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Grenfell Investigation into Potential Land Contamination Impacts

Technical Note 15: Factual data from exploratory sampling and pilot study

Royal Borough of Kensington and Chelsea

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Quality information

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		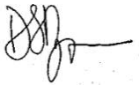	
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Draft	10 July 2019	First draft		Liz Philp	Technical Director
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1. Introduction

This technical note sets out AECOM's factual record of the Stage 1 exploratory soil sampling and pilot study exercise; including preliminary sampling undertaken inside the Tower cordon, and is based on the final agreed specification for the Stage 1 assessment (AECOM, 2019a).

1.1 Stage 1 Exploratory Sampling

The objective of the exploratory soil sampling task is to identify what fire effluent chemicals of potential concern (COPC) are present in soil, and at what concentrations within the geographical area of interest. The locations of the soil samples were chosen based on the desk study information and the site reconnaissance. The locations are primarily areas of accessible space where it is understood that the soil has not been significantly disturbed or altered since the fire. The full rationale and details of the Stage 1 exploratory sampling was provided in AECOM's Technical Note 3 (AECOM, 2019b).

1.2 Pilot Study Soil Sampling

The objective of the pilot study is to identify local spatial variability in COPC concentrations, distinct from the variability on the wider exploratory sampling scale and provide a dataset that enables the Part 2A-risk assessment process to be rehearsed and provided as an example, such that the output and learnings from that exercise can be factored into the design for Stage 2.

2. Sampling Dates and Personnel

2.1 Preliminary Sampling – Cordon area

An AECOM Environmental Consultant Rhys Plummer attended site on the 10th April 2019. Following an induction from a member of the Grenfell Site Management Team, the AECOM consultant was then accompanied on a site walkover in order to establish if the areas marked on the provisional sampling location plan within the cordon area were suitable.

2.2 Sample Area Reconnaissance Walkover

David Dyson and Katie Bruce of AECOM completed a walkover of the initially proposed sampling areas (identified from desk-based information) on 23rd and 24th May 2019 to identify any problems with the proposed areas, plan logistics for the sampling event, and select specific sampling locations within each area.

The AECOM staff were accompanied by staff from MHCLG including Lisa James and Simon Jolly. The walkover was filmed by Simon Edwards of MHCLG. Members of the public also attended during the site walkover at varying locations and for varying durations.

2.3 Stage 1 exploratory sampling

The exploratory sampling works were undertaken between the 4th and 7th of June 2019.

The AECOM sampling team comprised David Dyson, Katie Bruce, William Hartas, Jessica Storey, Jonathan Craggs and John Andrews.

The following people from MHCLG were in attendance for varying amounts of time during the sampling: Lisa James; Simon Jolly; Cecil Sinclair; and Loughlan Campbell. The project Suitably Qualified Person (Paul Nathanail) also visited and observed sampling activities on 5th June. Members of the public also attended during sampling activities at varying locations and for varying durations.

The exploratory sampling works were filmed by Daniel Clayton. A video is available at https://www.gov.uk/guidance/soil-and-environmental-checks showing the completed film.

2.4 Pilot Study

The Pilot study works were undertaken on the 5th and 6th of June 2019.

The AECOM sampling team comprised David Dyson, William Hartas and John Andrews.

3. Sampling Areas and Locations

3.1 Location Rationale for Stage 1 Exploratory Soil Sampling

Four locations within the Tower cordon were subject to preliminary soil sampling; recorded as sample numbers GTCS101 to GTCS104. These locations were selected from a limited number of areas with suitable soft ground cover. The locations of the preliminary samples inside the Tower cordon are shown on **Figure TN15-01**.

Based on Table TN03-03 (AECOM, 2019b), 20 sampling areas (excluding the area within the Tower cordon) within a 1km radius of the Tower were chosen for Stage 1 exploratory sampling. These areas are identified on **Figure TN15-02**. The areas include a combination of accessible open spaces and community kitchen gardens that meet a combination of one or more of the following criteria:

- Areas close to two transects that run either NW/SE through the Tower, or W/E through the Tower, representing the wind directions on the day of and day after the fire.
- Areas where debris has been reported to have fallen during the fire.
- Areas within the Met Office defined smoke particle deposition plume.
- Areas identified by the public during community engagement events or via community communication channels with MHCLG as being of particular concern or where debris was identified.

Of the 20 exploratory sampling areas, one was selected for more detailed assessment through completion of a pilot study. The pilot study is described below.

3.2 Pilot Study Location Rationale

Waynflete Square (Area 3 of the 20 exploratory sampling areas described above) was chosen area for the pilot study sampling as an area of public open space within a residential setting within 200m of the Tower where it is reported that debris fell during the fire. The area is in a west/north-westerly direction from the Tower, consistent with the wind and smoke plume direction during the fire.

The pilot study soil sampling locations were selected using a systematic approximately 20 metre sampling grid across soft landscaped areas. Given the dimensions and layout of Waynflete Square, this provided nine sampling locations (GTCS1-43 to GTCS1-51) on the 20m grid.

Eight further sample locations (GTCS1-52 to GTCS1-59) were selected in closer proximity to one of the locations in the 20m grid. These locations comprised four samples at a distance of 2.5m from the central location in the northerly, easterly, southerly and westerly directions, and four samples at a distance of 5m from the central location in the same compass directions. These closer spaced samples were intended to explore the possibility of COPC concentration variation on a smaller scale.

The final precise sampling locations were measured from three suitable physical reference points using a tape measure to enable accurate transfer onto maps. The final sampling locations, based on the measurements taken at the time of the sampling, are shown on **Figures TN15-03A-S** and **Figure TN15-04.**

The sample location layout for the pilot study at Waynflete Square is presented as **Figure TN15-04**.

3.3 Sampling Area Adjustments

Three sampling areas were adjusted following the initial desktop based selection of areas following the site reconnaissance walkover and feedback from residents groups after the walkover.

During the reconnaissance walkover of 24th and 25th May, a potential location on Portland Road was excluded after it was identified as: being a small inaccessible ornamental garden; being relatively close to Area 13 (the community kitchen garden on Portland Road); and after discovering from the gardening contractors that the surface bark chippings had been removed since the fire. This area was replaced by a public open space area on Henry Dickens Estate (Area 15) following discussion with community representatives during the walkover.

A second sampling area that was adapted after the reconnaissance walkover was the Lancaster West Walkways (Area 11). This sampling area was expanded to include both communal garden areas within the Lancaster West Walkways whereas the original intention had been to collect both samples within the more easterly communal garden area.

The final area requiring adjustment was the original proposal to collect samples from an area at the southern end of St. Mark's Road opposite Dale Row. However, this potential location was not an easily accessible space and as a result an alternative location at Camelford Walk (Area 20) was selected as being appropriate having passed through the area during the reconnaissance walkover.

From the 20 areas, one area, Waynflete Square, was identified for completion of the pilot study. The selection of precise sample locations within each of the 20 areas is described in further detail below.

3.4 Selection of Sample Locations Within Each Area

In accordance with TN3, two samples were collected from each of the Stage 1 sampling areas (excluding the cordon and pilot study areas, discussed separately above). The precise sampling locations within each area were decided using a random selection process. Each individual area was divided into ten sections which were drawn free hand onto a large scale map of the area. The sections were then numbered (usually 1 – 10). A random number generator mobile phone application ('Pretty Random' by Fox Bytes) had been downloaded in advance onto one of the AECOM team's mobile phones. The number generator application was then used, and the first two (different) numbers were taken from the generator and marked in the field notes.

Within each of the two randomly selected sections, a location was chosen at random. The chosen locations avoided any hardstanding (paths, playground surfacing etc.), positions very close to trees (due to the possibility of tree roots near to surface), and unsafe sampling positions (from heavy foot traffic), potentially intrusive/ obstructive locations (such as directly outside windows/doors) and any raised beds or plant pots (due to the possibility of soil having been changed).

The random process could not be employed in three of the sampling areas due to the limited options available within them. These were:

- Bramley House (Area 1) - the sampling areas were limited to a narrow border and an ornamental hedge.
- St Quintin Community Kitchen Garden (Area 7) - the sampling areas were limited to a narrow border along the eastern edge of the garden, and a single raised bed which has not been used for several years.
- Community Garden at Portland Road (Area 13) - the sampling areas were limited to narrow paths between raised beds, not used for growing.

In each of these areas, two sampling locations were chosen to provide reasonable coverage given the limited options available.

In addition, the random selection process was not employed in the Waynflete Square area where the pilot study was conducted. The selection of sample locations in Waynflete Square is summarised below.

3.5 Sample Locations and Identification

The sample location IDs were prefixed 'GTCS 1' (Grenfell Tower Contamination, Soil – Stage 1) in accordance with TN3 (AECOM, 2019b). Each sample location was then provided with a unique two digit identifying number appended to the fixed 'GTCS 1' part of the ID. The sampling areas and sample IDs were selected as described in TN3 (AECOM, 2019b).

Preliminary and exploratory sampling location details are summarised in **Table TN15-01** below.

Pilot study sampling location details are summarised in **Table TN15-02** below.

Table TN15-01. Exploratory Soil Sample Locations

Sample Location Area	Figure Ref.	Unique Sample Location Code	Sample Type
Cordon Area	TN15-01	GTCS101	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS102	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS103	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS104	Surface soil (<5cm bgl), discrete disturbed sample
Bramley House communal garden (Area 1)	TN15-03A	GTCS 1-25	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-26	Surface soil (<5cm bgl), discrete disturbed sample
Communal open space at Whitstable House (Area 2)	TN15-03B	GTCS 1-27	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-28	Surface soil (<5cm bgl), discrete disturbed sample
Communal open space at Markland House (Area 4)	TN15-03C	GTCS 1-31	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-32	Surface soil (<5cm bgl), discrete disturbed sample
Community garden areas along Darfield Way (Area 5)	TN15-03D	GTCS 1-33	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-34	Surface soil (<5cm bgl), discrete disturbed sample
Robinson House (Area 6)	TN15-03E	GTCS 1-35	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-36	Surface soil (<5cm bgl), discrete disturbed sample
St Quintin Community Kitchen Gardens (Area 7)	TN15-03F	GTCS 1-29	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-30	Surface soil (<5cm bgl), discrete disturbed sample
St. Quintin's Roundabout (Area 8)	TN15-03G	GTCS 1-41	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-42	Surface soil (<5cm bgl), discrete disturbed sample
Kensington Memorial Park (St Marks Park) (Area 9)	TN15-03H	GTCS 1-37	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-38	Surface soil (<5cm bgl), discrete disturbed sample
West London Bowling Club (Area 10)	TN15-03I	GTCS 1-39	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-40	Surface soil (<5cm bgl), discrete disturbed sample

Sample Location Area	Figure Ref.	Unique Sample Location Code	Sample Type
Lancaster West Walkways communal gardens (Area 11)	TN15-03J	GTCS 1-05	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-06	Surface soil (<5cm bgl), discrete disturbed sample
Communal garden at Treadgold House (Area 12)	TN15-03K	GTCS 1-07	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-08	Surface soil (<5cm bgl), discrete disturbed sample
Community kitchen garden at Portland Road (Area 13)	TN15-03L	GTCS 1-17	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-18	Surface soil (<5cm bgl), discrete disturbed sample
Communal space at Avondale Park (Area 14)	TN15-03M	GTCS 1-23	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-24	Surface soil (<5cm bgl), discrete disturbed sample
Community garden at Henry Dickens Estate (Area 15)	TN15-03N	GTCS 1-19	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-20	Surface soil (<5cm bgl), discrete disturbed sample
Avondale Park (Area 16)	TN15-03O	GTCS 1-21	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-22	Surface soil (<5cm bgl), discrete disturbed sample
Open space at Verity Close (Area 17)	TN15-03P	GTCS 1-09	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-10	Surface soil (<5cm bgl), discrete disturbed sample
Communal open space at Morland House (Area 18)	TN15-03Q	GTCS 1-11	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-12	Surface soil (<5cm bgl), discrete disturbed sample
Communal open space at Allom House and Barlow House (Area 19)	TN15-03R	GTCS 1-13	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-14	Surface soil (<5cm bgl), discrete disturbed sample
Camelford Walk communal open space (Area 20)	TN15-03S	GTCS 1-15	Surface soil (<5cm bgl), discrete disturbed sample
		GTCS 1-16	Surface soil (<5cm bgl), discrete disturbed sample

Table TN15-02. Pilot Study Sample Locations

Sample Location Area	Figure Ref.	Unique Sample Location Codes	Sample Type	Rationale
Waynflete Square (Area 3)	TN15-04	GTCS 1-43 GTCS 1-44 GTCS 1-45 GTCS 1-46 GTCS 1-47 GTCS 1-48 GTCS 1-49 GTCS 1-50 GTCS 1-51 GTCS 1-52 GTCS 1-53 GTCS 1-54 GTCS 1-55 GTCS 1-56 GTCS 1-57 GTCS 1-58 GTCS 1-59	17x surface soil (<5cm bgl), discrete disturbed sample	As per objective of pilot study; to target a single parcel of land and investigate that land in a systematic way and in more detail than the exploratory sampling to explore more localised lateral and vertical spatial variability in soil concentrations
		GTCS 1-43 GTCS 1-44 GTCS 1-45 GTCS 1-46 GTCS 1-47 GTCS 1-48 GTCS 1-49 GTCS 1-50 GTCS 1-51	9x sub-surface (10-15cm bgl) discrete disturbed sample	

4. Sampling Methodology and Analytical Suites

Sampling was undertaken in accordance with the methodology described in **Appendix TN15-A** and AECOM field procedures FP07, FP17, FP24 and FP26, also presented in **Appendix TN15-A**.

