



Geotechnical &
Environmental
Consultants

Our ref: D37124/PK

28th September 2020

Belmont Contractors Ltd.
14-19 Spitfire Park
Northfield Road
Market Deeping
PE6 8GY

For the attention of Mr C. Todd

Dear Clint

Re: Supplementary Soil Sampling – Old Main Road, Fleet Hargate

We have now completed the supplementary soil sampling at the above site and are pleased to report as follows.

PROJECT UNDERSTANDING

We understand that the client (Belmont Contractors), are proposing to develop the site with nine low-rise residential properties with associated gardens.

PREVIOUS WORKS

The following reports have previously been prepared for the site, which should be read in conjunction with this letter:

- GeoDyne Limited Report entitled 'Old Main Road, Fleet Hargate – Combined Phase I Desk Study & Phase II Exploratory Investigation' prepared for Seagate Homes, Ref. D37124, dated 31st October 2017.
- GeoDyne Limited letter entitled 'Ground Gas Report - Old Main Road, Fleet Hargate', prepared for Belmont Contractors Ltd., Ref. D37124/PK, dated 25th September 2020.

We understand that since the production of the above Combined Report, Belmont Contractors have acquired the site from Seagate Homes.

The above referenced Combined Report highlighted the presence of a former historical pond in the northern extremity of the site (i.e. within the proposed rear garden area of Plot 5). It should be noted that access to the area of the former pond was not possible at the time of our previous site works in 2017.

LOCAL AUTHORITY CONSULTATION

The client has provided us with comments received from the Environmental Protection Officer (EPO) at South Holland District Council in relation to the above referenced Combined Report.

These comments are presented in Appendix I. With regards to the issue of the pond, the comments state '*There has been no investigation at all into the area of the former pond. This comprises the majority of the garden area of plot 5, and as such some investigation in this area is required*'.



Registered Number:
4286419 England & Wales

Registered Office:
GeoDyne Limited, Unit 2.2 Clarendon House, Clarendon Park, Nottingham NG5 1AH

GeoDyne Limited

9 Brunel Parkway, Pride Park, Derby DE24 8HR
Tel: 01332 290798 email: info@geodyne.co.uk

We have been requested by the client, to undertake investigation works in the area of the former pond at the site to satisfy the comments raised by the EPO.

SUPPLEMENTARY SOIL SAMPLING

Site Works

A window sampling borehole rig was mobilised to the site on 3rd September 2020 to advance five boreholes (WS1 to WS5) at the site, to a depth of 3.00m below existing ground level (begl). Four of these boreholes were installed with monitoring wells to facilitate a programme of ground gas monitoring (WS1 to WS4). Please refer to the ground gas report referenced on Page 1 with respect to this matter.

Boreholes WS4 and WS5 were advanced in the northern extremity of the site (within the proposed rear garden area to Plot 5) in an attempt to target the former location of the historical pond. A plan showing the approximate locations of the boreholes is presented in Appendix II of this report (Figure No. D37124/G1).

Ground Conditions

The ground conditions encountered in boreholes WS4 and WS5 revealed Made Ground to depths of between 1.55m and 1.95m begl, respectively.

The Made Ground encountered in these two boreholes is considered to be representative of pond infill materials and comprised loose to medium dense very silty sand and soft to firm very sandy silt. At the base of the Made Ground, a thin layer of black leaf remains were encountered, which is suspected to be the base of the former pond feature.

Beneath the Made Ground, the Natural Strata generally comprised soft to firm SILT. These deposits are considered to be typically representative of the Fenland Formation.

We would note that no obvious visual or olfactory evidence of significant soil contamination was identified during advancement of the boreholes (such as hydrocarbon impacted soils or asbestos fragments, for example).

The logs of the window sampling boreholes are presented in Appendix III of this report.

LABORATORY TESTING & CONTAMINATION ASSESSMENT

Introduction

Environmental soil testing was carried out on visually representative samples of the Made Ground recovered from boreholes WS4 and WS5. The testing strategy was considered sufficient to enable an assessment of the chemical status of the infill materials to the former pond.

