown sand with vegetation
310085	WS01	None Supplied	1	Brown clay
310086	WS03	None Supplied	1	Brown clay
310087	WS06	None Supplied	1	Brown clay and sand with stones
310088	WS08	None Supplied	0.5	Brown sand with stones
310089	WS09	None Supplied	0.9	Brown clay
310090	WS10	None Supplied	1.7	Brown clay
310091	WS14	None Supplied	1	Brown clay and sand
310092	WS15	None Supplied	0.9	Brown clay and sand with stones
310093	WS16	None Supplied	1	Brown clay and sand with stones
310094	WS17	None Supplied	1.5	Brown clay and sand with stones
310095	WS18	None Supplied	1	Brown clay with stones
310096	WS19	None Supplied	1	Brown clay and sand with gravel
310097	WS20	None Supplied	1.5	Brown clay and sand with gravel
310098	WS21	None Supplied	1	Brown clay and sand with gravel

Analytical Report Number : 24-040780

Project / Site name: Hornbrook Farm, Horsham

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Cr(VI) in soils by Ion chromatography	Determination of hexavalent chromium in alkaline soil extract by use of ion chromatography with spectrophotometric detection	In-house method	L130B	W	NONE
Pesticides by GC-MS/MS	Determination of Pesticides in soil by GC MS/MS	In-house method	L055B	W	NONE
Herbicides by LC-MS	Determination of Herbicides in soil by LC MS	In-house method	L056B	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil (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

Analytical Report Number : 24-040780

Project / Site name: Hornbrook Farm, Horsham

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

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

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

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

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

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

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

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

The result for sum should be interpreted with caution

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Analytical Report Number : 24-042539

Project / Site name:	Hornbrook Farm, Horsham	Samples received on:	12/09/2024
Your job number:	24-1979-P	Samples instructed on/ Analysis started on:	18/09/2024
Your order number:	01602	Analysis completed by:	24/09/2024
Report Issue Number:	1	Report issued on:	25/09/2024
Samples Analysed:	8 soil samples		

Signed:

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

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

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

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

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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

Analytical Report Number: 24-042539
Project / Site name: Hornbrook Farm, Horsham
Your Order No: 01602

Lab Sample Number				318797	318798	318799	318800	318801
Sample Reference				WS22	WS23	WS24	WS25	WS22
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.30	0.15	0.20	1.00
Date Sampled				06/09/2024	06/09/2024	06/09/2024	06/09/2024	06/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	23.4	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	17	14	16	16
Total mass of sample received	kg	0.1	NONE	1.2	1.2	1.1	1.2	1.2

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	PKU	-	PKU	PKU	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.4	-	5.6	6.2	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	11	-	16	17	9.8
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	5.52	-	8.13	8.23	-
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	-	-	-	4.92
Sulphide	mg/kg	1	MCERTS	< 1.0	-	4.3	< 1.0	-
Organic Matter (automated)	%	0.1	MCERTS	-	1.7	-	2.6	-

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	0.09	-	0.06	0.17	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	0.26	-	0.17	0.61	-
Pyrene	mg/kg	0.05	MCERTS	0.23	-	0.15	0.52	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.11	-	0.09	0.32	-
Chrysene	mg/kg	0.05	MCERTS	0.17	-	0.09	0.34	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.14	-	0.11	0.45	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.07	-	0.05	0.15	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11	-	0.09	0.33	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.08	-	< 0.05	0.26	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	< 0.05	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.09	-	< 0.05	0.27	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.34	-	0.81	3.41	-
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Analytical Report Number: 24-042539
Project / Site name: Hornbrook Farm, Horsham
Your Order No: 01602

Lab Sample Number	318797	318798	318799	318800	318801
Sample Reference	WS22	WS23	WS24	WS25	WS22
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.15	0.30	0.15	0.20	1.00
Date Sampled	06/09/2024	06/09/2024	06/09/2024	06/09/2024	06/09/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	-	10	10	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	-	0.7	0.7	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	-	< 0.2	0.4	-
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	-	< 1.2	< 1.2	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	-	17	19	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	-	18	16	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	59	-	67	45	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.8	-	9.8	12	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	2	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	70	-	57	69	-

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	< 10	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-	< 0.010	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-	< 0.020	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	< 10	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	12	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	12	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	< 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	5	MCERTS	-	-	-	< 5.0	-
o-Xylene	µg/kg	5	MCERTS	-	-	-	< 5.0	-

Analytical Report Number: 24-042539
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01602

Lab Sample Number				318797	318798	318799	318800	318801
Sample Reference				WS22	WS23	WS24	WS25	WS22
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.30	0.15	0.20	1.00
Date Sampled				06/09/2024	06/09/2024	06/09/2024	06/09/2024	06/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	< 10	-	-
Alachlor	µg/kg	10	NONE	-	-	< 10	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	< 10	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	< 10	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	< 10	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	< 10	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	< 10	-	-
Tecnazene	µg/kg	10	NONE	-	-	< 10	-	-
Aldrin	µg/kg	10	NONE	-	-	< 10	-	-
Beta-BHC	µg/kg	10	NONE	-	-	< 10	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	< 10	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	< 10	-	-
Delta-BHC	µg/kg	10	NONE	-	-	< 10	-	-
Dieldrin	µg/kg	10	NONE	-	-	< 10	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	< 10	-	-
Endrin	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	< 10	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	< 10	-	-
Isodrin	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	< 10	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	< 10	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	< 10	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	< 10	-	-
Trifluralin	µg/kg	10	NONE	-	-	< 10	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	< 10	-	-	-
Prometryn	µg/kg	10	NONE	-	< 10	-	-	-
Propazine	µg/kg	10	NONE	-	< 10	-	-	-
Trietazine	µg/kg	10	NONE	-	< 10	-	-	-
Atrazine	µg/kg	10	NONE	-	< 10	-	-	-
Cyanazine	µg/kg	10	NONE	-	< 10	-	-	-
Simazine	µg/kg	10	NONE	-	< 10	-	-	-
Terbuthylazine	µg/kg	10	NONE	-	< 10	-	-	-

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

Analytical Report Number: 24-042539
Project / Site name: Hornbrook Farm, Horsham
Your Order No: 01602

Lab Sample Number				318802	318803	318804
Sample Reference				WS23	WS24	WS25
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				1.00	0.50	1.50
Date Sampled				06/09/2024	06/09/2024	06/09/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	1.6	53.6
Moisture Content	%	0.01	NONE	16	11	10
Total mass of sample received	kg	0.1	NONE	1.2	0.6	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.9	6.3	6.7
Total Cyanide	mg/kg	1	MCERTS	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	11	18	170
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	5.46	8.93	83.5
Sulphide	mg/kg	1	MCERTS	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	-	-
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Analytical Report Number: 24-042539
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01602

Lab Sample Number	318802	318803	318804
Sample Reference	WS23	WS24	WS25
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	1.00	0.50	1.50
Date Sampled	06/09/2024	06/09/2024	06/09/2024
Time Taken	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	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.01	MCERTS	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-
TPHCWG - Aliphatic >EC5 - EC35 EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-

TPHCWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-
TPHCWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	MCERTS	-	-	-
TPHCWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.02	MCERTS	-	-	-
TPHCWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-
TPHCWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-
TPHCWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-
TPHCWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-
TPHCWG - Aromatic >EC5 - EC35 EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-
Benzene	µg/kg	5	MCERTS	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	-	-
o-Xylene	µg/kg	5	MCERTS	-	-	-

Analytical Report Number: 24-042539
 Project / Site name: Hornbrook Farm, Horsham
 Your Order No: 01602

Lab Sample Number	318802	318803	318804
Sample Reference	WS23	WS24	WS25
Sample Number	None Supplied	None Supplied	None Supplied
Depth (m)	1.00	0.50	1.50
Date Sampled	06/09/2024	06/09/2024	06/09/2024
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Pesticides

Alpha-BHC (Benzene Hexachloride)	µg/kg	10	NONE	-	-	-
Alachlor	µg/kg	10	NONE	-	-	-
Gamma-BHC (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-
1,2,3-Trichlorobenzene	µg/kg	10	NONE	-	-	-
1,3,5-Trichlorobenzene	µg/kg	10	NONE	-	-	-
2,6-Dichlorobenzonitrile	µg/kg	10	NONE	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-
1,2,4,5-Tetrachlorobenzene	µg/kg	10	NONE	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	-
Tecnazene	µg/kg	10	NONE	-	-	-
Aldrin	µg/kg	10	NONE	-	-	-
Beta-BHC	µg/kg	10	NONE	-	-	-
Cis-Chlordane	µg/kg	10	NONE	-	-	-
Chlorothalonil	µg/kg	10	NONE	-	-	-
Delta-BHC	µg/kg	10	NONE	-	-	-
Dieldrin	µg/kg	10	NONE	-	-	-
Heptachlor Exo-epoxide	µg/kg	10	NONE	-	-	-
Endrin	µg/kg	10	NONE	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-
Isodrin	µg/kg	10	NONE	-	-	-
O,p'-DDD	µg/kg	10	NONE	-	-	-
O,p'-DDE	µg/kg	10	NONE	-	-	-
O,p'-DDT	µg/kg	10	NONE	-	-	-
P,p'-DDD	µg/kg	10	NONE	-	-	-
P,p'-DDE	µg/kg	10	NONE	-	-	-
P,p'-DDT	µg/kg	10	NONE	-	-	-
P,p'-Methoxychlor	µg/kg	10	NONE	-	-	-
Trans-Chlordane	µg/kg	10	NONE	-	-	-
Trifluralin	µg/kg	10	NONE	-	-	-

Herbicides

Terbutryn	µg/kg	10	NONE	-	-	-
Prometryn	µg/kg	10	NONE	-	-	-
Propazine	µg/kg	10	NONE	-	-	-
Trietazine	µg/kg	10	NONE	-	-	-
Atrazine	µg/kg	10	NONE	-	-	-
Cyanazine	µg/kg	10	NONE	-	-	-
Simazine	µg/kg	10	NONE	-	-	-
Terbuthylazine	µg/kg	10	NONE	-	-	-

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

Analytical Report Number : 24-042539
Project / Site name: Hornbrook Farm, Horsham

* 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 *
318797	WS22	None Supplied	0.15	Brown loam and clay with gravel and vegetation
318798	WS23	None Supplied	0.3	Brown loam and clay with gravel and vegetation
318799	WS24	None Supplied	0.15	Brown loam and clay with vegetation and stones
318800	WS25	None Supplied	0.2	Brown loam and clay with gravel and vegetation
318801	WS22	None Supplied	1	Brown clay and sand
318802	WS23	None Supplied	1	Brown clay and sand
318803	WS24	None Supplied	0.5	Brown sand with stones
318804	WS25	None Supplied	1.5	Brown clay and sand with stones

Analytical Report Number : 24-042539

Project / Site name: Hornbrook Farm, Horsham

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Pesticides by GC-MS/MS	Determination of Pesticides in soil by GC MS/MS	In-house method	L055B	W	NONE
Herbicides by LC-MS	Determination of Herbicides in soil by LC MS	In-house method	L056B	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil (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
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 24-042539

Project / Site name: Hornbrook Farm, Horsham

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

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 30°C.

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.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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

The result for sum should be interpreted with caution

Analytical Report Number : 24-042539

Project / Site name: Hornbrook Farm, Horsham

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

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

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS22	N/A	S	318797	c	Sulphide in soil	L010-PL	c
WS22	N/A	S	318797	c	Total cyanide in soil	L080-PL	c
WS24	N/A	S	318799	c	Sulphide in soil	L010-PL	c
WS24	N/A	S	318799	c	Total cyanide in soil	L080-PL	c
WS25	N/A	S	318800	c	Sulphide in soil	L010-PL	c
WS25	N/A	S	318800	c	Total cyanide in soil	L080-PL	c

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7 Woodshots Meadow,
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Analytical Report Number : 24-042767

Project / Site name:	Hombrook Farm, Horsham	Samples received on:	18/09/2024
Your job number:	24-1979-P	Samples instructed on/ Analysis started on:	18/09/2024
Your order number:	01603	Analysis completed by:	27/09/2024
Report Issue Number:	1	Report issued on:	27/09/2024
Samples Analysed:	5 soil samples		

Signed:

Charlotte Andrew
Key Account Manager
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

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

Analytical Report Number: 24-042767
Project / Site name: Hombrook Farm, Horsham
Your Order No: 01603

Lab Sample Number				320096	320097	320098	320099	320100
Sample Reference				TP20	TP08	TP09	TP24	TP26
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.20	0.90	1.00	1.00
Date Sampled				12/09/2024	10/09/2024	10/09/2024	12/09/2024	12/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	9	14	14	13
Total mass of sample received	kg	0.1	NONE	0.9	0.6	0.7	0.6	0.6

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	-	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.9	7.9	7.9	7.7	7.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	18	21	37	34	100
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.02	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	-	10.7	18.5	16.9	52
Sulphide	mg/kg	1	MCERTS	< 1.0	-	-	-	-

Total Phenols

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

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.3	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Chromium (hexavalent) Low Level	mg/kg	1.2	NONE	< 1.2	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-

Analytical Report Number: 24-042767
Project / Site name: Hombrook Farm, Horsham
Your Order No: 01603

Lab Sample Number				320096	320097	320098	320099	320100
Sample Reference				TP20	TP08	TP09	TP24	TP26
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.20	0.90	1.00	1.00
Date Sampled				12/09/2024	10/09/2024	10/09/2024	12/09/2024	12/09/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	53	-	-	-	-

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	-	-	-	-

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	-	-	-	-
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	-	-	-	-
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	-	-	-	-
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	-	-	-	-
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	-	-	-	-

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 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	5	MCERTS	< 5.0	-	-	-	-
o-Xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-

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

Analytical Report Number : 24-042767

Project / Site name: Hombrook Farm, Horsham

* 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 *
320096	TP20	None Supplied	0.5	Brown clay and sand with gravel
320097	TP08	None Supplied	1.2	Brown clay and sand with gravel
320098	TP09	None Supplied	0.9	Brown clay and sand
320099	TP24	None Supplied	1	Brown clay and sand
320100	TP26	None Supplied	1	Brown clay and sand

Analytical Report Number : 24-042767

Project / Site name: Hombrook Farm, Horsham

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (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
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil (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
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

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 30°C.

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.

Analytical Report Number : 24-042767
Project / Site name: Hombrook Farm, Horsham

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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

Appendix D

Geotechnical Laboratory Analysis Results



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Obsidian Geo-Consulting Limited
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14 October 2024

Report No : GEO/41262/01

Page 1 of 1

For the attention of Mr S Dempsey

Our ref	GEO / 41262	Date samples received	20/09/2024
Your ref	24-1979-P	Date written instructions received	20/09/2024
Order ref	PO-01606	Date testing commenced	21/09/2024
		Date of sample disposal	07/11/2024

Project **LAND AT HORN BROOK FARM, HORSHAM**

Further to your instructions we have pleasure in enclosing the results of the tests you requested in the attached figures.

LABORATORY TEST REPORT

Item No	Test Quantity	Description
1	~	Geochemical Test Summary
~	16	Water Content
2	16	Liquid & Plastic Limits
3	9	Particle Size Distribution

Any opinions or interpretations expressed herein are outside the scope of UKAS accreditation. All results contained in this report are provisional unless signed by an approved signatory. The results contained in this report relate only to samples received in the laboratory and are tested 'as received' unless otherwise stated. This report should not be reproduced, except in full, without the written approval of the laboratory. The results reported are applicable only to the test items received by the laboratory.

All the necessary data required by the documented test procedures has been recorded and will be stored for a period of not less than 6 years. This data will be issued to yourselves at your request. All samples will be disposed of after the date shown above. Written confirmation will be required to retain the samples beyond this period and a storage charge may be applied.

We trust that the above meets your requirements and should you require any further information or assistance, please do not hesitate to contact us.

Yours faithfully
on behalf of **GEOLABS Limited**

J A Reynolds
Director

SUMMARY OF LIQUID AND PLASTIC LIMIT TESTS

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 +A1:2022 %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Percentage Passing 425µm %	Atterberg Classification	Test Type	Sample Condition
TP02	0.80		D	Light brown mottled light grey slightly sandy CLAY.	19.5	40	19	21	100	CI	2	1
TP03	0.50		D	Greyish brown mottled light grey and dark brown slightly sandy CLAY.	21.1	45	19	26	100	CI	2	1
TP07	0.50		D	Multicoloured slightly sandy CLAY.	19.9	47	21	26	100	CI	2	1
TP08	1.60		D	Greyish brown mottled orangish brown and light grey slightly sandy CLAY with rare fine to medium gravel.	17.9	38	20	18	96	CI	2	1
TP15	1.20		D	Light grey mottled light brown and brownish grey CLAY.	19.9	53	20	33	100	CH	2	1
WS01	0.50		D	Greyish brown and light grey mottled light brown slightly sandy CLAY.	18.6	35	21	14	100	CL	2	1
WS03	0.50		D	Brown mottled orangish brown and light grey slightly sandy CLAY.	19.8	49	21	28	100	CI	2	1
WS08	1.00		D	Greyish brown mottled light grey slightly sandy CLAY with rare fine gravel.	16.4	46	20	26	98	CI	1	1
WS10	0.50		D	Light brown and light grey mottled greyish brown slightly sandy CLAY.	19.2	35	20	15	100	CL	2	1
WS11	0.50		D	Light brown mottled light grey slightly sandy CLAY.	20.5	39	21	18	100	CI	2	1
WS12	0.50		D	Light brown and light grey mottled orange CLAY.	24.0	59	24	35	100	CH	2	1
WS14	0.60		D	Light brown mottled light grey slightly sandy CLAY with rare fine to medium gravel.	13.0	35	17	18	99	CL	2	1
WS15	0.50		D	Greyish brown mottled light grey and orangish brown slightly sandy CLAY.	22.8	61	23	38	100	CH	2	1
WS16	0.50		D	Light brown mottled brownish grey very sandy CLAY with much fine to medium gravel.	14.3	32	18	14	85	CL	2	3
WS17	1.00		D	Light brown mottled brownish grey very sandy CLAY with some fine to medium gravel.	13.7	28	17	11	95	CL	2	3

Test Type: 1 - 1 point 80g / 30° fall cone method.
2 - 4 point 80g / 30° fall cone method.