During the sampling activities, a supply of cool packs was kept in a freezer at the Grenfell Tower site. Each morning, empty sample containers were stored in cool boxes along with frozen cool packs. Prior to sending samples to the laboratory using the laboratory organised overnight courier, fresh frozen cool packs were placed in the cool boxes to maintain a low temperature during transport. For samples collected after the courier collection, fresh frozen ice packs were placed in the cool boxes for overnight storage at the Grenfell Tower site. These samples were then sent by courier to the laboratory the following day, with further fresh frozen cool packs placed in the cool box immediately prior to the courier collection.

In addition, during the exploratory and pilot study sampling (i.e. excluding the preliminary sampling inside the cordon), further specific procedures included:

- Two full sets of sampleware[1] were collected at each location, with the sample ID on one set of sampleware appended with an 'a', and the sample ID on the second set of sampleware appended with a 'b'. This was undertaken in order to provide a complete sample (the containers appended 'b') for long-term storage at the laboratory;
- Where a duplicate sample was collected, five full sets of sampleware were filled with soil. The sample location ID on each complete set of sampleware was labelled with a different letter, 'a', 'b', 'c', 'd' and 'e'; and
- The 60g soil jar filled immediately (i.e. before mixing) in each of the 'a', 'b', 'c', 'd' and 'e' sampleware sets was additionally labelled 'VOC' so that it could be identified by the laboratory.

For locations without a duplicate sample, the agreed procedure comprised analysis of the 'a' sample and long-term storage of the 'b' sample. For locations requiring duplicate sample analysis, the 'b' sample was again put into long-term storage, with the following procedure implemented at the laboratory to create the four sub-samples needed for duplicate analysis:

1. The 'a', 'c', 'd' and 'e' 60g jars labelled VOC were taken for immediate analysis and were not mixed together for subsequent duplicate sub-sampling.
2. For all other sample containers, the soil in containers labelled 'a' and 'c' was mixed together and then split into two new sub-samples labelled PRIMARY SAMPLE and LAB DUPLICATE. These new samples were then repackaged for onward processing at the laboratory.
3. Similarly, the soil in containers labelled 'd' and 'e' was mixed together and then split into two new sub-samples labelled FIELD DUPLICATE and LAB FIELD DUPLICATE. These new samples were then repackaged for onward processing at the laboratory.

This procedure resulted in four samples for analysis for each field duplicate sample location.

The laboratory duplicate sample preparation method for the exploratory sampling is described in **Appendix TN15-D**. Duplicate analytical results are reported by the laboratory as follows:

- GTCS 1-xx PRIMARY SAMPLE = VOC jar labelled 'a' and first portion of the recombined, mixed and split soil from the sampleware containers labelled 'a' and 'c' from each duplicate sample location
- GTCS 1-xx LAB DUPLICATE = VOC jar labelled 'c' and second portion of the recombined, mixed and split soil from the sampleware containers labelled 'a' and 'c' from each duplicate sample location
- GTCS 1-xx FIELD DUPLICATE = VOC jar labelled 'd' and first portion of the recombined, mixed and split soil from the sampleware containers labelled 'd' and 'e' from each duplicate sample location

[1] One set of sampleware included 1 x 1kg (950ml) plastic tub, 2 x 250g (260ml) glass jars and 5 x 60g (74ml) glass jars

- GTCS 1-xx LAB FIELD DUPLICATE = VOC jar labelled ‘e’ and second portion of the recombined, mixed and split soil from the sampleware containers labelled ‘d’ and ‘e’ from each duplicate sample location

A photographic record of the sampling process at each location is included in **Appendix TN15-B**.

4.1 Duplicates

One duplicate sample was collected during the preliminary sampling inside the Tower cordon. These samples were collected prior to finalisation of methods as part of the ongoing method refinement process and therefore the preparation of this duplicate sample was not carried out in the same manner as for the subsequent exploratory sampling, with the additional laboratory preparation procedures described in Appendix TN15-D not included.

Eight duplicates were collected during the exploratory sampling as per the method outlined in TN3 and in accordance with BS10175:2011+A2:2017 (British Standards Institute, 2017) duplicate method for the assessment and control of sampling uncertainty.

The sample locations where duplicates were collected are summarised in **Table TN15-03** below.

Table TN15-03. Duplicate sample sources

Date	Area	Primary sample (combined ‘a’ and ‘c’ sampleware)	Duplicate (combined ‘d’ and ‘e’ sampleware)
Wednesday 10th April	Cordon	GTCS101	DUP01
Tuesday 4th June	6	GTCS 1-36a	GTCS 1-36d
		GTCS 1-36c	GTCS 1-36e
	7	GTCS 1-30a	GTCS 1-30d
		GTCS 1-30c	GTCS 1-30e
	8	GTCS 1-41a	GTCS 1-41d
		GTCS 1-41c	GTCS 1-41e
	10	GTCS 1-39a	GTCS 1-39d
		GTCS 1-39c	GTCS 1-39e
Wednesday 5th June	13	GTCS 1-18a	GTCS 1-18d
		GTCS 1-18c	GTCS 1-18e
	14	GTCS 1-23a	GTCS 1-23d
		GTCS 1-23c	GTCS 1-23e
Thursday 6th June	12	GTCS 1-8a	GTCS 1-8d
		GTCS 1-8c	GTCS 1-8e
	18	GTCS 1-12a	GTCS 1-12d
		GTCS 1-12c	GTCS 1-12e

4.2 Analytical Testing

All samples collected as part of the exploratory and pilot study sampling were scheduled for the same suite of analytes, listed in **Table TN15-04**. The preliminary cordon samples were scheduled for a smaller suite of analytes as these samples were collected prior to finalisation of methods and testing suites as part of the ongoing method refinement process.

Table TN15-04. Sample quantities and analytical suites

Sample Type	Sample Quantity	Analytical Suites
Cordon sample	5 samples (incl. one duplicate) – all 0 – 0.05m depth (locations GTCS101, GTCS102, GTCS103, GTCS104, DUP01 (blind duplicate of GTCS101))	Full schedule in Appendix TN15-C, and including: Metals, 17 speciated poly-cyclic aromatic hydrocarbons (PAH-17), volatile organic compounds including tentatively identified compounds (VOCs + TICs), volatile organic compounds (SVOCs), total cyanide, total organic carbon (TOC), asbestos screen, dioxins & furans, dioxin-like poly-chorinated biphenyls (PCBs)
Exploratory sample	38 samples (all 0 – 0.05m depth) GTCS1-05 to GTCS1-42	Full schedule in Appendix TN15-C, and including: • Metals • PAH-17 • VOC + TICs • SVOC + TICs • SVOC forensic scan • Total cyanide, free cyanide and thiocyanate • TOC • Asbestos screen (+ quantification where detected) • Chlorinated dioxins and furans • dioxin-like PCBs ('WHO-12' congeners) • non dioxin-like PCBs ('Dutch 7' congeners) • brominated dioxins and furans • organophosphorous flame retardants • brominated flame retardants • poly brominated biphenyls (PBBs) • Tetrabromobisphenol A • hexabromocyclododecane (1,2,5,6,9,10-) • Isocyanates • Synthetic vitreous fibres / man-made mineral fibres (SVFs / MMMFs)
Pilot study sample	17 samples at 0 – 0.05m depth (locations GTCS1-43 to GTCS1-59) 9 samples at 0.1 – 0.15m depth (locations GTCS1-43 to GTCS1-51)	
Exploratory sample duplicates	24 samples all at 0 – 0.05m depth (comprising three equivalent duplicates at 8 locations) (at locations GTCS1-8, GTCS1-12, GTCS1-18, GTCS1-23, GTCS1-30, GTCS1-36, GTCS1-39 & GTCS1-41.	

4.3 Quality Assurance

The review /checking process for the Field Records was performed as per AECOM Field Procedure 'FP26 - Field Sampling and Laboratory Quality Assurance and Quality Control Procedures' **Appendix TN15-A**.

The completed field records were checked by the originators on the day of the field work.

Review of field notes was completed as soon as possible following the sampling works by David Dyson, Katie Bruce (both checking other originators records) and Jim Cochrane. The review included

performing a detailed check of field data sheets for completeness, accuracy, and any potential safety observations that could be added into Industry Safe (no safety concerns were noted).

5. Summary of Ground Conditions

Photographic logs and typed up sampling notes are presented in **Appendix TN15-B**.

The following **Tables TN15-05 to TN15-07** present the soil descriptions and observations for the preliminary (Cordon), exploratory (19 Stage 1 areas) and pilot study (Area 3) sampling respectively.

Table TN15-05. Ground Conditions – Preliminary Sampling: Cordon Area

Unique sample codes*	Depth (cm)	Soil Description
GTCS101	0-5	Loose and dry dark brown silty gravelly clay. Gravels are rounded fine of lithic with rootlets and detrital material (Topsoil).
GTCS102	0-5	Loose dark brown-black gravelly clay with occasional cobbles of brick. Gravels are rounded fine to coarse. Occasional detrital material. Concrete and metal scattered around sample (Made Ground).
GTCS103	0-5	Loose brown-black gravelly clay with occasional cobbles of brick. Gravel is sub-rounded to rounded fine to coarse. Frequent detrital material and rootlets. Shards of metal and glass within the cut turf box (Topsoil).
GTCS104	0-5	Gravelly clay with frequent detrital material. Gravels are sub rounded-rounded fine to coarse of lithic with rare quantities of brick (Topsoil).

*locations shown on Figure TN15-01

Table TN15-06. Ground Conditions – Exploratory Sampling

Sample Location Area	Figure Ref.	Unique sample codes	Depth (cm)	Soil Description
Bramley House communal garden (Area 1)	TN15-03A	GTCS 1-25	0-5	Loose black and light brown slightly gravelly clayey sand. Sand is fine to coarse. Gravel is fine to medium flint. Occasional brick and plastic and decomposing wood present (Topsoil / Made Ground).
		GTCS 1-26	0-5	Loose very dark brown silty sand. Sand is sub-angular to sub-rounded. Occasional gravels of chert, plastic, organic material, food wrappers, sandstone, brick, paper, tarmac. Possible cladding (placed in VOC sample jar) (Topsoil / Made Ground).
Communal open space at Whitstable House (Area 2)	TN15-03B	GTCS 1-27	0-5	Turf over loose light brown slightly silty gravelly fine to coarse sand. Gravel is sub-angular to sub-rounded. Inclusions of plastic, glass, clinker, coal, rootlets, a marble (toy) and a pencil sharpener (Topsoil / Made Ground).
		GTCS 1-28	0-5	Dense dark brown slightly sandy silt with occasional sub-angular to sub-rounded flint. Inclusions of plastic, glass and wood (Topsoil / Made Ground).
		GTCS 1-31	0-5	Light brown slightly silty sand with frequent gravel of flint and brick. Occasional fragments of glass, plastic, shells and rare fragments of shiny black material and grey vesicular charred material (Topsoil / Made Ground).

