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Date: 22nd October 2019
Your Ref:
Our Ref: L-STR4836-001

FAO Richard Hitch
Blackburn and Co
No 1 Clink Street,
London,
SE1 9DG

Dear Richard,

RE: 1st Interim report - St Pancras Campus, Pratt Street, Camden, NW1 0BY

1 Introduction and brief

1.1 Further to our correspondence of 25th July 2019, and your subsequent instructions, we confirm completion of the first phase of the proposed intrusive investigations at the above site and can now offer the following interim report.

1.2 An original ground investigation report was undertaken in February 2019 (reference STR4646-G01 dated May 2019). The site was occupied at the time of these works and due to access restrictions, works undertaken were relatively limited. Given the history of the site (former electricity generating station) and therefore the potential for contamination to be present across the site, further works were recommended as commercial units on site became vacant to refine the risk assessment.

1.3 These supplementary investigations will be undertaken in phases as the units become accessible for intrusive works. Interim reports detailing our findings will be provided for these phases in advance of a full, updated ground investigation report.

1.4 For this phase of works, we confirm our brief was to undertake supplementary investigations within accessible external areas and in and around units 7 to 10. Exploratory points were undertaken to target areas of the former building where contamination was most likely to be present. These areas were identified using historic building plans presented in the desk study section of our original report.

1.5 Soiltechnics liability

1.5.1 Soiltechnics disclaims any responsibility to our Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence in accordance with the terms of our contract, taking account of the manpower, resources, investigations and testing devoted to it by agreement with our Client. This report is confidential to our Client and Soiltechnics accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

2 Proposals

2.1 We understand the scheme will comprise the construction of three, six-storey blocks for office/residential use. A single-level basement is also proposed connecting all three buildings.

3 Fieldwork

3.1 General

3.1.1 Fieldwork was undertaken between 1st and 5th August and comprised the following:

- Formation of eight boreholes using driven tube sampling equipment.
- Formation of eight machine excavated trial pits
- Formation of one hand excavated trial pit

3.1.2 A plan showing existing site features and locations of exploratory points are presented on Drawing 01. The position of exploratory points shown on these plans is approximate only.

3.1.3 Exploratory points were positioned to avoid known locations of underground services. Prior to commencement of exploratory excavations an electronic cable locating tool was used to scan the area of the excavation. If we received a response to this equipment, then the excavation would be relocated.

3.1.4 All soils exposed in excavations were described in accordance with BS EN ISO 14688 *'Identification and Classification of soil'* and BS EN ISO 14689 *'Identification and classification of rock'.*

3.2 Exploratory trial pits

3.2.1 Trial pits excavated using hand-held tools

3.2.1.1 Trial pit HP01 was excavated using hand tools to a maximum depth of 1.0m. An electrically-powered breaker was used to loosen surface concrete prior to excavation. The trial pit excavations were backfilled with excavated material, which was compacted using hand-held ramming tools. A Geotechnical Engineer supervised the excavations.

3.2.2 Trial pits formed using a mechanical excavator

3.2.2.1 Trial pits TP01 to TP08 were excavated to a maximum depth of 2.9m using a rubber-tyred excavator. Surface concrete was initially broken out using hydraulic breaking equipment fixed to the excavator. The excavations were backfilled with excavated material compacted using the back of the excavator bucket. Whilst we attempted to reinstate the excavation to its original condition some short-term settlement of the backfilling materials may occur. A Geotechnical Engineer supervised the excavations.

3.2.2.2 Trial pit records are presented in Appendix A.

3.3 Boreholes formed using driven tube sampling techniques

3.3.1 Boreholes DTS01 to DTS08 were formed using driven tube sampling equipment. Driven tube sampling comprises driving 1m long steel sample tubes which are screw coupled together or coupled to extension rods and fitted with a screw on cutting edge. The sample tubes are of various diameters, generally commencing with 100mm and reducing, with depth, to 50mm and include a disposable plastic liner which is changed between sampling locations in order to limit the risk of cross contamination. On completion of excavation the liner containing the sample is cut open and the soil sample logged by a geo-environmental engineer. The sample tubes are considered thick walled with reference to BS EN ISO 22475-1:2006 clause 3.3.11.

3.3.2 In each location, surface concrete was cored prior to excavation of the borehole.

3.3.3 Borehole records are presented in Appendix B.

3.4 Sampling

3.4.1 Sampling and logging was carried out as excavations proceeded. Soil samples for subsequent laboratory determination of concentration of chemical contaminants were taken from the sides of trial pits or from samples obtained in the disposable borehole tubes. Samples were stored in new plastic containers, which were labelled and sealed. Samples for organic testing were stored in an amber glass jar with a PTFE sealing washer.

4 Ground conditions

4.1 Each exploratory location encountered Made Ground to the full depth of the excavation. Within TP01 and TP05 concrete boulders were encountered at approximately 2.50m and 1.30m depth respectively. In numerous locations, excavations were terminated due to the presence of obstructions. Within trial pits these were observed as concrete and masonry structures.

4.2 The Made Ground generally comprised loose to dense brown, dark brown, grey brown silty gravelly sand, sometimes sandy gravel and occasional sandy gravelly clay. The gravels included flint, brick, concrete asphaltic concrete, timber, slag, glass, plastic, tiles, wire and metal. Cobbles of concrete and masonry (possible former foundations) were encountered within the trial pits, appearing to increase in frequency with depth. Suspected fragments of asbestos containing material were observed within the Made Ground. In addition, odours of hydrocarbons were noted although no staining was observed.

5 Laboratory testing

5.1 Chemical testing was carried out based on ground conditions and with reference to the contamination Initial Conceptual Model as presented in Section 8 of our previous ground investigation report. The test methods are recorded on the chemical test certificates. The following table summarises the chemical testing scheduled;

Table summarising asbestos testing			
Exploratory point	**Depth (m)**	**Medium/soil type**	**Testing scheduled (Refer to Appendix A for details).**
DTS01	1.23-2.0	Made Ground	Asbestos Screening
DTS03	0.26		
DTS04	1.30-2.0		
DTS06	0.24-0.6		
TP01	0.40		
TP01	2.00		
TP04	0.70		
TP07	1.60		
TP08	1.0		
TP08	1.7	Made Ground	Asbestos ID & quantification and screening
DTS03	1.00	Made Ground	Asbestos Screening Suite 17
DTS07	1.0-1.3		
TP08	2.70		
DTS08	0.75-1.0		
DTS04	2.00-3.0	Made Ground	Suite 17
TP05	1.00		
Table 5.1			

5.2 Copies of laboratory test results are presented in Appendix C.

6 Evaluation of test data

6.1 Tables summarising and analysing test data are presented in Appendix D. The following table summarises the outcome of the analyses. As per our previous report, we have not compared results to guideline values for end users as pathways are limited to inhalation of vapours.

Table summarising assessment of test data for human receptors					
Analysis tables	**Receptor group**	**Critical receptor**	**CLEA model**	**Inorganic contaminants**	**Organic contaminants**
1 and 2	Current site users and construction operatives	Adult	Industrial/ commercial	No exceedances	No exceedances
Table 8.7.6.1					

6.2 Based on the above, laboratory testing has not identified any measured concentrations of contaminants which exceed current guideline values for human receptors. The samples did exhibit a degree of hydrocarbon contamination although total concentrations were all recorded below 500mg/kg and it is considered unlikely they would produce significant concentrations of vapours. However, this assessment would need to be reviewed on completion of site works.

6.3 In addition to the above, concentrations of SVOCs and VOCs were all recorded below detectable limits

6.4 Fourteen samples were sent for asbestos screening, of which nine came back with positive asbestos content. All three types of asbestos fibres (amosite, chrysotile and crocidolite) were identified. The asbestos was identified as bundles of fibres and microscopic sheeting board debris. Asbestos quantification was undertaken on one sample, which recorded 0.001% asbestos.

6.5 Based on current testing, the Made Ground soils potentially pose a risk to human receptors due to the presence of asbestos. Further testing and quantification of asbestos from elsewhere on site will be undertaken within future phases of work to refine the assessment. However, at this stage, the asbestos is considered to be widespread throughout the Made Ground, both laterally and vertically.

6.6 No elevated concentrations of inorganic or organic contaminants have been identified at this stage. This reflects the findings of the original ground investigation report.

7 Classification of waste

7.1 Full details of landfill waste classification procedures are presented in Section 11 of our original ground investigation report. Testing undertaken as part of these investigations concluded the Made Ground soils could be classified as stable non-hazardous non-reactive hazardous waste in non-hazardous landfill. However, testing was predominantly undertaken within near surface Made Ground and it was suggested that further testing could allow zoning of the soils if deeper soils did not contain elevated metals. In addition, asbestos (amosite board) was identified within a single sample of Made Ground. The presence of asbestos impacts the waste classification assessment and therefore further testing was recommended.

7.2 Hazardous waste classification

7.2.1 To determine the hazardous waste properties for each element considered, we have reviewed chemical compounds listed in Table 3.2 of Annex VI of the European Regulation (1272/2008) for Classification, Labelling and Packaging (CLP) of chemicals which has now superseded the Approved Supply List (Published by the Health and Safety Executive) for the classification of hazardous chemicals in the UK. In order to provide a 'worst case' scenario, initially we adopt the most severe hazardous properties (risk phrases) associated with the various compounds for each element under review. If measured concentrations produce a hazardous outcome then the element or elements are reassessed on a site specific basis. For review of organic contamination, we have directly adopted the threshold concentrations for the appropriate organic compounds listed in Table 3.2.

7.2.2 The compound or compounds adopted for each element is used to convert the measured metallic concentration to the substance concentration using their respective molecular weights. This derived conversion factor is then used in the threshold concentration spreadsheet (refer paragraph 11.3.2.8 below).

7.2.3 Our assessment of each of the chemical substances is maintained on our files and is available for confidential review/audit by the Environment Agency.

7.2.4 A spreadsheet detailing the hazard assessment is presented in Appendix E. The spreadsheet indicates the soils are **hazardous** by virtue of elevated combined metals. Testing was undertaken from a range of depths up to 2.7m. High concentrations of metals were identified within samples at 2m and 2.7m suggesting elevated metals are likely present throughout the Made Ground not just near surface.

7.3 Landfill waste acceptance criteria

7.3.1 We have scheduled testing of **two** samples to measure the parameters listed in Table 5.3 (landfill waste acceptance criteria) included in '*Waste Sampling and Testing for Disposal to Landfill*' (2013). A copy of the test result certificate is presented in Appendix C. The source of the composite sample(s) is detailed below:

Composition of soil samples for classification testing		
Strata	**Source**	**Soil Type**
WAC01	DTS02 – 0.22m	Made Ground
	TP05 – 0.50m	
	TP03 – 0.30m	
	TP01 – 0.15m	
WAC02	DTS01 – 2.44m	Made Ground
	TP08 – 1.90m	
	TP06 – 1.50m	
	TP01 – 1.20m	

Table 7.3.1

7.3.2 The sample was deemed representative of Made Ground soils as described in Section 4. The sample was formed by combining individual samples taken from exploratory excavations within the Made Ground. The combined sample was then quartered in the laboratory to produce a representative sample for subsequent testing.