Sample condition: 1 - As Received
2 - Air Dried
3 - Washed & Air Dried

Checked and Approved by:



J A Reynolds - Director
14/10/2024

Project Number:

GEO / 41262

Project Name:

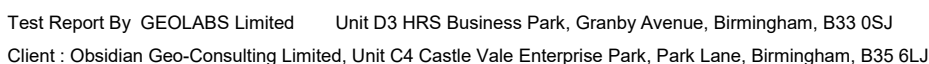
LAND AT HORN BROOK FARM, HORSHAM
24-1979-P



Test Type:	1 - 1 point 80g / 30° fall cone method. 2 - 4 point 80g / 30° fall cone method.	Sample condition:	1 - As Received 2 - Air Dried 3 - Washed & Air Dried
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14/10/2024

LAND AT HORNBROOK FARM, HORSHAM
24-1979-P



LIQUID AND PLASTIC LIMITS

Location TP02
Depth (m) 0.80
Sample Type D

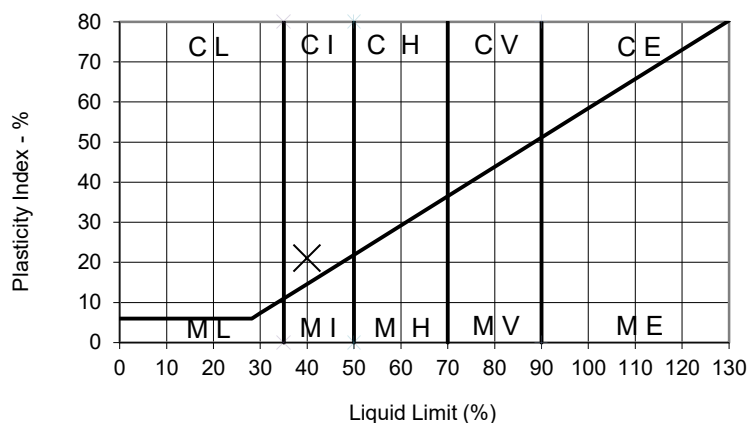
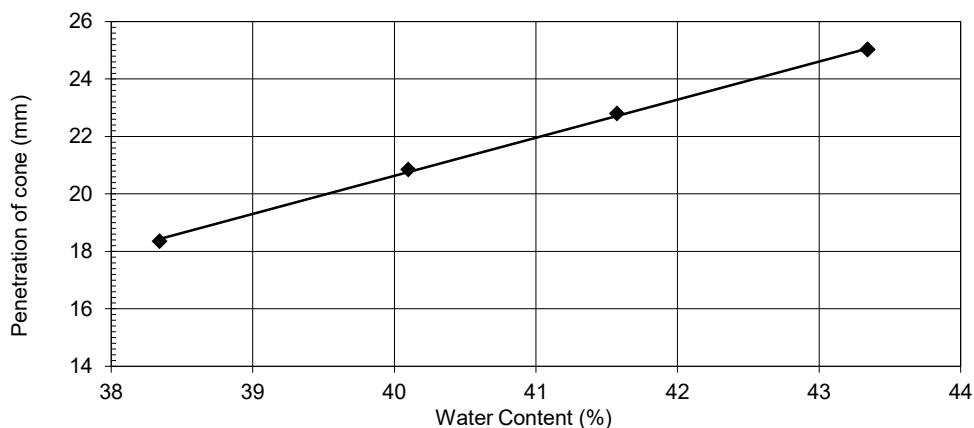
Description:

Light brown mottled light grey slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 19.5 %
 Estimated percentage passing 425µm sieve : 100 %
 Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 40 %
 Plastic Limit : 19 %
 Plasticity Index : 21 %

Equivalent Water Content of material passing 425µm sieve : 19.5 %
 Liquidity Index : 0.02



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location TP03
Depth (m) 0.50
Sample Type D

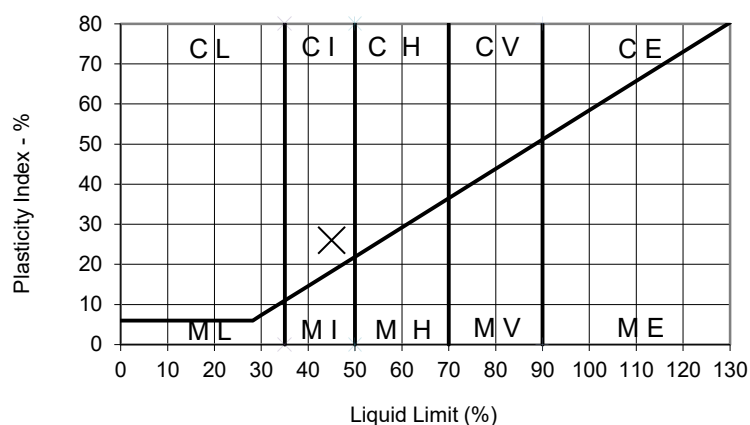
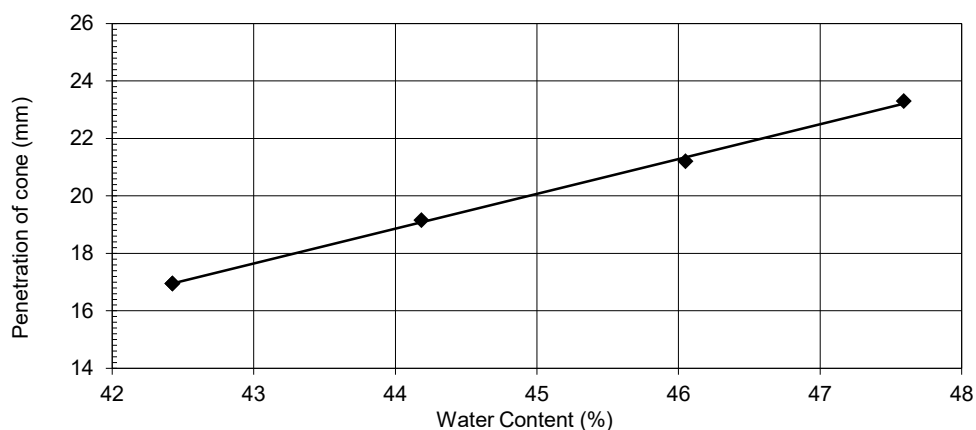
Description:

Greyish brown mottled light grey and dark brown slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 21.1 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 45 %
Plastic Limit : 19 %
Plasticity Index : 26 %

Equivalent Water Content of material passing 425µm sieve : 21.1 %
Liquidity Index : 0.08



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location TP07
Depth (m) 0.50
Sample Type D

Description:

Multicoloured slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 19.9 %

Estimated percentage passing 425µm sieve : 100 %

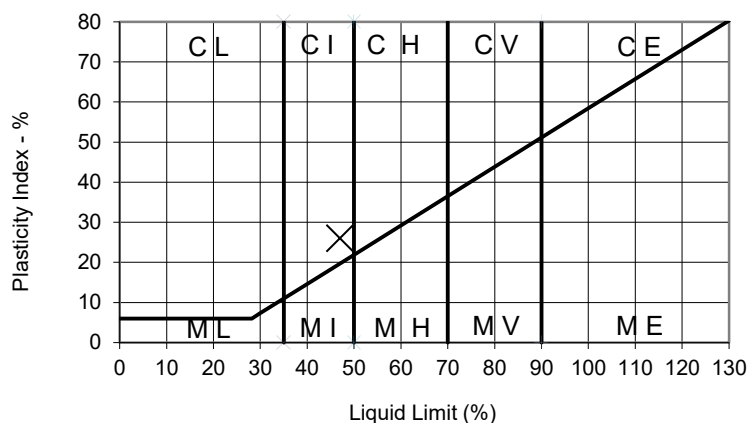
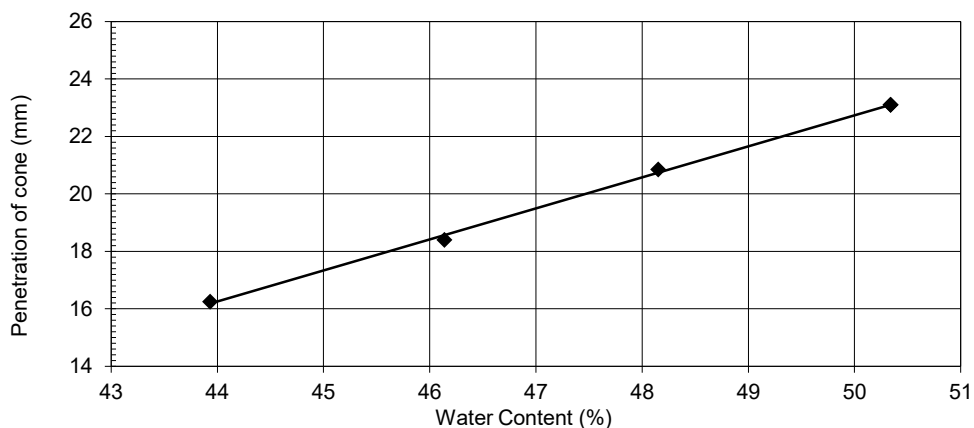
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 47 %

Plastic Limit : 21 %

Plasticity Index : 26 %

Equivalent Water Content of material passing 425µm sieve : 19.9 %

Liquidity Index : -0.04



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LIQUID AND PLASTIC LIMITS

Location TP08
Depth (m) 1.60
Sample Type D

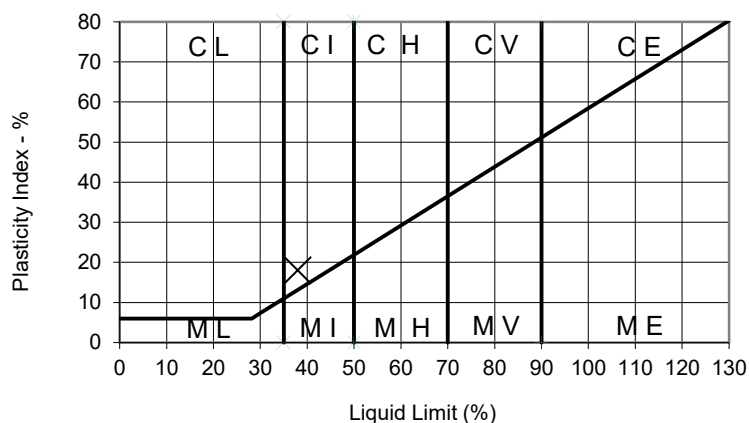
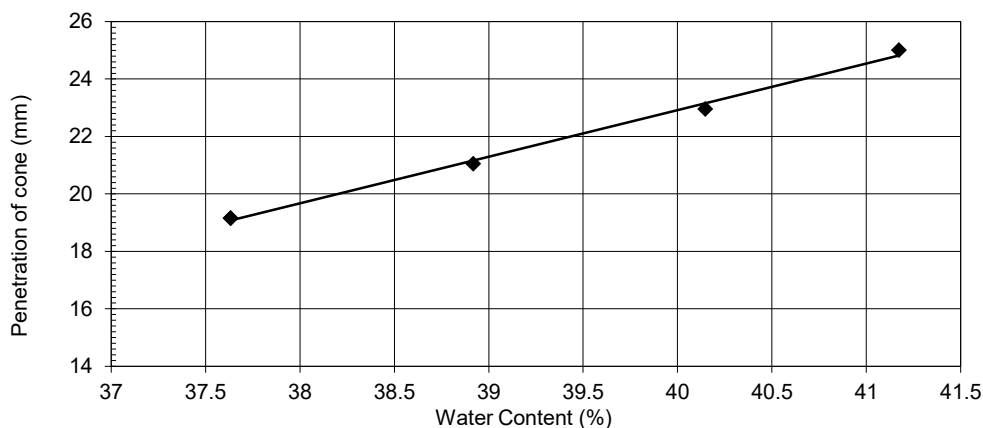
Description:

Greyish brown mottled orangish brown and light grey slightly sandy CLAY with rare fine to medium gravel.

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 17.9 %
Estimated percentage passing 425µm sieve : 96 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 38 %
Plastic Limit : 20 %
Plasticity Index : 18 %

Equivalent Water Content of material passing 425µm sieve : 18.6 %
Liquidity Index : -0.08



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location TP15
Depth (m) 1.20
Sample Type D

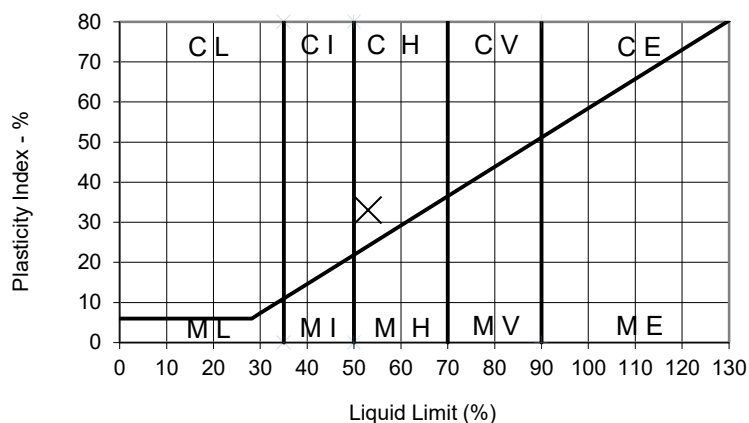
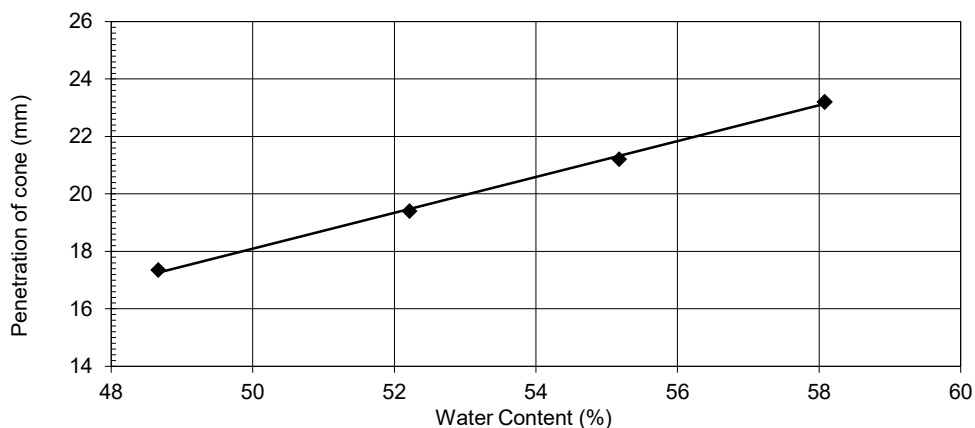
Description:

Light grey mottled light brown and brownish grey CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 19.9 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 53 %
Plastic Limit : 20 %
Plasticity Index : 33 %

Equivalent Water Content of material passing 425µm sieve : 19.9 %
Liquidity Index : 0.00



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS01
Depth (m) 0.50
Sample Type D

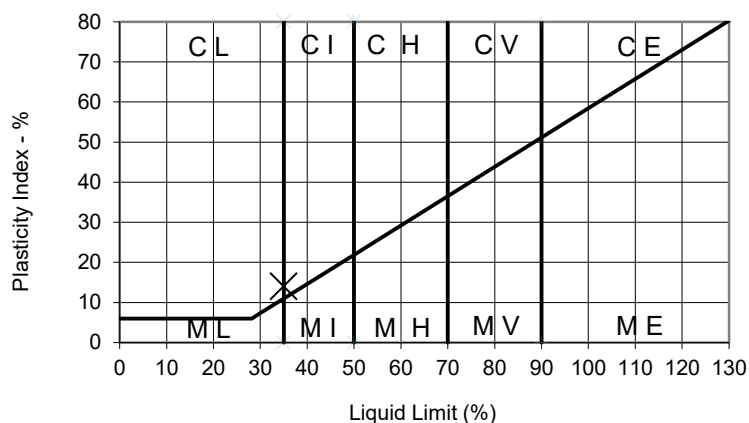
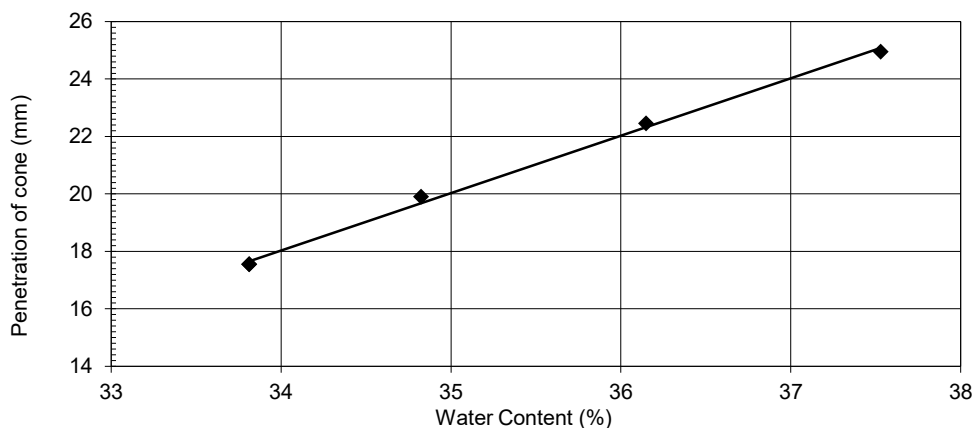
Description:

Greyish brown and light grey mottled light brown slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 18.6 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 35 %
Plastic Limit : 21 %
Plasticity Index : 14 %

Equivalent Water Content of material passing 425µm sieve : 18.6 %
Liquidity Index : -0.17



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24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS03
Depth (m) 0.50
Sample Type D

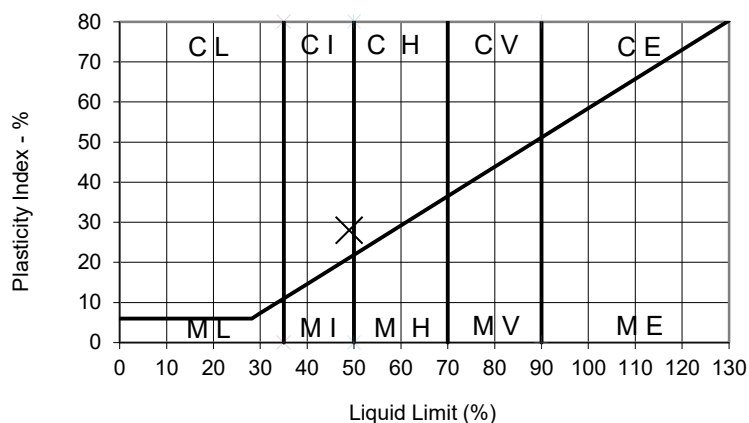
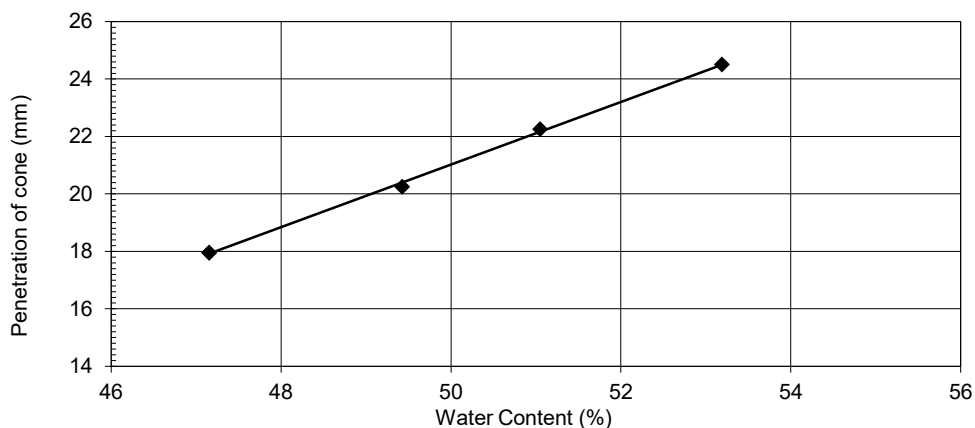
Description:

Brown mottled orangish brown and light grey slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 19.8 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 49 %
Plastic Limit : 21 %
Plasticity Index : 28 %

Equivalent Water Content of material passing 425µm sieve : 19.8 %
Liquidity Index : -0.04



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24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS08
Depth (m) 1.00
Sample Type D

Description:

Greyish brown mottled light grey slightly sandy CLAY with rare fine gravel.

Insufficient sample for 4 point test ,

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 16.4 %

Estimated percentage passing 425µm sieve : 98 %

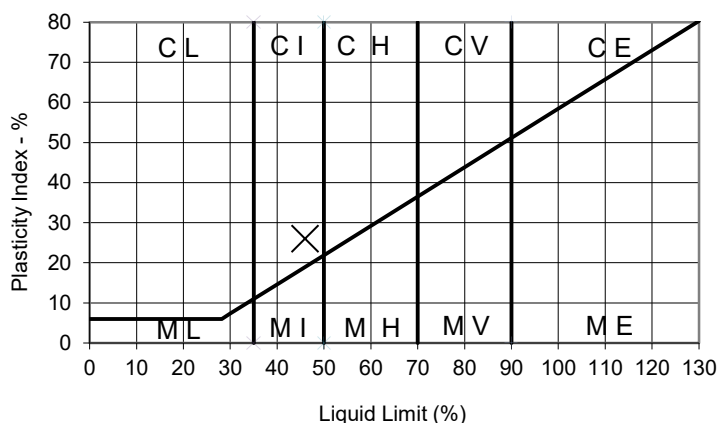
*Liquid Limit - Fall Cone 1 point Method (cone angle 30°) : 46 %

Plastic Limit : 20 %

Plasticity Index : 26 %

Equivalent Water Content of material passing 425µm sieve : 16.8 %

Liquidity Index : -0.12



Insufficient sample for 4 point test

***One point liquid limit test readings**

Cone penetration 21.4 mm

Water content 46.7 %

One point method correlation factor : BS 1377-2 : 2022 : 5.3.2 0.978

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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS10
Depth (m) 0.50
Sample Type D

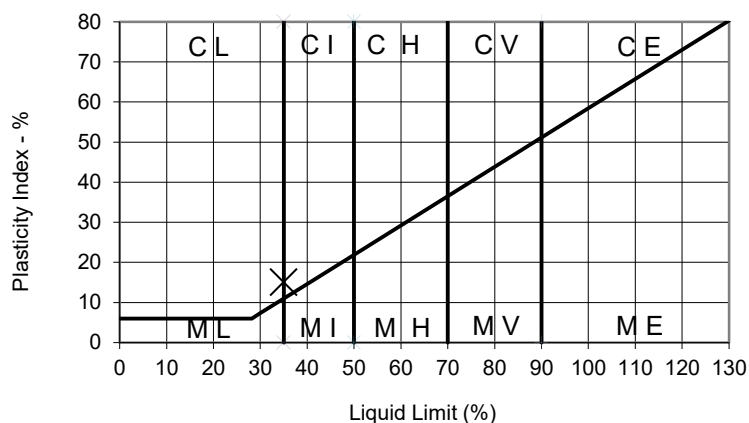
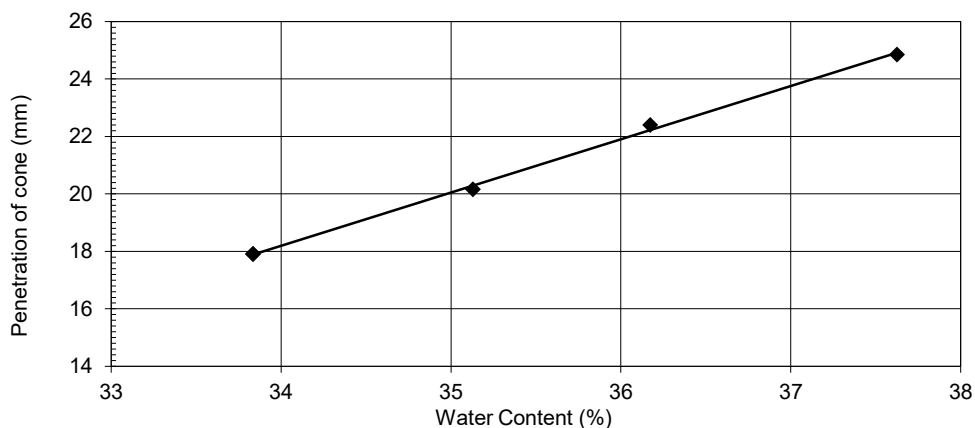
Description:

Light brown and light grey mottled greyish brown slightly sandy
CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 19.2 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 35 %
Plastic Limit : 20 %
Plasticity Index : 15 %

Equivalent Water Content of material passing 425µm sieve : 19.2 %
Liquidity Index : -0.05



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS11
 Depth (m) 0.50
 Sample Type D

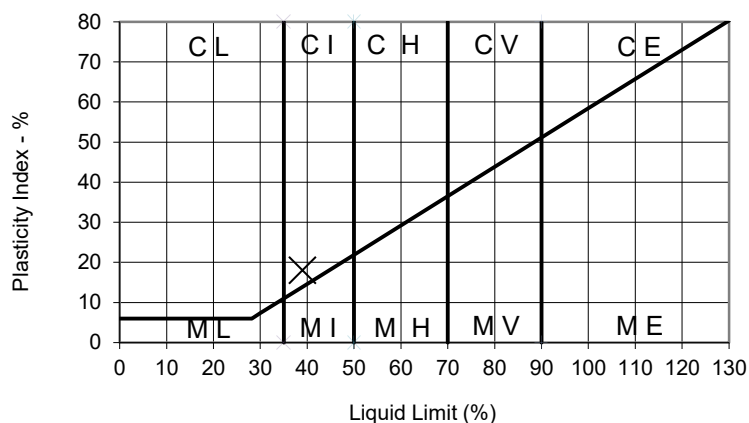
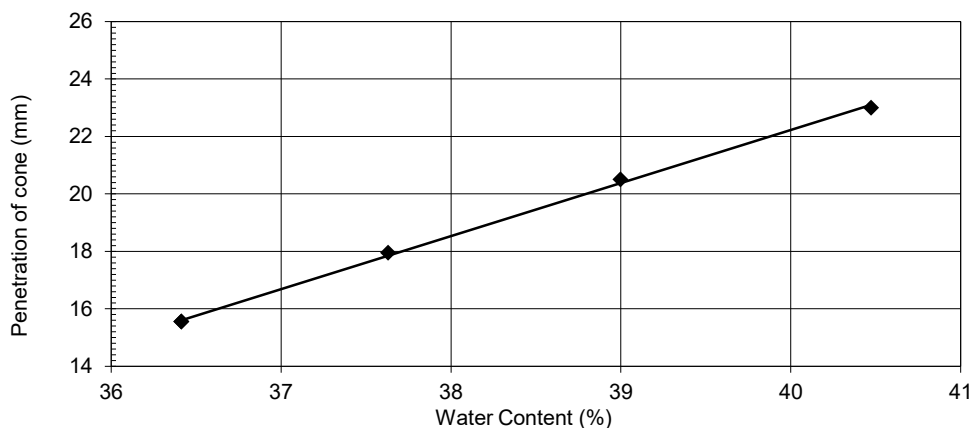
Description:

Light brown mottled light grey slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 20.5 %
 Estimated percentage passing 425µm sieve : 100 %
 Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 39 %
 Plastic Limit : 21 %
 Plasticity Index : 18 %

Equivalent Water Content of material passing 425µm sieve : 20.5 %
 Liquidity Index : -0.03



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**LAND AT HORN BROOK FARM, HORSHAM
 24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS12
Depth (m) 0.50
Sample Type D

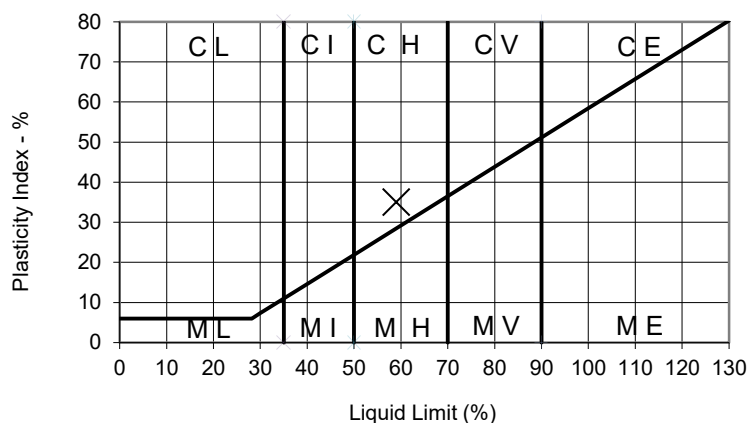
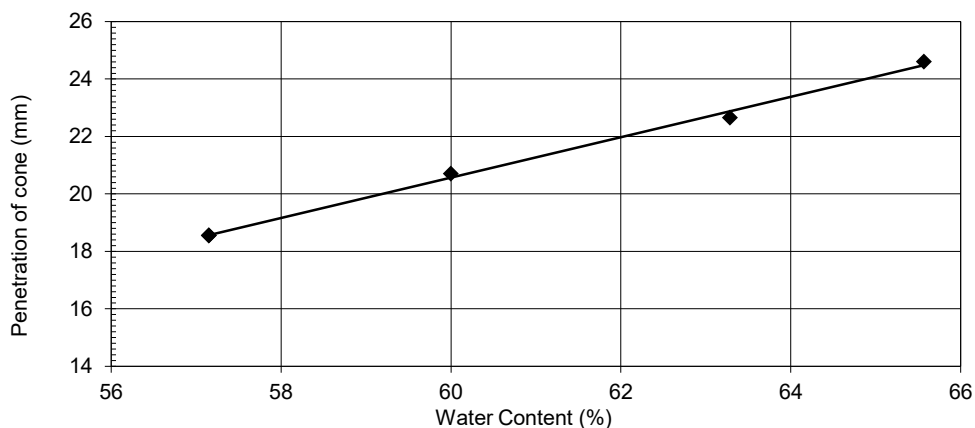
Description:

Light brown and light grey mottled orange CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 24.0 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 59 %
Plastic Limit : 24 %
Plasticity Index : 35 %

Equivalent Water Content of material passing 425µm sieve : 24.0 %
Liquidity Index : 0.00



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Project Number:

GEO / 41262

Project Name:

**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS14
Depth (m) 0.60
Sample Type D

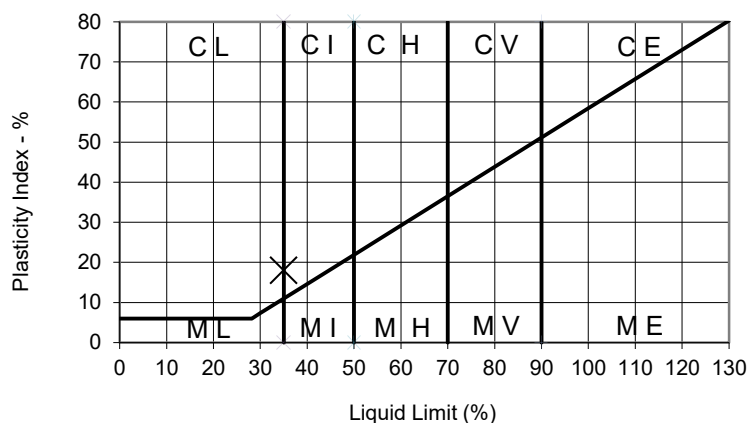
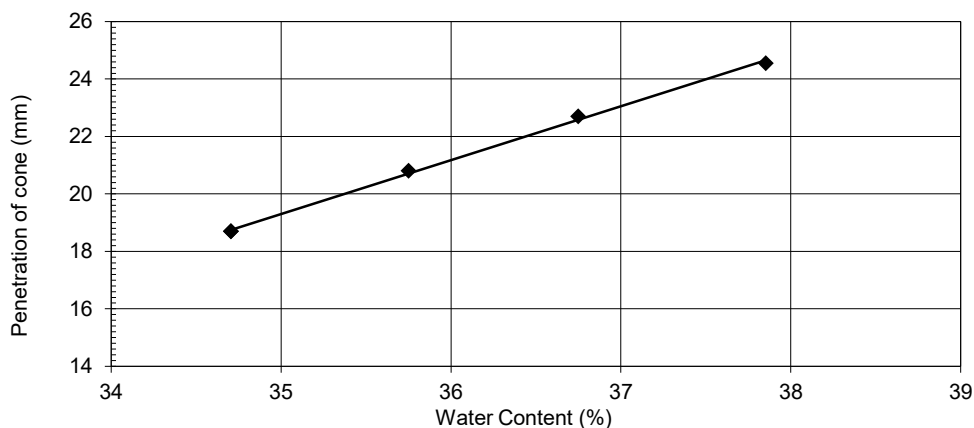
Description:

Light brown mottled light grey slightly sandy CLAY with rare fine to medium gravel.