Sample Location Area	Figure Ref.	Unique sample codes	Depth (cm)	Soil Description
Communal open space at Markland House (Area 4)	TN15-03C	GTCS 1-32	0-5	Turf over loose light brown silty sand with occasional flint gravel. Occasional ceramic, wood, plastic, fabric. Rare white ashy material (Topsoil / Made Ground).
Community garden areas along Darfield Way (Area 5)	TN15-03D	GTCS 1-33	0-5	Grass over light brown medium dense sandy silt with rootlets and occasional gravels. Gravels are sub-angular to sub-rounded of brick, sandstone with occasional fabric and glass (Topsoil / Made Ground).
		GTCS 1-34	0-5	Patchy grass over loose light brown fine sandy silt with occasional gravel. Gravel is angular fine of chert with rare fragments of brick and glass. Tree root at 3cm depth (Topsoil / Made Ground).
Robinson House (Area 6)	TN15-03E	GTCS 1-35	0-5	Dense brown gravelly sandy silt. Gravel is sub-angular to sub-rounded of mixed lithology. Fragments of brick, glass, plastic and occasional ash. (Topsoil / Made Ground)
		GTCS 1-36	0-5	Very dense light brown gravelly sandy silt topsoil. Gravel is angular to sub-rounded of mixed lithology. Fragments of brick, concrete, limestone, ash, glass & plastic with occasional ceramics. (Topsoil / Made Ground)
St Quintin Community Kitchen Gardens (Area 7)	TN15-03F	GTCS 1-29	0-5	Loose dark brown clayey silty medium to coarse sand. Occasional sub-rounded to angular gravel of flint, metal, plastic, frequent ash, clinker, wood. Rare brick fragments. One piece of concrete. (Topsoil / Made Ground)
		GTCS 1-30	0-5	Dark brown clayey gravelly sand. Sand is fine to course. Gravel is angular to sub-rounded of flint, brick, ceramic, metal, wood, ash and clinker, charcoal and concrete fragments frequent throughout (Made Ground / Topsoil).
St. Quintin's Roundabout (Area 8)	TN15-03G	GTCS 1-41	0-5	Loose brown very silty fine sand with occasional gravel. Gravel is sub-angular to sub-rounded of brick and quartz. Rootlets and plant bulbs. Ants' nest present. (Topsoil / Made Ground)
		GTCS 1-42	0-5	Loose mid-brown very clayey fine sand. Very occasional fine sub-angular to sub-rounded gravel. Occasional brick, plastic fragments, rootlets and a glass bottle (Made Ground / Topsoil). (Topsoil / Made Ground).
Kensington Memorial Park (St Marks Park) (Area 9)	TN15-03H	GTCS 1-37	0-5	Very loose dark brown gravelly very sandy silt. Gravel of chert, mica, quartz, glass. Organic matter of wood, sticks and rootlets (Topsoil).
		GTCS 1-38	0-5	Firm brown slightly sandy clay with rootlets (Topsoil).
West London Bowling Club (Area 10)	TN15-03I	GTCS 1-39	0-5	Loose dark brown organic silty sand with occasional gravel. Gravel is sub-angular to sub-rounded of mixed lithologies. Occasional brick, plastic and cloth (Made Ground / Topsoil).
		GTCS 1-40	0-5	Loose medium brown slightly gravelly very silty sand with organic matter and abundant rootlets. Gravel of flint, quartzite and sandstone with ash and glass bottle. (Topsoil / Made Ground)
		GTCS 1-05	0-5	Scruffy turf over loose light brown very silty fine to medium sand with abundant tree roots and occasional plastic, metal, wood, wire, clinker, porous black/grey ashy debris (1cm max) (Topsoil / Made Ground).

Sample Location Area	Figure Ref.	Unique sample codes	Depth (cm)	Soil Description
Lancaster West Walkways communal gardens (Area 11)	TN15-03J	GTCS 1-06	0-5	Turf over loose light brown very silty fine to medium sand with occasional flint, glass, brick, plastic and wood. Some fragments of friable, porous ashy grey debris (Topsoil / Made Ground)
Communal garden at Treadgold House (Area 12)	TN15-03K	GTCS 1-07	0-5	Loose greyish brown gravelly very silty sand. Sand is fine to medium. Gravel is sub-angular fine to medium with occasional flint, glass, plastic, grey black ashy material, brick, concrete, black charcoal / burnt fragments, grey porous debris (Topsoil / Made Ground).
		GTCS 1-08	0-5	Loose dark brown sandy silt with occasional gravels. Sand is fine to medium. Gravel is sub-angular to sub-rounded of brick, metal, glass, clinker, ash and flint (Topsoil / Made Ground).
Community kitchen garden at Portland Road (Area 13)	TN15-03L	GTCS 1-17	0-5	Loose brown slightly gravelly clayey sand. Sand is fine to coarse. Gravel is fine to medium sub-angular to angular flint and brick. Rare glass, plastic and charcoal present (Topsoil / Made Ground).
		GTCS 1-18	0-5	Sub-angular to rounded fine to medium flint gravels at surface. Dark brown slightly gravelly sandy clay. Sand is coarse. Gravel is fine to medium sub-rounded to angular flint, brick, glass, ceramic and coal. Occasional rootlets and wood fragments present. Rare tarmac / asphalt material present (Topsoil / Made Ground).
Communal space at Avondale Park (Area 14)	TN15-03M	GTCS 1-23	0-5	Loose brown slightly gravelly sandy clay. Gravel is angular to sub-rounded fine to coarse of brick and flint. Occasional fragments of metal, glass and plastic. Rare fragments of coal. Rootlets frequent throughout (Topsoil / Made Ground).
		GTCS 1-24	0-5	Loose brown sandy clay with rare gravels. Gravel is fine angular to sub-angular brick and flint. Glass, bone and metal (bottle cap) fragments at base. Rootlets very frequent (Topsoil / Made Ground).
Community garden at Henry Dickens Estate (Area 15)	TN15-03N	GTCS 1-19	0-5	Slightly loose dark greyish brown silty sand with small fragments of coal (Topsoil / Made Ground).
		GTCS 1-20	0-5	Loose dark brown gravelly sandy clay. Sand is fine to coarse. Gravel is angular to sub-angular fine to medium of flint, glass, brick and concrete with frequent wood chippings throughout. Rare coal and occasional cigarette butts. Sandstone and concrete sub-base layer at base of strata (Topsoil / Made Ground).
Avondale Park (Area 16)	TN15-03O	GTCS 1-21	0-5	Brown clayey fine to coarse sand with rare gravels. Gravel is angular fine to medium brick and sub-rounded flint. Rare fragments of plastic and concrete present (Turf / Topsoil / Made Ground).
		GTCS 1-22	0-5	Loose brown clayey gravelly fine to coarse sand. Gravel is fine to coarse angular to sub-rounded flint. Occasional brick, coal, plastic and wood present. Rare shell fragments. Rootlets frequent at the surface (Turf / Topsoil / Made Ground)
Open space at Verity Close		GTCS 1-09	0-5	Loose light brown slightly sandy silt. Sand is fine. Occasional small fragments of ash, charcoal, brick and glass (Topsoil / Made Ground).

Sample Location Area	Figure Ref.	Unique sample codes	Depth (cm)	Soil Description
(Area 17)	TN15-03P	GTCS 1-10	0-5	Loose light brown slightly sandy silt. Sand is fine. Occasional gravel of charcoal, brick, flint and plastic (Topsoil / Made Ground)
Communal open space at Morland House (Area 18)	TN15-03Q	GTCS 1-11	0-5	Bark over loose slightly clayey gravelly fine to medium sand. Gravel is sub-angular to sub-rounded of brick, coal, glass and flint (Topsoil / Made Ground).
		GTCS 1-12	0-5	Loose dark brown slightly silty gravelly fine to coarse sand. Gravel is sub-angular to sub-rounded of flint, wood, ash and possible cladding (Topsoil / Made Ground).
Communal open space at Allom House and Barlow House (Area 19)	TN15-03R	GTCS 1-13	0-5	Turf over loose light brown very silty sand with occasional gravel of flint, rare plastic and rare tiny ash particles (Topsoil / Made Ground).
		GTCS 1-14	0-5	Turf over loose light brown very silty fine to coarse sand. Occasional angular to rounded gravels, rare wood and brick. Occasional tiny white ash particles (Topsoil / Made Ground).
Camelford Walk communal open space (Area 20)	TN15-03S	GTCS 1-15	0-5	Light brown clayey gravelly sand. Sand is fine to medium. Frequent angular to sub-rounded gravel of flint. Fragments of brick, metal, plastic, ceramic, slate, foam, coal (Topsoil / Made Ground).
		GTCS 1-16	0-5	Light brown clayey gravelly fine to medium sand. Gravel is angular to sub-rounded fine to coarse flint. Frequent fragments of glass, clinker, red brick, plastic, stone. Occasional small gravel sized fragments of clinker and black shiny charred material (Topsoil / Made Ground).

Table TN15-07. Ground Conditions – Pilot Study: Waynflete Square (Area 3)

Unique sample location*	Depth (cm)	Soil Description
GTCS 1-43	0-5	Light brown silty fine sand with frequent gravel and occasional small cobbles. Gravel is angular to sub-rounded of flint, brick, ceramic and clinker. Some ash.
	5-15	Becoming more gravelly with increasing depth.
GTCS 1-44	0-5	Light brown silty topsoil with frequent rootlets and occasional wood fragments
	5-15	Light brown silty sand with frequent gravel of brick, concrete, flint and rare plastic and charcoal fragments. Gravel is angular to rounded fine to coarse. Frequent rootlets.
GTCS 1-45	0-5	Fairly loose light brown silty sand.
	At 10	Becoming fairly loose light brown silty gravelly sand. Sand is fine, gravel is angular to sub-rounded of brick, concrete, glass, plastic, ask and ceramic fragments (Made Ground).

Unique sample location*	Depth (cm)	Soil Description
GTCS 1-46	0-10	Grass over light brown silty sand (Topsoil)
	10-15	Light brown fairly loose slightly silty slightly gravelly fine sand. Gravel is of brick, concrete, flint and chert. Fragments of ash, plastic, charcoal, metal and rootlets (Made Ground)
GTCS 1-47	0-15	Very loose medium brown highly organic slightly gravelly silty sand. Gravel is sub-angular of brick, flint, occasional plastic, abundant rootlets and timber fragments. At 0.15 becoming more gravelly (Made Ground)
GTCS 1-48	0-5	Very loose brown silty sand with gravel and fragments of metal (Topsoil)
	5-15	Very loose medium brown silty gravelly sand with clay pockets and occasional cobbles. Gravel is of mixed lithologies including fragments of brick, metal, plastic, ceramic, some ash, rootlets and timber fragments (Made Ground)
GTCS 1-49	0-15	Grass over dense slightly silty very gravelly fine brown sand. Occasional cobbles. Gravel is sub-angular to sub-rounded of flint, chert, mica, sandstone and concrete. Fragments of ash, glass, plastic, metal, ceramic and cloth and occasional clinker. Some rootlets (Made Ground)
GTCS 1-50	0-5	Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is fine to coarse sub-angular to rounded flint, plastic, glass, ceramic, brick. Quite dry.
	5-15	Dark grey brown silty sandy angular to sub-rounded fine to coarse gravel with fine rootlets. Gravel comprises plastic, flint, brick. Slightly damp.
GTCS 1-51	0-6	Grass over dark grey slightly gravelly silty fine to medium sand with abundant desiccated roots. Gravel is fine to coarse angular to sub-rounded flint, brick, tile, glass. Abundant roots.
GTCS 1-52	0-5	Grass over dark grey silty gravelly fine to medium sand. Gravel is angular to sub-rounded fine to medium flint, occasional brick and ceramic fragments and abundant roots. Quite dry.
GTCS 1-53	0-5	Grass over dark grey gravelly silty fine to medium sand. Gravel is angular to sub-rounded fine to medium flint, wood, brick and abundant roots. Quite dry.
GTCS 1-54	0-5	Grass over dark grey brown silty gravelly fine to medium sand with abundant roots and larvae. Gravel is angular to sub-rounded fine to medium flint, plastic, brick, tile. Dry
GTCS 1-55	0-5	Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is angular to sub-rounded fine to medium flint, with chalk, brick and plastic. Also with occasional larvae and red ants. Dry
GTCS 1-56	0-5	Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is angular to sub-rounded fine to coarse flint, brick and plastic. Dry
GTCS 1-57	0-5	Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is sub-rounded to sub-angular fine to medium flint, plastic, glass, ceramic, metal, twine. Dry

Unique sample location*	Depth (cm)	Soil Description
GTCS 1-58	0-5	Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is angular to sub-rounded medium to coarse flint, plastic, wood. Dry
GTCS 1-59	0-5	Dark grey brown slightly gravelly silty fine to medium sand with abundant pine needles. Gravel is sub-angular to sub-rounded fine to medium flint, wood fragments, foil, burnt wood, glass.