The following testing was undertaken as part of our works:

- 3 No. Contamination suites (including metals, speciated Polycyclic Aromatic Hydrocarbons and Total Organic Carbon).
- 3 No. Asbestos screens.

Laboratory soil test results are included in Appendix IV of this report.

Laboratory Soil Test Results

The contamination assessment for the samples of Made Ground subjected to testing is summarised in Table 1.

Please note that screening values have only been used for determinands where they are present at concentrations in excess of the laboratory Limit of Detection (LOD) on at least one occasion.

**TABLE 1 – SUMMARY OF TIER 1 GAC ASSESSMENT
(RESIDENTIAL WITH PLANT UPTAKE END-USE)**

Contaminants – Potentially Harmful to Human Health	No. of Samples Tested	Concentration Range (mg/kg)	Tier 1 GAC (mg/kg)	Tier 1 GAC Exceeded (Yes/No) & No. of Exceedances
Metals				
Arsenic	3	2 - 10	37 S4UL	No
Chromium III	3	23 - 28	910 S4UL	No
Copper	3	9 - 16	2400 S4UL	No
Lead	3	12 – 15	200 C4SL	No
Nickel	3	19 – 22	130 S4UL	No
Zinc	3	48	3700 S4UL	No
Key				
S4UL – CIEH/LQM Suitable 4 Use Levels (2015). Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3026. All rights reserved. C4SL – value for Lead taken from DEFRA publication SP1010 and based on a residential (with home-grown produce) end-use.				

All determinands assessed were present at individual concentrations below the Limit of Detection of the method of analysis adopted by the laboratory or below the Tier 1 GAC based on a residential with plant uptake end-use. The results revealed that asbestos was not detected by the laboratory in any of the samples tested.

CONCLUSIONS & RECOMMENDATIONS

Contamination Assessment

On the basis of the chemical contamination assessment undertaken, the soils comprising the infill materials to the former pond may be considered to be uncontaminated for the proposed residential with plant uptake end-use (i.e. in relation to human health). **Therefore, the recommendations stated within Section 8.16 of our previous Combined Report for the site (referenced on Page 1) continue to apply.**

Statutory Consultation

We would recommend that a copy of this report is issued by the Client to the Local Authority (and NHBC or other Warranty Provider, if necessary) for review/comment and approval prior to commencing with the development of the site. We trust the above is suitable for your current requirements. If you have any queries, please do not hesitate to contact us.

Yours sincerely

For and on the behalf of GeoDyne Limited



**Paul Kershaw
Director**

Encl	Appendix I	Comments from Environmental Protection Officer
	Appendix II	Plan Showing Approximate Location of Monitoring Wells (Figure No. D37124/G1)
	Appendix III	Borehole Logs (WS1 to WS5)
	Appendix IV	Laboratory Soil Test Results
	Appendix V	Conditions & Limitations

APPENDIX I

Comments from Environmental Protection Officer

Online Comment

Application H05-0459-20
Location Land off Old Main Road Fleet Hargate Spalding
Proposal Details of Conditions 3, 4, 6, 7, 8, 9, 11, 12, 14, 15, 18, 19, 20, 21, 22 and 23 of H05-1235-18.

Name Sue Armour
Address Environmental Protection Officer SHDC PE11 2XE

Date Submitted 10-07-20
For/Against Comments

I have reviewed the GeoDyne Limited report 'Old Main Road Fleet Hargate Combined Phase I Desk Study & Phase II Exploratory Investigation For Seagate Homes' ref D37124 Combined Report V1.0 dated 31st October 2017 I am in general agreement with the findings, but am unable to recommend discharge of condition X at the current time. I make the following comments:

Please could the consultant clarify the situation with the near surface soils? The logs and text note that the site is underlain by topsoil, but the plates are labelled as 'made ground'.