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 13.0 %
Estimated percentage passing 425µm sieve : 99 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 35 %
Plastic Limit : 17 %
Plasticity Index : 18 %

Equivalent Water Content of material passing 425µm sieve : 13.1 %
Liquidity Index : -0.22



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J A Reynolds - Director
14/10/2024

Project Number:

GEO / 41262

Project Name:

**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS15
Depth (m) 0.50
Sample Type D

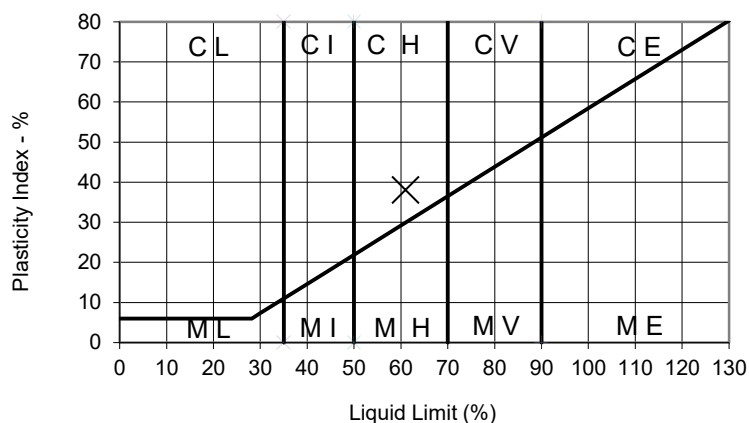
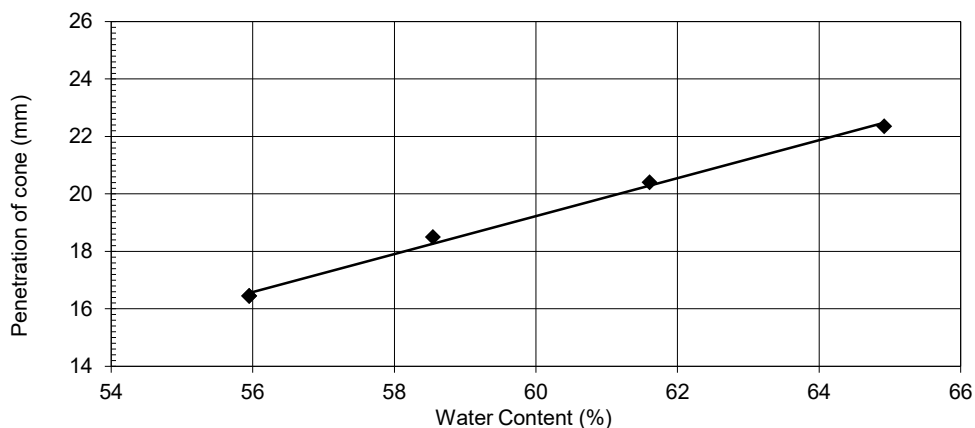
Description:

Greyish brown mottled light grey and orangish brown slightly sandy CLAY.

Preparation : Sample as received.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 22.8 %
Estimated percentage passing 425µm sieve : 100 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 61 %
Plastic Limit : 23 %
Plasticity Index : 38 %

Equivalent Water Content of material passing 425µm sieve : 22.8 %
Liquidity Index : -0.01



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS16
Depth (m) 0.50
Sample Type D

Description:

Light brown mottled brownish grey very sandy CLAY with much fine to medium gravel.

Preparation : Particles >425µm removed by wet sieving and air drying.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 14.3 %

Measured percentage passing 425µm sieve : 85 %

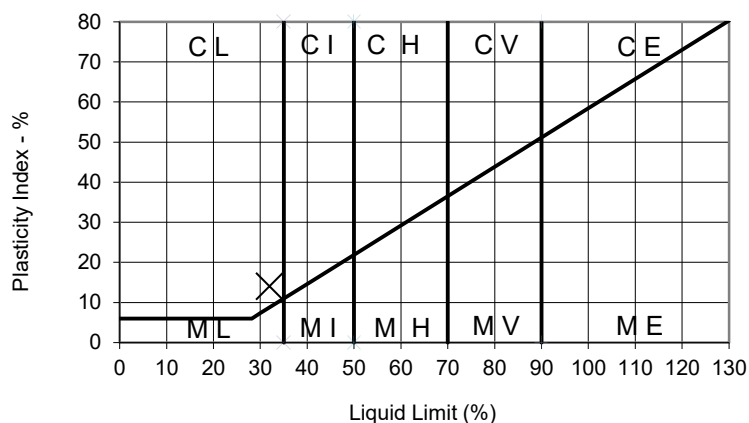
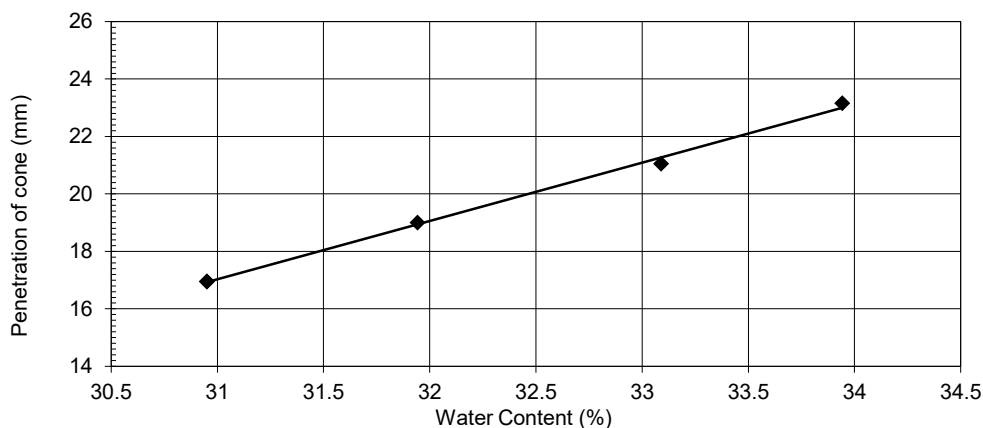
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 32 %

Plastic Limit : 18 %

Plasticity Index : 14 %

Equivalent Water Content of material passing 425µm sieve : 16.8 %

Liquidity Index : -0.09



Tested by AD
Checked and Approved by

J A Reynolds - Director
14/10/2024

Project Number:

GEO / 41262

Project Name:

**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



LIQUID AND PLASTIC LIMITS

Location WS17
Depth (m) 1.00
Sample Type D

Description:

Light brown mottled brownish grey very sandy CLAY with some fine to medium gravel.

Preparation : Particles >425µm removed by wet sieving and air drying.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 13.7 %

Measured percentage passing 425µm sieve : 95 %

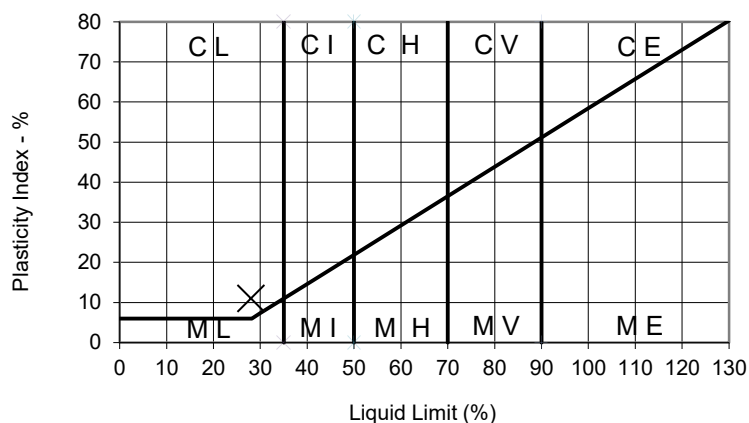
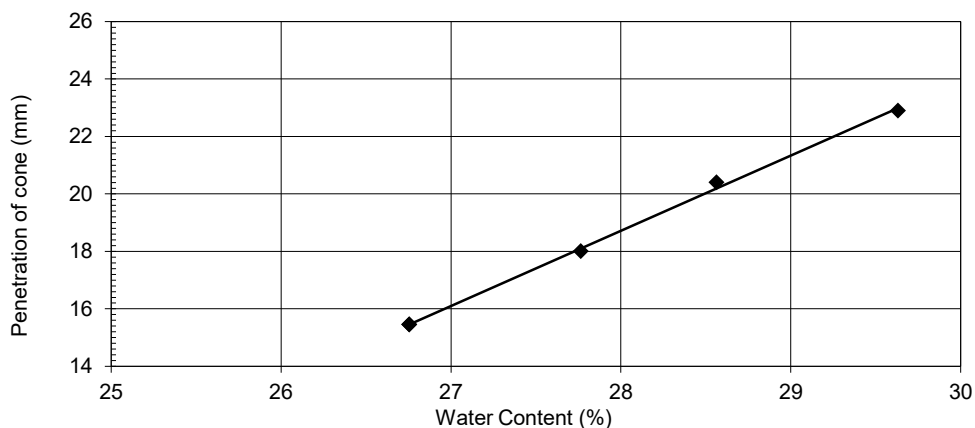
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with decreasing water content : 28 %

Plastic Limit : 17 %

Plasticity Index : 11 %

Equivalent Water Content of material passing 425µm sieve : 14.5 %

Liquidity Index : -0.23



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**LAND AT HORN BROOK FARM, HORSHAM
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LIQUID AND PLASTIC LIMITS

Location WS18
Depth (m) 0.50
Sample Type D

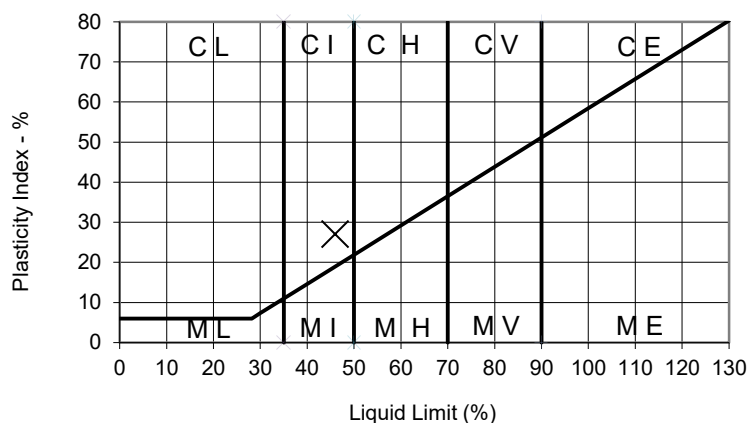
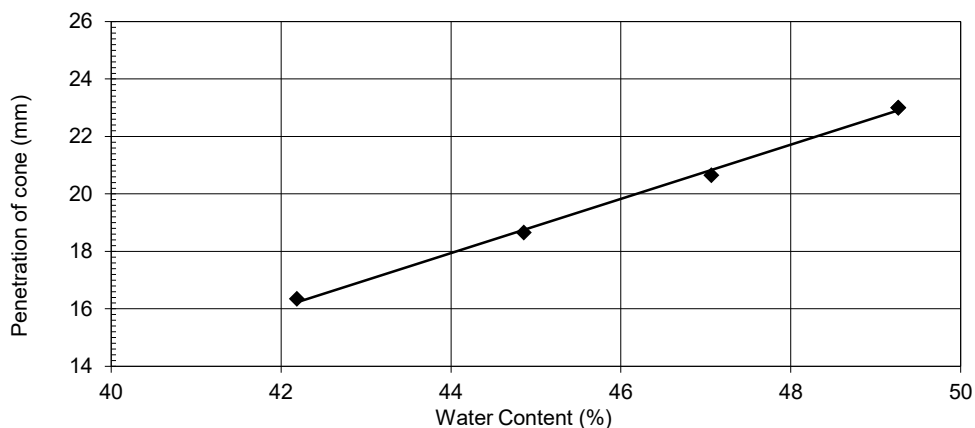
Description:

Greyish brown mottled brownish grey sandy CLAY with some fine to medium gravel.

Preparation : Sample as received with discrete coarse particles removed by hand.

Water Content : (BS EN ISO 17892-1:2014+A1:2022) 16.4 %
Estimated percentage passing 425µm sieve : 97 %
Liquid Limit - Fall Cone 4 point Method (cone angle 30°) with increasing water content : 46 %
Plastic Limit : 19 %
Plasticity Index : 27 %

Equivalent Water Content of material passing 425µm sieve : 17.0 %
Liquidity Index : -0.07



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**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



PARTICLE SIZE DISTRIBUTION

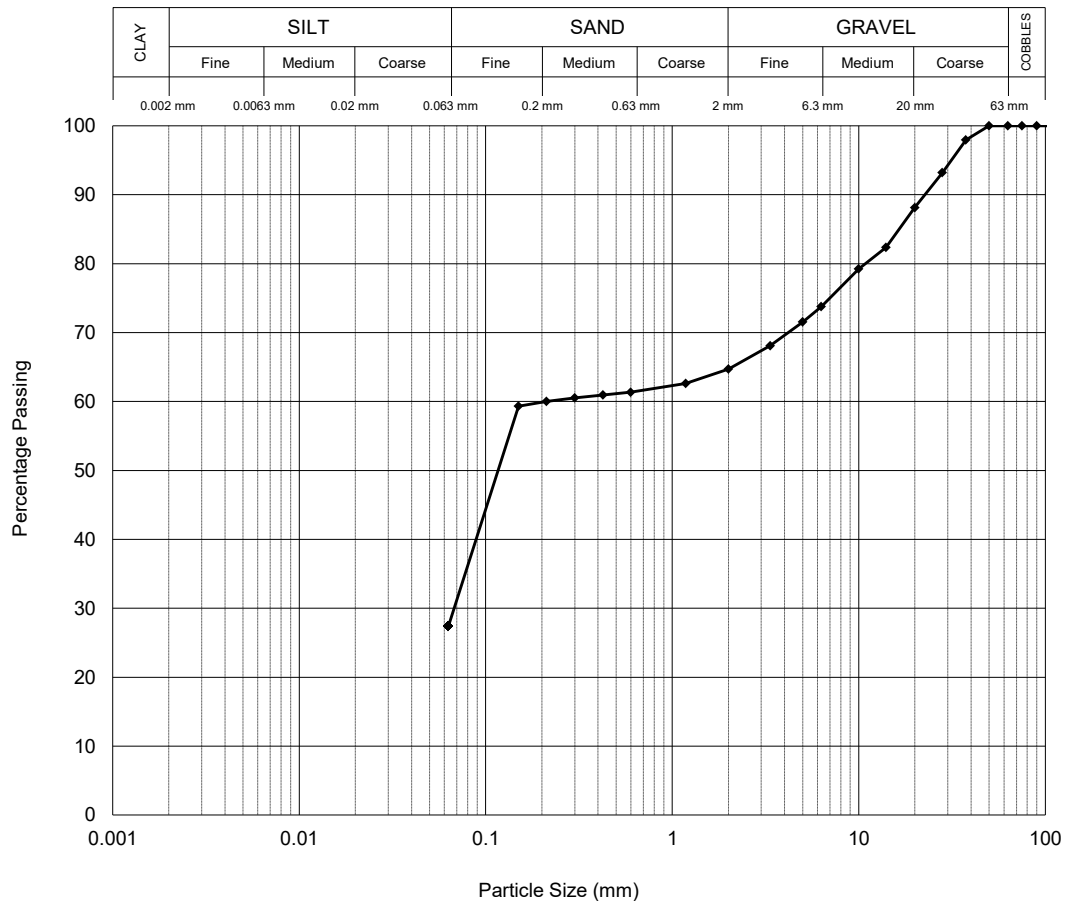
Location TP02
Sample Depth 0.50 m
Sample Type B

Description

Greyish brown very clayey silty SAND with much fine to coarse gravel.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	98
28.0 mm	93
20.0 mm	88
14.0 mm	82
10.0 mm	79
6.30 mm	74
5.00 mm	72
3.35 mm	68
2.00 mm	65
1.18 mm	63
600 µm	61
425 µm	61
300 µm	61
212 µm	60
150 µm	59
63 µm	27



Particle Proportions	
Cobbles	0.0
Gravel	35.3
Sand	37.3
Silt & Clay	27.4

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LAND AT HORN BROOK FARM, HORSHAM
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PARTICLE SIZE DISTRIBUTION

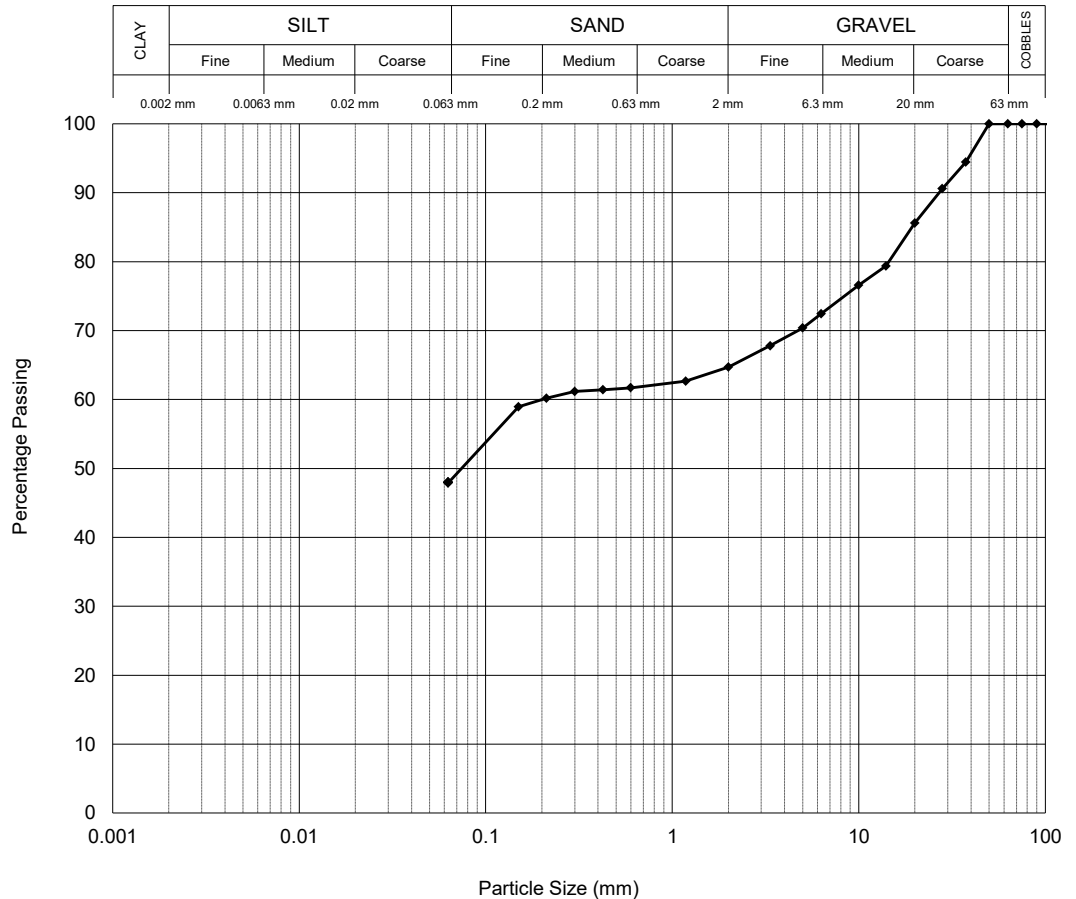
Location TP05
Sample Depth 0.30-0.65 m
Sample Type B