* locations shown on Figure TN15-04

Table TN15-08 and **Table TN15-09** present summaries of the visual observations of COPC (such as ash, coal, clinker and potential cladding) for the exploratory and pilot study samples respectively.

No COPC were reported in the four preliminary samples from the cordon area.

Table TN15-08. Visual Observations of COPC – Exploratory Sampling

Sample Location Area	Figure Ref.	Sample location	Depth (cm)	Observed COPC
Area 1: Bramley House	TN15-03A	GTCS 1-26	0-5	Possible cladding fragments. Tarmac
Area 2: Communal open space at Whitstable House	TN15-03B	GTCS 1-27	0-5	Clinker and coal
Area 4: Communal open space at Markland House	TN15-03C	GTCS 1-31	0-5	Small shiny black fragments possibly slag. Grey vesicular possibly charred material/slag.
		GTCS 1-32	0-5	Rare white ashy material.
Area 6: Robinson House	TN15-03E	GTCS 1-35	0-5	Occasional ash.
		GTCS 1-36	0-5	Ash
Area 7: St Quintin Community Kitchen Gardens	TN15-03F	GTCS 1-29	0-5	Ash, clinker
		GTCS 1-30	0-5	Ash, clinker and charcoal.
Area 10: West London Bowling Club	TN15-03I	GTCS 1-40	0-5	Ash, charcoal
Area 11: Communal Gardens at Lancaster West Walkways	TN15-03J	GTCS 1-05	0-5	Clinker fragments, porous black/grey ashy debris (1cm max).
		GTCS 1-06	0-5	Possible black lagging / insulation fragments, some very small, some up to 2 pence coin size. Some larger pieces of debris.
Area 12: Communal open space around Treadgold House	TN15-03K	GTCS 1-07	0-5	Grey black ashy material, black charcoal / burnt fragments of grey porous debris.
		GTCS 1-08	0-5	Ash, clinker, burnt material, porous ashy material.
Area 13: Community garden at Portland Road (northern)	TN15-03L	GTCS 1-17	0-5	Charcoal fragments
		GTCS 1-18	0-5	Coal, tarmac / asphalt
Area 14: Communal space at Avondale Park (residential road)	TN15-03M	GTCS 1-23	0-5	Coal fragments

Sample Location Area	Figure Ref.	Sample location	Depth (cm)	Observed COPC
Area 15: Communal garden at Henry Dickins Estate	TN15-03N	GTCS 1-19	0-5	Small fragments of coal.
		GTCS 1-20	0-5	Rare coal and occasional cigarette butts
Area 16: Avondale Park (recreation ground)	TN15-03O	GTCS 1-22	0-5	Coal
Area 17: Open space at Verity Close	TN15-03P	GTCS 1-9	0-5	Ash and charcoal
		GTCS 1-10	0-5	Charcoal
Area 18: Communal open space at Morland House	TN15-03Q	GTCS 1-11	0-5	Coal
		GTCS 1-12	0-5	Ash and possible cladding.
Area 19: Communal open space at Allom House and Barlow House	TN15-03R	GTCS 1-13	0-5	Rare tiny ash particles.
		GTCS 1-14	0-5	Occasional tiny white ash particles
Area 20: Camelford Walk	TN15-03S	GTCS 1-15	0-5	Coal – two medium sized gravel fragments
		GTCS 1-16	0-5	Small fragments of shiny black, vesicular charred material.

Table TN15-09. Visual Observations of COPC – Pilot Study: Waynflete Square (Area 3)

Sample location	Depth (cm)	Observed COPC
GTCS 1–43	0-15	Ash, clinker and coal.
GTCS 1–44	5-15	Rare charcoal
GTCS 1–45	10-15	Ash
GTCS 1–46	10-15	Ash, charcoal.
GTCS 1–48	10-15	Ash
GTCS 1–49	0-15	Ash, clinker
GTCS 1–59	0-5	Burnt wood fragments

Pilot study locations are presented on **Figure TN15-04**.

6. Laboratory Analysis

Scans of the signed Chains of Custody are presented in **Appendix TN15-C**.

Test methods and the accreditation status of each analysis are as per **Table TN3-08: Analytical Methods** of TN3 and are also included within the laboratory analytical certificates presented in **Appendix TN15-D**.

At the time of the preparation of TN03, the isocyanate analytical method was still being developed and as such it is not described in Table TN3-08. Subsequently, following Exova's method development, the analytical test for isocyanates is summarised as:

- Dichloromethane solvent extraction with concurrent derivatisation by dibutylamine on as received sample. Quantification of the resultant isocyanate derivatives determined by reverse-phase LCMS against commercially available derivatised standards.

The primary analytical laboratory was:

- Exova Jones Environmental Ltd (Exova), Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA, UKAS Accreditation No. 4225.

Note: during the Stage 1 project, Exova Jones was in the process of being acquired by, and changing its name to Element. Hence, laboratory certificates showing the laboratory name as Element are equivalent to Exova.

For the analysis of metals, Exova adopted the accredited dry preparation method for samples where asbestos fibres were not identified. However for samples with asbestos fibres identified, a modified (and unaccredited) preparation was adopted due to the unacceptable health and safety risks associated with the dry crushing preparation method where asbestos is present. For these samples, the modified method involves picking the asbestos fibres out of a sub-sample of the main sample to provide an asbestos fibre free sample portion which can then be dry crushed in accordance with the normal method.

Subcontracted analyses were completed by two additional laboratories (arranged through Exova):

- Marchwood Scientific Services Ltd - 371 Millbrook Rd W, Southampton SO15 0HW, UKAS Accreditation No. 1668.
  - Chlorinated dioxins and furans and dioxin-like PCBs.
  - Brominated dioxins and furans.
- RPS Mountainheath Limited – 13 St. Martins Way, Bedford, Bedfordshire, MK42 0LF, UKAS Accreditation No. 1663.
  - organophosphorous flame retardants.
  - brominated flame retardants.
  - poly brominated biphenyls (PBBs).
  - Tetrabromobisphenol A.
  - hexabromocyclododecane (1,2,5,6,9,10-).

6.1 Quality Assurance

Chain of custody confirmation reports from analytical laboratories were checked for consistency with the Sampling Plan and Analytical Schedule on the day of receipt, and any errors/omissions communicated to the laboratory and resolved within the sampling holding time.

7. Analytical Results

Laboratory certificates for the scheduled analyses are presented in **Appendix TN15-D.**

All laboratory analytical data has been collated into data tables presented in **Appendix TN15-E.** The analytical data have been compared against generic screening criteria identified in TN8, with the specific criteria selected described in TN17 within the pilot study risk assessment.

7.1 QA/QC

A Data Validation Summary Report (DVSR, Attachment 1 of FP26) has been completed in accordance with the AECOM FP26 procedure. The completed DVSR is included in **Appendix TN15-F** and concludes that the analytical data received for the exploratory samples is suitable for interpretation, with the following two minor comments:

- Element laboratory certificates indicate that the surrogate recovery for 2,4-toluene diisocyanate-d was outside the calibration range for 22 of the 93 samples tested. The laboratory certificate indicates that the result in these cases should be taken as indicative. It is noted that all 22 surrogate recoveries that were outside the calibration range were reported at >100%, suggesting potential over-reporting of concentrations rather than under-reporting; and
- Relative Percentage Differences (RPDs) were generally within acceptable limits. Sporadic occasional high values were identified and are considered to be a result of inherent heterogeneity in the sampled material. More detailed assessment of duplicate variability completed in accordance with 'Duplicate Method' is described further in **Appendix TN15-F.**

In addition, a detailed discussion of the duplicate sample assessment is included in **Appendix TN15-F**. This concludes that, based on assessment of the datasets for arsenic, benzo(a)pyrene and dioxins, furans and dioxin-like PCBs, the analytical uncertainty and sampling uncertainty (which combine as the measurement uncertainty) are sufficiently low that they should not introduce unacceptable uncertainty into the risk assessment process.

For the lead dataset, the measurement uncertainty is sufficiently high that there is sufficient uncertainty over whether the average lead concentration exceeds the C4SL that efforts should be made to reduce this uncertainty.

Overall, the sampling uncertainty is consistently higher than the analytical uncertainty, however, the analysis does indicate that the variability within duplicates is low and the sampling method is therefore suitable for continued use at Stage 2.

8. Reference List

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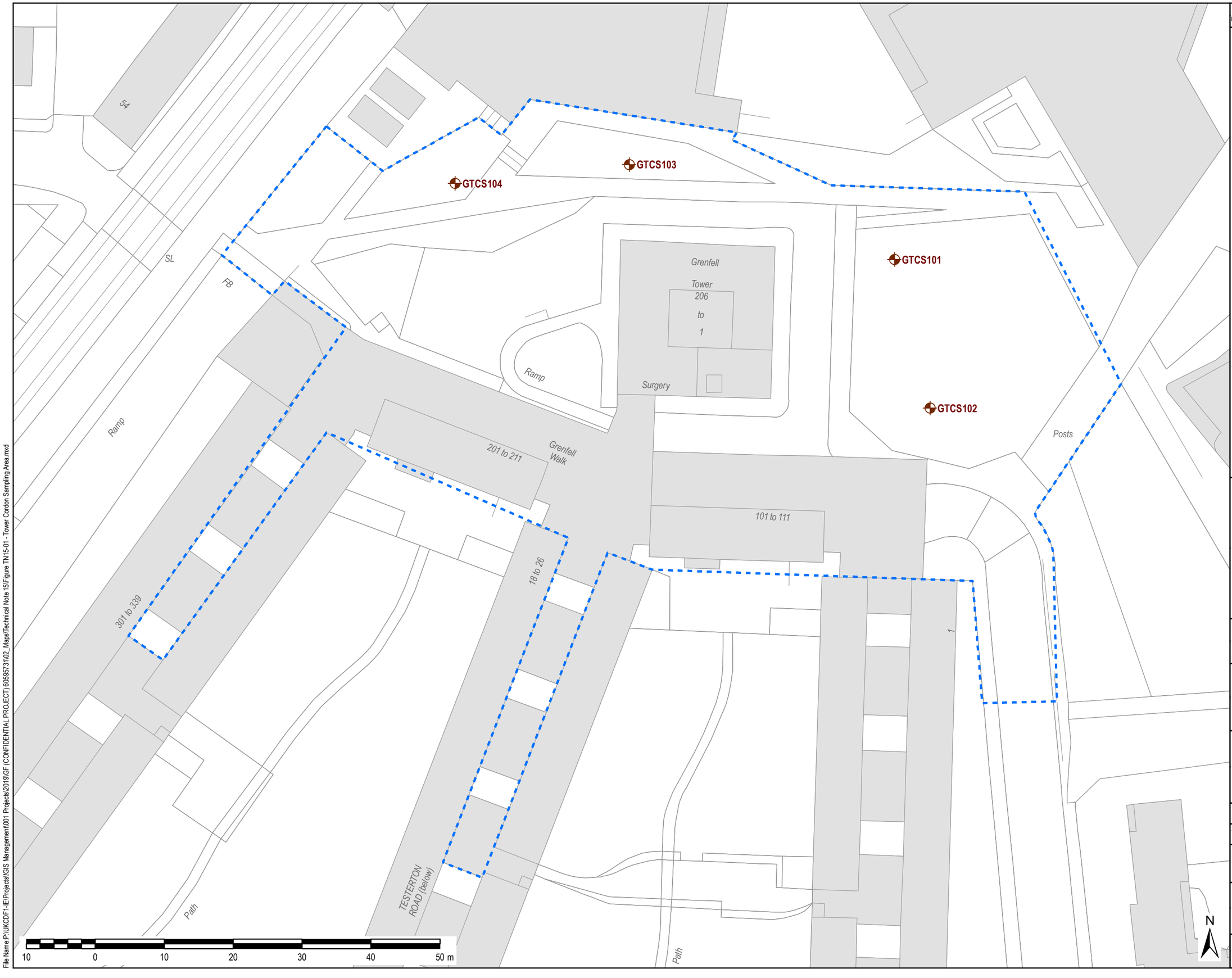
Figures

Figure TN15-01. Tower Cordon Sampling Area



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LEGEND

- Tower Cordon Sampling Area
- Indicative Preliminary Sampling Locations

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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
PRELIMINARY SAMPLING LOCATIONS TOWER CORDON AREA

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SM	DD	DD	30/08/2019

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60595731	1:500

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FIGURE TN15-01	01

Figure TN15-02. Stage 1 Exploratory Sampling Locations

1 - Bramley House Communal Garden
2 - Communal Open Space at Whitstable House
3 - Waynflete Square (Also Proposed Location for Pilot Study)
4 - Communal Open Space at Markland House
5 - Community Gardens Areas Along Darfield Way
6 - Robinson House
7 - St. Quintin Community Kitchen Garden
8 - St. Quintin's Roundabout
9 - Kensington Memorial Park (St. Marks Park)
10 - West London Bowling Club
11 - Lancaster West Walkways Communal Gardens
12 - Communal Garden at Treadgold House
13 - Community Kitchen Garden and Portland Road
14 - Communal Space at Avondale Park
15 - Communal Garden at Henry Dickens Estate
16 - Avondale Park
17 - Open Space at Verity Close
18 - Communal Open Space at Morland House
19 - Communal Open Space at Allom House and Barlow House
20 - Communal Open Space at Camelford Walk

Area 1
Area 2
Area 3
Area 4
Area 5
Area 6
Area 7
Area 8
Area 9
Area 10
Area 11
Area 12
Area 13
Area 14
Area 15
Area 16
Area 17
Area 18
Area 19
Area 20
*Area 3
**Tower Cordon Sampling Area
50m
100m
250m
500m
1km

100 0 100 200 300 400 500 m

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Radial Distance from Tower
Sampling Areas
AECOM Sampling Locations

Note:

* For Sampling Locations for Area 3 - Waynflete Square. Please refer to Figure TN15-04 in Technical Note 15.

