

Your Ref:
Our Ref: CRM.1265.035.GE.P.001.A

Date: 2 December 2021
Email: steve.rhodes@enzygo.com

Rory Baxter
Bellway Homes
19 Imperial Way,
Reading, RG2 0TD

By Email: Rory.Baxter@bellway.co.uk

Dear Rory

RE: Dee Road, Tilehurst, Reading, RG30 4BX

General

We are pleased to provide a summary of the ground investigation works undertaken and preliminary recommendations.

Desk Study Information

No significant contamination risks have been identified from the desk study information.

The British Geological Survey (BGS) indicates that the site is underlain by the following geological sequence:

Geological	Type	Descriptions	Aquifer Classification
Drift	Lambeth Beds	Clay	Secondary A
Solid	Seaford and Newhaven Formation	Chalk.	Principal

Ground Investigation

A site investigation was undertaken by Enzygo Geoenvironmental Limited between 18th and 19th November 2021 and comprised nine window sampler boreholes (WS1 to WS9).

Boreholes WS1 to WS4 were located around an underground fuel tank identified from a previous ground investigation report, the location of which was confirmed on site.

Ground Conditions

Ground and groundwater conditions have been assessed by Enzygo Geoenvironmental Limited investigation. The investigation undertaken identify the following strata:

Strata	Summary Description	Thickness (m)
Made Ground	Tarmac or concrete and medium dense grey clayey flint gravel. This is underlain by soft greenish grey sandy silty clay with gravel sized fragments of chalk, flint, brick, concrete and ash.	0.5 to 1.75
Lambeth Beds	Medium dense yellow brown clayey sand varying to soft becoming firm and stiff with depth sandy clay.	3.1 to 3.9
Seaford and Newhaven Formation	White and light yellow silt with occasional chalk gravel (Class Dm)	>0.9
Groundwater.	Seepages WS4 only.	3m bgl

Contamination

Slight hydrocarbon odour and staining were noted in Made Ground encountered within Borehole WS7 at a depth of between 0.2m and 0.6m bgl. No other visual or olfactory evidence of contamination was encountered during the site works, including around the tank.

Results of laboratory soil testing is attached and has assessed for potential risks to human health by comparing the soil quality data with reference values obtained from the Contaminated Land Exposure Assessment (CLEA), Soil Guideline Values (SGV) and General Acceptance Criteria (GAC) published by LQM and derived in consultation with the Chartered Institute of Environmental Health. The proposed use of the Development Site comprises conventional residential houses with domestic gardens. The GAC values for residential use with plant uptake are therefore used.

The soil quality shows exceedances of the GAC values in the following sample only:

Exploratory Hole	Determinant	Concentration (mg/kg)		Notes
		Soil	GAC	
WS1 @ 1.1m	Dibenz(a,h)anthracene	0.32	0.24	Within Made Ground.
	Arsenic	45	37	
WS3 @ 1.2m	Asbestos	Present	Absent	Quantification being undertaken.
WS4 @ 0.5m	Arsenic	45	37	Within Made Ground.
	Asbestos	Present	Absent	Quantification being undertaken.
WS7 @ 1.1m	Dibenz(a,h)anthracene	0.32	0.24	Within Made Ground.
	Benzo(b)fluoranthene	2.9	2.6	
	Benzo(a)pyrene	2.6	2.2	
	Naphthalene	3.7	2.3	
	Asbestos	Present	Absent	Quantification being undertaken.
WS8 @ 0.5m	Asbestos	Present	Absent	Quantification being undertaken.

No Total Petroleum Hydrocarbons (TPH) were detected above the GAC values. The elevated PAH is likely to be associated with ash material within Made Ground.

No significant contamination migration from the underground storage tank appears to have occurred.

Groundwater was only encountered in Borehole WS4 during the return visit. A sample was collected using low flow methods and the results should be available Friday 10th December.

Ground Gas

Ground gas was monitored during a return visit and the results are summarised on the table below:

Exploratory Hole	Atmos pressure (Mb)	Flow (l/hr)	CH4		CO2		O2
			Concentration (%)	GSV (l/hr)	Concentration (%)	GSV (l/hr)	Concentration (%)
29.11.21							
WS2	1009	<0.1	<0.1	<0.0001	0.6	<0.0006	20.5
WS4	1009	<0.1	<0.1	<0.0001	1.7	<0.0017	19.5
WS6	1009	<0.1	<0.1	<0.0001	1.1	<0.0011	20.3
WS7	1009	<0.1	<0.1	<0.0001	0.1	<0.0001	20.9
WS8	1009	<0.1	<0.1	<0.0001	0.9	<0.0009	20.6

Gas monitoring has not recorded elevated concentrations of Methane and no flow. Based on the gas monitoring undertake the Gas Screening Value is less than 0.07l/hr and therefore falls within Characteristic Situation 1 (CS1).

Additional ground gas monitoring is being undertaken.

Preliminary Assessment

No significant contamination migration from the underground fuel tank appears to have occurred which is supported by the presence of low permeability clay soils surrounding the tank.

No significant gas risk is identified and no gas protection measures are expected, subject to the additional monitoring being undertaken.

Some PAH, arsenic and asbestos contamination in Made Ground is identified and this should be addressed through the use of clean cover soils to soft landscape areas.