Description

Greyish brown silty sandy CLAY with much fine to coarse gravel.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	94
28.0 mm	91
20.0 mm	86
14.0 mm	79
10.0 mm	77
6.30 mm	72
5.00 mm	70
3.35 mm	68
2.00 mm	65
1.18 mm	63
600 µm	62
425 µm	61
300 µm	61
212 µm	60
150 µm	59
63 µm	48



Particle Proportions	
Cobbles	0.0
Gravel	35.3
Sand	16.7
Silt & Clay	48.0

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Project Name:

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PARTICLE SIZE DISTRIBUTION

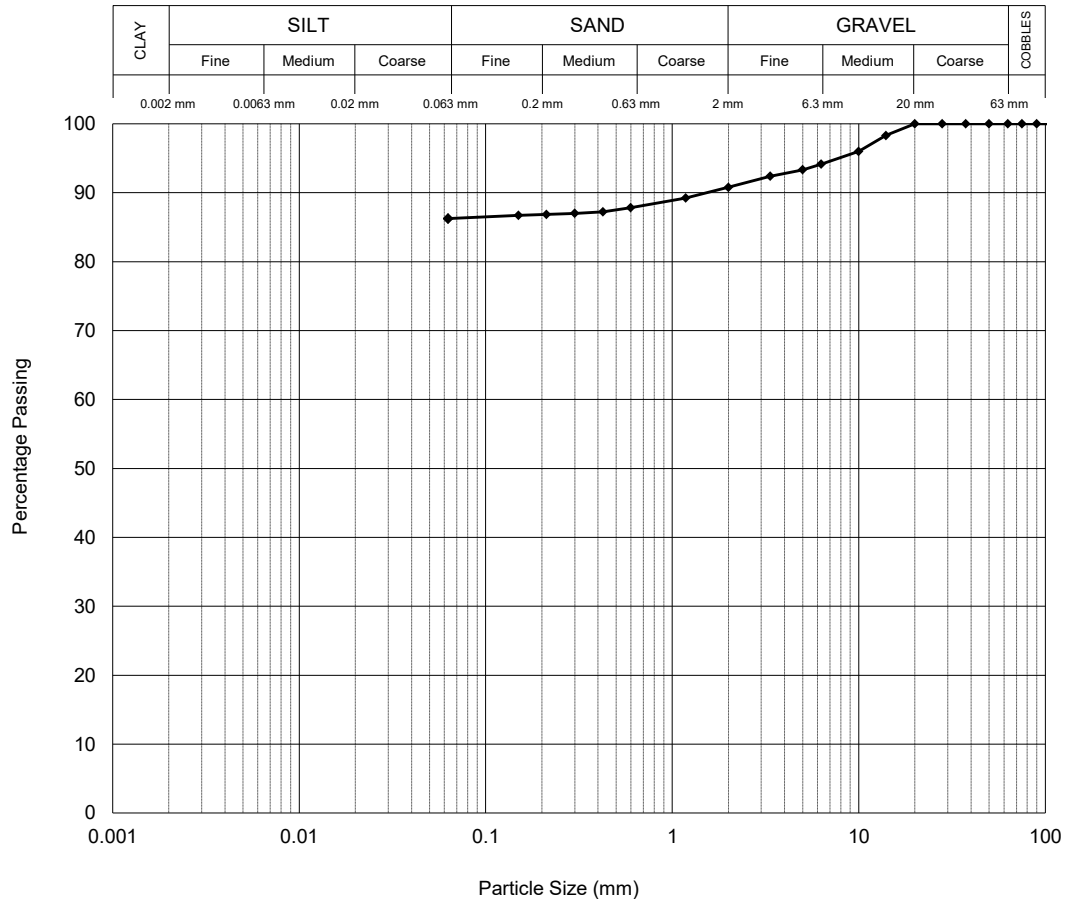
Location TP06
Sample Depth 1.10 m
Sample Type B

Description

Greyish brown mottled light grey sandy silty CLAY with some fine to medium gravel.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	100
14.0 mm	98
10.0 mm	96
6.30 mm	94
5.00 mm	93
3.35 mm	92
2.00 mm	91
1.18 mm	89
600 µm	88
425 µm	87
300 µm	87
212 µm	87
150 µm	87
63 µm	86



Particle Proportions	
Cobbles	0.0
Gravel	9.2
Sand	4.5
Silt & Clay	86.3

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PARTICLE SIZE DISTRIBUTION

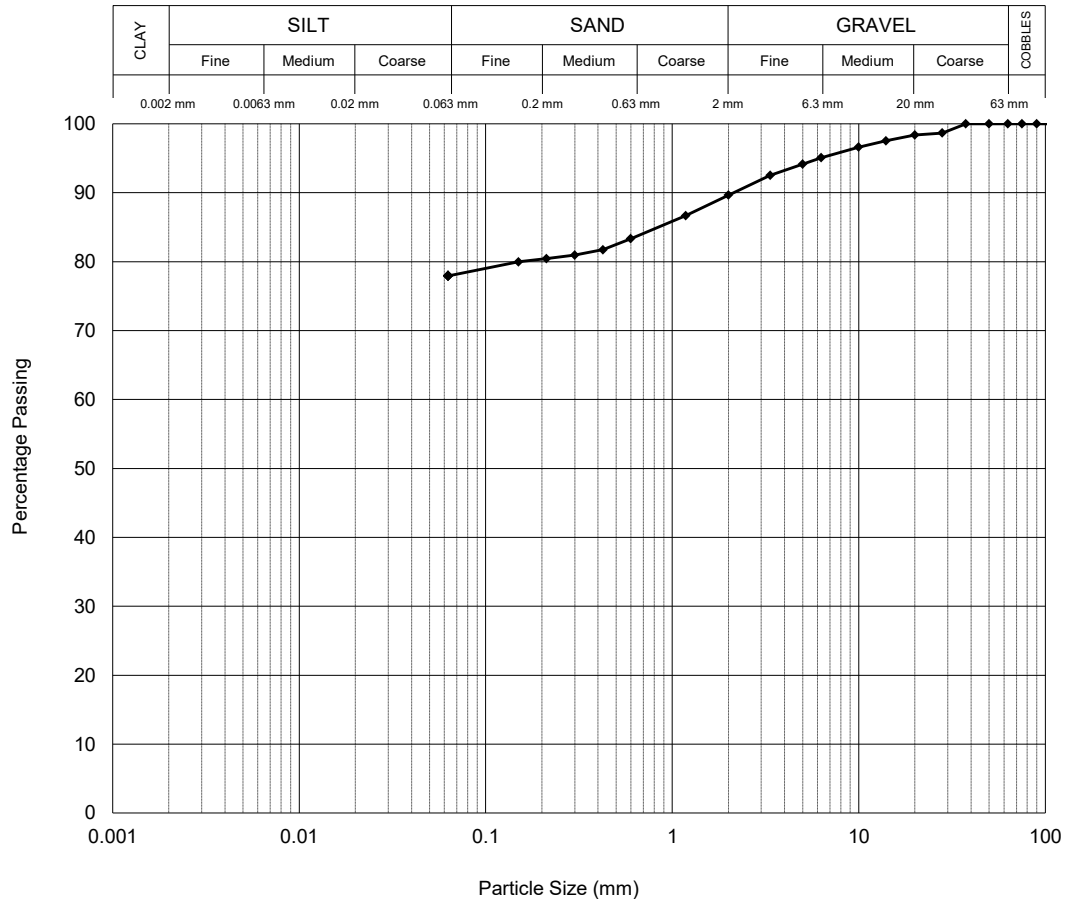
Location TP06
Sample Depth 1.90 m
Sample Type B

Description

Greyish brown mottled light grey sandy silty CLAY with some fine to coarse gravel.

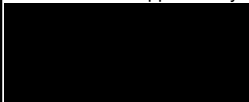
BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	99
20.0 mm	98
14.0 mm	98
10.0 mm	97
6.30 mm	95
5.00 mm	94
3.35 mm	93
2.00 mm	90
1.18 mm	87
600 µm	83
425 µm	82
300 µm	81
212 µm	80
150 µm	80
63 µm	78



Particle Proportions	
Cobbles	0.0
Gravel	10.4
Sand	11.7
Silt & Clay	77.9

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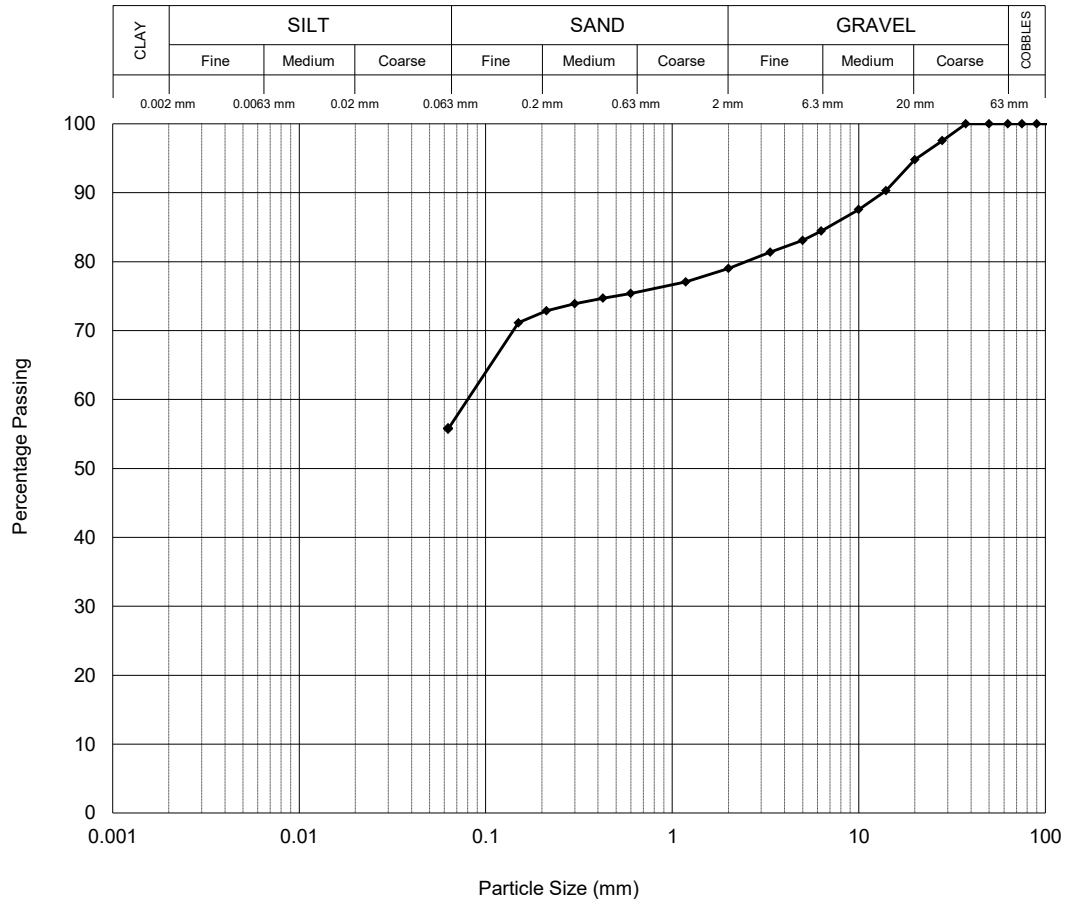
Location TP09
Sample Depth 0.60 m
Sample Type B

Description

Greyish brown sandy silty CLAY with some fine to coarse gravel.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	98
20.0 mm	95
14.0 mm	90
10.0 mm	88
6.30 mm	84
5.00 mm	83
3.35 mm	81
2.00 mm	79
1.18 mm	77
600 µm	75
425 µm	75
300 µm	74
212 µm	73
150 µm	71
63 µm	56



Particle Proportions	
Cobbles	0.0
Gravel	21.0
Sand	23.2
Silt & Clay	55.8

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PARTICLE SIZE DISTRIBUTION

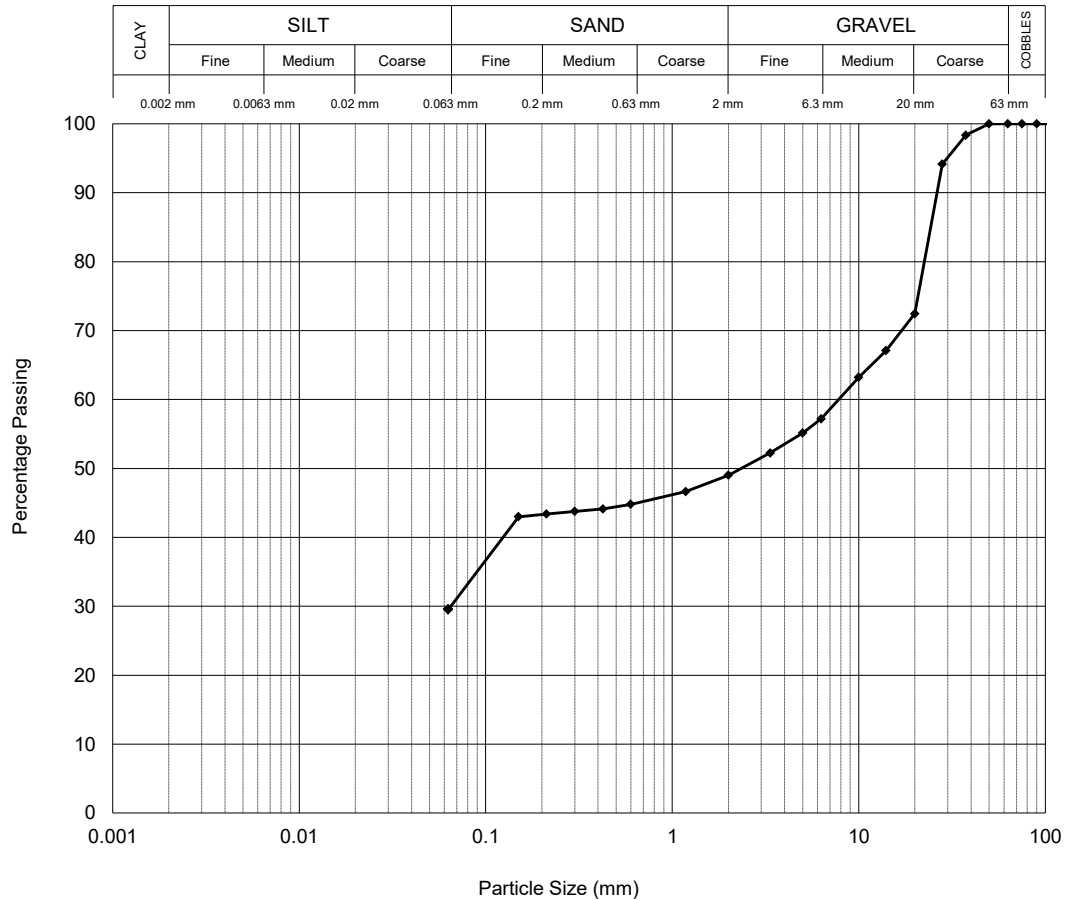
Location TP10
Sample Depth 0.45-1.20 m
Sample Type B

Description

Greyish brown sandy very clayey fine to coarse GRAVEL.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	98
28.0 mm	94
20.0 mm	72
14.0 mm	67
10.0 mm	63
6.30 mm	57
5.00 mm	55
3.35 mm	52
2.00 mm	49
1.18 mm	47
600 µm	45
425 µm	44
300 µm	44
212 µm	43
150 µm	43
63 µm	30