** For Preliminary Sampling Locations for the Tower Cordon Area. please refer to Figure TN15-01 in Technical Note 15

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STAGE 1 EXPLORATORY SAMPLING AREAS

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FIGURE TN15-02

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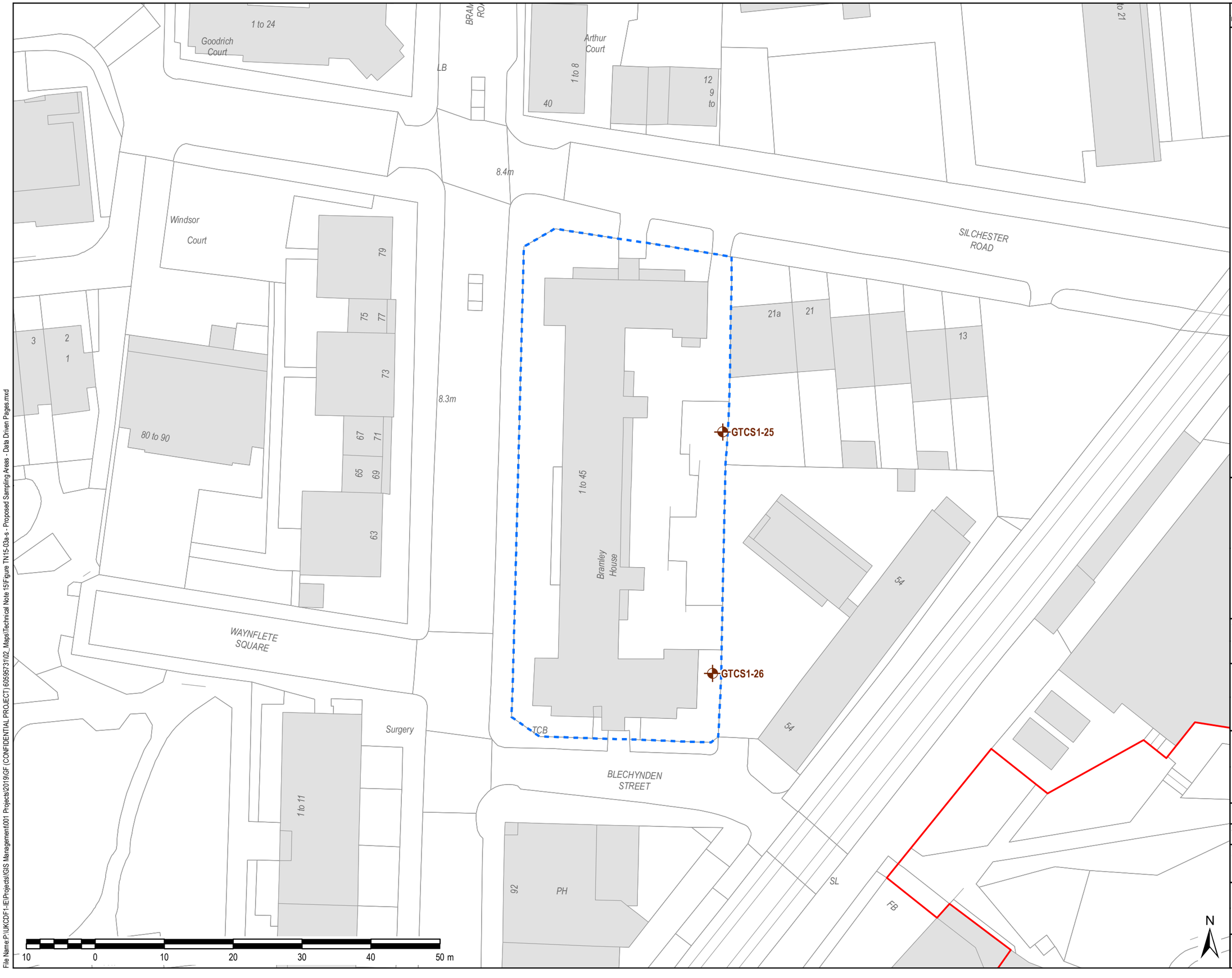
Figures TN15-03A to 03S. Individual Stage 1 Sampling Areas (exc. Area 3)



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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas
- Tower Cordon

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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
BRAMLEY HOUSE COMMUNAL GARDEN (AREA 1) SAMPLINGS LOCATIONS

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FIGURE TN15-03A

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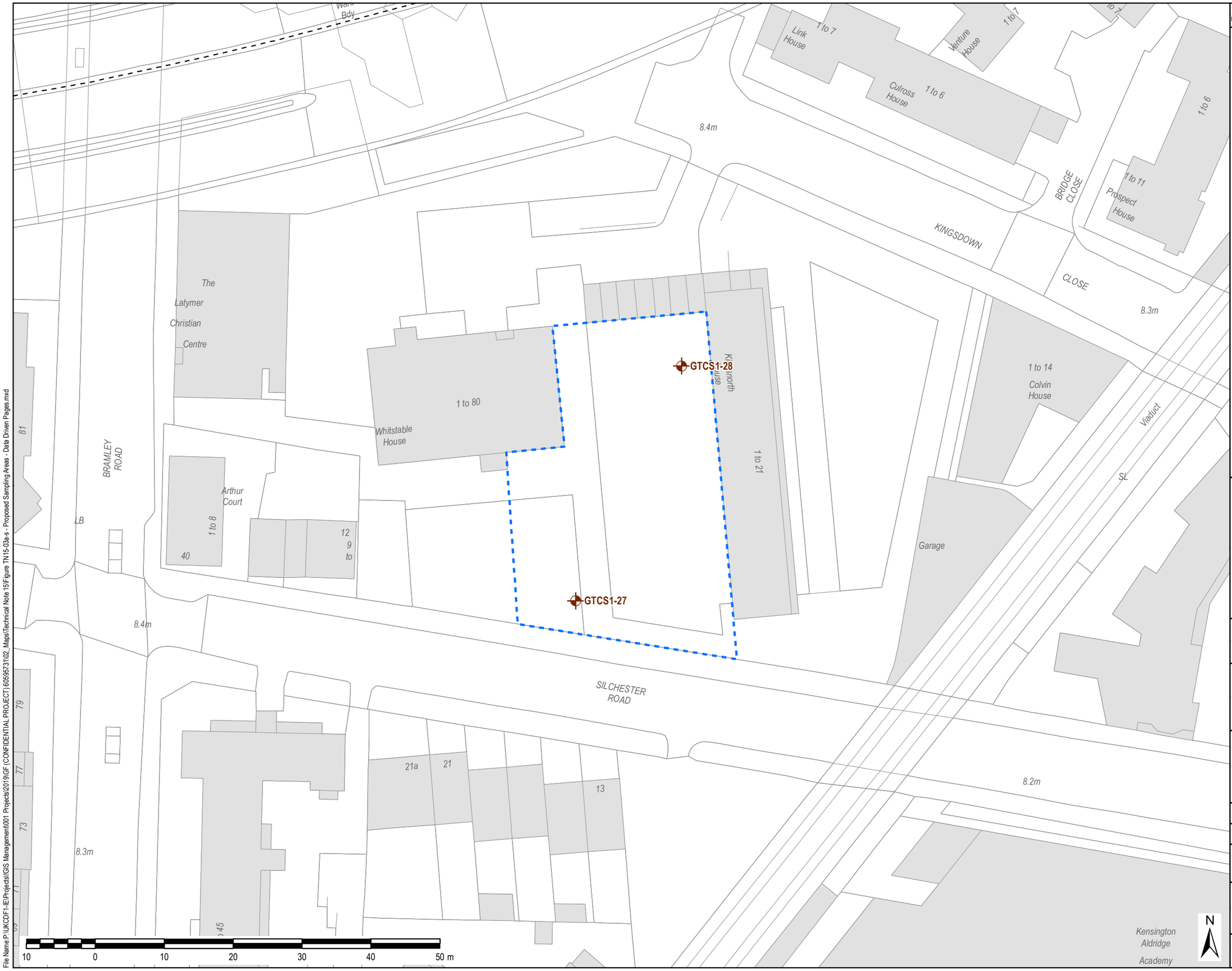

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- AECOM Sampling Location
- Indicative Sampling Areas

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Project Title
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Drawing Title
COMMUNAL OPEN SPACE AT WHITSTABLE HOUSE (AREA 2) SAMPLINGS LOCATIONS

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FIGURE TN15-03B

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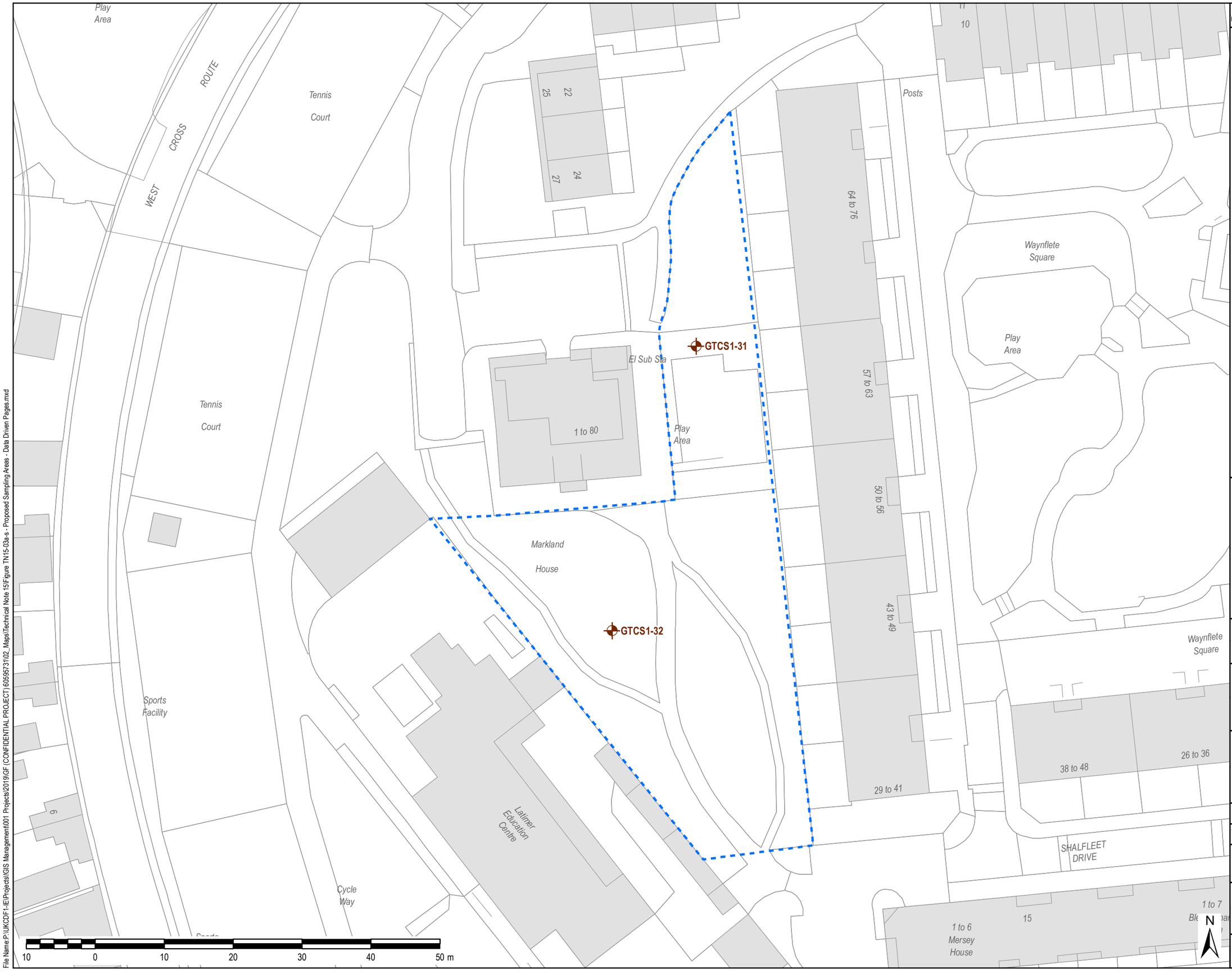