There has been no investigation at all into the area of the former pond. This comprises the majority of the garden area of plot 5, and as such some investigation in this area is required.

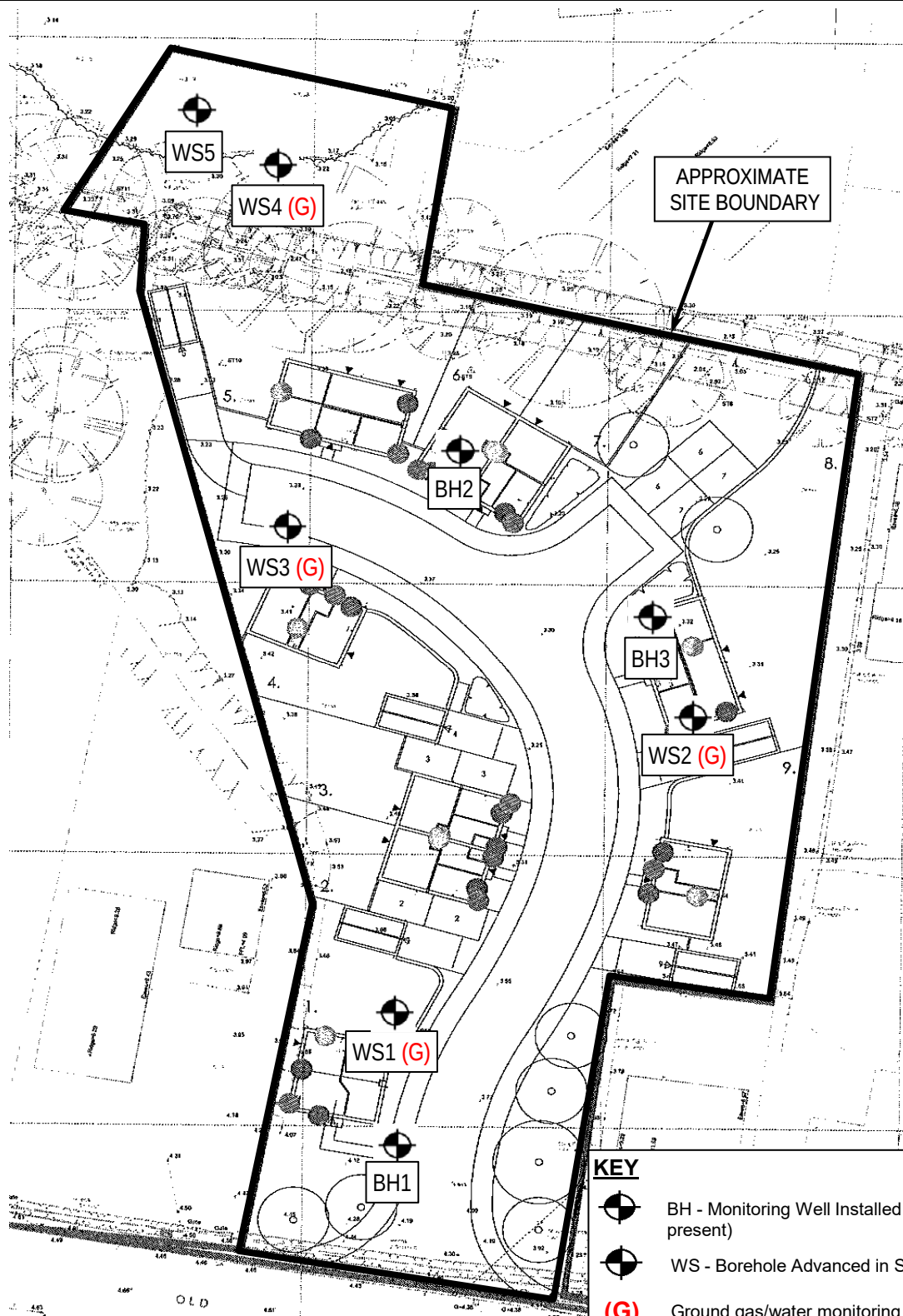
The site has been classified as CS2, however only three ground gas monitoring visits have been undertaken. Generally, a minimum of 6 visits are required in order to consider the site adequately characterised.