Particle Proportions	
Cobbles	0.0
Gravel	51.0
Sand	19.5
Silt & Clay	29.5

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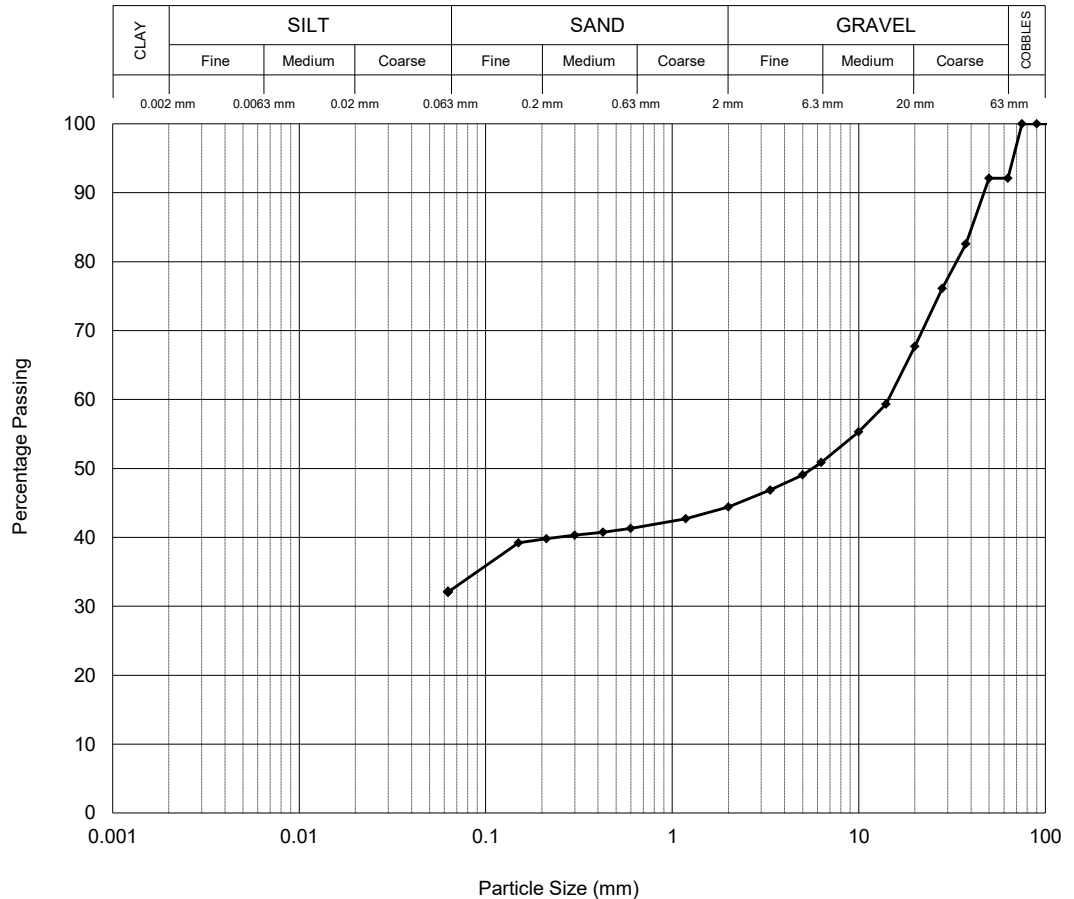
Location TP16
Sample Depth 1.00 m
Sample Type B

Description

Greyish brown very clayey sandy fine to coarse GRAVEL.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	92
50.0 mm	92
37.5 mm	83
28.0 mm	76
20.0 mm	68
14.0 mm	59
10.0 mm	55
6.30 mm	51
5.00 mm	49
3.35 mm	47
2.00 mm	44
1.18 mm	43
600 µm	41
425 µm	41
300 µm	40
212 µm	40
150 µm	39
63 µm	32



Particle Proportions	
Cobbles	7.9
Gravel	47.7
Sand	12.3
Silt & Clay	32.1

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LAND AT HORN BROOK FARM, HORSHAM
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PARTICLE SIZE DISTRIBUTION

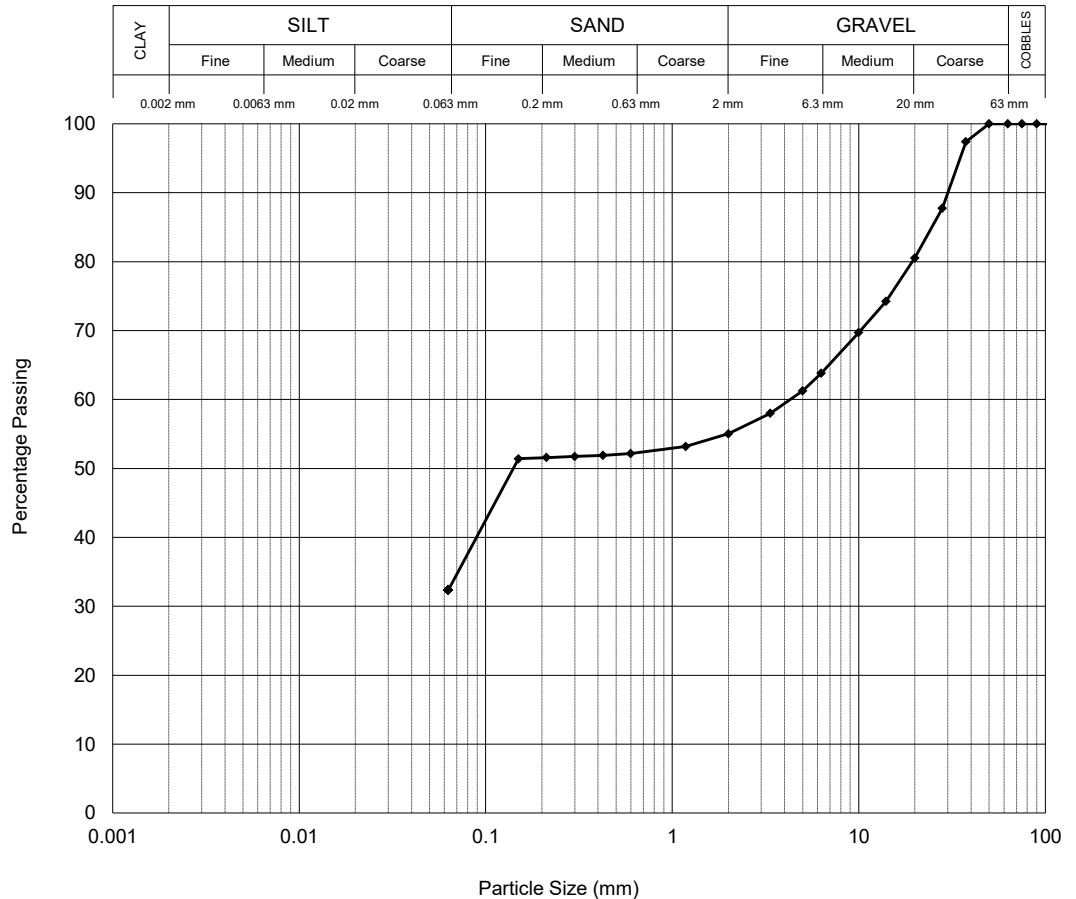
Location TP18
Sample Depth 1.00 m
Sample Type B

Description

Greyish brown very sandy very clayey fine to coarse GRAVEL.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	97
28.0 mm	88
20.0 mm	81
14.0 mm	74
10.0 mm	70
6.30 mm	64
5.00 mm	61
3.35 mm	58
2.00 mm	55
1.18 mm	53
600 µm	52
425 µm	52
300 µm	52
212 µm	52
150 µm	51
63 µm	32



Particle Proportions	
Cobbles	0.0
Gravel	45.0
Sand	22.6
Silt & Clay	32.4

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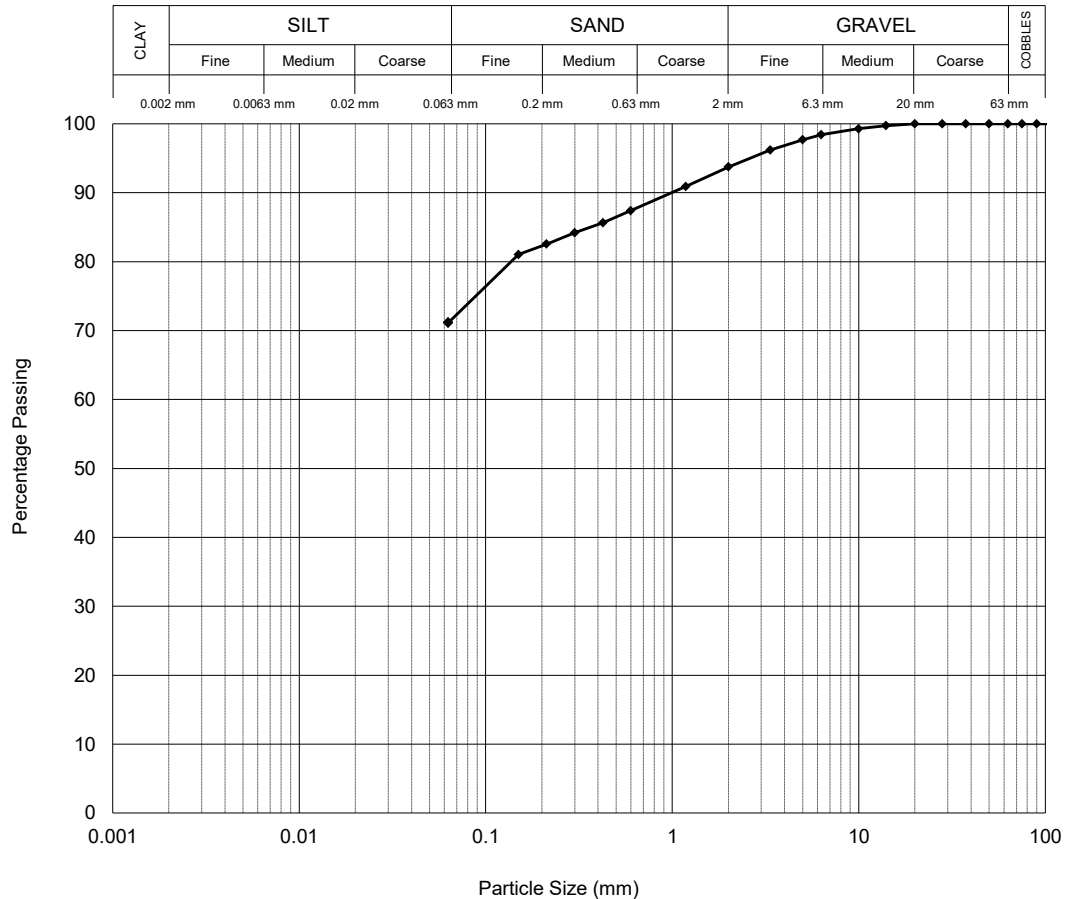
Location TP25
Sample Depth 0.75-1.00 m
Sample Type B

Description

Greyish brown mottled light brown very sandy CLAY with some fine to medium gravel.

BS EN ISO 17892-4 : 2016 : Clause 5.2 - Wet Sieve

Sieve	
Size	% Pass
200.0 mm	100
125.0 mm	100
90.0 mm	100
75.0 mm	100
63.0 mm	100
50.0 mm	100
37.5 mm	100
28.0 mm	100
20.0 mm	100
14.0 mm	100
10.0 mm	99
6.30 mm	98
5.00 mm	98
3.35 mm	96
2.00 mm	94
1.18 mm	91
600 µm	87
425 µm	86
300 µm	84
212 µm	83
150 µm	81
63 µm	71



Particle Proportions	
Cobbles	0.0
Gravel	6.2
Sand	22.6
Silt & Clay	71.2

Tested by AD
Checked and Approved by



J A Reynolds - Director
14/10/2024

Project Number:

GEO / 41262

Project Name:

**LAND AT HORN BROOK FARM, HORSHAM
24-1979-P**



Appendix E

OB-Screen Human Health Screening Assessment



OBScreen Human Health Screening Assessment

Project Name:	Land at Hornbrook Farm, Horsham.
Project Number:	24-1979-P
Assessment Date:	15/10/2024
End Use Scenario:	Residential with Homegrown Produce Uptake

Project Name:	Land at Hornbrook Farm, Horsham.
Project Number:	24-1979-P
End Use Scenario:	Residential with Homegrown Produce Uptake

Metals & Asbestos		Exploratory Hole Ref		WS01	WS02	WS04	WS05	WS06	WS07	WS09	WS10	WS11	WS12	WS13	WS14
		Additional Ref													
		Sample Depth (m)		0.20	0.10	0.20	0.10	0.15	0.10	0.10	0.20	0.10	0.20	0.30	0.20
Determinand	Screening Value	Source	Units												
Arsenic (As)	37	C4SL	mg/kg	10	9	9.5	8.3	8.9	9.1	7.7	8.8	7.9	8.3	8.7	8.3
W/S Boron	290	S4UL	mg/kg	0.9	0.5	0.5	0.8	0.6	0.4	0.4	0.5	0.9	0.8	0.5	0.9
Cadmium (Cd)	22	C4SL	mg/kg	0.2	< 0.2	0.2	0.2	< 0.2	0.2	0.2	< 0.2	0.2	< 0.2	0.2	0.2
Chromium (hexavalent)	21	C4SL	mg/kg	1.9	6.3	2.6	2.8	1.6	5	3	< 1.2	3.1	< 1.2	5.1	3.7
Copper (Cu)	2,400	S4UL	mg/kg	16	13	17	13	14	14	13	12	15	14	20	15
Lead (Pb)	200	C4SL	mg/kg	51	44	57	40	36	47	31	29	37	31	43	47
Mercury (Hg)	40	S4UL	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (Ni)	130	S4UL	mg/kg	7.8	6.6	7	8.4	9.6	8.4	15	6.4	8	8.4	8	7.5
Selenium (Se)	250	S4UL	mg/kg	< 1.0	< 1.0	< 1.0	1.3	1.1	1.4	1.7	1.2	< 1.0	< 1.0	1.4	1.4
Zinc (Zn)	3,700	S4UL	mg/kg	46	40	51	49	48	50	62	34	42	40	53	51
Cyanide	34	OBScreen	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Asbestos Screen	Detection	OBScreen	-	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Asbestos Quantification	Detection	OBScreen	%	-	-	-	-	-	-	-	-	-	-	-	-

Concentrations Highlighted in Red Exceed their Adopted Screening Value

Project Name:	Land at Hornbrook Farm, Horsham.
Project Number:	24-1979-P
End Use Scenario:	Residential with Homegrown Produce Uptake

Metals & Asbestos		Exploratory Hole Ref		WS15	WS17	WS18	WS19	WS20	WS21	WS22	WS24	WS25	TP20		
		Additional Ref													
		Sample Depth (m)		0.10	0.25	0.10	0.20	0.20	0.25	0.15	0.15	0.20	0.50		
Determinand	Screening Value	Source	Units												
Arsenic (As)	37	C4SL	mg/kg	8.1	8.6	9.1	9.2	8.1	8.9	8.9	10	10	8.3		
W/S Boron	290	S4UL	mg/kg	1.3	0.9	0.4	0.4	0.6	0.6	0.5	0.7	0.7	0.8		
Cadmium (Cd)	22	C4SL	mg/kg	0.2	< 0.2	< 0.2	0.3	0.4	0.3	0.2	< 0.2	0.4	< 0.2		
Chromium (hexavalent)	21	C4SL	mg/kg	3.3	< 1.2	< 1.2	1.9	2.9	3.5	< 1.2	< 1.2	< 1.2	< 1.2		
Copper (Cu)	2,400	S4UL	mg/kg	16	13	13	14	18	15	14	18	16	14		
Lead (Pb)	200	C4SL	mg/kg	43	89	31	40	67	56	59	67	45	16		
Mercury (Hg)	40	S4UL	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		
Nickel (Ni)	130	S4UL	mg/kg	8.9	7.1	8.1	9.2	8.7	8.8	7.8	9.8	12	13		
Selenium (Se)	250	S4UL	mg/kg	< 1.0	1.3	< 1.0	< 1.0	< 1.0	1.9	< 1.0	2	< 1.0	< 1.0		
Zinc (Zn)	3,700	S4UL	mg/kg	52	50	47	57	69	52	70	57	69	53		
Cyanide	34	OBScreen	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		
Asbestos Screen	Detection	OBScreen	-	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative		
Asbestos Quantification	Detection	OBScreen	%	-	-	-	-	-	-	-	-	-	-		

Concentrations Highlighted in Red Exceed their Adopted Screening Value

Project Name:	Land at Hornbrook Farm, Horsham.
Project Number:	24-1979-P
End Use Scenario:	Residential with Homegrown Produce Uptake