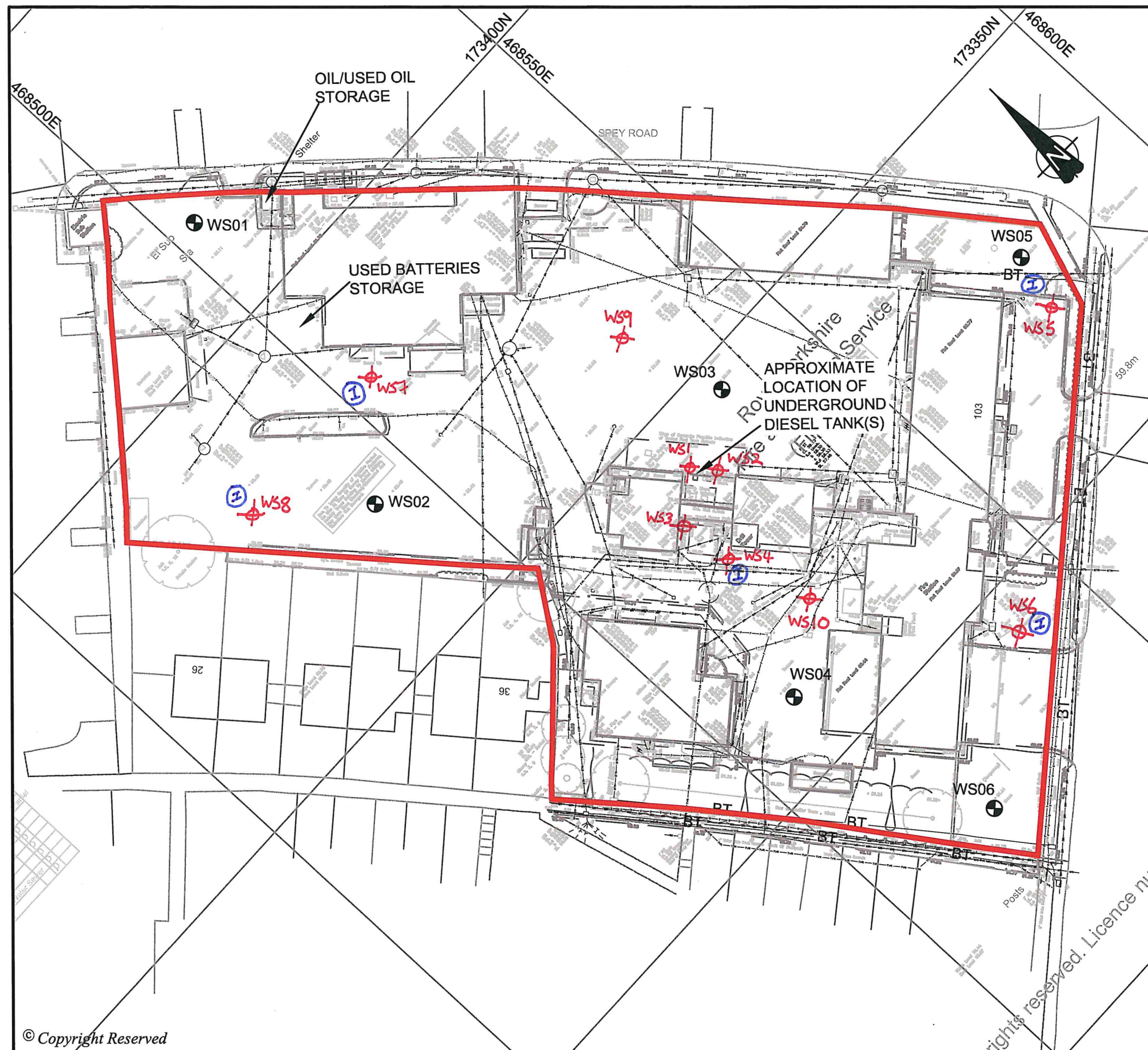
Yours sincerely,

For and on behalf of Enzygo



Steve Rhodes BSc(hon) MSc DIC CEng CGeol MIMMM MIEEnvSc FGS

Director



DO NOT SCALE FROM THIS DRAWING

KEY

- SITE BOUNDARY
- WS01 WINDOW SAMPLE LOCATIONS

NOTES:
LAYOUT/UTILITIES/SERVICES UNDERTAKEN
AND PROVIDED BY RANDALL SURVEY LLP.
DWG No. 15879/GN/1B DATED AUGUST 2020

A	FIRST ISSUE	14/10/20	SJB	SR	RB
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REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
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CLIENT

BNP PARIBAS REAL ESTATE

PROJECT

DEE ROAD FIRE STATION
READING

DRAWING TITLE

WINDOWLESS SAMPLING
LOCATION PLAN

DRG No	ST17828-002	REV	A
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SIZE	A4	SCALE	1:750	DATE	22-09-20
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DRAWN BY	DR	CHECKED BY	SR	APPROVED BY	RB
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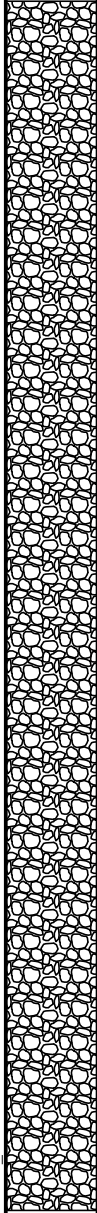
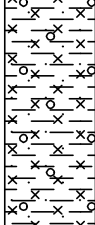
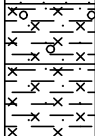
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Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS1
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates	

Client Bellway Homes	Sheet 1 of 2
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Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
		0.30 - 0.50	ES		0.10			MADE GROUND: Tarmac.	0
					0.20			MADE GROUND: Grey slightly clayey sandy angular to subangular fine to medium GRAVEL of flint. Sand is fine to coarse.	
					0.30			MADE GROUND: Reddish brown cobbly sandy angular to subangular and subrounded fine to coarse GRAVEL of brick and flint. Sand is fine to coarse.	
		0.90 - 1.10	ES		0.80			MADE GROUND: (Soft) greenish grey mottled yellow brown sandy silty CLAY with occasional angular fine to coarse brick fragments, dark grey staining and local decaying rootlets.	1
					1.20			MADE GROUND: (Soft) greenish grey slightly gravelly very sandy silty CLAY with dark grey staining and rare decaying rootlets. GRAVEL is angular to subangular and subrounded fine to medium flint, occasional chalk and brick fragments.	
					1.60			POSSIBLE MADE GROUND: Yellow brown mottled orange brown occasionally slightly gravelly clayey fine to medium SAND tending to a slightly gravelly sandy silty CLAY. Gravel is angular and subrounded fine flint.	
		1.90 - 2.00 2.00 - 2.45	D SPT	N 9	2.40			(Firm) greenish grey mottled yellow brown slightly sandy silty CLAY with rare subangular fine to medium flint gravel.	2
					3.20			Greenish grey mottled yellow brown clayey fine to medium SAND tending to a sandy silty CLAY.	
					3.40			3.00 - 3.45 Stiff, high strength.	
		2.90 - 3.00 3.00 - 3.45	ES SPT	N 23	3.90			(Stiff) greenish grey mottled yellow brown very gravelly sandy silty CLAY tending to a clayey sandy GRAVEL. Gravel is angular to subangular and subrounded fine to medium flint.	3
					4.00			(Stiff to very stiff) Dark green mottled dark brown and dark grey very sandy silty CLAY.	
					4.00				
		3.90 - 4.00 4.00 - 4.42	D SPT	N 50	4.00				4
					4.00				
					4.00				