No details of the proposed ground gas protection measures have been submitted at this stage. Guidance as to the requirements, including the need for validation, can be found in the document 'YALPAG Technical Guidance - Verification requirements for gas protection systems v1.1' which can be downloaded from <https://www.sholland.gov.uk/article/11653/Planning-Application-Consultations-Condition-Discharge>

As such, I recommend that part i of condition 22 of H05-1235-18 be discharged, with parts ii-iv outstanding.

APPENDIX II

**Plan Showing Approximate Location of Monitoring Wells
(Figure No. D37124/G1)**

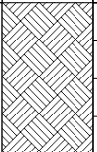
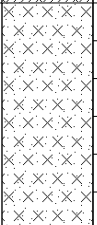
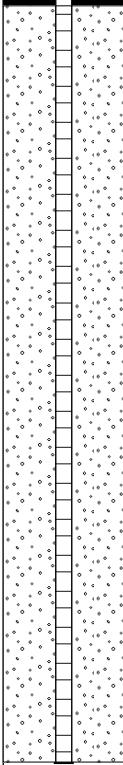
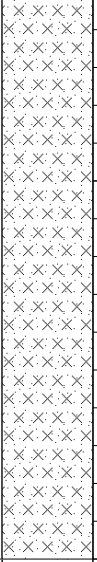


REPRODUCED FROM THE DRAWING ENTITLED 'CONSTRUCTION SITE LAYOUT'. PRODUCED BY STUDIO 11 ARCHITECTS, DRAWING NO. 356.CSL.01, DATED 30.01.2019. USED EDITED AND REPRODUCED WITH THE PERMISSION OF THE CLIENT.

Project No.	D37124	Drawn	SJ
Client	Belmont Contractors Ltd	Checked	PK
Project	Old Main Road Fleet Hargate	Approved	PK
		Scale	NTS
		Date Drawn	22/09/2020
Title	Plan Showing Approximate Locations of Monitoring Wells	Rev.	
		Figure No.	D37124/G1

APPENDIX III

Borehole Logs (WS1 to WS5)

Samples and Tests				Description of Strata	Legend	Depth & (Thickness) (m)	Casing (m)	Ground-water	Installation
Depth (m)	Type	Sample Ref	SPT "N" Value						
				Dark brown slightly sandy clayey very silty TOPSOIL (TOPSOIL)		(0.40)			
				Firm light brown mottled orange very sandy SILT (FENLAND FORMATION)		0.40			
				...becoming light brown below approximately 1.00m					
				...becoming soft to firm and damp below approximately 1.20m					
				...becoming wet below approximately 1.50m					
						(2.60)			
				End of Borehole at 3.00m		3.00	3.00		

Remarks

1.Borehole cased to 3.00m as a precautionary measure.
2.Water encountered at approximately 1.50m.
3.Plain pipe installed from ground level to 1.00m in a bentonite surround. Slotted pipe installed from 1.00m to 3.00m in a gravel surround.
4.Bung, valve and lockable cover installed.

Key

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
J = Jar Sample
V = Vial Sample
W = Water Sample
S = Standard Penetration Test (Split Spoon)
C = Standard Penetration Test (Cone)
 = Water Strike (m)
 = Steady Water Level (m)

Project: Old Main Road, Fleet Hargate

Client: Belmont Contractors Ltd.