PAH		Exploratory Hole Ref		WS01	WS02	WS04	WS05	WS06	WS07	WS09	WS10	WS11	WS12	WS13	WS14	WS15	WS17
Based on 2.5% SOM		Additional Ref															
		Sample Depth (m)		0.20	0.10	0.20	0.10	0.15	0.10	0.10	0.20	0.10	0.20	0.30	0.20	0.10	0.25
Determinand	Screening Value	Source	Units														
Naphthalene	5.6	S4UL	mg/kg	0.13	0.07	0.11	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.06	0.1	< 0.05
Acenaphthylene	420	S4UL	mg/kg	< 0.05	0.11	0.27	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.14	< 0.05	< 0.05	0.12	0.3	< 0.05
Acenaphthene	510	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.11	< 0.05	< 0.05	< 0.05	0.06	< 0.05
Fluorene	400	S4UL	mg/kg	< 0.05	< 0.05	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.15	< 0.05	< 0.05	< 0.05	0.09	< 0.05
Phenanthrene	220	S4UL	mg/kg	0.26	0.63	1	0.14	0.12	0.13	0.15	0.06	2.2	0.07	0.08	0.51	1.9	0.13
Anthracene	5,400	S4UL	mg/kg	< 0.05	0.15	0.25	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.35	< 0.05	< 0.05	0.12	0.48	< 0.05
Fluoranthene	560	S4UL	mg/kg	0.74	1.6	5	0.38	0.32	0.26	0.55	0.15	4	0.18	0.25	2.1	6.2	0.28
Pyrene	1,200	S4UL	mg/kg	0.64	1.4	4.5	0.34	0.27	0.22	0.49	0.12	3.4	0.17	0.23	1.9	5.4	0.25
Benzo(a)anthracene	11	S4UL	mg/kg	0.33	0.78	2.5	0.18	0.17	0.11	0.28	0.07	1.8	0.1	0.11	1.2	3.2	0.16
Chrysene	22	S4UL	mg/kg	0.48	0.99	3.3	0.26	0.21	0.16	0.38	0.12	2.3	0.13	0.18	1.3	3.4	0.18
Benzo(b)fluoranthene	3.3	S4UL	mg/kg	0.54	1.2	4.1	0.32	0.27	0.17	0.43	0.11	2.7	0.11	0.25	1.6	4.3	0.22
Benzo(k)fluoranthene	93	S4UL	mg/kg	0.24	0.5	2	0.14	0.08	0.09	0.19	< 0.05	1.4	0.06	0.07	0.84	1.5	0.09
Benzo(a)pyrene	2.7	S4UL	mg/kg	0.38	0.87	3.3	0.19	0.16	0.12	0.26	< 0.05	2.1	0.06	0.15	1.4	3.6	0.17
Indeno(1,2,3-cd)pyrene	36	S4UL	mg/kg	0.23	0.47	1.8	0.12	0.11	0.09	0.17	0.06	1.2	< 0.05	0.12	0.7	1.8	0.14
Dibenz(a,h)anthracene	0.28	S4UL	mg/kg	< 0.05	0.11	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.24	< 0.05	< 0.05	0.17	0.39	< 0.05
Benzo(ghi)perylene	340	S4UL	mg/kg	0.28	0.48	2	0.14	0.13	0.11	0.2	0.06	1.4	0.07	0.13	0.79	1.8	0.15
Total Phenols (monohydric)	200	S4UL	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Concentrations Highlighted in Red Exceed their Adopted Screening Value

Project Name:	Land at Hornbrook Farm, Horsham.
Project Number:	24-1979-P
End Use Scenario:	Residential with Homegrown Produce Uptake

PAH Based on 2.5% SOM		Exploratory Hole Ref		WS18	WS19	WS20	WS21	WS22	WS24	WS25	TP20							
		Additional Ref																
		Sample Depth (m)		0.10	0.20	0.20	0.25	0.15	0.15	0.20	0.50							
Determinand	Screening Value	Source	Units															
Naphthalene	5.6	S4UL	mg/kg	< 0.05	< 0.05	0.06	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05							
Acenaphthylene	420	S4UL	mg/kg	< 0.05	0.11	0.17	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05							
Acenaphthene	510	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05							
Fluorene	400	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05							
Phenanthrene	220	S4UL	mg/kg	0.12	0.69	0.83	0.11	0.09	0.06	0.17	< 0.05							
Anthracene	5,400	S4UL	mg/kg	< 0.05	0.12	0.17	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05							
Fluoranthene	560	S4UL	mg/kg	0.33	1.8	2.9	0.32	0.26	0.17	0.61	< 0.05							
Pyrene	1,200	S4UL	mg/kg	0.29	1.6	2.6	0.28	0.23	0.15	0.52	< 0.05							
Benzo(a)anthracene	11	S4UL	mg/kg	0.16	0.85	1.5	0.18	0.11	0.09	0.32	< 0.05							
Chrysene	22	S4UL	mg/kg	0.19	1.1	1.8	0.18	0.17	0.09	0.34	< 0.05							
Benzo(b)fluoranthene	3.3	S4UL	mg/kg	0.23	1.2	2	0.23	0.14	0.11	0.45	< 0.05							
Benzo(k)fluoranthene	93	S4UL	mg/kg	0.08	0.5	1.1	0.11	0.07	0.05	0.15	< 0.05							
Benzo(a)pyrene	2.7	S4UL	mg/kg	0.14	0.94	1.9	0.16	0.11	0.09	0.33	< 0.05							
Indeno(1,2,3-cd)pyrene	36	S4UL	mg/kg	0.13	0.53	1.1	0.15	0.08	< 0.05	0.26	< 0.05							
Dibenz(a,h)anthracene	0.28	S4UL	mg/kg	< 0.05	0.13	0.25	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05							
Benzo(ghi)perylene	340	S4UL	mg/kg	0.16	0.63	1.2	0.17	0.09	< 0.05	0.27	< 0.05							
Total Phenols (monohydric)	200	S4UL	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0							

Concentrations Highlighted in Red Exceed their Adopted Screening Value

Project Name:	Land at Hornbrook Farm, Horsham.
Project Number:	24-1979-P
End Use Scenario:	Residential with Homegrown Produce Uptake

TPH, BTEX & MTBE Based on 2.5% SOM		Exploratory Hole Ref		WS01	WS04	WS09	WS15	WS16	WS20	WS25	TP20				
		Additional Ref													
		Sample Depth (m)		0.20	0.20	0.10	0.10	0.15	0.20	0.20	0.50				
Determinand	Screening Value	Source	Units												
TPH															
Aliphatic >C5 - C6	78	S4UL	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010				
Aliphatic >C6 - C8	230	S4UL	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010				
Aliphatic >C8 - C10	65	S4UL	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010				
Aliphatic >C10 - C12	330	S4UL	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
Aliphatic >C12 - C16	24,000	S4UL	mg/kg	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0				
Aliphatic >C16 - C21	92,000	S4UL	mg/kg	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0				
Aliphatic >C21 - C35	92,000	S4UL	mg/kg	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0				
Aromatic >C5 - C7	140	S4UL	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010				
Aromatic >C7 - C8	290	S4UL	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010				
Aromatic >C8 - C10	83	S4UL	mg/kg	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020				
Aromatic >C10 - C12	180	S4UL	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
Aromatic >C12 - C16	330	S4UL	mg/kg	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0				
Aromatic >C16 - C21	1,500	S4UL	mg/kg	< 10	14	< 10	< 10	< 10	< 10	< 10	< 10				
Aromatic >C21 - C35	1,500	S4UL	mg/kg	< 10	38	< 10	20	< 10	14	12	< 10				
BTEX & MTBE															
Benzene	170	C4SL	ug/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
Toluene	290,000	S4UL	ug/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
Ethylbenzene	110,000	S4UL	ug/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
m & p-xylene	130,000	S4UL	ug/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
o-xylene	140,000	S4UL	ug/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				
MTBE	84,000	EIC/AGS/CL:AIRE	ug/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0				

Concentrations Highlighted in Red Exceed their Adopted Screening Value

LQM S4UL Publication Ref: S4UL3698

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Appendix E

Ground Gas Monitoring Results



Ground Gas and Groundwater Monitoring Results



Project Name:	Land at Hornbrook Farm, Brighton Road, Horsham.
Project Number:	24-1979-P
Client:	Jaynic Properties Ltd.

Date:	13/09/2024
Visit:	1 of 6

Barometric Pressure (mb)	
Start:	1010
Finish:	1010
Trend:	Rising

Ambient Concentration (% vol)	
CH ₄ :	ND
CO ₂ :	ND
O ₂ :	21.0

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Heavy Rain
Surface Conditions:	Wet
Operator:	SM

Key	
ND =	Not detected
NGW =	No groundwater encountered

[illegible]

Ground Gas and Groundwater Monitoring Results



Project Name:	Land at Hornbrook Farm, Brighton Road, Horsham.
Project Number:	24-1979-P
Client:	Javnic Properties Ltd

Date:	27/09/2024
Visit:	2 of 6

Barometric Pressure (mb)	
Start:	989
Finish:	989
Trend:	Rising

Ambient Concentration (% vol)	
CH ₄ :	ND
CO ₂ :	ND
O ₂ :	20.4

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Rain
Surface Conditions:	Wet
Operator:	DH

Key	
ND =	Not detected
NGW =	No groundwater encountered

[illegible]

Ground Gas and Groundwater Monitoring Results



Project Name:	Land at Hornbrook Farm, Brighton Road, Horsham.
Project Number:	24-1979-P
Client:	Jaynic Properties Ltd

Date:	02/10/2024
Visit:	3 of 6

<u>Barometric Pressure (mb)</u>	
Start:	1003
Finish:	1004
Trend:	Rising

Ambient Concentration (% vol)	
CH ₄ :	ND
CO ₂ :	ND
O ₂ :	20.4

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Light rain to Overcast to Sunny spells
Surface Conditions:	Wet
Operator:	DH

Key	
ND =	Not detected
NGW =	No groundwater encountered

[illegible]

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Date:	10/10/2024
Visit:	4 of 6

Key	
ND =	Not detected
NGW =	No groundwater encountered

[illegible]

Ground Gas and Groundwater Monitoring Results



Project Name:	Land at Hornbrook Farm, Brighton Road, Horsham.
Project Number:	24-1979-P
Client:	Javnic Properties Ltd

Date:	17/10/2024
Visit:	5 of 6

Barometric Pressure (mb)	
Start:	1002
Finish:	1001
Trend:	Rising

Ambient Concentration (% vol)	
CH ₄ :	ND
CO ₂ :	ND
O ₂ :	20.7

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Bright and Clear
Surface Conditions:	Damp
Operator:	DH

Key	
ND =	Not detected
NGW =	No groundwater encountered

[illegible]

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Date:	25/10/2024
Visit:	6 of 6

Key	
ND =	Not detected
NGW =	No groundwater encountered

[illegible]

Appendix G

Soakaway Test Results



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham

Project Number : 24-1979-P

Test Location: TP05
Test No: 1
Test Date: 10/09/2024

Soakaway Test Dimensions

Depth to top of test zone (m) 0.50
Depth to base of test zone (m) 1.50
Length of pit (m) 2.10
Width of pit (m) 0.60
Voids Ratio (%) 100

Water Level During Test

Time (secs)	Depth bgl (m)
0	0.50
60	0.52
120	0.53
180	0.54
240	0.55
300	0.55
360	0.57
420	0.57
480	0.57
540	0.58
600	0.58
900	0.60
1200	0.61
1800	0.64
2400	0.66
3000	0.67
3600	0.69
7200	0.78
10800	0.84
14400	0.91
18000	0.96
21600	1.00
82800	1.32

$$f = \frac{V_p}{\alpha_p \times t_p}$$

f = soil infiltration rate

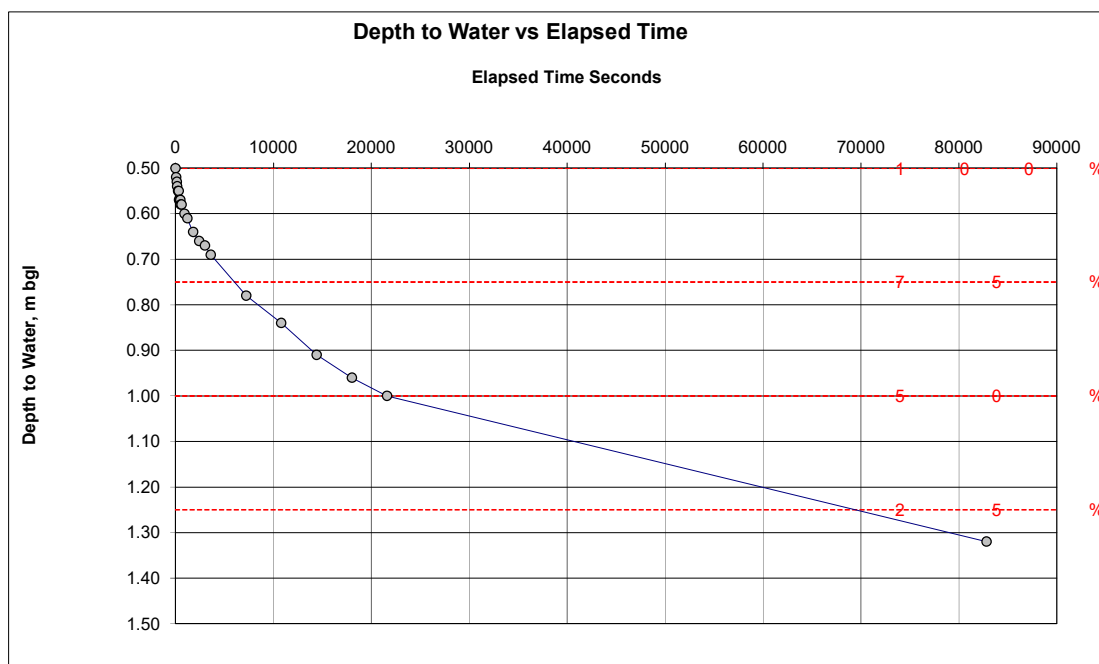
V_p = volume of water from 75% to 25% effective depth

α_p = Internal surface area at 50% effective depth

t_p = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs) 6000
time at 25% effective depth (secs) 69900

Calculated Soil Infiltration Rate = 2.49×10^{-6} m/sec



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham

Project Number : 24-1979-P

Test Location:	TP06
Test No:	1
Test Date:	10/09/2024

Soakaway Test Dimensions	
Depth to top of test zone (m)	0.80
Depth to base of test zone (m)	2.18
Length of pit (m)	2.10
Width of pit (m)	0.65
Voids Ratio (%)	100

Water Level During Test

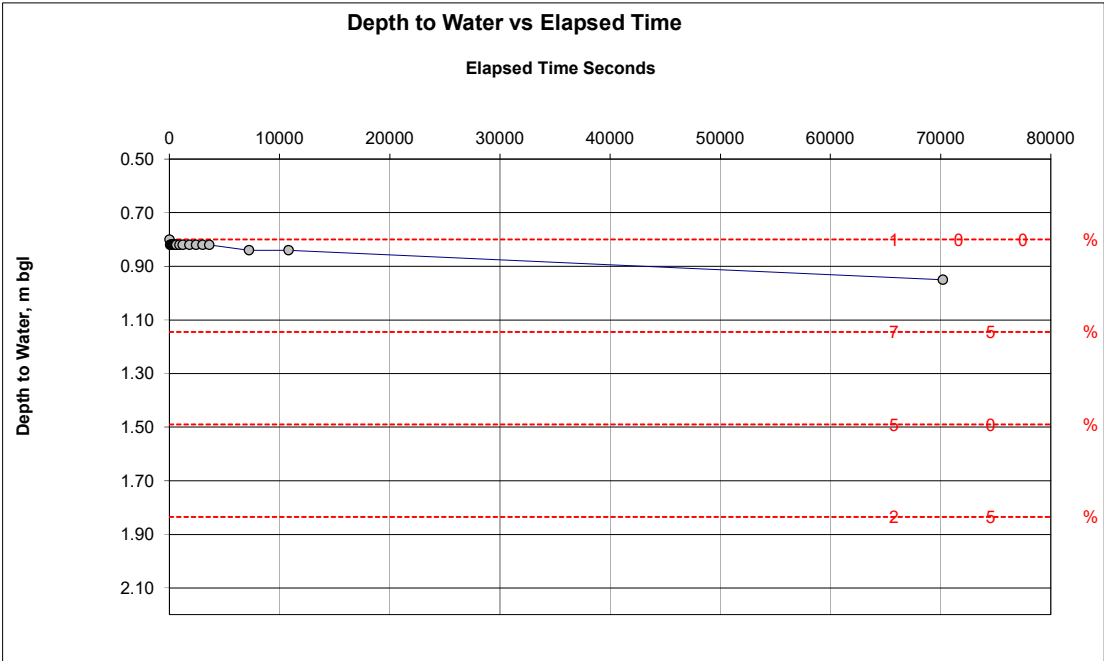
Time (secs)	Depth bgl (m)
0	0.80
60	0.82
120	0.82
180	0.82
240	0.82
300	0.82
360	0.82
420	0.82
480	0.82
540	0.82
600	0.82
900	0.82
1200	0.82
1800	0.82
2400	0.82
3000	0.82
3600	0.82
7200	0.84
10800	0.84
70200	0.95

$$f = \frac{V_p}{\alpha_p \times t_p}$$

f = soil infiltration rate
 V_p = volume of water from 75% to 25% effective depth
 α_p = Internal surface area at 50% effective depth
 t_p = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs)	FAIL
time at 25% effective depth (secs)	FAIL

Calculated Soil Infiltration Rate = FAIL



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Project Number : 24-1979-P

Depth to top of test zone (m)	0.71
Depth to base of test zone (m)	2.30
Length of pit (m)	2.00
Width of pit (m)	0.60
Voids Ratio (%)	100