7.3.3 Laboratory test data has been compared with the landfill waste acceptable criteria to allow the assessment to be completed. A tabulated copy this comparison is presented in Appendix E.

7.3.4 Comparison of test data with landfill waste acceptance criteria indicates that Made Ground soils are suitable for disposal as **stable non-hazardous non-reactive hazardous waste** in non-hazardous landfill.

7.3.5 It should be noted that the above classification relates to Made Ground ***not containing asbestos***;

7.3.6 Classification of soils containing asbestos

7.3.6.1 Asbestos in the form of chrysotile, amosite and crocidolite fibres and microscopic fragments of board have been identified throughout the Made Ground within this investigation. A fragment of amosite board was found to be present within the Made Ground during the original investigation. With reference to the Environment Agency publication '*Guidance on the classification and assessment of waste – WM3 (1st Edition, 2015)*', wastes containing greater than 0.1% free and dispersed asbestos fibres are classified as **hazardous waste** with the code 17 05 03* (soils and stones containing hazardous substances). Where a waste contains identifiable pieces of ACM, then these pieces must be assessed separately. The waste is hazardous if the concentration of asbestos in the ACM exceeds 0.1%. Made Ground containing ACM would be regarded as a mixed waste and classified as follows:

- **17 06 05*** *(Construction material containing asbestos)* – this relates to the individual pieces of asbestos cement within the soil, which are classified as hazardous waste.
- **17 05 03*** *(Soil and stones other than those mentioned in 17 05 03)* – this relates to the main body of the soil, which is classified as stable non-reactive hazardous waste in non-hazardous landfill.

7.3.6.2 Quantification on a single sample produced an asbestos concentration of 0.001%, well below the 0.1% required for hazardous waste. However, further testing undertaken as part of subsequent phases of the investigations will be required to confirm whether asbestos fibre concentrations fall below the 0.1% threshold consistently.

7.3.6.3 Due to the high costs associated with disposal of asbestos containing wastes, we recommend that the development is designed with a view to limiting as far as possible the removal from site of asbestos containing soils.

8 Conclusions

8.1 Based on the current supplementary investigations and testing, we have not identified any ground conditions or contamination significantly different to that identified within the original ground investigation. No elevated inorganic or organic contaminants have been identified within the area of this investigation although asbestos is present throughout the Made Ground. Waste classification testing has confirmed the original classification remains valid for the identified Made Ground soils.

8.2 Further investigations are proposed within other areas of the site as the units become vacant. There remains the potential for additional contamination to be identified elsewhere on site and therefore this assessment should be considered interim only. Further reports will be produced on completion of the additional phases of work.

We trust this report provides you with the information you require. If you have any queries please do not hesitate to contact us.

Yours sincerely,

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Encs.

Drawing(s)	Principal coverage
01	Plan showing existing site features and location of exploratory points
Appendices	**Principal coverage**
A	Trial pit records
B	Driven tube borehole records
C	Copies of laboratory test result certificates – concentrations of chemical contaminants
D	Analysis and summary of test data in relation to concentrations of chemical contaminants
E	Landfill waste acceptance criteria – classification

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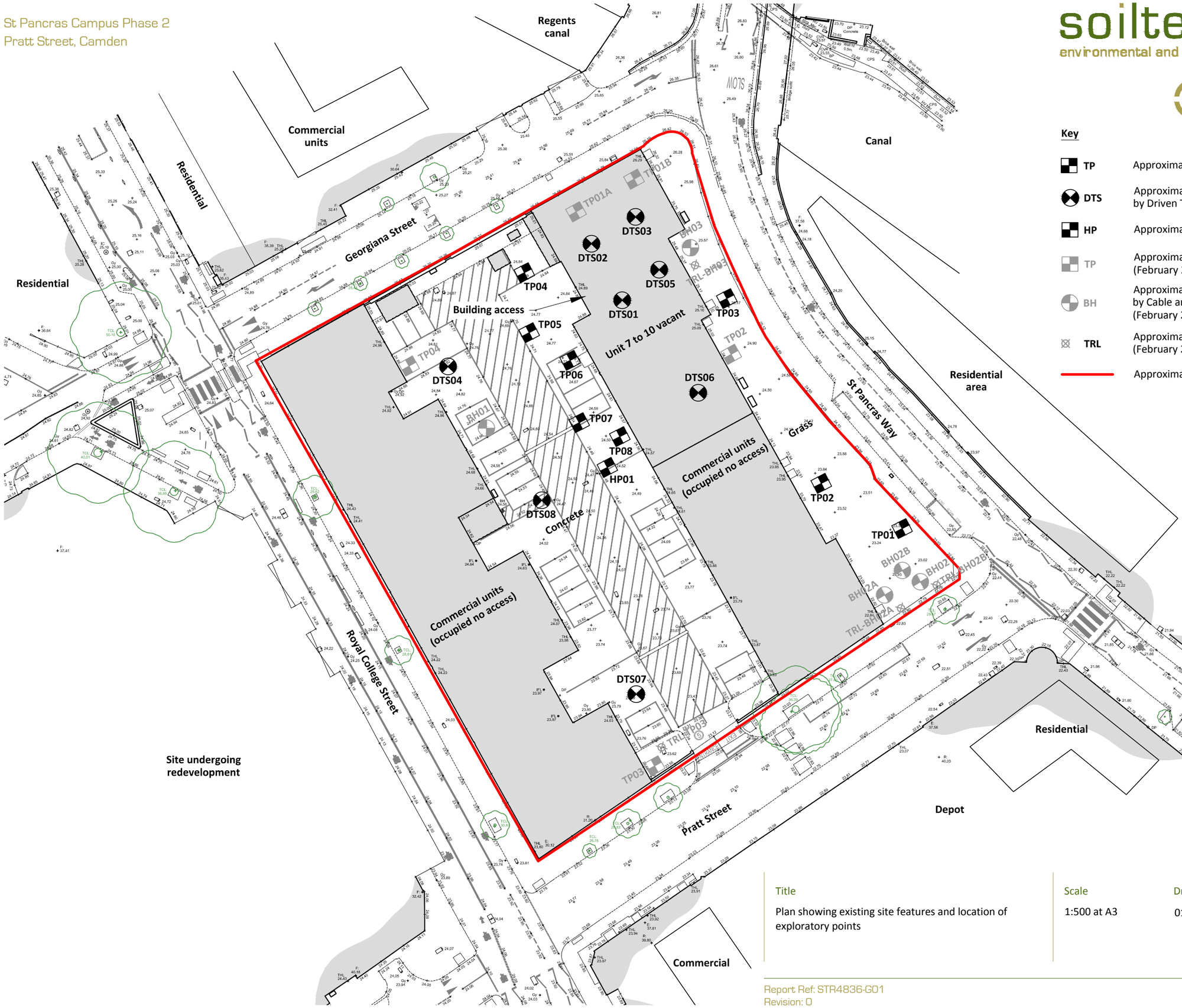

Key

TP	Approximate location of trial pit excavation
DTS	Approximate location of borehole formed by Driven Tube Sampling techniques
HP	Approximate location of hand pit excavation
TP	Approximate location of trial pit excavation (February 2019)
BH	Approximate location of borehole formed by Cable and Tool percussive techniques (February 2019)
TRL	Approximate location of TRL testing (February 2019)
	Approximate site boundary

Title	Scale	Drawing number
Plan showing existing site features and location of exploratory points	1:500 at A3	01

Report Ref: STR4836-G01
Revision: 0

September 2019

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Key to legends

Composite materials, soils and lithology

Topsoil	Made Ground	Boulders
Chalk	Clay	Coal
Cobbles	Cobbles & Boulders	Concrete
Gravel	Limestone	Mudstone
Peat	Sand	Sand and Gravel
Sandstone	Silt	Silt / Clay
		Siltstone

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result	
Depth	Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)
Result	PP – Pocket penetrometer result (kN/m^2) SV – Hand held shear vane result (kN/m^2) PP result converted to an equivalent undrained shear strength by applying a factor of 50. Where at least 3 results obtained at same depth then an average value may be reported.

Sampling		
From (m) To (m)	Records depth of sampling	
Type	D	Disturbed sample
	B	Bulk disturbed sample
	ES	Environmental sample comprising plastic and/or glass container
	W	Water sample
	CBR	Undisturbed sample in mould (California Bearing Ratio)

Water observations

Described at foot of log and shown in the 'water strike' column.