Continued next sheet

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.10m begl. Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date

Strike Depth
(m)

Casing Depth
(m)

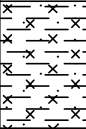
Depth After
Observation
(m)

All dimensions in metres
Scale 1:25

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NM



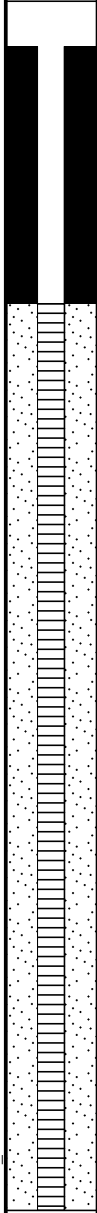
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Web: www.enzygo.com

Site Dee Road Fire Station, Dee Road, Reading RG30 4BT								WS1	
Job No CRM.1265.035		Dates Start 19-11-21 Finish 19-11-21		Ground Level (m)		Co-Ordinates			
Client Bellway Homes								Sheet 2 of 2	
Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					4.42		 (Very stiff) Dark green mottled dark brown and dark grey very sandy silty CLAY. 4.00 - 4.42 Very stiff, very high strength. Refused at 4.42m begl.	4	
							Borehole completed at 4.42m.	5	
								6	
								7	
					{8.00}			8	
General Remarks EQUIPMENT: Premier 110 compact window sampling tracked rig. METHOD: Hydraulic breaker 0.00m-0.10m begl. Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-4.00m begl. CASING: Not used. GROUNDWATER: Groundwater not encountered. BACKFILL: On completion, the borehole was backfilled with arisings.									
Groundwater									
Date		Strike Depth (m)		Casing Depth (m)		Depth After Observation (m)			
All dimensions in metres Scale 1:25								Logged By NM	

1.0 ENZYGO WS LOG CRM 1265.035 READING.GPJ GINT STD AGS 3.1 ENZYGO.GPJ 23/11/21

Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS2
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates	

Client Bellway Homes	Sheet 1 of 2
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Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					0.10 0.15			MADE GROUND: Tarmac.	0
								MADE GROUND: Grey slightly clayey sandy angular to subangular fine to medium GRAVEL of flint. Sand is fine to coarse.	
		0.40 - 0.60	ES		0.40			MADE GROUND: Grey and reddish brown sandy angular COBBLES of brick and concrete. Sand is fine to coarse.	
								MADE GROUND: (Soft) green grey mottled yellow brown slightly sandy CLAY with occasional angular brick cobbles and local rootlets.	
		0.90 - 1.00	ES		0.90				
		1.00 - 1.10	D					(Soft) green grey mottled yellow brown slightly sandy silty CLAY with occasional dark grey local staining, and rare local rootlets.	1
		1.20 - 1.65	SPT	N 10					
								1.20 - 1.60 No visible staining. Becoming mottled dark orange.	
					1.60				
		1.70 - 1.80	ES		1.80			Greenish grey mottled yellow brown clayey fine to medium SAND tending to a sandy CLAY.	
		1.90 - 2.00	D					(Firm) greenish grey mottled dark orange and yellow brown sandy silty CLAY with fine to medium sand-sized sand bands.	2
		2.00 - 2.45	SPT	N 12				2.00 - 2.45 Firm, medium strength.	
		2.30 - 2.50	ES		2.30			2.30 - 2.45 Becoming very sandy. (Firm to stiff) greenish grey sandy silty CLAY with dark grey staining. Sand is fine to medium.	
					2.65				
		2.90 - 3.00	D					Greenish grey mottled yellow brown clayey fine to medium SAND tending to a sandy CLAY.	3
		3.00 - 3.45	SPTLS	N 29				3.00 - 3.45 Medium dense.	
					3.60				
								(Stiff) Dark green mottled orange and yellow brown very gravelly sandy silty CLAY. Gravel is angular to subangular and subrounded fine to coarse flint.	
		3.90 - 4.00	D		3.90				
		4.00 - 4.44	SPTLS	N 50	4.00 {4.00}				4

Continued next sheet

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.10m begl. Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 4.00m begl, granular response zone (4.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

Groundwater

Date

Strike Depth
(m)

Casing Depth
(m)

Depth After
Observation
(m)

All dimensions in metres
Scale 1:25

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Dee Road Fire Station, Dee Road, Reading RG30 4BT

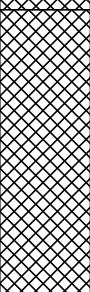
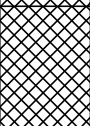
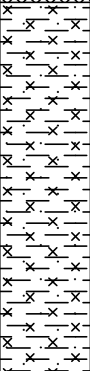
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates
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Sheet
2 of 21.0ENZYGOWS LOG CRM.1265.035 READING.GPJ GINT STD AGS 3 1 ENZYGO.GPJ 23/11/21

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.10m begl. Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 4.00m begl, granular response zone (4.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

Groundwater	Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
All dimensions in metres Scale 1:25		Logged By NM		

Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS3
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates	
Client Bellway Homes				Sheet 1 of 1

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					0.03			MADE GROUND: Tarmac.	0
								MADE GROUND: Concrete.	
					0.40				
								MADE GROUND: Black ashy sandy angular to subangular and rounded to subrounded fine to medium GRAVEL of flint, ash and occasional clinker. Sand is fine to coarse.	
		1.00 - 1.20	D ES					1.00 - 3.00 Borehole collapsed due to presence of gravel associated with adjacent services.	1
		1.20 - 1.65	SPT	N 5				1.20 - 1.65 Loose.	
					1.35				
								MADE GROUND: Brown slightly sandy angular to subangular and subrounded fine to medium GRAVEL of flint. Sand is fine to coarse.	
		1.80 - 2.00	ES						
		2.00 - 2.45	SPT	N 7				(Firm) greenish grey mottled orange and yellow brown sandy silty CLAY with local black staining.	2
								2.00 - 2.45 Soft, low strength.	
		2.70 - 2.90	ES						
		2.90 - 3.00	D						
					3.00			Borehole completed at 3.00m.	3
					{4.00}				4