Time (secs)	Depth bgl (m)
----------------	------------------

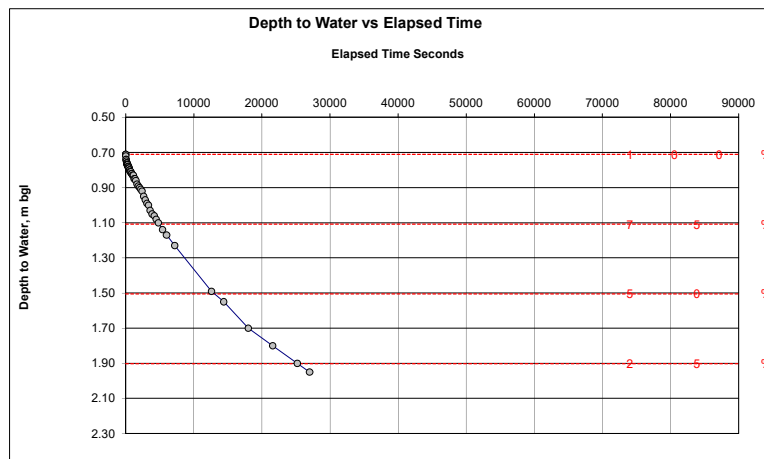
0	0.71
20	0.71
40	0.72
60	0.74
80	0.74
100	0.75
140	0.76
160	0.76
180	0.76
200	0.76
220	0.77
240	0.77
260	0.77
280	0.77
300	0.77
330	0.78
360	0.78
390	0.78
420	0.78
450	0.79
480	0.79
510	0.79
570	0.80
585	0.80
600	0.80
660	0.81
720	0.81
780	0.81
840	0.82
900	0.82
1020	0.83
1140	0.83
1260	0.85
1380	0.85
1500	0.86
1680	0.88
1860	0.89
2040	0.90
2220	0.91
2400	0.92
2640	0.95
2880	0.97
3120	0.99
3360	1.00
3600	1.03
3900	1.05
4200	1.06
4500	1.08
4800	1.10
5400	1.14
6000	1.17
7200	1.23
12600	1.49
14400	1.55
18000	1.70
21600	1.80
25200	1.90
27000	1.95

$$f = \frac{V_p}{\alpha_p \times t_p}$$

tp = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs)	4900
time at 25% effective depth (secs)	25200

8.81x10⁻⁶ m/sec



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham

Project Number : 24-1979-P

Test Location: TP14
Test No: 2
Test Date: 12/09/2024

Soakaway Test Dimensions

Depth to top of test zone (m)	0.58
Depth to base of test zone (m)	2.30
Length of pit (m)	2.00
Width of pit (m)	0.60
Voids Ratio (%)	100

Water Level During Test

Time (secs)	Depth bgl (m)
0	0.58
20	0.59
40	0.60
60	0.60
80	0.60
100	0.60
120	0.60
140	0.60
160	0.61
180	0.61
200	0.61
220	0.61
240	0.61
260	0.62
280	0.62
300	0.62
360	0.62
420	0.62
480	0.62
540	0.62
600	0.63
720	0.63
840	0.63
960	0.64
1080	0.64
1200	0.65
1500	0.67
1800	0.67
3600	0.72
7200	0.83
10800	0.94
14400	1.06

$$f = \frac{V_p}{a_p \times t_p}$$

f = soil infiltration rate

V_p = volume of water from 75% to 25% effective depth

a_p = Internal surface area at 50% effective depth

t_p = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs)

12900

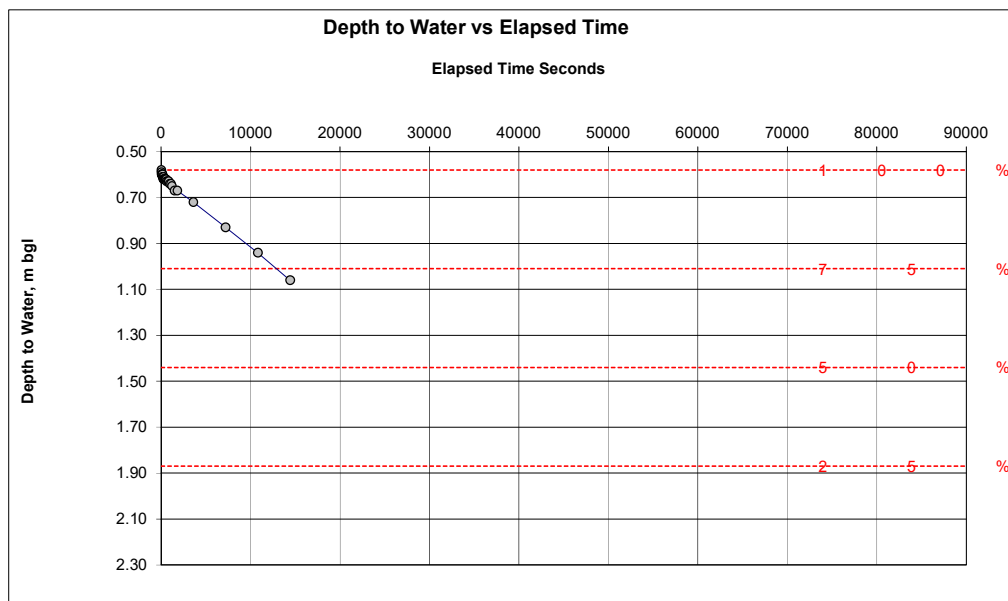
time at 25% effective depth (secs)

38700 Extrapolated

Value extrapolated due to insufficient time to complete test

Calculated Soil Infiltration Rate =

7.05x10-6 m/sec



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham
Project Number : 24-1979-P

Test Location:	TP16
Test No:	1
Test Date:	11/09/2024

Soakaway Test Dimensions	
Depth to top of test zone (m)	0.50
Depth to base of test zone (m)	1.40
Length of pit (m)	1.90
Width of pit (m)	0.60
Voids Ratio (%)	100

Water Level During Test

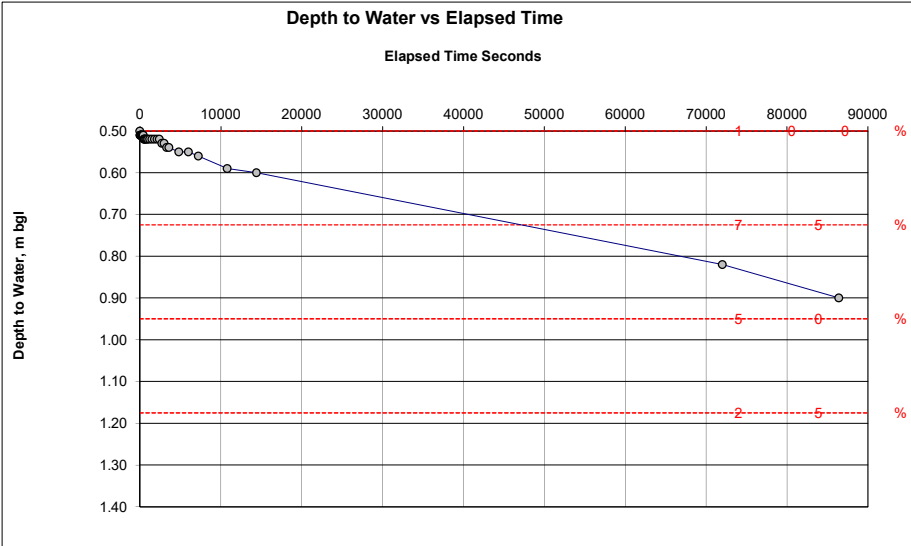
Time (secs)	Depth bgl (m)
0	0.50
20	0.51
40	0.51
60	0.51
80	0.51
100	0.51
120	0.51
140	0.51
160	0.51
180	0.51
200	0.51
220	0.51
240	0.51
260	0.51
280	0.51
300	0.51
360	0.51
420	0.51
480	0.52
540	0.52
600	0.52
720	0.52
840	0.52
969	0.52
1200	0.52
1500	0.52
1800	0.52
2100	0.52
2400	0.52
2700	0.53
3000	0.53
3300	0.54
3600	0.54
4800	0.55
6000	0.55
7200	0.56
10800	0.59
14400	0.60
72000	0.82
86400	0.90

$$f = \frac{V_p}{\alpha_p \times t_p}$$

f = soil infiltration rate
 V_p = volume of water from 75% to 25% effective depth
 α_p = Internal surface area at 50% effective depth
 t_p = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs)	48434
time at 25% effective depth (secs)	FAIL

Calculated Soil Infiltration Rate = FAIL m/sec



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham

Project Number : 24-1979-P

Test Location:	TP21
Test No:	1
Test Date:	12/09/2024

Soakaway Test Dimensions	
Depth to top of test zone (m)	0.50
Depth to base of test zone (m)	1.75
Length of pit (m)	2.00
Width of pit (m)	0.60
Voids Ratio (%)	100

Water Level During Test

Time (secs)	Depth bgl (m)
0	0.50
60	0.52
120	0.52
180	0.52
240	0.53
300	0.54
360	0.55
420	0.55
480	0.55
540	0.55
600	0.56
900	0.57
1200	0.59
1800	0.61
2400	0.64
3000	0.67
3600	0.69
7200	0.76
10800	0.82
14400	0.89

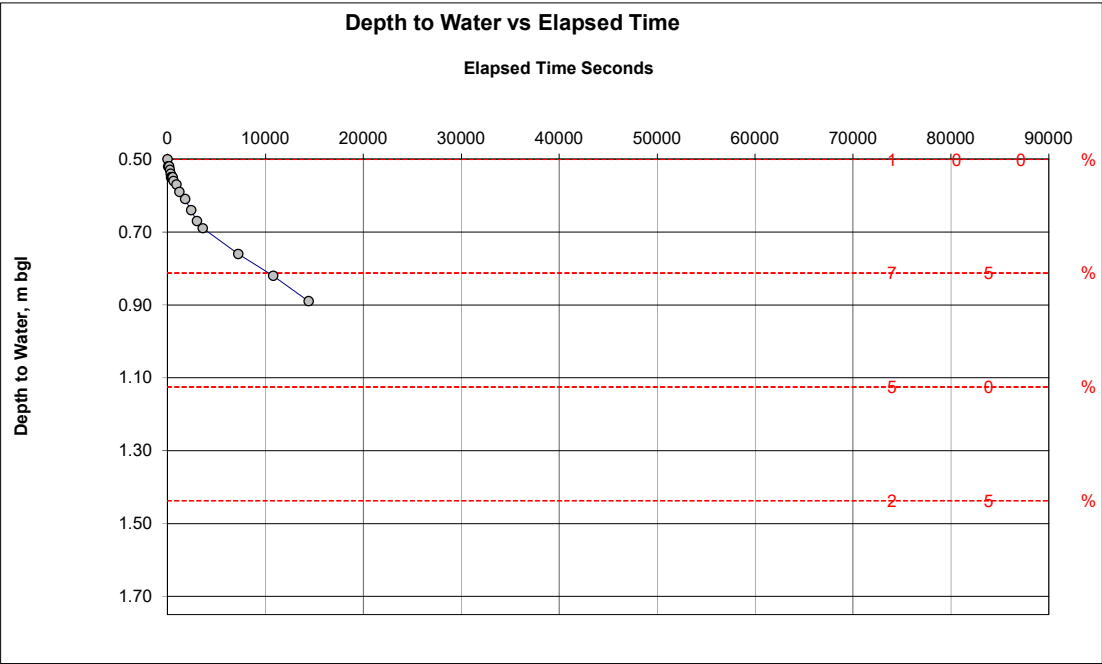
$$f = \frac{V_p}{a_p \times t_p}$$

f = soil infiltration rate
 V_p = volume of water from 75% to 25% effective depth
 a_p = Internal surface area at 50% effective depth
 t_p = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs)	10200
time at 25% effective depth (secs)	42670 Extrapolated

Value extrapolated due to insufficient tim to complete test

Calculated Soil Infiltration Rate = 5.19x10-6 m/sec



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham
Project Number : 24-1979-P

Test Location:	TP25
Test No:	1
Test Date:	12/09/2024

Soakaway Test Dimensions	
Depth to top of test zone (m)	0.44
Depth to base of test zone (m)	1.65
Length of pit (m)	2.00
Width of pit (m)	0.60
Voids Ratio (%)	100

Water Level During Test

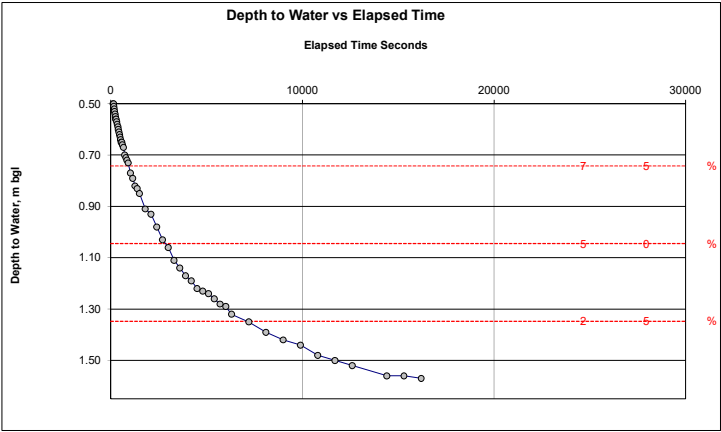
Time (secs)	Depth bgl (m)
0	0.44
20	0.45
40	0.46
60	0.47
80	0.48
100	0.49
120	0.50
140	0.50
160	0.51
180	0.52
200	0.53
220	0.54
240	0.55
260	0.56
280	0.56
300	0.57
330	0.58
370	0.59
390	0.60
420	0.61
450	0.62
480	0.63
510	0.64
540	0.65
570	0.65
600	0.66
660	0.67
720	0.70
780	0.71
840	0.72
900	0.73
1020	0.77
1140	0.79
1260	0.82
1380	0.83
1500	0.85
1800	0.91
2100	0.93
2400	0.98
2700	1.03
3000	1.06
3300	1.11
3600	1.14
3900	1.17
4200	1.19
4500	1.22
4800	1.23
5100	1.24
5400	1.26
5700	1.28
6000	1.29
6300	1.32
7200	1.35
8100	1.39
9000	1.42
9900	1.44
10800	1.48
11700	1.50
12600	1.52
14400	1.56
15300	1.56
16200	1.57

$$f = \frac{V_p}{\alpha_p \times t_p}$$

f = soil infiltration rate
 V_p = volume of water from 75% to 25% effective depth
 α_p = Internal surface area at 50% effective depth
 t_p = time for the water level to fall from 75% to 25% effective depth

time at 75% effective depth (secs)	930
time at 25% effective depth (secs)	7200

Calculated Soil Infiltration Rate = 2.66x10-5 m/sec



Soakaway Test Results



Project Name: Land at Hornbrook Farm, Brighton Road, Horsham

Project Number : 24-1979-P

Test Location:	TP25
Test No:	2
Test Date:	12/09/2024

Soakaway Test Dimensions	
Depth to top of test zone (m)	0.44
Depth to base of test zone (m)	1.65
Length of pit (m)	2.00
Width of pit (m)	0.60
Voids Ratio (%)	100

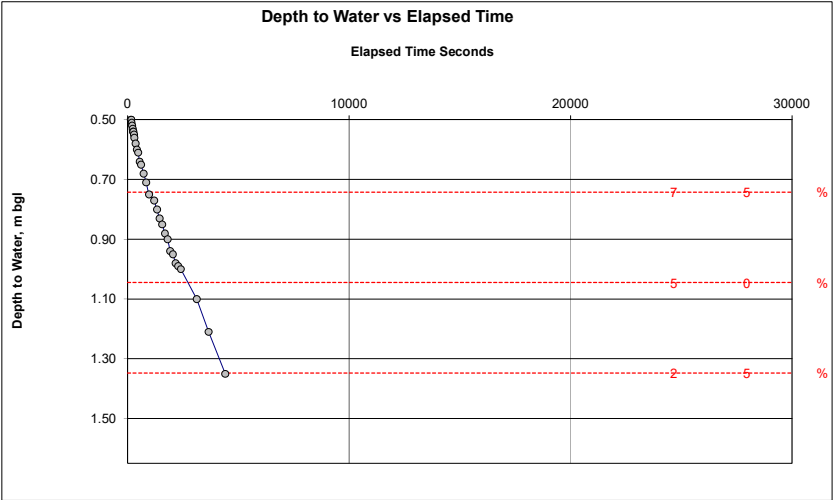
Water Level During Test

Time (secs)	Depth bgl (m)
0	0.44
20	0.44
40	0.46
60	0.47
80	0.48
100	0.48
120	0.48
140	0.50
160	0.50
180	0.51
200	0.52
220	0.53
240	0.54
260	0.54
280	0.55
300	0.56
360	0.58
420	0.60
480	0.61
540	0.64
600	0.65
720	0.68
840	0.71
960	0.75
1200	0.77
1320	0.80
1440	0.83
1560	0.85
1680	0.88
1800	0.90
1920	0.94
2040	0.95
2160	0.98
2280	0.99
2400	1.00
3120	1.10
3660	1.21
4400	1.35

$$f = \frac{V_p}{\alpha_p \times t_p}$$

f = soil infiltration rate	
V_p = volume of water from 75% to 25% effective depth	
α_p = Internal surface area at 50% effective depth	
t_p = time for the water level to fall from 75% to 25% effective depth	
time at 75% effective depth (secs)	930
time at 25% effective depth (secs)	4400

Calculated Soil Infiltration Rate = 4.81x10-5 m/sec





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