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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNAL OPEN SPACE AT MARKLAND HOUSE (AREA 4) SAMPLINGS LOCATIONS

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Drawing Number
FIGURE TN15-03C

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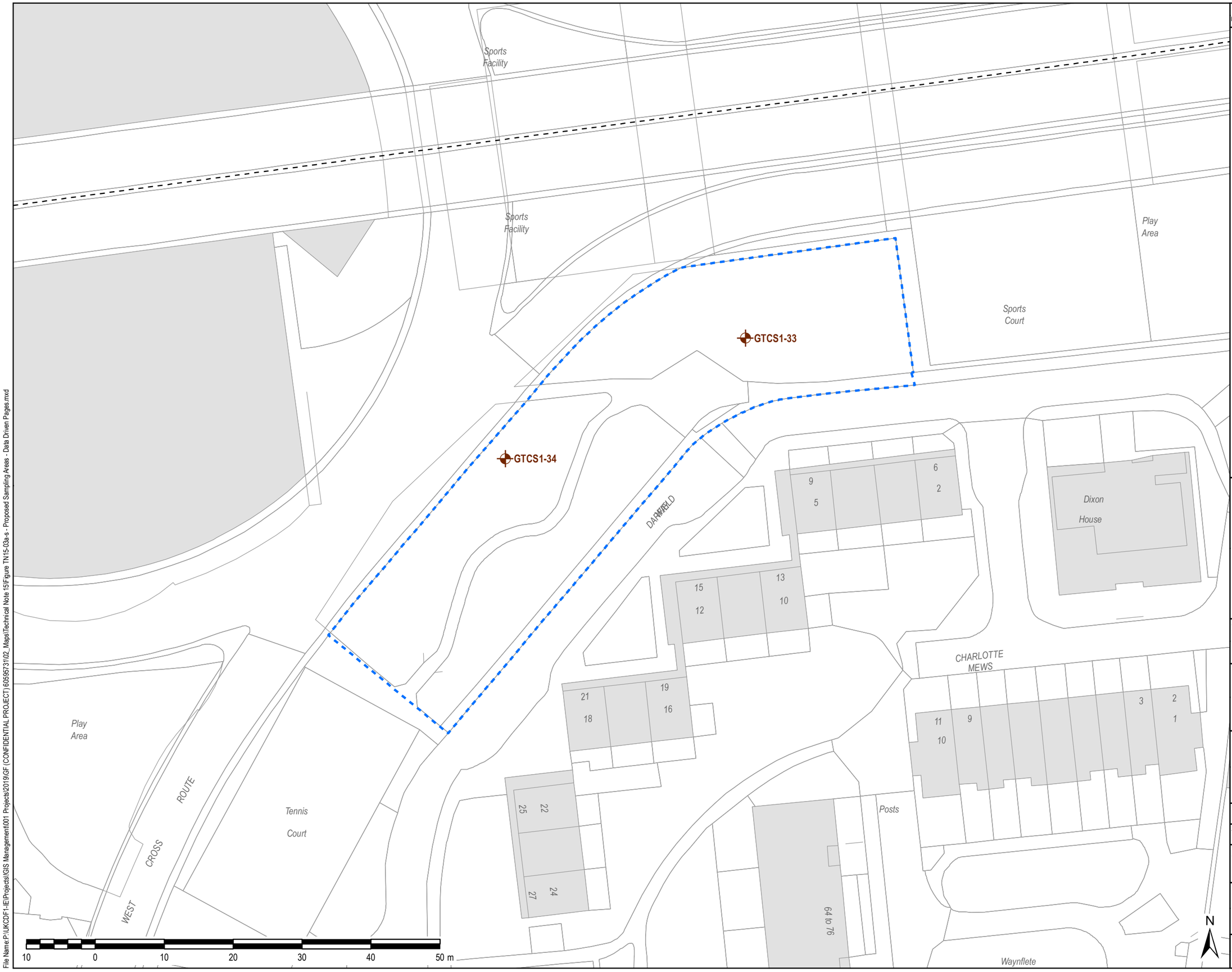
01



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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNITY GARDENS AREAS ALONG DARFIELD WAY (AREA 5) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03D

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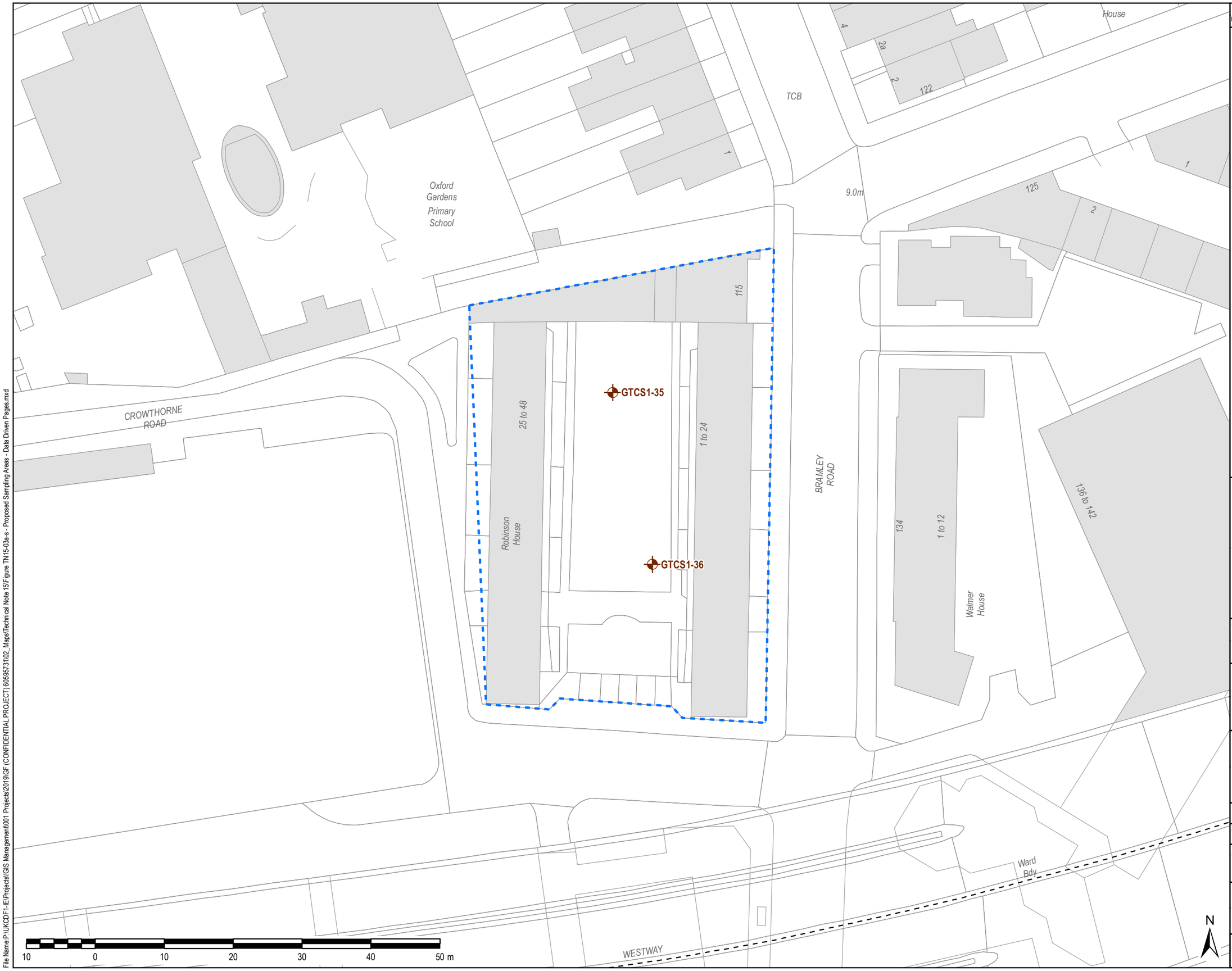
File Name:P:\UKCDF1-IE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT) 60595731\02_Maps\Technical Note 15\Figure TN15-03a-s - Proposed Sampling Areas - Data Driven Pages.mxd



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- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
ROBINSON HOUSE (AREA 6) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03E

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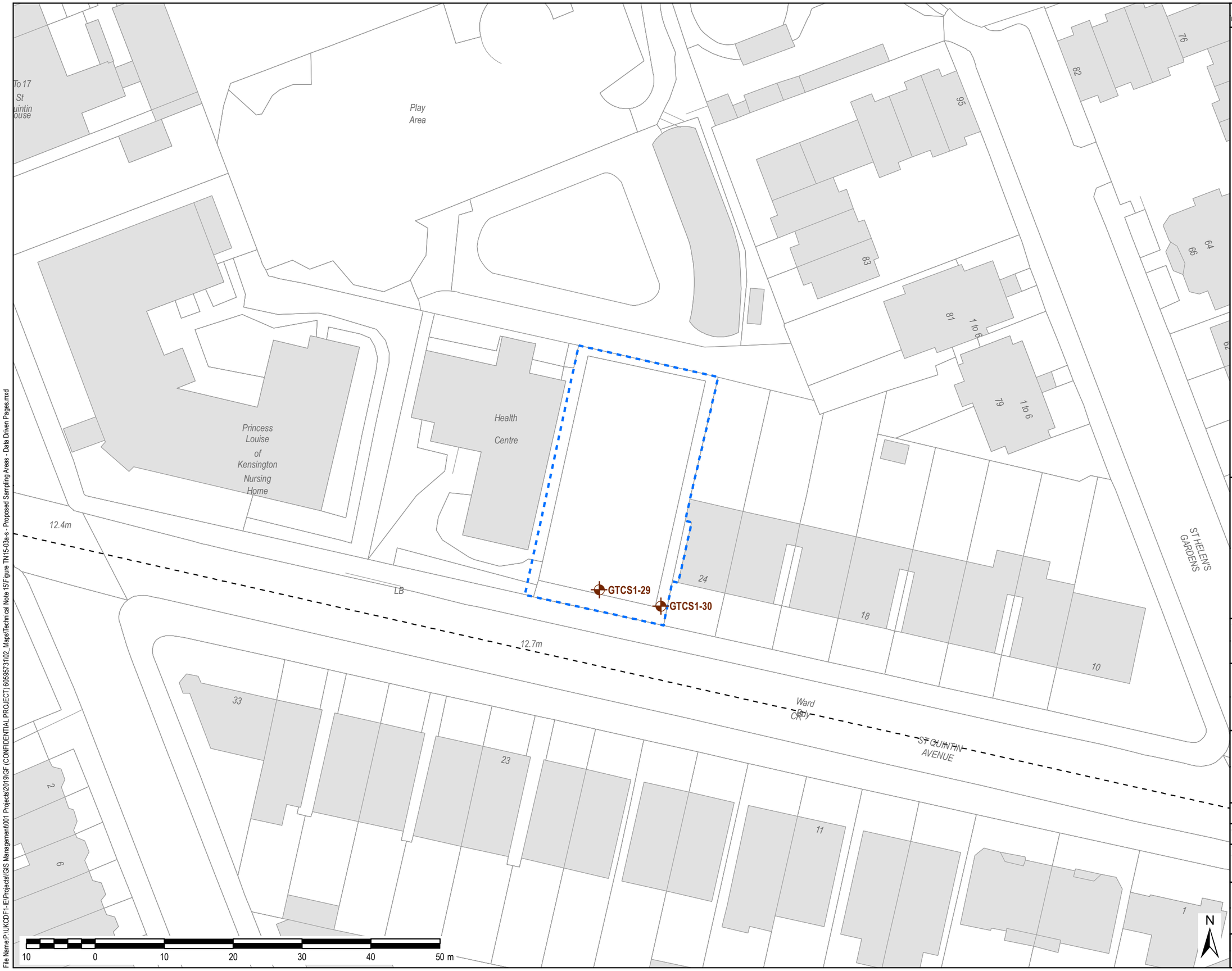