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.40m begl. Hand dug inspection pit 0.40m-1.20m begl. Dynamic sampled 1.20m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater encountered at 3.00m begl.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date

Strike Depth
(m)

Casing Depth
(m)

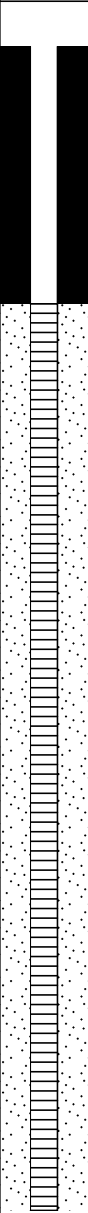
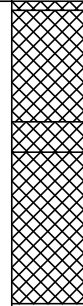
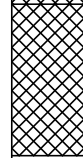
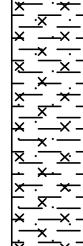
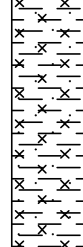
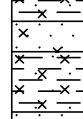
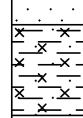
Depth After
Observation
(m)

All dimensions in metres
Scale 1:25

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Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS4
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates	

Client Bellway Homes	Sheet 1 of 2
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Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description		
		Depth (m)	No/Type	Results						
					0.03			MADE GROUND: Tarmac.	0	
								MADE GROUND: Concrete.		
		0.40 - 0.50	ES		0.40					
		0.55 - 0.75	ES		0.50				MADE GROUND: Black ashy gravelly fine to coarse SAND. Gravel is angular to subangular and subrounded fine to medium GRAVEL of flint.	
		0.80 - 0.90	D				MADE GROUND: (Soft) greenish grey mottled yellow brown sandy silty CLAY with occasional angular and subrounded fine flint and brick fragments, and local dark grey staining.			
		1.00 - 1.20	ES		1.00					
		1.20 - 1.65	SPT	N 6			(Soft) greenish grey mottled yellow brown slightly sandy silty CLAY. Sand is fine.		1	
							1.20 - 1.65 Soft, low strength.			
		1.90 - 2.00	D							
		2.00 - 2.45	SPT	N 10				2.00 - 2.45 Firm, medium strength.	2	
						2.15 Band light brown fine to medium SAND with dark grey staining.				
		2.70 - 2.90	ES		2.70					
		2.90 - 3.00	D		2.80			Yellow brown locally silty fine to coarse SAND with dark grey black staining.		
		3.00 - 3.45	SPT	N 22	3.00		(Firm to stiff) light brown mottled yellow brown slightly sandy silty CLAY with occasional local dark grey staining.	3		
					3.15			Yellow brown fine to coarse SAND.		
					3.30			Light grey brown slightly clayey fine to medium SAND.		
								(Stiff) light grey brown mottled yellow brown sandy silty CLAY.		
					3.60					
					3.70			Light grey brown fine to medium SAND.		
		3.90 - 4.00	D					(Stiff) light grey brown mottled orange and yellow brown sandy silty CLAY. 3.72 - 3.75 With local black staining.	4	
4.00 - 4.45	SPT	N 18	4.00 {4.00}							
Continued next sheet										

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.40m begl. Hand dug inspection pit 0.40m-1.20m begl. Dynamic sampled 1.20m-5.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater encountered at 3.00m begl.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 4.00m begl, granular response zone (4.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
19/11/21	3.00		

All dimensions in metres
Scale 1:25

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Site

Dee Road Fire Station, Dee Road, Reading RG30 4BT

WS4

Job No

Dates

Start 19-11-21
Finish 19-11-21

Ground Level (m)

Co-Ordinates

CRM.1265.035

Client

Bellway Homes

Sheet

2 of 2

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General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.40m begl. Hand dug inspection pit 0.40m-1.20m begl. Dynamic sampled 1.20m-5.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater encountered at 3.00m begl.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 4.00m begl, granular response zone (4.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

Groundwater	Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
All dimensions in metres Scale 1:25				Logged By NM

1.0ENZYGO WS LOG CRM.1265.035 READING.GPJ GINT STD AGS 3 1ENZYGO.GPJ 23/11/21

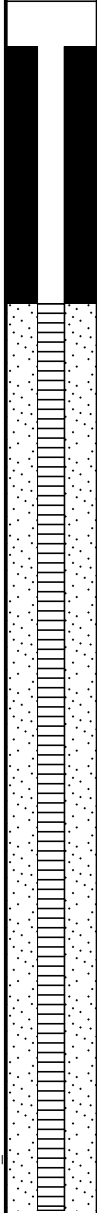


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Site Dee Road Fire Station, Dee Road, Reading RG30 4BT										WS5
Job No CRM.1265.035		Dates Start 18-11-21 Finish 18-11-21		Ground Level (m)		Co-Ordinates				
Client Bellway Homes										Sheet 1 of 1
Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description		
		Depth (m)	No/Type	Results						
		0.40 - 0.60	B ES		0.15			MADE GROUND: Tarmac.	0	
					0.40			MADE GROUND: Concrete.		
					0.72			MADE GROUND: (Soft) green grey locally slightly gravelly sandy silty CLAY. Gravel is angular and subrounded fine to medium flint.		
					0.75					
							0.72 Concrete obstruction encountered, possibly a basement ceiling, borehole terminated. MADE GROUND: Concrete. Borehole completed at 0.75m.	1		
									2	
									3	
					{4.00}				4	
General Remarks EQUIPMENT: Premier 110 compact window sampling tracked rig. METHOD: Hydraulic breaker 0.00m-0.40m begl. Hand dug inspection pit 0.40m-0.72m begl. Hydraulic breaker 0.72m-0.75m begl. CASING: Not used. GROUNDWATER: Groundwater not encountered. BACKFILL: On completion, the borehole was backfilled with arisings.										
Groundwater DateStrike Depth (m)Casing Depth (m)Depth After Observation (m)										
All dimensions in metres Scale 1:25										Logged By NM