▼ = water level observed after specified delay in excavation

▽ = water strike

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)									
	0.23								
Dense brown silty very sandy GRAVEL. Gravel consists of fine to coarse angular to rounded brick, concrete, timber, flint and slag. (MADE GROUND)							0.30	0.60	D
							0.60	1.00	D
TRIAL PIT TERMINATED AT 1.00m	1.00								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Hand excavated inspection pit. Hand pit terminated due to potential services.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.50m x 0.50m	
Method Hand tools	**Logged by** MG	**Date(s)** 02/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**HP01**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto soft grey brown slightly clayey very sandy organic SILT. (MADE GROUND)	0.10						0.05		ES
Dense brown very sandy GRAVEL. Gravel consists of fine to coarse angular to well rounded brick, crushed concrete, timber, flint and slag. (MADE GROUND)							0.15		D
...at 0.3m depth, roots to 0.3m depth.							0.40		D
ASPHALTIC CONCRETE. (MADE GROUND)	0.65								
Medium dense black gravelly SAND. Gravel consists of fine to medium angular asphaltic concrete, brick and slag. (MADE GROUND)	0.80						0.85		ES
Loose brown slightly silty gravelly SAND with abundant cobbles of brick and concrete. Gravel consists of glass, plastic and slag. (MADE GROUND)	1.00						1.20		D
Brick and mortar PAVING. (MADE GROUND)	1.40								
Loose light brown gravelly SAND with abundant cobbles of mortar and concrete. Gravel consists of fine to coarse angular brick, mortar, concrete, tiles and wire. (MADE GROUND)	1.80						2.00		D
...from 2.1m depth, slight hydrocarbon odour.							2.20		ES
...at 2.5m depth, cobbles of concrete.									
TRIAL PIT TERMINATED AT 2.90m	2.90								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Hydrocarbon odours present from 1.2m depth. Trial pit sides were unstable below 1.8m depth. Trial pit terminated due to competency of deposits.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.60m x 2.40m	
Method Machine excavator	**Logged by** MG	**Date(s)** 02/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP01**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto soft grey brown slightly clayey very sandy organic SILT with frequent roots to 0.2m depth. (MADE GROUND)									
Dense brown very sandy GRAVEL. Gravel consists of fine to coarse angular to well rounded brick, crushed concrete, timber, flint and slag. (MADE GROUND)	0.30						0.50		D
TRIAL PIT TERMINATED AT 0.85m	0.85								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial pit sides remained upright and stable upon completion. Trial pit terminated due to services.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.60m x 2.10m	
Method Machine excavator	**Logged by** MG	**Date(s)** 02/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP02**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto soft grey brown slightly clayey very sandy SILT. (MADE GROUND)							0.10		D
	0.20								
Dense brown very sandy GRAVEL. Gravel consists of fine to coarse angular brick, crushed concrete, timber, flint and slag. (MADE GROUND)							0.30		D
Dense yellow brown clayey gravelly SAND. Gravel consists of fine to coarse angular crushed brick and flint. (MADE GROUND)	0.40						0.50		D
Dark brown clayey very gravelly SAND. Gravel consists of fine to coarse angular crushed brick and flint. (MADE GROUND)	0.70								
...at 1.5m depth, flint no longer present.							1.50		ES
TRIAL PIT TERMINATED AT 1.80m	1.80								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial sides remained upright and stable upon completion. Trial pit terminated due to competency of deposits.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.60m x 2.20m	
Method Machine excavator	**Logged by** MG	**Date(s)** 02/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP03**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)	0.23								
Dense brown slightly gravelly silty SAND. Gravel consists of fine to coarse angular brick, concrete, clay pipe, flint, glass, slag and plastic. (MADE GROUND)							0.30		D
							0.70		D
TRIAL PIT TERMINATED AT 0.80m	0.80								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial pit sides remained upright and stable upon completion. Terminated due to services.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.60m x 2.10m	
Method Machine excavator	**Logged by** MG	**Date(s)** 05/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP04**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)									
	0.24								
Dense brown slightly gravelly silty SAND. Gravel consists of fine to coarse angular brick and concrete, flint, timber and metal pipe. (MADE GROUND)							0.30		D
							0.50		D
...from 0.5m depth, cobbles of brick and concrete.	0.55								
Dense dark brown slightly gravelly silty CLAY. Gravel consists of fine to coarse angular brick, concrete, flint, timber and metal pipe. (MADE GROUND)							0.70		D
...from 0.7m depth, pockets of bituminous coated material and possible ACM.									
							1.00		D
TRIAL PIT TERMINATED AT 1.30m	1.30								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial pit sides remained upright and stable upon completion. Terminated due to concrete obstruction.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.85m x 2.08m	
Method Machine excavator	**Logged by** MG	**Date(s)** 05/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP05**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)	0.22								
Dense brown slightly gravelly silty SAND. Gravel consists of fine to coarse angular to well rounded brick and concrete, flint, slate tiles, quartzite, timber, wire, metal and pipe. (MADE GROUND)							0.30		D
Dense dark brown slightly gravelly silty SAND with cobbles of asphaltic concrete and metal. Gravel consists of fine to coarse angular brick, concrete and clay pipe, flint, slate tiles, quartzite, timber and wire. (MADE GROUND)	0.55						0.60		D
...at 0.9m depth, odour of asphaltic concrete.							1.00		D
...at 1.1m depth, coarse well-rounded flint .							1.50		D
TRIAL PIT TERMINATED AT 1.60m	1.60								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial pit sides remained upright and stable upon completion. Terminated due to foul water drain.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 0.80m x 1.90m	
Method Machine excavator	**Logged by** MG	**Date(s)** 05/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP06**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)									
	0.24						0.30		D
Dense brown slightly gravelly silty SAND. Gravel consists of fine to coarse angular timber, brick, concrete and glass. (MADE GROUND)									
...between 0.4m and 0.65m depth, ground visibly wet.							0.50		D
	0.65								
Dense dark brown slightly gravelly silty SAND with cobbles of asphaltic concrete. Gravel consists of fine to coarse angular to well rounded brick, concrete, clay pipe, flint, slate tiles, quartzite, timber, wire and metal. (MADE GROUND)									
...from 0.9m depth, cobbles of concrete.							0.90		D
							1.60		D
	1.70								
TRIAL PIT TERMINATED AT 1.70m									

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial pit sides remained upright and stable upon completion. Terminated due to services.

Groundwater observations
No groundwater encountered. Wet soils between 0.4m and 0.65m depth.

Title Trial pit record	**Dimensions (w x l)** 0.75m x 2.10m	
Method Machine excavator	**Logged by** MG	**Date(s)** 05/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP07**

Report ref: STR4836-G01 **Revision:** 0

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)									
	0.24								
Medium dense dark brown silty gravelly SAND. Gravel consists of fine to coarse angular to well rounded crushed brick, concrete, flint, quartzite, fragments of plastic and metal bars. (MADE GROUND)							0.30		D
...from 0.24m depth, yellow pockets of sand.									
							0.80		D
							1.00		D
...at 1.7m depth, cobbles of concrete, suspected ACM and metal tank.							1.70		D
...at 1.9m depth, artificial turf and metal.							1.90		D
...at 2m depth, brick wall.									
...at 2.3m depth, suspected foundation.									
...at 2.7m depth, polystyrene, plastic fragments, metal wire and odour of hydrocarbon.							2.70		D
TRIAL PIT TERMINATED AT 2.90m	2.90								

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Trial pit sides remained upright and stable upon completion. Trial pit terminated due to brick wall.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 1.00m x 2.10m	
Method Machine excavator	**Logged by** MG	**Date(s)** 05/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**TP08**

Report ref: STR4836-G01 **Revision:** 0

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Key to legends

Composite materials, soils and lithology

Topsoil	Made Ground	Boulders
Chalk	Clay	Coal
Cobbles	Cobbles & Boulders	Concrete
Gravel	Limestone	Mudstone
Peat	Sand	Sand and Gravel
Sandstone	Silt	Silt / Clay
		Siltstone

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result	
Depth	Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)
Result	PP – Pocket penetrometer result (kN/m^2) SV – Hand held shear vane result (kN/m^2) PP result converted to an equivalent undrained shear strength by applying a factor of 50. Where at least 3 results obtained at same depth then an average value may be reported.
	SPT – Standard Penetration Test result (uncorrected)[1,2,3] SPT(c) – Standard Penetration Test result (solid cone) (uncorrected)[1,2,3]
	UT – Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample

Sampling		
From (m) To (m)	Records depth of sampling	
Type	D	Disturbed sample
	B	Bulk disturbed sample
	ES	Environmental sample comprising plastic and/or glass container
	W	Water sample
	UT	Undisturbed sample 100mm diameter sampler

Water observations

Described at foot of log and shown in the 'water strike' column.

▼ = water level observed after specified delay in drilling

▽ = water strike

Standpipe details

Gravel filter

Arisings

Bentonite

Slotted pipe

Unslotted pipe

Density

Density recorded in brackets inferred from density testing and soil descriptions from across the site (i.e.: [Medium dense]).

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WELL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane.													
	(MADE GROUND)	0.23										0.23	0.90	B
	Brown gravelly very sandy SILT. Gravel consists of fine to coarse very angular to rounded flint, concrete, brick, mortar, slag and plastic fragments. (MADE GROUND)													
	Dark brown slightly gravelly clayey sandy SILT. Gravel consists of fine to coarse very angular to rounded concrete, brick and flint. (MADE GROUND)	0.90										0.95		ES
	Grey brown slightly clayey very sandy GRAVEL. Gravel consists of fine to coarse very angular to rounded slag, brick, glass, metal piping, concrete, metal wire and timber. (MADE GROUND)	1.23										1.23	2.00	B
	...at 1.6m depth, metal wire.													
	Grey brown slightly clayey very sandy GRAVEL with pockets of black sand. Gravel consists of fine to coarse very angular to rounded slag, brick, glass and metal piping, concrete, metal wire and timber. (MADE GROUND)	2.00										2.00	2.44	B
												2.44	3.00	B
	...from 2.9m depth, becoming clayey.													
	BOREHOLE TERMINATED AT 3.00m	3.00												

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Continuous collapse of borehole during sampling, up to 0.23m depth. Borehole terminated due to refusal.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	70
1.00 - 2.00	80
2.00 - 3.00	80
3.00 - 4.00	80

Method
Driven tube sampler

Logged by
MG

Date(s)
01/08/2019

Level (m OD)
-

Compiled by
MC

Sheet number
Sheet 1 of 1

Co-ordinates
-

Checked by
KB

DTS01

Report ref: STR4836-G01

Revision: 0

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Pratt Street, Camden

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WELL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane.													
	(MADE GROUND)	0.21										0.21	1.00	B
	Dark brown slightly clayey sandy gravelly SILT. Gravel consists of fine to coarse angular to well rounded brick, fabric, plastic, flint, crushed concrete, glass, slag and timber.													
	(MADE GROUND)											1.00	2.00	B
	...between 0.6m and 0.7m depth, very clayey.													
	...at 2.5m depth, possible ACM.											2.00	3.00	B
												2.50		D
	BOREHOLE TERMINATED AT 3.00m	3.00												

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Borehole terminated due to refusal. Borehole sides remained upright and stable upon completion.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	80
1.00 - 2.00	80
2.00 - 3.00	70

Method Driven tube sampler	**Logged by** MG	**Date(s)** 01/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**DTS02**

Report ref: STR4836-G01 **Revision:** 0

St Pancras Campus Phase 2
Pratt Street, Camden

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WELL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bar and double membrane. (MADE GROUND)													
	Dark brown slightly clayey sandy gravelly SILT with 50mm pockets of brown clayey sand. Gravel consists of fine to coarse angular to well rounded brick, fabric, plastic, flint, crushed concrete, glass, slag and timber. (MADE GROUND)	0.26										0.26		B
	BOREHOLE TERMINATED AT 2.00m	2.00										1.00	2.00	B

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Borehole terminated due to refusal. Borehole sides remained upright and stable upon completion.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	70
1.00 - 2.00	90

Method
Driven tube sampler

Logged by
MG

Date(s)
01/08/2019

Level (m OD)
-

Compiled by
MC

Sheet number
Sheet 1 of 1

Co-ordinates
-

Checked by
KB

DTS03

Report ref: STR4836-G01

Revision: 0

St Pancras Campus Phase 2
Pratt Street, Camden

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WELL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bar and single membrane. (MADE GROUND)	0.23										0.23	0.45	B
	Red brown black mottled slightly clayey sandy GRAVEL. Gravel consists of fine to medium angular to rounded brick, concrete and flint. (MADE GROUND)	0.45												
	ASPHALTIC CONCRETE. (MADE GROUND)	0.55										0.55	0.85	ES
	Black slightly clayey slightly gravelly SAND. Gravel consists of fine to medium angular to sub-rounded limestone and flint. Slight hydrocarbon odour noted from asphaltic concrete. (MADE GROUND)	0.85												
	Yellow silty SAND. (MADE GROUND)	1.00												
	Dark brown slightly clayey sandy gravelly SILT. Gravel consists of fine to coarse angular to rounded brick, fabric, plastic, flint, crushed concrete, glass, slag and timber. (MADE GROUND)											1.30	2.00	B
	...between 1.75m and 1.85m depth, black sand.											2.00	3.00	B
	BOREHOLE TERMINATED AT 3.00m	3.00												