Logged: PK

Checked: PK

Field Book Ref:

Plant: Competitor Rig

Drawing Ref:

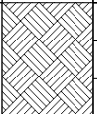
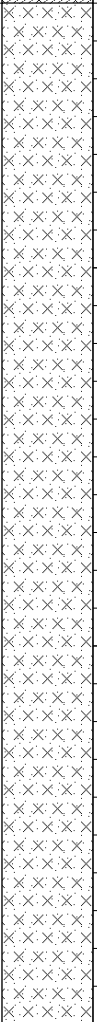
Date: 03/09/2020

Approved: PK

PK2019/02

Scale: 1:20

WS1

Samples and Tests				Description of Strata	Legend	Depth & (Thickness) (m)	Casing (m)	Ground-water	Installation
Depth (m)	Type	Sample Ref	SPT "N" Value						
				Dark brown slightly sandy clayey very silty TOPSOIL (TOPSOIL)		(0.30)			
				Firm light brown mottled orange very sandy SILT (FENLAND FORMATION)		0.30			
				...becoming light brown-grey below approximately 1.00m					
				...becoming soft to firm and damp below approximately 1.30m					
				...becoming wet below approximately 1.70m		(2.70)			
				End of Borehole at 3.00m		3.00	3.00		

Remarks

1. Borehole cased to 3.00m as a precautionary measure.
2. Water encountered at approximately 1.70m.
3. Plain pipe installed from ground level to 1.00m in a bentonite surround. Slotted pipe installed from 1.00m to 3.00m in a gravel surround.
4. Bung, valve and lockable cover installed.

Key

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
J = Jar Sample
V = Vial Sample
W = Water Sample
S = Standard Penetration Test (Split Spoon)
C = Standard Penetration Test (Cone)
 = Water Strike (m)
 = Steady Water Level (m)

Project: Old Main Road, Fleet Hargate

Client: Belmont Contractors Ltd.

Logged: PK

Checked: PK

Field Book Ref:

Plant: Competitor Rig

Drawing Ref:

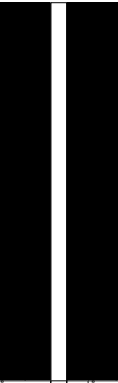
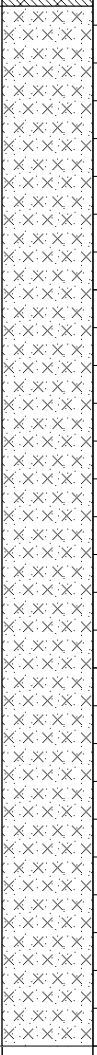
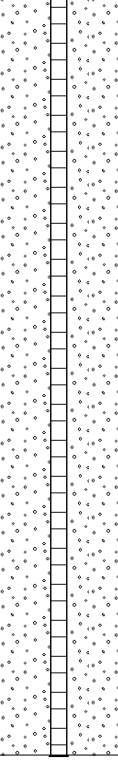
Date: 03/09/2020

Approved: PK

PK2019/02

Scale: 1:20

WS2

Samples and Tests				Description of Strata	Legend	Depth & (Thickness) (m)	Casing (m)	Ground-water	Installation
Depth (m)	Type	Sample Ref	SPT "N" Value						
				Dark brown slightly sandy clayey very silty TOPSOIL (TOPSOIL)		0.25			
				Firm light brown very sandy SILT (FENLAND FORMATION)					
				...becoming light brown mottled orange below approximately 1.00m		(2.75)			
				...becoming soft to firm and damp below approximately 1.35m					
				...becoming wet below approximately 1.80m					
				End of Borehole at 3.00m					
						3.00	3.00		

Remarks

1.Borehole cased to 3.00m as a precautionary measure.
2.Water encountered at approximately 1.80m.
3.Plain pipe installed from ground level to 1.00m in a bentonite surround. Slotted pipe installed from 1.00m to 3.00m in a gravel surround.
4.Bung, valve and lockable cover installed.

Key

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
J = Jar Sample
V = Vial Sample
W = Water Sample
S = Standard Penetration Test (Split Spoon)
C = Standard Penetration Test (Cone)
 = Water Strike (m)
 = Steady Water Level (m)

Project: Old Main Road, Fleet Hargate

Client: Belmont Contractors Ltd.