1.0 ENZYGO WS LOG CRM 1265.035 READING.GPJ GINT STD AGS 3.1 ENZYGO.GPJ 23/11/21

Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS6
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates	
Client Bellway Homes				Sheet 1 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					0.12			MADE GROUND: Grass over (very soft) brownish dark grey slightly gravelly sandy SILT with frequent rootlets. Gravel is angular to subangular and subrounded fine to medium flint and occasional ash. Sand is fine to medium.	0
		0.40 - 0.60	B ES					0.12 - 0.60 Becoming yellow brown. MADE GROUND: (Soft) Yellow brown and dark grey brown occasionally slightly gravelly sandy silty CLAY with local rootlets. GRAVEL is angular to subangular fine to medium flint, and brick fragments.	
		1.00 - 1.20	ES		0.90			MADE GROUND: (Soft) greenish grey mottled orange and yellow brown occasionally slightly gravelly sandy silty CLAY. Gravel is angular to subangular and subrounded fine flint and ash.	1
		1.20 - 1.65	SPT	N 17	1.20			POSSIBLE MADE GROUND: Brown and yellowish brown mottled orange clayey sandy angular to subangular and rounded to subrounded fine to coarse flint GRAVEL of flint.	
		1.70 - 1.90	ES		1.60			(Firm) greenish grey mottled light brown and yellow brown slightly gravelly sandy silty CLAY. Gravel is angular to subangular and subrounded fine to medium flint.	
		1.90 - 2.00	D		2.00			2.00 - 2.45 Firm, medium strength. (Firm to stiff) greenish grey mottled locally sandy silty CLAY. 2.10 Dark grey staining.	2
		2.00 - 2.45	SPT	N 11				2.40 - 2.80 Becoming very sandy.	
		2.10	ES					(Stiff) yellow brown sandy silty CLAY. Sand is fine.	3
		2.60 - 2.70	ES		2.80			3.00 - 3.35 Becoming greenish grey mottled orange and yellow brown. 3.00 - 3.45 Stiff, high strength.	
		2.90 - 3.00	D					Yellow brown and green grey fine to medium SAND with occasional local black staining.	
		3.00 - 3.45	SPT	N 23				3.70 - 4.00 Becoming yellow brown mottled grey green with local black staining. (Stiff) greenish grey mottled yellow brown sandy silty CLAY.	4
		3.55 - 3.75	ES		3.55				
					3.70				
		3.90 - 4.00	D						
		4.00 - 4.45	SPT	N 30	{4.00}				

Continued next sheet

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-5.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 5.00m begl, granular response zone (5.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

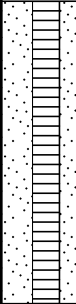
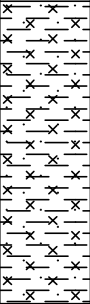
Groundwater	Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
All dimensions in metres Scale 1:25				
				Logged By NM



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Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS6
Job No CRM.1265.035	Dates Start 19-11-21 Finish 19-11-21	Ground Level (m)	Co-Ordinates	

Client Bellway Homes	Sheet 2 of 2
-------------------------	-----------------

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
		4.90 - 5.00	D					4.00 - 4.45 Stiff to very stiff, high strength.	4
		5.00 - 5.45	SPT	N 28	5.00			(Stiff) greenish grey mottled yellow brown sandy silty CLAY.	5
					5.45			5.00 - 5.45 Stiff, high strength.	
								Borehole completed at 5.45m.	
									6
									7
									8

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-5.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 5.00m begl, granular response zone (5.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

Groundwater

Date

Strike Depth
(m)

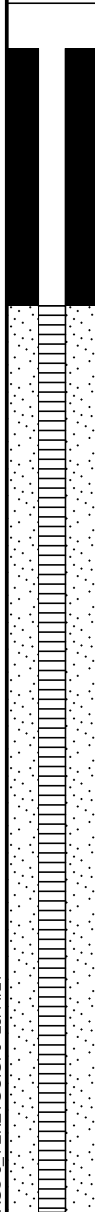
Casing Depth
(m)

Depth After
Observation
(m)

All dimensions in metres
Scale 1:25

Logged By
NM

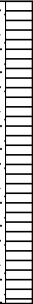
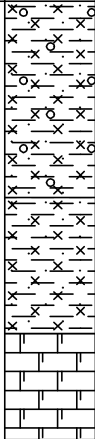
Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS7
Job No CRM.1265.035	Dates Start 18-11-21 Finish 18-11-21	Ground Level (m)	Co-Ordinates	
Client Bellway Homes				Sheet 1 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					0.10			MADE GROUND: Tarmac.	0
					0.20			MADE GROUND: Brown grey clayey sandy angular to subangular fine to medium GRAVEL of flint. Sand is fine to coarse.	
		0.40 - 0.60	B ES					MADE GROUND: Grey and reddish brown slightly cobbly sandy angular to subangular and subrounded fine to coarse GRAVEL of flint, brick, occasional ash and brick cobbles with dark grey hydrocarbon staining and odour. Sand is fine to coarse.	
		0.60 - 0.70	ES		0.55			MADE GROUND: Greenish grey mottled orange and yellow brown fine to medium SAND tending to a sandy silty CLAY.	
		1.10 - 1.15	ES						1
		1.20 - 1.65	SPTLS N 14		1.20				
									
									
									
									
									
									
									
									
					1.80		Grey green mottled light brown, orange and yellow brown locally fine to medium SAND. 2.00 - 2.45 Medium dense. 2.45 - 2.50 Becoming locally slightly clayey. 2.75 - 2.90 Becoming green grey, tending to a sandy silty CLAY.	2	
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
						<			



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Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS7
Job No CRM.1265.035	Dates Start 18-11-21 Finish 18-11-21	Ground Level (m)	Co-Ordinates	
Client Bellway Homes				Sheet 2 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
		4.90 - 5.00 5.00 - 5.45	D SPTLS N 18		4.65 5.10 5.45 {8.00}			4.00 - 4.45 Stiff, high strength.	4
								(Stiff) dark brown mottled dark grey and dark orange sandy silty CLAY. Sand is fine to medium.	
								5.00 - 5.10 Becoming dark green. 5.00 - 5.45 Stiff, medium strength.	5
								White speckled black and light yellow CHALK.	
								Borehole completed at 5.45m.	
									6
									7
									8

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.10m begl. Hand dug inspection pit 0.10m-1.20m begl. Dynamic sampled 1.20m-5.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 5.00m begl, granular response zone (5.00m-1.00m), bentonite seal 1.00m-0.15m, flush steel cover 0.15m-0.00m.