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Borehole terminated due to refusal. Borehole sides remained upright and stable upon completion.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	90
1.00 - 2.00	60
2.00 - 3.00	50

Method
Driven tube sampler

Logged by
MG

Date(s)
01/08/2019

Level (m OD)
-

Compiled by
MC

Sheet number
Sheet 1 of 1

Co-ordinates
-

Checked by
KB

DTS04

Report ref: STR4836-G01

Revision: 0

St Pancras Campus Phase 2
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WELL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)	0.23										0.23	1.00	D
	Brown very sandy GRAVEL. Gravel consists of fine to coarse angular brick, crushed concrete, timber, flint and slag. (MADE GROUND)											1.00	2.00	D
	Dark brown very sandy GRAVEL. Gravel consists of fine to coarse angular brick, crushed concrete, timber, flint and slag. (MADE GROUND)	1.50										2.00	3.00	D
	...between 2.9m and 3m depth, sand.											3.00	4.00	D
	BOREHOLE TERMINATED AT 4.00m	4.00												

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Borehole collapsed to 2.2m depth upon completion. Borehole terminated due to refusal.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	75
1.00 - 2.00	70
2.00 - 3.00	65
3.00 - 4.00	55

Method
Driven tube sampler

Logged by
MG

Date(s)
02/08/2019

Level (m OD)
-

Compiled by
MC

Sheet number
Sheet 1 of 1

Co-ordinates
-

Checked by
KB

DTS05

Report ref: STR4836-G01

Revision: 0

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WELL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)	0.24										0.24	0.60	D
	Brown silty very sandy GRAVEL. Gravel consists of fine to medium angular to rounded brick, concrete, timber, flint and slag. (MADE GROUND)											0.60	1.00	D
	BOREHOLE TERMINATED AT 1.00m	1.00												

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Borehole collapsed to 0.5m depth upon completion. Borehole terminated due to refusal.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	70

Method Driven tube sampler	**Logged by** MG	**Date(s)** 02/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**DTS06**

Report ref: STR4836-G01 **Revision:** 0

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WELL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey reinforced CONCRETE. (MADE GROUND)	0.24										0.24	0.35	D
	Red brown black mottled slightly clayey very sandy GRAVEL. Gravel consists of fine to medium angular to rounded brick and concrete and flint. (MADE GROUND)	0.35										0.35	0.45	D
	Yellow brown very gravelly SAND. Gravel consists of fine to coarse angular limestone. (MADE GROUND)	0.45										0.45	1.00	D
	Brown very sandy GRAVEL. Gravel consists of fine to coarse angular brick, crushed concrete, timber, flint and slag. (MADE GROUND)													
	...between 0.55m and 0.65m depth, black sand.											1.00	1.30	D
	BOREHOLE TERMINATED AT 1.30m	1.30												

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes

Borehole collapsed to 2.2m depth upon completion. Borehole terminated due to refusal.

Groundwater observations

No groundwater encountered.

Title

Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	50
1.00 - 2.00	50
2.00 - 3.00	30

Method Driven tube sampler	**Logged by** MG	**Date(s)** 02/08/2019
Level (m OD) -	**Compiled by** MC	**Sheet number** Sheet 1 of 1
Co-ordinates -	**Checked by** KB	**DTS07**

Report ref: STR4836-G01 **Revision:** 0

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WELL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey reinforced CONCRETE with 4mm and 6mm smooth reinforcement bars and with double layer of damp proof membrane. (MADE GROUND)	0.23										0.23	0.70	D
	Red brown black mottled slightly clayey very sandy GRAVEL. Gravel consists of fine to medium angular to rounded brick, concrete and flint. (MADE GROUND)	0.70										0.75	1.00	D
	Firm brown slightly sandy gravelly CLAY. Gravel consists of fine to medium well-rounded flint, angular crushed brick and asphaltic concrete. (MADE GROUND)	1.00										0.75	1.00	ES
	...from 0.75m depth, black staining.													
	ASPHALTIC CONCRETE. (MADE GROUND)	1.10												
	BOREHOLE TERMINATED AT 1.10m													

Key

D Small Disturbed Sample
B Bulk Disturbed Sample
ES Environmental Sample
W Water Sample
C Core sample
UT Undisturbed Sample

S Standard Penetration Test
C Standard Penetration Test (solid cone)

PP Pocket Penetrometer test
SV Shear Vane test
PID Photo Ionisation Detector test

Notes
Borehole terminated due to refusal. Borehole sides remained upright and stable upon completion.

Groundwater observations
No groundwater encountered.

Title
Driven tube sampler record

Recovery details	
Range (m)	Recovery (%)
0.00 - 1.00	70

Method
Driven tube sampler

Level (m OD)
-

Co-ordinates
-

Logged by
MG

Compiled by
MC

Checked by
KB

Date(s)
02/08/2019

Sheet number
Sheet 1 of 1

DTS08

Report ref: STR4836-G01

Revision: 0

4480

Lauren Wenham
Soiltechnics Ltd
White Lodge
Cedar Barn
Walgrave
NN6 9PY

DETS Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 19-11510

Site Reference: St Pancras Campus, Camden Phase 2

Project / Job Ref: STR4836

Order No: POR005984

Sample Receipt Date: 12/08/2019

Sample Scheduled Date: 12/08/2019

Report Issue Number: 1

Reporting Date: 16/08/2019

Authorised by:

Dave Ashworth
Technical Manager

DETS Ltd
: 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

mCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME

UKAS TESTING 4480

Waste Acceptance Criteria Analytical Certificate - BS EN 12457/3

DETS Report No: 19-11510	**Date Sampled**	05/08/19	
Soiltechnics Ltd	**Time Sampled**	None Supplied	
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	WAC010.001-051	
Project / Job Ref: STR4836	**Additional Refs**	WAC01	
Order No: POR005984	**Depth (m)**	0.00 - 0.23	
Reporting Date: 16/08/2019	**DETS Sample No**	427162	

Determinand	**Unit**	**MDL**		**Landfill Waste Acceptance Criteria Limits**		
				Inert Waste Landfill	**Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
TOC[MU]	%	< 0.1	1	3%	5%	6%
Loss on Ignition	%	< 0.01	2.89	--	--	10%
BTEX[MU]	mg/kg	< 0.05	< 0.05	6	--	--
Sum of PCBs	mg/kg	< 0.1	< 0.1	1	--	--
Mineral Oil[MU]	mg/kg	< 10	< 10	500	--	--
Total PAH[MU]	mg/kg	< 1.7	13.5	100	--	--
pH[MU]	pH Units	N/a	8.6	--	>6	--
Acid Neutralisation Capacity	mol/kg (+/-)	< 1	1.1	--	To be evaluated	To be evaluated

Eluate Analysis	**2:1 mg/l**	**8:1 mg/l**		**Cumulative 10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)**		
Arsenic[U]	0.02	0.01		< 0.2	0.5	2	25
Barium[U]	0.02	0.03		0.3	20	100	300
Cadmium[U]	< 0.0005	< 0.0005		< 0.02	0.04	1	5
Chromium[U]	0.006	0.006		< 0.20	0.5	10	70
Copper[U]	0.02	0.02		< 0.5	2	50	100
Mercury[U]	< 0.005	< 0.005		< 0.01	0.01	0.2	2
Molybdenum[U]	0.008	0.003		< 0.1	0.5	10	30
Nickel[U]	< 0.007	< 0.007		< 0.2	0.4	10	40
Lead[U]	0.010	0.026		0.2	0.5	10	50
Antimony[U]	0.017	0.007		0.08	**0.06**	0.7	5
Selenium[U]	< 0.005	< 0.005		< 0.1	0.1	0.5	7
Zinc[U]	0.009	0.029		0.3	4	50	200
Chloride[U]	10	5		53	800	15000	25000
Fluoride[U]	0.7	0.5		5.2	10	150	500
Sulphate[U]	28	10		111	1000	20000	50000
TDS	134	83		873	4000	60000	100000
Phenol Index	< 0.01	< 0.01		< 0.5	1	-	-
DOC	15.9	17.8		177	500	800	1000
Leach Test Information							
Sample Mass (kg)	0.19						
Dry Matter (%)	94.3						
Moisture (%)	6						
Stage 1							
Volume Eluate L2 (litres)	0.34						
Filtered Eluate VE1 (litres)	0.15						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and DETS Ltd cannot be held responsible for any discrepencies with current legislation
M Denotes MCERTS accredited test
U Denotes ISO17025 accredited test

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mCERTS THE ENVIRONMENT AGENCY'S MONITORING CERTIFICATION SCHEME
UKAS TESTING 4480

Waste Acceptance Criteria Analytical Certificate - BS EN 12457/3

DETS Report No: 19-11510	**Date Sampled**	05/08/19	
Soiltechnics Ltd	**Time Sampled**	None Supplied	
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	WAC020.001-052	
Project / Job Ref: STR4836	**Additional Refs**	WAC02	
Order No: POR005984	**Depth (m)**	0.00 - 0.23	
Reporting Date: 16/08/2019	**DETS Sample No**	427163	

Determinand	**Unit**	**MDL**		**Landfill Waste Acceptance Criteria Limits**		
				Inert Waste Landfill	**Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
TOC[MU]	%	< 0.1	0.7	3%	5%	6%
Loss on Ignition	%	< 0.01	2.73	--	--	10%
BTEX[MU]	mg/kg	< 0.05	< 0.05	6	--	--
Sum of PCBs	mg/kg	< 0.1	< 0.1	1	--	--
Mineral Oil[MU]	mg/kg	< 10	209	500	--	--
Total PAH[MU]	mg/kg	< 1.7	39.1	100	--	--
pH[MU]	pH Units	N/a	9.8	--	>6	--
Acid Neutralisation Capacity	mol/kg (+/-)	< 1	1.5	--	To be evaluated	To be evaluated