Logged: PK

Checked: PK

Field Book Ref: PK2019/02

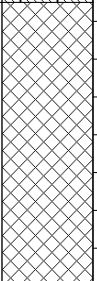
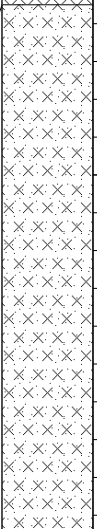
Plant: Competitor Rig

Drawing Ref: WS3

Date: 03/09/2020

Approved: PK

Scale: 1:20

Samples and Tests				Description of Strata	Legend	Depth & (Thickness) (m)	Casing (m)	Ground-water	Installation
Depth (m)	Type	Sample Ref	SPT "N" Value						
0.30 - 0.40	D	T1		Dark brown slightly sandy clayey very silty TOPSOIL (TOPSOIL)		0.15			
				Loose to medium dense brown very silty sand (MADE GROUND)					
0.95 - 1.00	D	T2				(0.80)			
				Loose to medium dense dark grey and brown very silty sand with occasional root remains and slight organic odour (MADE GROUND)		0.95			
				Soft to firm grey-brown mottled dark grey very sandy silt (MADE GROUND)		1.20			
				Soft to firm grey-brown very sandy silt with a thin layer of black leaf remains. Suspected base of former pond (MADE GROUND)		1.45			
				Soft to firm grey-brown very sandy SILT (FENLAND FORMATION)		1.55			
				...becoming damp with depth		(1.45)			
				End of Borehole at 3.00m		3.00	3.00		

Remarks

1.Borehole cased to 3.00m as a precautionary measure.
2.No water encountered.
3.Plain pipe installed from ground level to 1.00m in a bentonite surround. Slotted pipe installed from 1.00m to 3.00m in a gravel surround.
4.Bung, valve and lockable cover installed.

Key

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
J = Jar Sample
V = Vial Sample
W = Water Sample

S = Standard Penetration Test (Split Spoon)
C = Standard Penetration Test (Cone)
 = Water Strike (m)
 = Steady Water Level (m)

Project: Old Main Road, Fleet Hargate

Client: Belmont Contractors Ltd.

Logged: PK

Checked: PK

Field Book Ref: PK2019/02

Plant: Competitor Rig

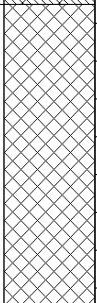
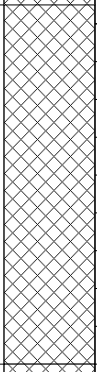
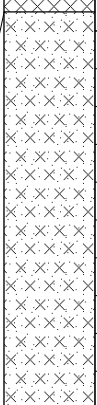
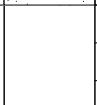
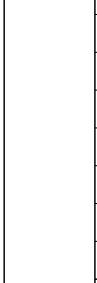
Drawing Ref:

Date: 03/09/2020

Approved: PK

Scale: 1:20

WS4

Samples and Tests				Description of Strata	Legend	Depth & (Thickness) (m)	Casing (m)	Ground-water	Installation
Depth (m)	Type	Sample Ref	SPT "N" Value						
0.50 - 0.60	D	T3		Dark brown slightly sandy clayey very silty TOPSOIL (TOPSOIL)		0.15			
				Firm mixture of brown and grey-brown very sandy silt with rare limestone gravel (MADE GROUND)		(0.80)			
1.10 - 1.20	D	T4		...with a limestone cobble at 0.80m		0.95			
				Soft to firm grey-brown very sandy silt (MADE GROUND)		(0.95)			
				Soft to firm dark grey-brown very sandy silt with a thin layer of black leaf remains. Suspected base of former pond (MADE GROUND)		1.90 1.95			
				Soft to firm grey-brown very sandy SILT (FENLAND FORMATION)		(1.05)			
				...becoming firm with depth			3.00		
				End of Borehole at 3.00m		3.00			

Remarks

1. Borehole cased to 3.00m as a precautionary measure.
2. No water encountered.

Key

D = Disturbed Sample
U = Undisturbed Sample
B = Bulk Sample
J = Jar Sample
V = Vial Sample
W = Water Sample

S = Standard Penetration Test (Split Spoon)
C = Standard Penetration Test (Cone)
 = Water Strike (m)
 = Steady Water Level (m)

Project: Old Main Road, Fleet Hargate

Client: Belmont Contractors Ltd.