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- AECOM Sampling Location
- Indicative Sampling Areas

Client
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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
ST. QUINTIN COMMUNITY KITCHEN GARDEN (AREA 7) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
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AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03F

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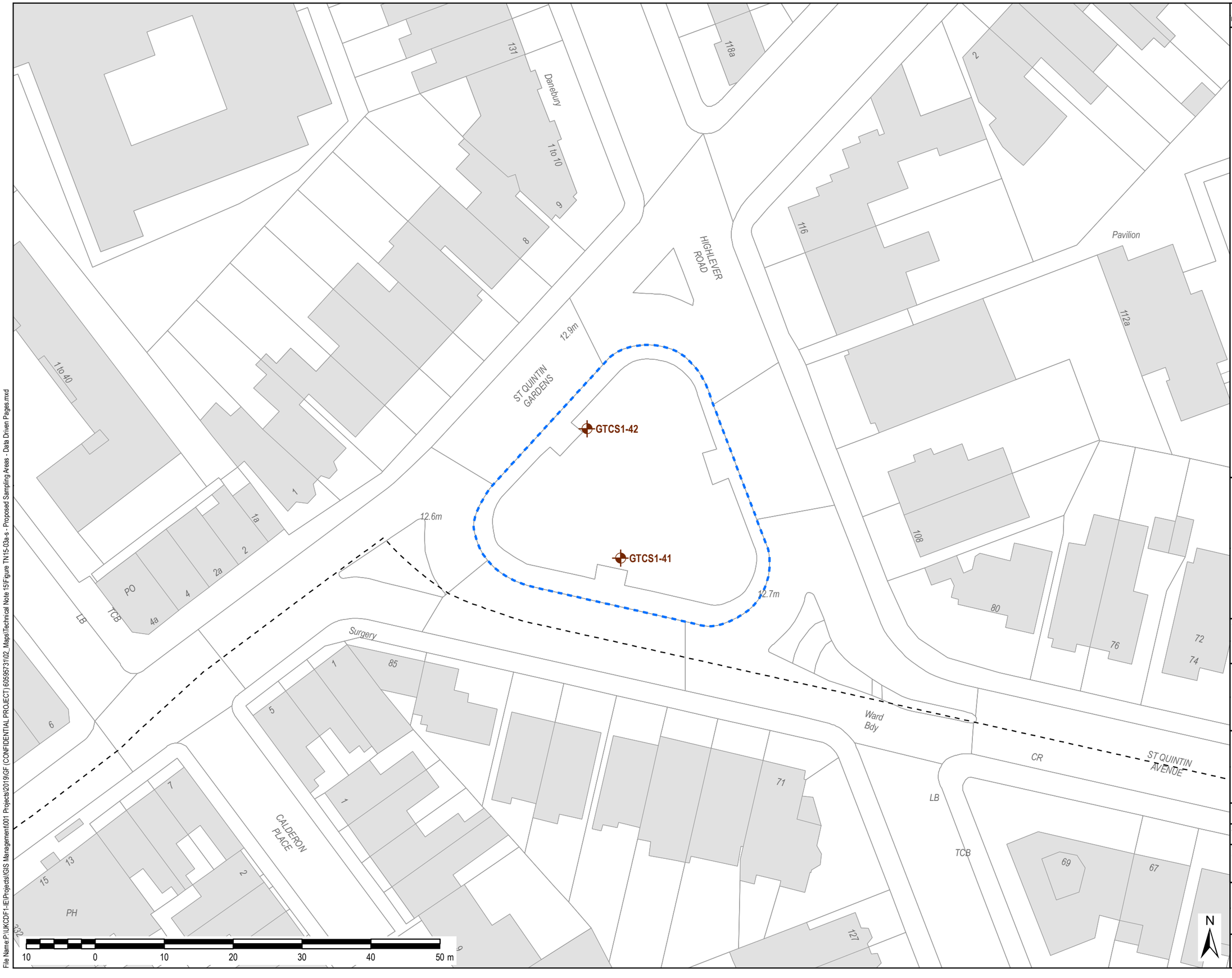

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- AECOM Sampling Location
- Indicative Sampling Areas

Client
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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
ST. QUINTIN'S ROUNDABOUT (AREA 8) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03G

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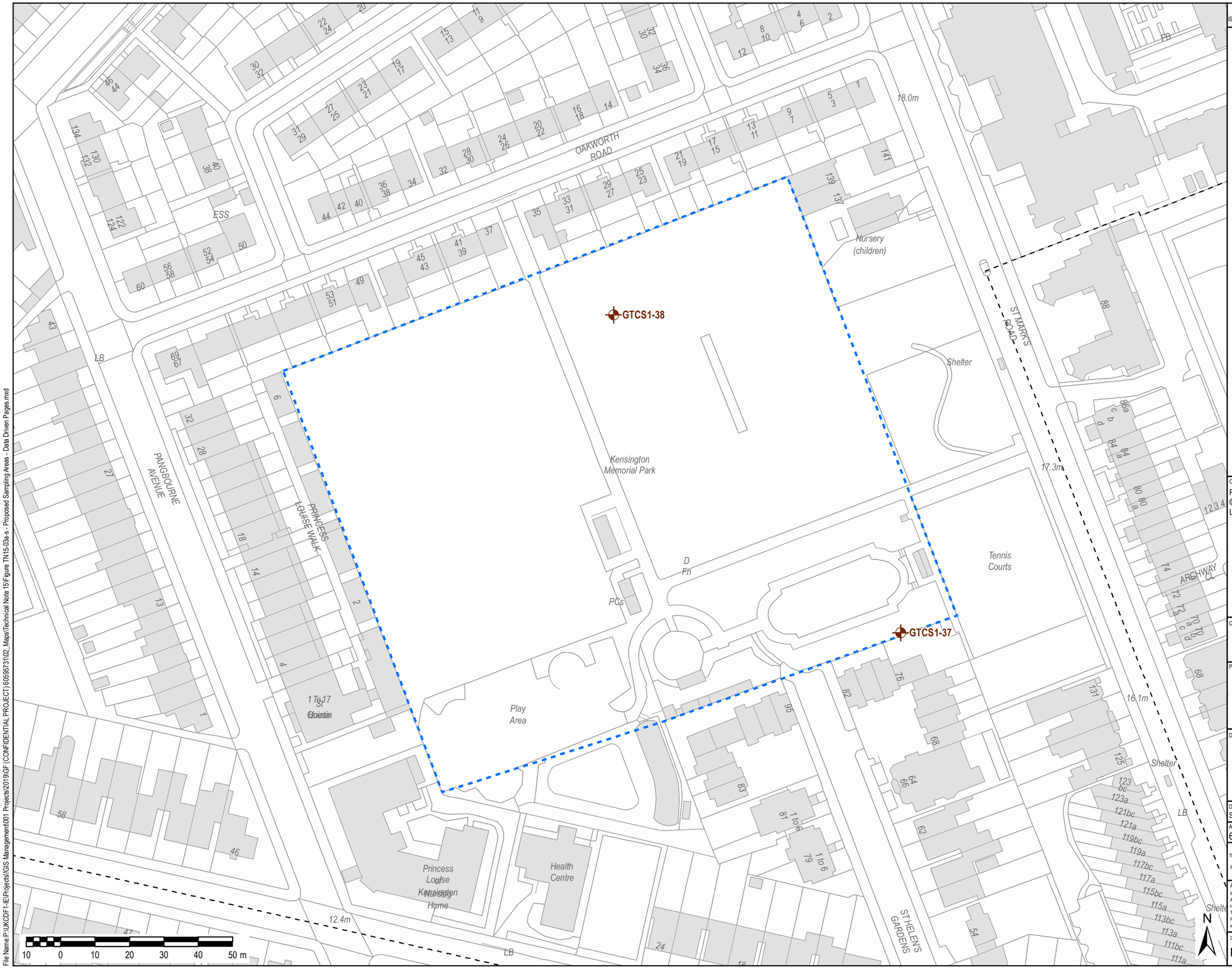

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- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
KENSINGTON MEMORIAL PARK (ST. MARKS PARK) (AREA 9) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
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AECOM Internal Project No.	Scale @ A3
60595731	1:1,000

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FIGURE TN15-03H

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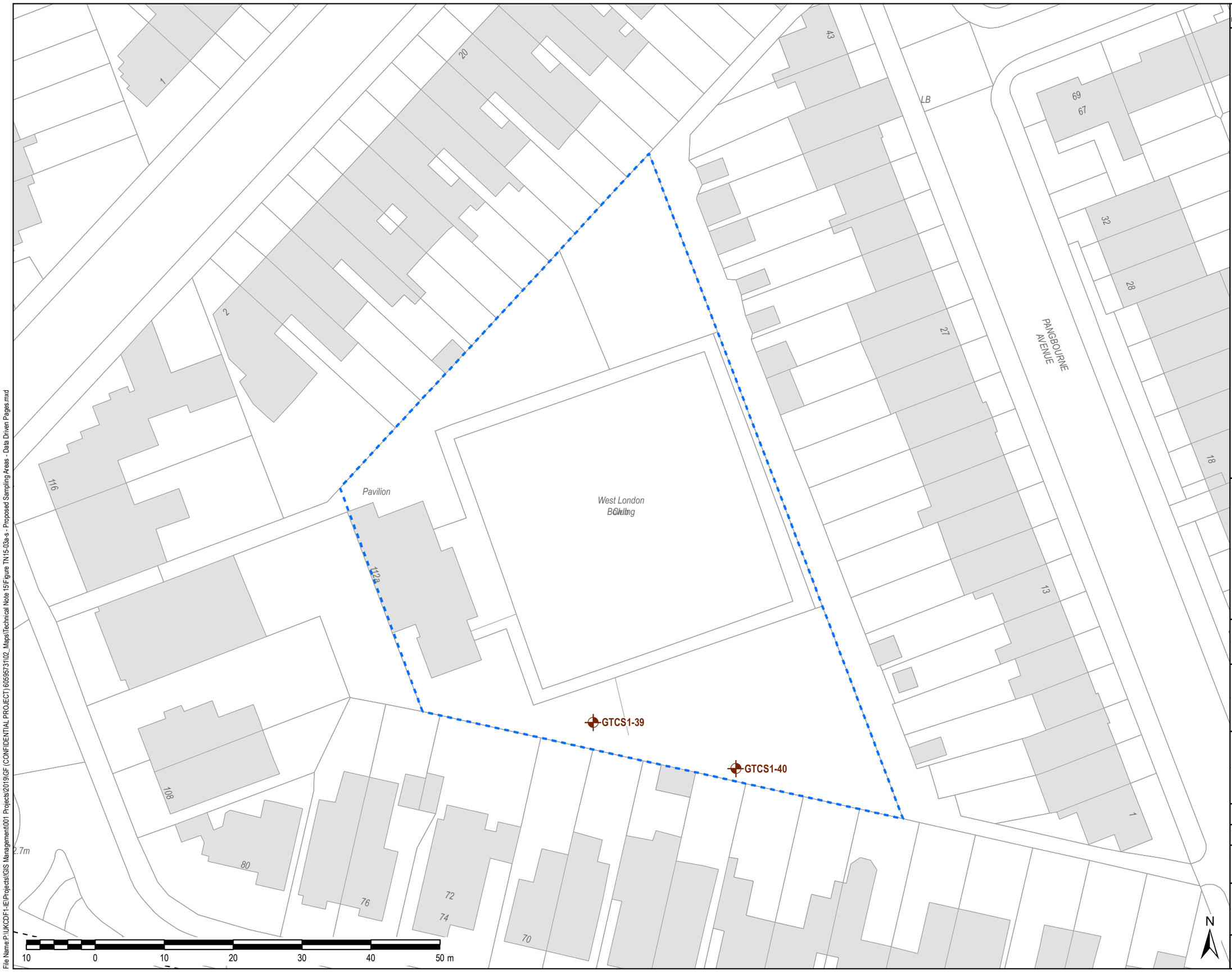

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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
WEST LONDON BOWLING CLUB (AREA 10) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03I