Eluate Analysis	**2:1 mg/l**	**8:1 mg/l**		**Cumulative 10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)**		
Arsenic[U]	< 0.01	< 0.01		< 0.2	0.5	2	25
Barium[U]	0.03	0.02		0.3	20	100	300
Cadmium[U]	< 0.0005	< 0.0005		< 0.02	0.04	1	5
Chromium[U]	0.018	0.009		< 0.20	0.5	10	70
Copper[U]	0.02	0.01		< 0.5	2	50	100
Mercury[U]	< 0.005	< 0.005		< 0.01	0.01	0.2	2
Molybdenum[U]	0.020	0.005		< 0.1	0.5	10	30
Nickel[U]	< 0.007	< 0.007		< 0.2	0.4	10	40
Lead[U]	< 0.005	0.016		< 0.2	0.5	10	50
Antimony[U]	0.014	0.010		0.10	**0.06**	0.7	5
Selenium[U]	< 0.005	< 0.005		< 0.1	0.1	0.5	7
Zinc[U]	0.005	0.012		< 0.2	4	50	200
Chloride[U]	21	4		56	800	15000	25000
Fluoride[U]	< 0.5	< 0.5		< 1	10	150	500
Sulphate[U]	400	71		1024	**1000**	20000	50000
TDS	446	136		1657	4000	60000	100000
Phenol Index	< 0.01	< 0.01		< 0.5	1	-	-
DOC	12.9	9.8		101	500	800	1000
Leach Test Information							
Sample Mass (kg)	0.19						
Dry Matter (%)	93.3						
Moisture (%)	7.2						
Stage 1							
Volume Eluate L2 (litres)	0.34						
Filtered Eluate VE1 (litres)	0.17						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and DETS Ltd cannot be held responsible for any discrepencies with current legislation
M Denotes MCERTS accredited test
U Denotes ISO17025 accredited test

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Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 19-11510	
Soiltechnics Ltd	
Site Reference: St Pancras Campus, Camden Phase 2	
Project / Job Ref: STR4836	
Order No: POR005984	
Reporting Date: 16/08/2019	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
427162	WAC010.001-051	WAC01	0.00 - 0.23	5.7	Brown sandy gravel with stones
427163	WAC020.001-052	WAC02	0.00 - 0.23	6.7	Brown sandy gravel with stones and concrete

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample I/S

Unsuitable Sample U/S

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Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 19-11510
Soiltechnics Ltd
Site Reference: St Pancras Campus, Camden Phase 2
Project / Job Ref: STR4836
Order No: POR005984
Reporting Date: 16/08/2019

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

Lauren Wenham
Soiltechnics Ltd
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Cedar Barn
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DETS Report No: 19-11509

Site Reference:	St Pancras Campus, Camden Phase 2
Project / Job Ref:	STR4836
Order No:	POR005983
Sample Receipt Date:	12/08/2019
Sample Scheduled Date:	12/08/2019
Report Issue Number:	1
Reporting Date:	19/08/2019

Authorised by:

Dave Ashworth
Technical Manager

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Soil Analysis Certificate						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	01/08/19	01/08/19	01/08/19	01/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS011.231-003	DTS030.261-010	DTS031.001-011	DTS041.301-014	DTS042.001-015
Project / Job Ref: STR4836	**Additional Refs**	DTS01	DTS03	DTS03	DTS04	DTS04
Order No: POR005983	**Depth (m)**	1.23 - 2.00	0.26	1.00 - 2.00	1.30 - 2.00	2.00 - 3.00
Reporting Date: 19/08/2019	**DETS Sample No**	427143	427145	427146	427147	427148

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Detected	Not Detected		Not Detected	
Sample Matrix (S)	Material Type	N/a	NONE	bundles of Chrysotile and Amosite fibres				
Asbestos Type (S)	PLM Result	N/a	ISO17025	Amosite Chrysotile				
Asbestos Quantification (S)	%	< 0.001	ISO17025					
pH	pH Units	N/a	MCERTS			10.1		11.0
Total Cyanide	mg/kg	< 2	NONE			< 2		< 2
Complex Cyanide	mg/kg	< 2	NONE			< 2		< 2
Free Cyanide	mg/kg	< 2	NONE			< 2		< 2
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS			418		209
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS			0.42		0.21
Sulphide	mg/kg	< 5	NONE			< 5		< 5
Organic Matter	%	< 0.1	MCERTS			1		1.5
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS			144		48
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS			72.1		23.9
Arsenic (As)	mg/kg	< 2	MCERTS			16		15
Beryllium (Be)	mg/kg	< 0.5	NONE			0.8		0.9
W/S Boron	mg/kg	< 1	NONE			< 1		< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS			0.3		0.4
Chromium (Cr)	mg/kg	< 2	MCERTS			34		35
Chromium (hexavalent)	mg/kg	< 2	NONE			< 2		< 2
Copper (Cu)	mg/kg	< 4	MCERTS			145		59
Lead (Pb)	mg/kg	< 3	MCERTS			383		881
Mercury (Hg)	mg/kg	< 1	NONE			< 1		< 1
Nickel (Ni)	mg/kg	< 3	MCERTS			17		18
Selenium (Se)	mg/kg	< 3	NONE			< 3		< 3
Vanadium (V)	mg/kg	< 2	NONE			37		44
Zinc (Zn)	mg/kg	< 3	MCERTS			173		227
Total Phenols (monohydric)	mg/kg	< 2	NONE			< 2		< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C
Subcontracted analysis (S)

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Soil Analysis Certificate						
DETS Report No: 19-11509	**Date Sampled**	02/08/19	02/08/19	02/08/19	02/08/19	02/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS060.241-032	DTS071.001-037	DTS080.751-040	DTS080.751-039	TP010.40-018
Project / Job Ref: STR4836	**Additional Refs**	DTS06	DTS07	DTS08	DTS08	TP01
Order No: POR005983	**Depth (m)**	0.24 - 0.60	1.00 - 1.30	0.75 - 1.00	0.75 - 1.00	0.40
Reporting Date: 19/08/2019	**DETS Sample No**	427149	427150	427151	427152	427153

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	**ISO17025**	Detected	Detected	Not Detected		Not Detected
Sample Matrix (S)	Material Type	N/a	NONE	bundle of Amosite fibres	bundles of Chrysotile and Amosite fibres			
Asbestos Type (S)	PLM Result	N/a	**ISO17025**	Amosite	Chrysotile Amosite			
Asbestos Quantification (S)	%	< 0.001	**ISO17025**					
pH	pH Units	N/a	**MCERTS**		11.1		8.5	
Total Cyanide	mg/kg	< 2	NONE		< 2		< 2	
Complex Cyanide	mg/kg	< 2	NONE		< 2		< 2	
Free Cyanide	mg/kg	< 2	NONE		< 2		< 2	
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	**MCERTS**		150		89	
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	**MCERTS**		0.15		0.09	
Sulphide	mg/kg	< 5	NONE		< 5		< 5	
Organic Matter	%	< 0.1	**MCERTS**		0.1		1.2	
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	**MCERTS**		59		12	
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	**MCERTS**		29.3		6.1	
Arsenic (As)	mg/kg	< 2	**MCERTS**		13		8	
Beryllium (Be)	mg/kg	< 0.5	NONE		0.9		0.7	
W/S Boron	mg/kg	< 1	NONE		< 1		< 1	
Cadmium (Cd)	mg/kg	< 0.2	**MCERTS**		< 0.2		0.4	
Chromium (Cr)	mg/kg	< 2	**MCERTS**		13		17	
Chromium (hexavalent)	mg/kg	< 2	NONE		< 2		< 2	
Copper (Cu)	mg/kg	< 4	**MCERTS**		115		40	
Lead (Pb)	mg/kg	< 3	**MCERTS**		43		98	
Mercury (Hg)	mg/kg	< 1	NONE		< 1		< 1	
Nickel (Ni)	mg/kg	< 3	**MCERTS**		16		11	
Selenium (Se)	mg/kg	< 3	NONE		< 3		< 3	
Vanadium (V)	mg/kg	< 2	NONE		18		26	
Zinc (Zn)	mg/kg	< 3	**MCERTS**		49		89	
Total Phenols (monohydric)	mg/kg	< 2	NONE		< 2		< 2	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C
Subcontracted analysis (S)

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Soil Analysis Certificate						
DETS Report No: 19-11509	**Date Sampled**	02/08/19	05/08/19	05/08/19	05/08/19	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP012.001-021	TP040.701-044	TP051.001-047	TP071.601-056	TP081.001-059
Project / Job Ref: STR4836	**Additional Refs**	TP01	TP04	TP05	TP07	TP08
Order No: POR005983	**Depth (m)**	2.00	0.70	1.00	1.60	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427154	427155	427157	427158	427159

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Detected	Detected		Detected	Detected
Sample Matrix (S)	Material Type	N/a	NONE	bundles of Crocidolite and Amosite fibres	Chrysotile and Crocidolite in microscopic asbestos sheeting board debris		bundles of Chrysotile and Crocidolite and Amosite fibres	Amosite in microscopic asbestos sheeting board debris and bundles of Chrysotile
Asbestos Type (S)	PLM Result	N/a	ISO17025	Crocidolite Amosite	Crocidolite Chrysotile		Crocidolite Chrysotile Amosite	Chrysotile Amosite
Asbestos Quantification (S)	%	< 0.001	ISO17025					
pH	pH Units	N/a	MCERTS			9.4		
Total Cyanide	mg/kg	< 2	NONE			< 2		
Complex Cyanide	mg/kg	< 2	NONE			< 2		
Free Cyanide	mg/kg	< 2	NONE			< 2		
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS			278		
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS			0.28		
Sulphide	mg/kg	< 5	NONE			< 5		
Organic Matter	%	< 0.1	MCERTS			1.6		
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS			44		
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS			22.1		
Arsenic (As)	mg/kg	< 2	MCERTS			11		
Beryllium (Be)	mg/kg	< 0.5	NONE			0.8		
W/S Boron	mg/kg	< 1	NONE			< 1		
Cadmium (Cd)	mg/kg	< 0.2	MCERTS			< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS			18		
Chromium (hexavalent)	mg/kg	< 2	NONE			< 2		
Copper (Cu)	mg/kg	< 4	MCERTS			30		
Lead (Pb)	mg/kg	< 3	MCERTS			192		
Mercury (Hg)	mg/kg	< 1	NONE			< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS			14		
Selenium (Se)	mg/kg	< 3	NONE			< 3		
Vanadium (V)	mg/kg	< 2	NONE			31		
Zinc (Zn)	mg/kg	< 3	MCERTS			146		
Total Phenols (monohydric)	mg/kg	< 2	NONE			< 2		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C
Subcontracted analysis (S)

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Soil Analysis Certificate						
DETS Report No: 19-11509	**Date Sampled**	05/08/19	05/08/19			
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied			
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP081.701-060	TP082.701-062			
Project / Job Ref: STR4836	**Additional Refs**	TP08	TP08			
Order No: POR005983	**Depth (m)**	1.70	2.70			
Reporting Date: 19/08/2019	**DETS Sample No**	427160	427161			