Logged: PK

Checked: PK

Field Book Ref:

Plant: Competitor Rig

Drawing Ref:

Date: 03/09/2020

Approved: PK

PK2019/02

Scale: 1:20

WS5

APPENDIX IV

Laboratory Soil Test Results

FINAL ANALYTICAL TEST REPORT

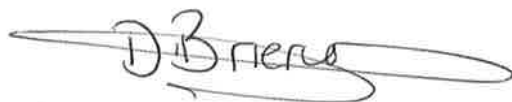
Envirolab Job Number: 20/07506
Issue Number: 1

Date: 15 September, 2020

Client: GeoDyne (Derby)
9 Brunel Parkway
Pride Park
Derby
Derbyshire
UK
DE24 8HR

Project Manager: Paul Kershaw
Project Name: Old Main Road, Fleet Hargate
Project Ref: D37124
Order No: D37124
Date Samples Received: 08/09/20
Date Instructions Received: 08/09/20
Date Analysis Completed: 14/09/20

Prepared by:



Danielle Brierley
Client Manager

Approved by:



Sophie France
Client Service Manager

Envirolab Job Number: 20/07506

Client Project Name: Old Main Road, Fleet Hargate

Client Project Ref: D37124

Lab Sample ID	20/07506/1	20/07506/2	20/07506/3					Units	Limit of Detection	Method ref
Client Sample No	T1	T2	T3							
Client Sample ID	WS4	WS4	WS5							
Depth to Top	0.30	0.95	0.50							
Depth To Bottom	0.40	1.00	0.60							
Date Sampled	03-Sep-20	03-Sep-20	03-Sep-20							
Sample Type	Soil	Soil	Soil							
Sample Matrix Code	5AE	5A	5A							
% Stones >10mm _A	<0.1	<0.1	<0.1					% w/w	0.1	A-T-044
pH _D ^{M#}	7.40	7.24	8.03					pH	0.01	A-T-031s
Total Organic Carbon _D ^{M#}	0.62	0.56	0.94					% w/w	0.03	A-T-032s
Arsenic _D ^{M#}	2	2	10					mg/kg	1	A-T-024s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5					mg/kg	0.5	A-T-024s
Copper _D ^{M#}	16	11	9					mg/kg	1	A-T-024s
Chromium _D ^{M#}	23	26	28					mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1					mg/kg	1	A-T-040s
Chromium (trivalent)	23	26	28					mg/kg	1	Calc
Lead _D ^{M#}	15	14	12					mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17					mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	19	21	22					mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1					mg/kg	1	A-T-024s
Zinc _D ^{M#}	48	48	48					mg/kg	5	A-T-024s

Envirolab Job Number: 20/07506

Client Project Name: Old Main Road, Fleet Hargate

Client Project Ref: D37124

Lab Sample ID	20/07506/1	20/07506/2	20/07506/3					Units	Limit of Detection	Method ref
Client Sample No	T1	T2	T3							
Client Sample ID	WS4	WS4	WS5							
Depth to Top	0.30	0.95	0.50							
Depth To Bottom	0.40	1.00	0.60							
Date Sampled	03-Sep-20	03-Sep-20	03-Sep-20							
Sample Type	Soil	Soil	Soil							
Sample Matrix Code	5AE	5A	5A							
Asbestos in Soil (inc. matrix)										
Asbestos in soil [#]	NAD	NAD	NAD							A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A							A-T-045