Groundwater

Date

Strike Depth
(m)

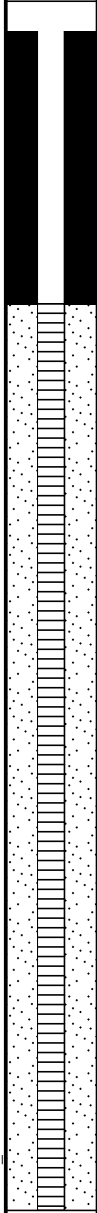
Casing Depth
(m)

Depth After
Observation
(m)

All dimensions in metres
Scale 1:25

Logged By
NM

Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS8
Job No CRM.1265.035	Dates Start 18-11-21 Finish 18-11-21	Ground Level (m)	Co-Ordinates	
Client Bellway Homes				Sheet 1 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
		0.20 - 0.50	ES		0.15			MADE GROUND: Tarmac.	0
					0.20			MADE GROUND: Grey and reddish brown clayey sandy angular to subangular and subrounded fine to coarse GRAVEL of flint and brick. San is fine to coarse.	
					0.25			MADE GROUND: Bland fine to coarse sand-sized ASH.	
		0.55 - 0.65	ES		0.55			MADE GROUND: Grey and reddish brown slightly clayey sandy cobbly angular to subangular and subrounded fine to coarse GRAVEL of flint, brick, cobbles of brick and concrete. Sand is fine to coarse.	
					0.90			(Soft) green grey mottled yellow brown sandy silty CLAY. Sand is fine to medium.	
		1.00 - 1.20	D					Grey green mottled yellow brown clayey fine to medium SAND.	1
		1.20 - 1.65	SPTLS N 9		1.20			1.20 - 1.65 Soft, low strength. (Stiff) green grey sandy silty CLAY. Sand is fine to medium.	
		1.90 - 2.00 2.00 - 2.45	D SPT	N 34	1.80			1.75 - 1.80 Becoming mottled orange and yellow brown.	
					2.00			Yellow brown fine to medium SAND.	
		2.90 - 3.00 3.00 - 3.45	D SPTLS N 37		2.10			Green green yellow brown clayey fine to medium SAND tending to a sandy CLAY.	2
					2.40			(Stiff) green grey mottled yellow brown sandy silty CLAY. Sand is fine to medium.	
					2.60			Green green mottled yellow brown slightly silty fine to coarse SAND.	
					2.80			(Stiff) green grey mottled orange and yellow brown sandy silty CLAY. Sand is fine to medium.	
					3.00			2.80 - 2.90 Becoming tending to a sandy silty CLAY. Green green mottled yellow brown clayey fine to medium SAND.	
					3.60			3.00 - 3.45 Very stiff, high strength. (Stiff) yellow brown mottled grey green very sandy silty CLAY. Sand is fine to medium.	3
		3.90 - 4.00 4.00 - 4.43	D SPTLS N 50		4.00			(Stiff to very stiff) dark green mottled yellow brown very gravelly sandy silty CLAY. Gravel is angular to subangular and subrounded medium to coarse flint. Sand is fine to medium.	
					{4.00}			Continued next sheet	4

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.15m begl. Hand dug inspection pit 0.15m-1.20m begl. Dynamic sampled 1.20m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 4.00m begl, granular response zone (4.00m-1.00m), bentonite seal 1.00m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date

Strike Depth (m)

Casing Depth (m)

Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By
NM



Site

Dee Road Fire Station, Dee Road, Reading RG30 4BT

WS8

Job No

Dates

Start 18-11-21
Finish 18-11-21

Ground Level (m)

Co-Ordinates

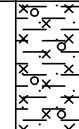
CRM.1265.035

Client

Bellway Homes

Sheet

2 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					4.43			(Very stiff) dark green mottled yellow brown very gravelly sandy silty CLAY. Gravel is angular to subangular and subrounded medium to coarse flint. Sand is fine to medium. 4.00 - 4.43 Very stiff, very high strength. Refused at 4.43m begl.	4
								Borehole completed at 4.43m.	5
									6
									7
									8
				{8.00}					

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.15m begl. Hand dug inspection pit 0.15m-1.20m begl. Dynamic sampled 1.20m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 4.00m begl, granular response zone (4.00m-1.00m), bentonite seal 1.00m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater	Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
All dimensions in metres Scale 1:25				Logged By NM

1.0ENZYGO WS LOG CRM.1265.035 READING.GPJ GINT STD AGS 3 1ENZYGO.GPJ 23/11/21

Site Dee Road Fire Station, Dee Road, Reading RG30 4BT				WS9
Job No CRM.1265.035	Dates Start 18-11-21 Finish 18-11-21	Ground Level (m)	Co-Ordinates	
Client Bellway Homes				Sheet 1 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description	
		Depth (m)	No/Type	Results					
					0.15			MADE GROUND: Tarmac.	0
		0.40 - 0.60	B					MADE GROUND: Grey and reddish brown sandy angular COBBLES of brick and concrete. Sand is fine to coarse.	
		0.50 - 0.70	ES		0.50				
		0.80 - 1.00	ES					MADE GROUND: Light green clayey fine to medium SAND with local dark grey staining with occasional brick fragments, decaying rootlets, and rare angular and subrounded fine flint gravel.	
		1.20 - 1.65	SPT	N 7	1.15 1.25			MADE GROUND: (Soft) light green slightly gravelly sandy silty CLAY with occasional local black staining. Gravel is angular and subrounded fine to medium flint.	1
		1.55 - 1.75	ES		1.45 1.55			MADE GROUND: (Soft) light brown slightly gravelly sandy silty CLAY with rare local black staining. Gravel is angular and subrounded fine to medium flint.	
		1.75 - 1.90	ES					MADE GROUND: Light brown slightly clayey sandy angular to subangular fine to coarse crystalline GRAVEL with rare local dark grey staining.	
		1.90 - 2.00	D		1.90			Light brown fine to medium SAND.	
		2.00 - 2.45	SPT	N 9				1.75 - 1.90 With occasional local black staining. (Firm to stiff) green grey mottled orange and yellow brown sandy silty CLAY with occasional local staining.	2
					2.30			2.00 - 2.30 Becoming (stiff), with no visible black staining. 2.00 - 2.45 Firm, low strength.	
								(Stiff) green grey brown mottled yellow brown very sandy silty CLAY. Sand is fine to medium.	
		2.90 - 3.00	D					(Stiff) dark green mottled yellow brown slightly gravelly sandy silty CLAY. Gravel is angular and subrounded fine to medium flint.	3
		3.00 - 3.45	SPT	N 10	3.00			3.00 - 3.45 Firm, medium strength. (Stiff) dark green mottled dark grey and yellow brown sandy silty CLAY.	
					3.30			(Stiff) dark green mottled yellow brown slightly gravelly sandy silty CLAY. Gravel is angular and subrounded fine to medium flint.	
					3.50			(Stiff) dark green mottled dark grey and yellow brown sandy silty CLAY.	
		3.90 - 4.00	D					(Stiff) dark green mottled yellow brown slightly gravelly sandy silty CLAY. Gravel is angular and subrounded fine to medium flint.	
		4.00 - 4.45	SPT	N 18	4.00 {4.00}			(Stiff) dark green mottled dark grey and yellow brown sandy silty CLAY.	4
Continued next sheet									