Determinand	**Unit**	**RL**	**Accreditation**					
Asbestos Screen (S)	N/a	N/a	**ISO17025**	Detected	Detected			
Sample Matrix (S)	Material Type	N/a	NONE	Chrysotile present as fibre bundles	bundle of Chrysotile fibres			
Asbestos Type (S)	PLM Result	N/a	**ISO17025**	Chrysotile	Chrysotile			
Asbestos Quantification (S)	%	< 0.001	**ISO17025**	0.001				
pH	pH Units	N/a	**MCERTS**		8.1			
Total Cyanide	mg/kg	< 2	NONE		< 2			
Complex Cyanide	mg/kg	< 2	NONE		< 2			
Free Cyanide	mg/kg	< 2	NONE		< 2			
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	**MCERTS**		1430			
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	**MCERTS**		1.43			
Sulphide	mg/kg	< 5	NONE		< 5			
Organic Matter	%	< 0.1	**MCERTS**		2.1			
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	**MCERTS**		49			
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	**MCERTS**		24.4			
Arsenic (As)	mg/kg	< 2	**MCERTS**		20			
Beryllium (Be)	mg/kg	< 0.5	NONE		1.2			
W/S Boron	mg/kg	< 1	NONE		1.1			
Cadmium (Cd)	mg/kg	< 0.2	**MCERTS**		1.3			
Chromium (Cr)	mg/kg	< 2	**MCERTS**		26			
Chromium (hexavalent)	mg/kg	< 2	NONE		< 2			
Copper (Cu)	mg/kg	< 4	**MCERTS**		111			
Lead (Pb)	mg/kg	< 3	**MCERTS**		407			
Mercury (Hg)	mg/kg	< 1	NONE		< 1			
Nickel (Ni)	mg/kg	< 3	**MCERTS**		26			
Selenium (Se)	mg/kg	< 3	NONE		< 3			
Vanadium (V)	mg/kg	< 2	NONE		46			
Zinc (Zn)	mg/kg	< 3	**MCERTS**		559			
Total Phenols (monohydric)	mg/kg	< 2	NONE		< 2			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C
Subcontracted analysis (S)

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4480

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	01/08/19	02/08/19	02/08/19	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011	DTS042.001-015	DTS071.001-037	DTS080.751-039	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	DTS03	DTS04	DTS07	DTS08	TP05
Order No: POR005983	**Depth (m)**	1.00 - 2.00	2.00 - 3.00	1.00 - 1.30	0.75 - 1.00	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146	427148	427150	427152	427157

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	0.90	0.21	0.17	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.13	0.23	0.12	0.18	0.17
Acenaphthene	mg/kg	< 0.1	MCERTS	1.02	0.34	0.22	0.13	1.40
Fluorene	mg/kg	< 0.1	MCERTS	0.64	0.39	0.33	0.17	1.54
Phenanthrene	mg/kg	< 0.1	MCERTS	0.94	5.41	2.45	1.18	10.30
Anthracene	mg/kg	< 0.1	MCERTS	0.27	1.45	0.74	0.41	3.57
Fluoranthene	mg/kg	< 0.1	MCERTS	1.28	14.30	3.03	3.56	19.50
Pyrene	mg/kg	< 0.1	MCERTS	1.41	9.87	2.65	3.40	16.30
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	1.19	6.62	1.83	2.62	6.39
Chrysene	mg/kg	< 0.1	MCERTS	0.79	5.60	1.26	1.91	4.98
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	1.33	8.46	1.76	3.07	6
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.51	3.08	0.64	1.19	2.06
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	1.03	6.81	1.45	2.61	4.82
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.40	5.25	0.60	1.72	3.20
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.65	< 0.1	0.23	0.43
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.59	3.95	0.74	1.50	2.32
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	12.4	72.6	18	23.9	83.1

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 19-11509	**Date Sampled**	05/08/19				
Soiltechnics Ltd	**Time Sampled**	None Supplied				
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062				
Project / Job Ref: STR4836	**Additional Refs**	TP08				
Order No: POR005983	**Depth (m)**	2.70				
Reporting Date: 19/08/2019	**DETS Sample No**	427161				

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	0.20				
Acenaphthylene	mg/kg	< 0.1	MCERTS	0.17				
Acenaphthene	mg/kg	< 0.1	MCERTS	0.28				
Fluorene	mg/kg	< 0.1	MCERTS	0.30				
Phenanthrene	mg/kg	< 0.1	MCERTS	2.94				
Anthracene	mg/kg	< 0.1	MCERTS	0.81				
Fluoranthene	mg/kg	< 0.1	MCERTS	5.09				
Pyrene	mg/kg	< 0.1	MCERTS	4.46				
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	2.91				
Chrysene	mg/kg	< 0.1	MCERTS	2.09				
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	3.11				
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	1.04				
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	2.47				
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	1.62				
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	0.25				
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	1.49				
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	29.2				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	01/08/19	02/08/19	02/08/19	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011	DTS042.001-015	DTS071.001-037	DTS080.751-039	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	DTS03	DTS04	DTS07	DTS08	TP05
Order No: POR005983	**Depth (m)**	1.00 - 2.00	2.00 - 3.00	1.00 - 1.30	0.75 - 1.00	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146	427148	427150	427152	427157

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	16	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	76	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	92	< 21	< 21	< 21
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	3	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	12	< 2	6	2	15
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	10	65	30	25	103
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	35	239	68	178	253
Aromatic (C5 - C35)	mg/kg	< 21	NONE	60	304	103	205	371
Total >C5 - C35	mg/kg	< 42	NONE	60	397	103	205	371

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

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Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 19-11509	**Date Sampled**	05/08/19				
Soiltechnics Ltd	**Time Sampled**	None Supplied				
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062				
Project / Job Ref: STR4836	**Additional Refs**	TP08				
Order No: POR005983	**Depth (m)**	2.70				
Reporting Date: 19/08/2019	**DETS Sample No**	427161				

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01				
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05				
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2				
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2				
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3				
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3				
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10				
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21				
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01				
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05				
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2				
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2				
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	3				
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	25				
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	112				
Aromatic (C5 - C35)	mg/kg	< 21	NONE	140				
Total >C5 - C35	mg/kg	< 42	NONE	140				

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4480

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	01/08/19	02/08/19	02/08/19	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011	DTS042.001-015	DTS071.001-037	DTS080.751-039	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	DTS03	DTS04	DTS07	DTS08	TP05
Order No: POR005983	**Depth (m)**	1.00 - 2.00	2.00 - 3.00	1.00 - 1.30	0.75 - 1.00	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146	427148	427150	427152	427157

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{o}C

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4480

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 19-11509	**Date Sampled**	05/08/19				
Soiltechnics Ltd	**Time Sampled**	None Supplied				
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062				
Project / Job Ref: STR4836	**Additional Refs**	TP08				
Order No: POR005983	**Depth (m)**	2.70				
Reporting Date: 19/08/2019	**DETS Sample No**	427161				

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2				
Toluene	ug/kg	< 5	MCERTS	< 5				
Ethylbenzene	ug/kg	< 2	MCERTS	< 2				
p & m-xylene	ug/kg	< 2	MCERTS	< 2				
o-xylene	ug/kg	< 2	MCERTS	< 2				
MTBE	ug/kg	< 5	MCERTS	< 5				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

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4480

Soil Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	01/08/19	02/08/19	02/08/19	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011	DTS042.001-015	DTS071.001-037	DTS080.751-039	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	DTS03	DTS04	DTS07	DTS08	TP05
Order No: POR005983	**Depth (m)**	1.00 - 2.00	2.00 - 3.00	1.00 - 1.30	0.75 - 1.00	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146	427148	427150	427152	427157

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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4480

Soil Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 19-11509	**Date Sampled**	05/08/19				
Soiltechnics Ltd	**Time Sampled**	None Supplied				
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062				
Project / Job Ref: STR4836	**Additional Refs**	TP08				
Order No: POR005983	**Depth (m)**	2.70				
Reporting Date: 19/08/2019	**DETS Sample No**	427161				

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5				
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5				
Chloromethane	ug/kg	< 10	MCERTS	< 10				
Chloroethane	ug/kg	< 5	MCERTS	< 5				
Bromomethane	ug/kg	< 10	MCERTS	< 10				
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5				
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5				
MTBE	ug/kg	< 5	MCERTS	< 5				
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5				
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5				
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5				
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5				
Chloroform	ug/kg	< 5	MCERTS	< 5				
Bromochloromethane	ug/kg	< 5	MCERTS	< 5				
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5				
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10				
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5				
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5				
Benzene	ug/kg	< 2	MCERTS	< 2				
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5				
Trichloroethene	ug/kg	< 5	MCERTS	< 5				
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5				
Dibromomethane	ug/kg	< 5	MCERTS	< 5				
TAME	ug/kg	< 5	MCERTS	< 5				
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5				
Toluene	ug/kg	< 5	MCERTS	< 5				
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5				
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10				
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5				
Tetrachloroethene	ug/kg	< 5	MCERTS	13				
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5				
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5				
Chlorobenzene	ug/kg	< 5	MCERTS	< 5				
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5				
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2				
m,p-Xylene	ug/kg	< 2	MCERTS	< 2				
o-Xylene	ug/kg	< 2	MCERTS	< 2				
Styrene	ug/kg	< 5	MCERTS	< 5				
Bromoform	ug/kg	< 10	MCERTS	< 10				
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5				
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5				
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5				
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5				
Bromobenzene	ug/kg	< 5	MCERTS	< 5				
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5				
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5				
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5				
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5				
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5				
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5				
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5				
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5				
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5				
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5				
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5				
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10				
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 19-11509	**Date Sampled**	01/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011
Project / Job Ref: STR4836	**Additional Refs**	DTS03
Order No: POR005983	**Depth (m)**	1.00 - 2.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 19-11509	**Date Sampled**	01/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS042.001-015
Project / Job Ref: STR4836	**Additional Refs**	DTS04
Order No: POR005983	**Depth (m)**	2.00 - 3.00
Reporting Date: 19/08/2019	**DETS Sample No**	427148

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 19-11509	**Date Sampled**	02/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS071.001-037
Project / Job Ref: STR4836	**Additional Refs**	DTS07
Order No: POR005983	**Depth (m)**	1.00 - 1.30
Reporting Date: 19/08/2019	**DETS Sample No**	427150

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 19-11509	**Date Sampled**	02/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS080.751-039
Project / Job Ref: STR4836	**Additional Refs**	DTS08
Order No: POR005983	**Depth (m)**	0.75 - 1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427152

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 19-11509	**Date Sampled**	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	TP05
Order No: POR005983	**Depth (m)**	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427157