Envirolab Job Number: 20/07506

Client Project Name: Old Main Road, Fleet Hargate

Client Project Ref: D37124

Lab Sample ID	20/07506/1	20/07506/2	20/07506/3					Units	Limit of Detection	Method ref
Client Sample No	T1	T2	T3							
Client Sample ID	WS4	WS4	WS5							
Depth to Top	0.30	0.95	0.50							
Depth To Bottom	0.40	1.00	0.60							
Date Sampled	03-Sep-20	03-Sep-20	03-Sep-20							
Sample Type	Soil	Soil	Soil							
Sample Matrix Code	5AE	5A	5A							
PAH-16MS										
Acenaphthene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Acenaphthylene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Anthracene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Chrysene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Fluoranthene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Fluorene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Naphthalene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Phenanthrene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Pyrene _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s
Total PAH-16MS _A ^{M#}	<0.1	<0.1	<0.1					mg/kg	0.1	A-T-019s

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.

APPENDIX V

Conditions & Limitations

Conditions & Limitations

Phase I Desk Studies

1. Works undertaken to provide the basis of the Phase I Desk Study report comprise a review of information available from a number of sources/parties (potentially also including the Client) together with a walk over of the site (where applicable and included within the quotation). The opinions given in the Phase I Desk Study are based on the information available from third parties/sources that has been obtained within the available timeframe. GeoDyne Limited assumes all third party information to be true and correct and therefore cannot accept liability for the accuracy of such information supplied.
2. Should additional information become available that may affect the comments and opinions made within the Phase I Desk Study, GeoDyne Limited reserves the right to review such information and make modifications to comments/opinions as appropriate.
3. It should be borne in mind that a Phase I Desk Study collates available information to generate a conceptual model of the site. The actual geotechnical and environmental considerations can only be fully quantified by intrusive investigation works to confirm the accuracy of the conceptual site model.

Phase II Intrusive Investigations

1. Our quotation assumes that access to the site will be arranged by others at no cost to ourselves.
2. We have assumed that free access is available throughout to the entire site and that works can be undertaken during a single mobilisation. Where restricted access is encountered, or where additional unscheduled mobilisations are required, additional costs may be incurred to the client.
3. We have assumed that all available information relating to buried services will be supplied by the Client at no cost to ourselves. No responsibility will be accepted for damage to underground services that have not been brought to our prior attention by the Client.
4. All excavations/boreholes will be backfilled with compacted arisings upon completion, with any excess arisings left proud of ground levels. Excess arisings will not be removed from the site unless specifically requested by the Client. Where we are requested to remove excess arisings, all associated costs will be passed to the Client.
5. We will attempt to leave the site in a clean and tidy state, however, it must be understood that some disturbance of the site is unavoidable during intrusive works.
6. Exploratory holes are positioned approximately on site by GeoDyne Limited. Should the client require precise locations of all exploratory points, additional fees will be incurred. It must be borne in mind that backfilled trial pits can create 'soft spots', therefore, should the Client wish to designate 'no dig' zones, for example under the footprint of proposed structures, these must be brought to our attention prior to commencement of works.
7. Groundwater observations relate to conditions encountered at the time of investigation. It must be understood that groundwater levels may vary as a result of recent climatic conditions or seasonal variation.
8. Trial pits and boreholes examine only a small proportion of the total site area. No liability can be accepted for conditions not revealed in exploratory holes, particularly between positions. All extrapolations of available data are given in good faith.

Payment

1. Payment terms are strictly 28 days from the invoice date.
2. Prior to commencement of works, we require receipt of formal written instruction from the party accepting full financial responsibility for the work. In the absence of such an instruction, we would expect the instructing Consulting Engineers/Architects to accept full financial responsibility for the works.
3. Receipt of instruction to commence work shall be taken as acceptance and compliance of the foregoing conditions.

Liability

1. GeoDyne Limited offer £5,000,000.00 Professional Indemnity Insurance (in aggregate over the year). This shall be the limit of our liability for works undertaken. No individual liability shall be implied to, or accepted by, any employee for works undertaken for and on the behalf of GeoDyne Limited.