General Remarks

EQUIPMENT: Premier 110 compact window sampling tracked rig.
METHOD: Hydraulic breaker 0.00m-0.15m begl. Hand dug inspection pit 0.15m-1.20m begl. Dynamic sampled 1.20m-5.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date

Strike Depth (m)

Casing Depth (m)

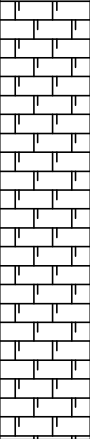
Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By
NM



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Site Dee Road Fire Station, Dee Road, Reading RG30 4BT								WS9						
Job No CRM.1265.035		Dates Start 18-11-21 Finish 18-11-21		Ground Level (m)		Co-Ordinates								
Client Bellway Homes								Sheet 2 of 2						
Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description						
		Depth (m)	No/Type	Results										
		4.90 - 5.00	D	SPTLS N 14	5.45			4.00 - 4.20 Flint cobbles. White specked black and light yellow CHALK.	4					
	5.00 - 5.45													
								Borehole completed at 5.45m.	5					
									6					
									7					
					{8.00}				8					
General Remarks EQUIPMENT: Premier 110 compact window sampling tracked rig. METHOD: Hydraulic breaker 0.00m-0.15m begl. Hand dug inspection pit 0.15m-1.20m begl. Dynamic sampled 1.20m-5.00m begl. CASING: Not used. GROUNDWATER: Groundwater not encountered. BACKFILL: On completion, the borehole was backfilled with arisings.														
<table><tr><td>Groundwater</td><td>Date</td><td>Strike Depth (m)</td><td>Casing Depth (m)</td><td>Depth After Observation (m)</td></tr></table>										Groundwater	Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
Groundwater	Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)										
All dimensions in metres Scale 1:25								Logged By NM						

1.0 ENZYGO WS LOG CRM 1265.035 READING.GPJ GINT STD AGS 3.1 ENZYGO.GPJ 23/11/21

**Steve Rhodes**

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e: reception@i2analytical.com

Analytical Report Number : 21-24698

Project / Site name:	Dee Road Reading RG30 4BT	Samples received on:	23/11/2021
Your job number:	CRM 1265 035	Samples instructed on/ Analysis started on:	24/11/2021
Your order number:	CRM 1265 032	Analysis completed by:	30/11/2021
Report Issue Number:	1	Report issued on:	30/11/2021
Samples Analysed:	20 soil samples		

Signed: *Karolina Marek*

Karolina Marek
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

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

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

Analytical Report Number: 21-24698
Project / Site name: Dee Road Reading RG30 4BT
Your Order No: CRM 1265 032

Lab Sample Number				2092289	2092290	2092291	2092292	2092293
Sample Reference				WS1	WS1	WS1	WS2	WS2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	1.10	3.00	0.40	1.00
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	10	11	15	16
Total mass of sample received	kg	0.001	NONE	1.2	1.2	1.2	1.2	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	Not-detected	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.4	-	-	7.6	-
Organic Matter (automated)	%	0.1	MCERTS	0.6	-	-	0.3	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.4	-	-	0.2	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.0	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.33	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	3.5	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	3.1	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.8	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	1.7	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.6	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.4	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.5	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.0	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.32	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	1.2	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	18.3	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	42	-	-	6.8	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	-	-	0.2	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	-	-	26	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	-	-	21	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	-	-	17	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	-	-	23	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	-	-	51	-

Analytical Report Number: 21-24698

Project / Site name: Dee Road Reading RG30 4BT

Your Order No: CRM 1265 032

Lab Sample Number				2092289	2092290	2092291	2092292	2092293
Sample Reference				WS1	WS1	WS1	WS2	WS2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	1.10	3.00	0.40	1.00
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	21	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	30	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-

TPH (>C5 - C7)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (>C7 - C8)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C8 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH (C10 - C12)	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16)	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C44)	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C44	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-24698
Project / Site name: Dee Road Reading RG30 4BT
Your Order No: CRM 1265 032

Lab Sample Number				2092294	2092295	2092296	2092297	2092298
Sample Reference				WS2	WS3	WS3	WS4	WS4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.70	1.20	2.00	0.50	1.20
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.4	13	15	18	16
Total mass of sample received	kg	0.001	NONE	0.50	1.2	1.2	1.2	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile - Loose Fibres	-	Chrysotile - Loose Fibres	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Detected	-	Detected	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.5	-	10.1	-
Organic Matter (automated)	%	0.1	MCERTS	-	3.7	-	3.3	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	2.2	-	1.9	-

Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	25	-	45	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.6	-	0.3	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	26	-	23	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	85	-	160	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	16	-	18	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	43	-	44	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	32	-	30	-

Analytical Report Number: 21-24698
 Project / Site name: Dee Road Reading RG30 4BT
 Your Order No: CRM 1265 032

Lab Sample Number				2092294	2092295	2092296	2092297	2092298
Sample Reference				WS2	WS3	WS3	WS4	WS4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.70	1.20	2.00	0.50	1.20
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	-	-	-	-