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 19-11509	**Date Sampled**	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062
Project / Job Ref: STR4836	**Additional Refs**	TP08
Order No: POR005983	**Depth (m)**	2.70
Reporting Date: 19/08/2019	**DETS Sample No**	427161

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	01/08/19	02/08/19	02/08/19	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011	DTS042.001-015	DTS071.001-037	DTS080.751-039	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	DTS03	DTS04	DTS07	DTS08	TP05
Order No: POR005983	**Depth (m)**	1.00 - 2.00	2.00 - 3.00	1.00 - 1.30	0.75 - 1.00	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146	427148	427150	427152	427157

Determinand	Unit	RL	Accreditation					
Phenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	mg/kg	< 0.15	ISO17025	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Isophorone	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
2,4,6-Trichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
2-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	mg/kg	< 0.1	MCERTS	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	mg/kg	< 0.15	NONE	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
4-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	mg/kg	< 0.1	MCERTS	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Azobenzene	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	mg/kg	< 0.1	ISO17025	< 0.1	0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Benzyl butyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 19-11509	**Date Sampled**	05/08/19				
Soiltechnics Ltd	**Time Sampled**	None Supplied				
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062				
Project / Job Ref: STR4836	**Additional Refs**	TP08				
Order No: POR005983	**Depth (m)**	2.70				
Reporting Date: 19/08/2019	**DETS Sample No**	427161				

Determinand	Unit	RL	Accreditation					
Phenol	mg/kg	< 0.1	NONE	< 0.1				
1,2,4-Trichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1				
2-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1				
Nitrobenzene	mg/kg	< 0.1	MCERTS	< 0.1				
0-Cresol	mg/kg	< 0.1	NONE	< 0.1				
bis(2-chloroethoxy)methane	mg/kg	< 0.1	MCERTS	< 0.1				
bis(2-chloroethyl)ether	mg/kg	< 0.1	MCERTS	< 0.1				
2,4-Dichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1				
2-Chlorophenol	mg/kg	< 0.1	ISO17025	< 0.1				
1,3-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1				
1,4-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1				
1,2-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1				
2,4-Dimethylphenol	mg/kg	< 0.15	ISO17025	< 0.15				
Isophorone	mg/kg	< 0.1	NONE	< 0.1				
Hexachloroethane	mg/kg	< 0.1	MCERTS	< 0.1				
p-Cresol	mg/kg	< 0.15	MCERTS	< 0.15				
2,4,6-Trichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1				
2,4,5-Trichlorophenol	mg/kg	< 0.15	MCERTS	< 0.15				
2-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1				
4-Chloro-3-methylphenol	mg/kg	< 0.1	NONE	< 0.1				
2-Methylnaphthalene	mg/kg	< 0.1	MCERTS	< 0.1				
Hexachlorocyclopentadiene	mg/kg	< 0.1	NONE	< 0.1				
Hexachlorobutadiene	mg/kg	< 0.1	ISO17025	< 0.1				
2,6-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1				
Dimethyl phthalate	mg/kg	< 0.1	NONE	< 0.1				
2-Chloronaphthalene	mg/kg	< 0.1	MCERTS	< 0.1				
4-Chloroanaline	mg/kg	< 0.15	NONE	< 0.15				
4-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1				
4-Chlorophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1				
3-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1				
4-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1				
4-Bromophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1				
Hexachlorobenzene	mg/kg	< 0.1	MCERTS	< 0.1				
2,4-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1				
Diethyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1				
Dibenzofuran	mg/kg	< 0.1	MCERTS	< 0.1				
Azobenzene	mg/kg	< 0.1	NONE	< 0.1				
Dibutyl phthalate	mg/kg	< 0.1	ISO17025	< 0.1				
Carbazole	mg/kg	< 0.1	ISO17025	< 0.1				
bis(2-ethylhexyl)phthalate	mg/kg	< 0.15	MCERTS	< 0.15				
Benzyl butyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1				
Di-n-octyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 19-11509	**Date Sampled**	01/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS031.001-011
Project / Job Ref: STR4836	**Additional Refs**	DTS03
Order No: POR005983	**Depth (m)**	1.00 - 2.00
Reporting Date: 19/08/2019	**DETS Sample No**	427146

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 19-11509	**Date Sampled**	01/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS042.001-015
Project / Job Ref: STR4836	**Additional Refs**	DTS04
Order No: POR005983	**Depth (m)**	2.00 - 3.00
Reporting Date: 19/08/2019	**DETS Sample No**	427148

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 19-11509	**Date Sampled**	02/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS071.001-037
Project / Job Ref: STR4836	**Additional Refs**	DTS07
Order No: POR005983	**Depth (m)**	1.00 - 1.30
Reporting Date: 19/08/2019	**DETS Sample No**	427150

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 19-11509	**Date Sampled**	02/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS080.751-039
Project / Job Ref: STR4836	**Additional Refs**	DTS08
Order No: POR005983	**Depth (m)**	0.75 - 1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427152

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 19-11509	**Date Sampled**	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP051.001-047
Project / Job Ref: STR4836	**Additional Refs**	TP05
Order No: POR005983	**Depth (m)**	1.00
Reporting Date: 19/08/2019	**DETS Sample No**	427157

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 19-11509	**Date Sampled**	05/08/19
Soiltechnics Ltd	**Time Sampled**	None Supplied
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	TP082.701-062
Project / Job Ref: STR4836	**Additional Refs**	TP08
Order No: POR005983	**Depth (m)**	2.70
Reporting Date: 19/08/2019	**DETS Sample No**	427161

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Bulk Analysis Certificate						
DETS Report No: 19-11509	**Date Sampled**	01/08/19	05/08/19			
Soiltechnics Ltd	**Time Sampled**	None Supplied	None Supplied			
Site Reference: St Pancras Campus, Camden Phase 2	**TP / BH No**	DTS022.501-009	TP050.701-046			
Project / Job Ref: STR4836	**Additional Refs**	DTS02	TP05			
Order No: POR005983	**Depth (m)**	2.50	0.70			
Reporting Date: 19/08/2019	**DETS Sample No**	427144	427156			

Determinand	Unit	RL	Accreditation					
Asbestos Type (S)	PLM Result	N/a	ISO17025	No Asbestos Detected	No Asbestos Detected			
Sample Matrix (S)	Material Type	N/a	NONE	Woven	Debris			

The samples have been examined to identify the presence of asbestiform minerals by polarising light microscopy and dispersion staining technique to In-House Procedures QTSE600 Determination of Asbestos in Bulk Materials; Asbestos in Soils/Sediments (fibre screening and identification) that is in accordance with the Health and Safety Executive HSG 248 Appendix 2.

This report refers to samples as received, and QTS Environmental Ltd, takes no responsibility for the accuracy or competence of sampling by others.

The material description shall be regarded as tentative and is not included in our scope of UKAS Accreditation.

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

RL: Reporting Limit

Subcontracted analysis (S)

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Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 19-11509	
Soiltechnics Ltd	
Site Reference: St Pancras Campus, Camden Phase 2	
Project / Job Ref: STR4836	
Order No: POR005983	
Reporting Date: 19/08/2019	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
$ 427146	DTS031.001-011	DTS03	1.00 - 2.00	5.8	Brown sandy gravel with stones and concrete
$ 427148	DTS042.001-015	DTS04	2.00 - 3.00	8.5	Brown sandy gravel with stones and concrete
427150	DTS071.001-037	DTS07	1.00 - 1.30	8.4	Brown sandy gravel with stones and concrete
427152	DTS080.751-039	DTS08	0.75 - 1.00	3.5	Brown sandy gravel with stones and concrete
427157	TP051.001-047	TP05	1.00	7.9	Brown sandy gravel with stones and concrete
427161	TP082.701-062	TP08	2.70	13.4	Brown sandy gravel with stones and concrete

Moisture content is part of procedure E003 & is not an accredited test
Insufficient Sample [I/S]
& samples received in inappropriate containers for hydrocarbon analysis

$ samples exceeded recommended holding times

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Soil Analysis Certificate - Methodology & Miscellaneous Information

DETS Report No: 19-11509

Soiltechnics Ltd

Site Reference: St Pancras Campus, Camden Phase 2

Project / Job Ref: STR4836

Order No: POR005983

Reporting Date: 19/08/2019

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

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Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Industrial/Commercial
Receptor: Current site users and construction operatives

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	S4UL	640	6	8.0	20.0	13.8	0	Mean value below guideline	y					normal	normal	y	17.3	**Arsenic**
Beryllium	S4UL	12	6	0.7	1.2	0.9	0	Mean value below guideline	n					normal	not normal	n	1.2	**Beryllium**
Boron	S4UL	240000	6	1.0	1.1	1.0	0	Mean value below guideline	n					not normal	not normal	n	1.1	**Boron**
Cadmium	S4UL	190	6	0.2	1.3	0.5	0	Mean value below guideline	n					not normal	not normal	n	1.2	**Cadmium**
Chromium (III)	S4UL	8600	6	13.0	35.0	23.8	0	Mean value below guideline	y					normal	normal	y	31.5	**Chromium (III)**
Copper	S4UL	68000	6	30.0	145.0	83.3	0	Mean value below guideline	y					normal	normal	y	121.7	**Copper**
Cyanide (total)	ATK	34	6	2.0	2.0	2.0	0	Mean value below guideline	y					not normal	not normal	n	2.0	**Cyanide (total)**
Lead	C4SL (l)	1100	6	43.0	881.0	334.0	0	Mean value below guideline	y					normal	normal	y	585.5	**Lead**
Mercury#	S4UL	58	6	1.0	1.0	1.0	0	Mean value below guideline	y					not normal	not normal	n	1.0	**Mercury#**
Nickel	S4UL	980	6	11.0	26.0	17.0	0	Mean value below guideline	y					normal	normal	y	21.2	**Nickel**
Selenium	S4UL	12000	6	3.0	3.0	3.0	0	Mean value below guideline	y					not normal	not normal	n	3.0	**Selenium**
Vanadium	S4UL	9000	6	18.0	46.0	33.7	0	Mean value below guideline	y					normal	normal	y	42.5	**Vanadium**
Zinc	S4UL	730000	6	49.0	559.0	207.2	0	Mean value below guideline	n					normal	normal	y	358.0	**Zinc**

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
C4SL (lower) (upper)	Category 4 Screening Level for Lead at lower or upper bound of range
ATK	Soil Screening Value derived by Atkins
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

Title	Table number
Analysis of test data in relation to concentrations of inorganic chemical contaminants.	1

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Analysis of test data in relation to concentrations of organic chemical contaminants

Adopted model: Industrial/Commercial
Receptor: Current site users and construction operatives