TPH (>C5 - C7)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (>C7 - C8)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C8 - C10)	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH (C10 - C12)	mg/kg	2	MCERTS	-	-	-	-	-
TPH (C12 - C16)	mg/kg	4	MCERTS	-	-	-	-	-
TPH (C16 - C21)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C21 - C35)	mg/kg	1	MCERTS	-	-	-	-	-
TPH (C35 - C44)	mg/kg	10	NONE	-	-	-	-	-
TPH Total C5 - C44	mg/kg	10	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-24698
Project / Site name: Dee Road Reading RG30 4BT
Your Order No: CRM 1265 032

Lab Sample Number				2092299	2092300	2092301	2092302	2092303
Sample Reference				WS4	WS5	WS6	WS6	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.70-2.90	0.60	0.60	1.90	0.60
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	12	9.0	9.9	9.0
Total mass of sample received	kg	0.001	NONE	1.2	1.2	1.2	1.2	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	Chrysotile - Loose Fibres
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	-	Detected

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.3	6.7	-	8.2
Organic Matter (automated)	%	0.1	MCERTS	-	0.4	0.6	-	1.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	0.2	0.3	-	0.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	3.7
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	2.6
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.82
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.5
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.22	< 0.05	2.9
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	2.3
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3	< 0.05	13
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.1	< 0.05	10
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.62	< 0.05	4.7
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.72	< 0.05	3.0
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.52	< 0.05	2.9
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.57	< 0.05	2.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.64	< 0.05	2.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.40	< 0.05	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.34
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.45	< 0.05	1.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	6.50	< 0.80	55.7
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	6.8	8.0	-	11
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.3	0.2	-	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	12	28	-	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	15	17	-	21
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	12	22	-	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	12	16	-	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	22	45	-	67

Analytical Report Number: 21-24698

Project / Site name: Dee Road Reading RG30 4BT

Your Order No: CRM 1265 032

Lab Sample Number				2092299	2092300	2092301	2092302	2092303
Sample Reference				WS4	WS5	WS6	WS6	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.70-2.90	0.60	0.60	1.90	0.60
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	-	< 8.4	< 8.4	-	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	-	< 10	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	11
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	51
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	74
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	-	< 8.4	< 8.4	-	13
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	140
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	-	< 10	< 10	-	150

TPH (>C5 - C7)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	-	11
TPH (C16 - C21)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	51
TPH (C21 - C35)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	74
TPH (C35 - C44)	mg/kg	10	NONE	-	< 10	< 10	-	13
TPH Total C5 - C44	mg/kg	10	NONE	-	< 10	< 10	-	150

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-24698
Project / Site name: Dee Road Reading RG30 4BT
Your Order No: CRM 1265 032

Lab Sample Number				2092304	2092305	2092306	2092307	2092308
Sample Reference				WS8	WS8	WS9	WS9	WS9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.65	0.70	1.75	1.90
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.7	29	9.4	8.4	9.3
Total mass of sample received	kg	0.001	NONE	1.0	1.2	1.2	1.2	0.50

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile - Loose Fibres	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	-	Not-detected	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.4	-	8.3	-	-
Organic Matter (automated)	%	0.1	MCERTS	3.0	-	0.4	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.7	-	0.2	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.84	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.91	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.56	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.49	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.42	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.44	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.46	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.40	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.46	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	4.98	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	-	14	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	-	0.3	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	-	16	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	-	13	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	160	-	46	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	< 0.3	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	-	9.4	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	1.1	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	-	32	-	-

Analytical Report Number: 21-24698

Project / Site name: Dee Road Reading RG30 4BT

Your Order No: CRM 1265 032

Lab Sample Number				2092304	2092305	2092306	2092307	2092308
Sample Reference				WS8	WS8	WS9	WS9	WS9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.65	0.70	1.75	1.90
Date Sampled				19/11/2021	19/11/2021	19/11/2021	19/11/2021	19/11/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	-	< 8.4	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	-	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	24	-	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	-	< 8.4	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	30	-	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	30	-	< 10	-	-

TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	-
TPH (C16 - C21)	mg/kg	1	MCERTS	5.4	-	< 1.0	-	-
TPH (C21 - C35)	mg/kg	1	MCERTS	24	-	< 1.0	-	-
TPH (C35 - C44)	mg/kg	10	NONE	< 10	-	< 10	-	-
TPH Total C5 - C44	mg/kg	10	NONE	30	-	< 10	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-24698

Project / Site name: Dee Road Reading RG30 4BT

* 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 *
2092289	WS1	None Supplied	0.3	Brown clay with gravel.
2092290	WS1	None Supplied	1.1	Brown clay and sand with gravel.
2092291	WS1	None Supplied	3	Brown clay and sand.
2092292	WS2	None Supplied	0.4	Grey clay with vegetation.
2092293	WS2	None Supplied	1	Grey clay with vegetation and gravel.
2092294	WS2	None Supplied	1.7	Light brown clay and sand.
2092295	WS3	None Supplied	1.2	Black sand with clinker and gravel
2092296	WS3	None Supplied	2	Brown clay with gravel.
2092297	WS4	None Supplied	0.5	Grey sand with clinker and gravel.
2092298	WS4	None Supplied	1.2	Light grey clay.
2092299	WS4	None Supplied	2.70-2.90	Light brown clay and sand with gravel.
2092300	WS5	None Supplied	0.6	Light brown clay and sand with gravel.
2092301	WS6	None Supplied	0.6	Light brown clay and sand with vegetation.
2092302	WS6	None Supplied	1.9	Light brown clay and sand.
2092303	WS7	None Supplied	0.6	Brown clay and sand with rubble and brick.
2092304	WS8	None Supplied	0.5	Brown clay and sand with rubble and gravel
2092305	WS8	None Supplied	0.65	Light brown clay with gravel.
2092306	WS9	None Supplied	0.7	Brown clay and sand with gravel.
2092307	WS9	None Supplied	1.75	Light brown sand with gravel.
2092308	WS9	None Supplied	1.9	Brown sandy clay.

Analytical Report Number : 21-24698

Project / Site name: Dee Road Reading RG30 4BT

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
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.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
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	L038-PL	D	MCERTS
Hexavalent chromium in soil	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	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
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.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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.