Test procedure			Summary of test data					Initial Screening	Outlier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value* mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	S4UL	84000	6	0.1	1.4	0.6	0	Mean value below guideline	y					normal	not normal	n	1.5	**Acenaphthene**
Acenaphthylene	S4UL	83000	6	0.1	0.2	0.2	0	Mean value below guideline	y					normal	normal	y	0.2	**Acenaphthylene**
Anthracene	S4UL	520000	6	0.3	3.6	1.2	0	Mean value below guideline	n					not normal	not normal	n	3.4	**Anthracene**
Benzo(a)anthracene	S4UL	170	6	1.2	6.6	3.6	0	Mean value below guideline	y					normal	not normal	n	7.8	**Benzo(a)anthracene**
Benzo(a)pyrene	S4UL	35	6	1.0	6.8	3.2	0	Mean value below guideline	y					normal	normal	y	5.0	**Benzo(a)pyrene**
Benzo(b)fluoranthene	S4UL	44	6	1.3	8.5	4.0	0	Mean value below guideline	y					normal	not normal	n	8.8	**Benzo(b)fluoranthene**
Benzo(g,h,i)perylene	S4UL	3900	6	0.6	4.0	1.8	0	Mean value below guideline	y					normal	not normal	n	4.0	**Benzo(g,h,i)perylene**
Benzo(k)fluoranthene	S4UL	1200	6	0.5	3.1	1.4	0	Mean value below guideline	y					normal	normal	y	2.2	**Benzo(k)fluoranthene**
Chrysene	S4UL	350	6	0.8	5.6	2.8	0	Mean value below guideline	y					normal	not normal	n	6.4	**Chrysene**
Dibenzo(a,h)anthracene	S4UL	3.5	6	0.1	0.7	0.3	0	Mean value below guideline	y					normal	not normal	n	0.7	**Dibenzo(a,h)anthracene**
Fluoranthene	S4UL	23000	6	1.3	19.5	7.8	0	Mean value below guideline	y					normal	not normal	n	20.9	**Fluoranthene**
Fluorene	S4UL	63000	6	0.2	1.5	0.6	0	Mean value below guideline	n					not normal	not normal	n	1.5	**Fluorene**
Indeno(1,2,3-cd)pyrene	S4UL	500	6	0.4	5.3	2.1	0	Mean value below guideline	y					normal	not normal	n	5.4	**Indeno(1,2,3-cd)pyrene**
Naphthalene	S4UL	190	6	0.1	0.9	0.3	0	Mean value below guideline	n					not normal	not normal	n	0.8	**Naphthalene**
Phenanthrene	S4UL	22000	6	0.9	10.3	3.9	0	Mean value below guideline	y					normal	normal	y	6.8	**Phenanthrene**
Phenols	S4UL	760	6	2.0	2.0	2.0	0	Mean value below guideline	y					not normal	not normal	n	2.0	**Phenols**
Pyrene	S4UL	54000	6	1.4	16.3	6.3	0	Mean value below guideline	y					not normal	not normal	n	16.5	**Pyrene**

Notes

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
SGV	Soil Guideline Value as published by the Environment Agency 2009
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
*	Assuming a SOM of 1%

Title	Table number
Analysis of test data in relation to concentrations of organic chemical contaminants.	2

Summary of petroleum hydrocarbon test results

Model: **Industrial/Commercial**

BTEX (Red highlights indicate exceedance of guideline value)

Indicator	unit	S4UL (mg/kg)	Concentration DTS03 1.00	DTS04 2.00	DTS07 1.00	DTS08 0.75	TP05 1.00	TP08 2.70
Benzene	mg/kg	27	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	mg/kg	56000	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	mg/kg	5700	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	mg/kg	6600	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
m,p-Xylene	mg/kg	5900	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

Hydrocarbon banding (Red highlights indicate exceedance of guideline value)

Fraction	unit	S4UL (mg/kg)	Concentration DTS03 1.00	DTS04 2.00	DTS07 1.00	DTS08 0.75	TP05 1.00	TP08 2.70
Aliphatic								
EC 5 - 6	mg/kg	3200	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
EC >6 - 8	mg/kg	7800	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EC >8 - 10	mg/kg	2000	< 2	< 2	< 2	< 2	< 2	< 2
EC >10 - 12	mg/kg	9700	< 2	< 2	< 2	< 2	< 2	< 2
EC >12 - 16	mg/kg	59000	< 3	< 3	< 3	< 3	< 3	< 3
EC >16 - 35	mg/kg	1600000	0	92	0	0	0	0
EC >35 - 44	mg/kg	1600000						
Aromatic								
EC 5 - 7 (benzene)	mg/kg	26000	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
EC >7 - 8 (toluene)	mg/kg	56000	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EC >8 - 10	mg/kg	3500	< 2	< 2	< 2	< 2	< 2	< 2
EC >10 - 12	mg/kg	16000	3	< 2	< 2	< 2	< 2	< 2
EC >12 - 16	mg/kg	36000	12	< 2	6	2	15	3
EC >16 - 21	mg/kg	28000	10	65	30	25	103	25
EC >21 - 35	mg/kg	28000	35	239	68	178	253	112
EC >35 - 44	mg/kg	28000						
Total petroleum hydrocarbons			60	397	103	205	371	140

Title	Table number
Comparison of measured concentrations of petroleum hydrocarbons with	3

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Table comparing cumulative compound concentrations with hazardous waste threshold values

Category of danger		Irritant	Harmful	Toxic		Carcinogenic		Corrosive		Toxic for reproduction		Mutagenic		Ecotoxic		
														∑N : R50-53/0.25 +∑N : R51-53/2.5 +∑N : R52-53/25	∑N : 50-53 +∑N : R50	∑N : 50-53 +∑N : 51-53 +∑N : 52-53 +∑N : R53
Risk Phrase		Xi	Xn	T+	T	Carc Cat 1 or 2	Carc Cat 3	C R34	C R35	Repr Cat 1 or 2	Repr Cat 3	Muta Cat 2	Muta Cat 3			
Contaminant	Highest concentration	H4 (%)	H5 (%)	H6 (%)	H6 (%)	H7 (%)	H7 (%)	H8 (%)	H8 (%)	H10 (%)	H10 (%)	H11 (%)	H11 (%)	H14	H14	H14
Metals																
Arsenic	20.00			0.0026	0.0031	0.0031								2.2078	0.0031	0.0031
Beryllium	1.20	0.0003		0.0003	0.0003	0.0003										0.0003
Copper	145.00	0.0363	0.0363												0.0363	0.0363
Cadmium	1.30		0.0001		0.0001	0.0001										
Chromium	35.00					0.0057									0.0057	0.0057
Lead	881.00		0.0950							0.0950	0.0950				0.0950	0.0950
Mercury	0.00			0.0000											0.0000	0.0000
Nickel	26.00		0.0033				0.0033				0.0033				0.0033	0.0033
Selenium	0.00				0.0000										0.0000	0.0000
Zinc	559.00	0.4053	0.4053			0.1548		0.1166					0.2627		0.4053	0.4053
Vanadium	46.00	0.0068			0.0068						0.0068		0.0068			0.0068
PAH																
Naphthalene	0.90		0.0001												0.0001	0.0001
Benzo(a)anthracene	6.62				0.0007	0.0007									0.0007	0.0007
Chrysene	5.60				0.0006	0.0006							0.0006		0.0006	0.0006
Benzo(b)fluoranthene	8.46				0.0008	0.0008									0.0008	0.0008
Benzo(k)fluoranthene	3.08				0.0003	0.0003									0.0003	0.0003
Benzo(a)pyrene	6.81					0.0007				0.0007		0.0007			0.0007	0.0007
Dibenzo(a,h)anthracene	0.00				0.0000	0.0000									0.0000	0.0000
Total (or greatest)		0.4486	0.5400	0.0030	0.0127	(0.1548)	(0.0033)	0.1166	0.0000	(0.095)	(0.095)	(0.0007)	(0.2627)	2.2078	0.5517	0.5588
Threshold		1%	1%	0.10%	3%	0.10%	1%	5%	1%	0.50%	3%	0.10%	1%	1	25%	25%
Exceeded Y/N		N	N	N	N	Y	N	N	N	N	N	N	N	Y	N	N

Title	Table number
Hazard assessment spreadsheet	1 of 1

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Landfill Waste Acceptance Criteria

Parameter	Inert waste landfill	Stable non-reactive hazardous waste in non-hazardous landfill	Hazardous waste landfill	Laboratory test data	
				WAC01	WAC02
Parameters determined on the waste					
Total organic carbon (w/w %)	3%	5%	6%*	1	0.7
Loss on ignition			10%*	2.89	2.73
BTEX (mg kg^{-1})	6			< 0.05	< 0.05
PCBs (7 congeners) (mg kg^{-1})	1			< 0.1	< 0.1
Mineral oil C_{10} - C_{40} (mg kg^{-1})	500			< 10	209
PAH (17 congeners)	100			13.5	39.1
pH		>6		8.6	9.8
Acid neutralisation capacity pH 6 (mol kg^{-1})		To be evaluated	To be evaluated	1.1	1.5
Acid neutralisation capacity pH 4 (mol kg^{-1})		To be evaluated	To be evaluated		
Limit values (mg kg^{-1}) for compliance test using BN 12457-3 at L/S 10 l kg^{-1}					
As (arsenic)	0.5	2	25	< 0.2	< 0.2
Ba (barium)	20	100	300	0.3	0.3
Cd (cadmium)	0.04	1	5	< 0.02	< 0.02
Cr (chromium (total))	0.5	10	70	< 0.20	< 0.20
Cu (Copper)	2	50	100	< 0.5	< 0.5
Hg (mercury)	0.01	0.2	2	< 0.01	< 0.01
Mo (molybdenum)	0.5	10	30	< 0.1	< 0.1
Ni (nickel)	0.4	10	40	< 0.2	< 0.2
Pb (lead)	0.5	10	50	0.2	< 0.2
Sb (antimony)	0.06	0.7	5	0.08	0.1
Se (selenium)	0.1	0.5	7	< 0.1	< 0.1
Zn (zinc)	4	50	200	0.3	< 0.2
Cl (chloride)	800	15,000	25,000	53	56
F (fluoride)	10	150	500	5.2	< 1
SO_4 (sulphate)	1000#	20,000	50,000	111	1024
Total Dissolved Solids (TDS)$^{+}$	4,000	60,000	100,000	873	1657
Phenol index	1			< 0.5	< 0.5
Dissolved organic carbon at own pH or pH 7.5-8.0$^{@}$	500	800	1000	177	101

Primary classification	HAZARDOUS	HAZARDOUS
Secondary classification	STABLE NON-REACTIVE HAZARDOUS WASTE IN NON-HAZARDOUS LANDFILL	STABLE NON-REACTIVE HAZARDOUS WASTE IN NON-HAZARDOUS LANDFILL

Title

Comparison of test data to landfill waste acceptance criteria (Table 5.1) (Secondary classification)

Table number

1 of 1