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- AECOM Sampling Location
- Indicative Sampling Areas
- Tower Cordon

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
LANCASTER WEST WALKWAYS COMMUNAL GARDENS (AREA 11) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:1,000

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FIGURE TN15-03J

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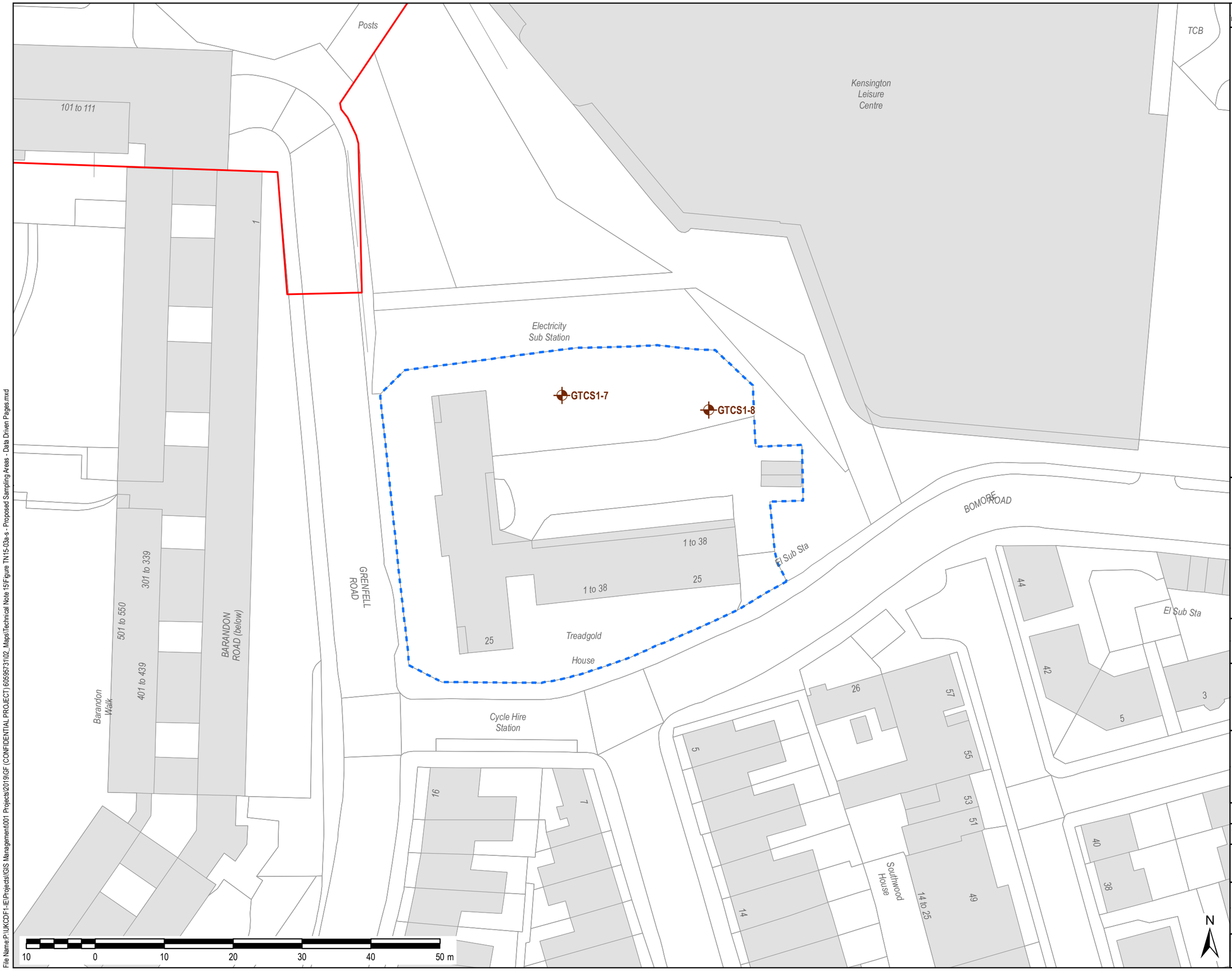
File Name:P:\UKCDF1-HE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT) 60595731\02_Maps\Technical Note 15\Figure TN15-03a-s - Proposed Sampling Areas - Data Driven Pages.mxd



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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas
- Tower Cordon

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNAL GARDEN AT TREADGOLD HOUSE (AREA 12) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03K

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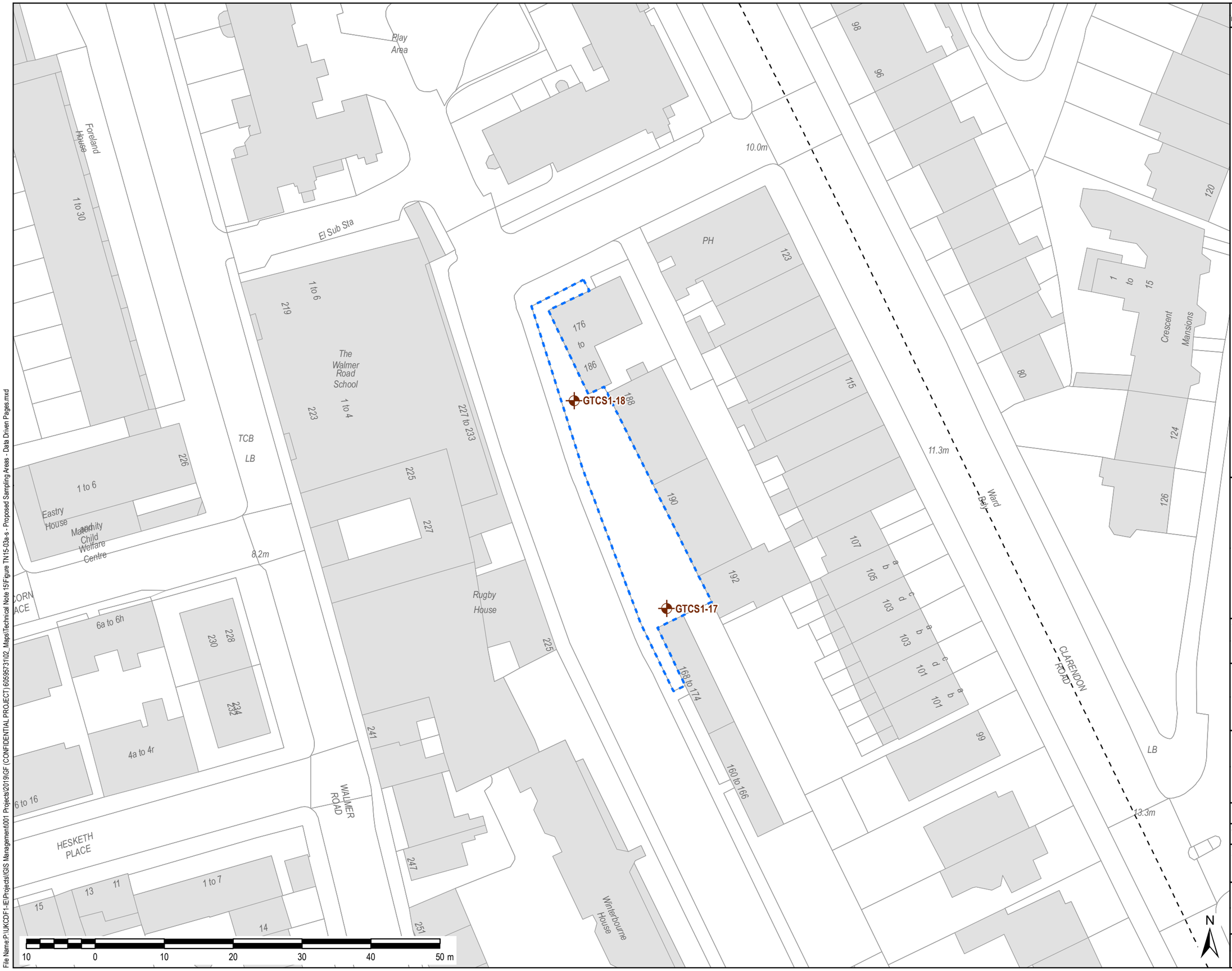
File Name:P:\UKCDF1-IE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT) 60595731\02_Maps\Technical Note 15\Figure TN15-03a-s - Proposed Sampling Areas - Data Driven Pages.mxd



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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNITY KITCHEN GARDEN AND PORTLAND ROAD (AREA 13) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03L

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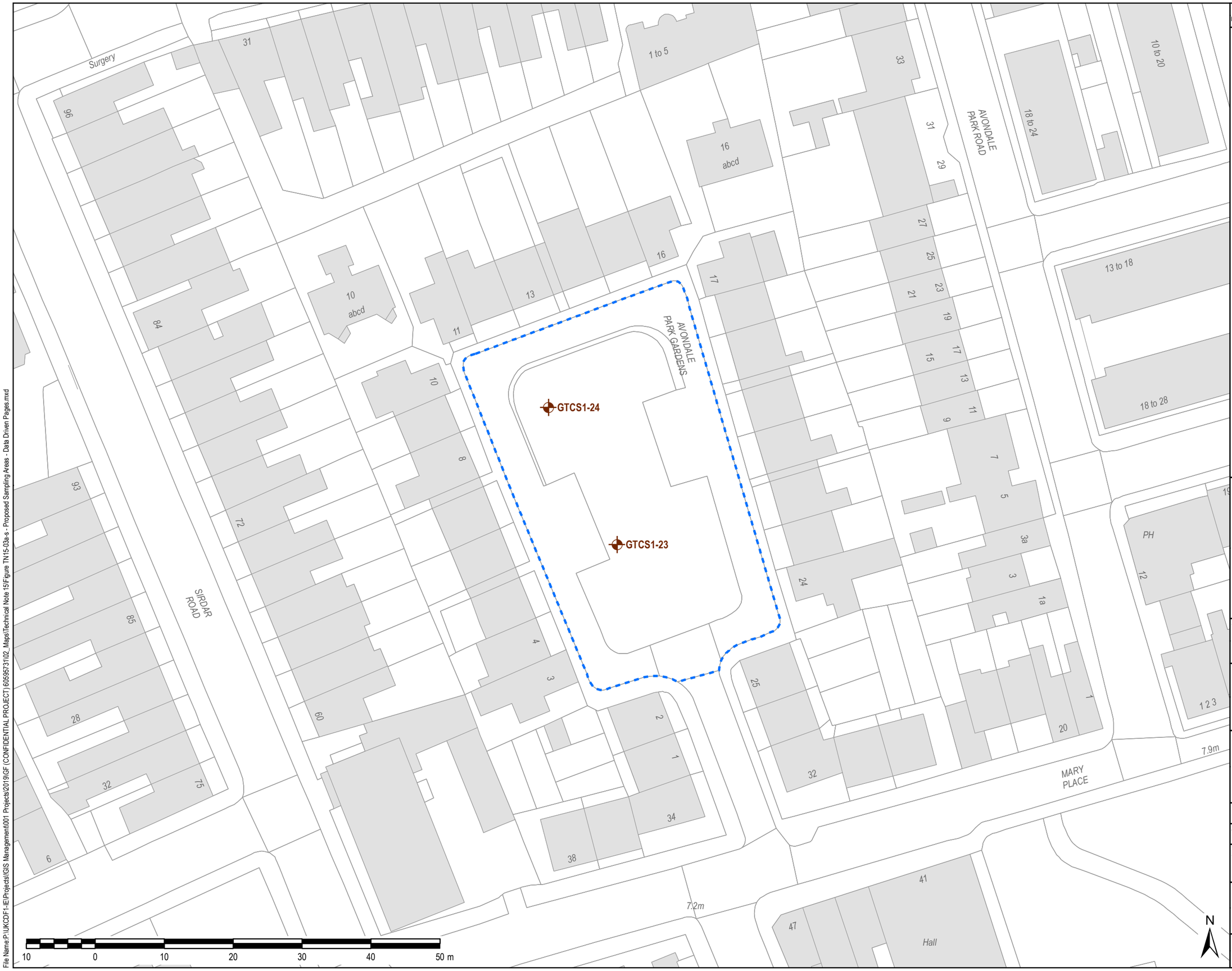
File Name:P:\UKCDF1-IE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT)\60595731\02_Maps\Technical Note 15\Figure TN15-03a-s - Proposed Sampling Areas - Data Driven Pages.mxd



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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

Client

ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title

GRENFELL PART 2A ASSESSMENT

Drawing Title

COMMUNAL SPACE AT AVONDALE PARK (AREA 14) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03M

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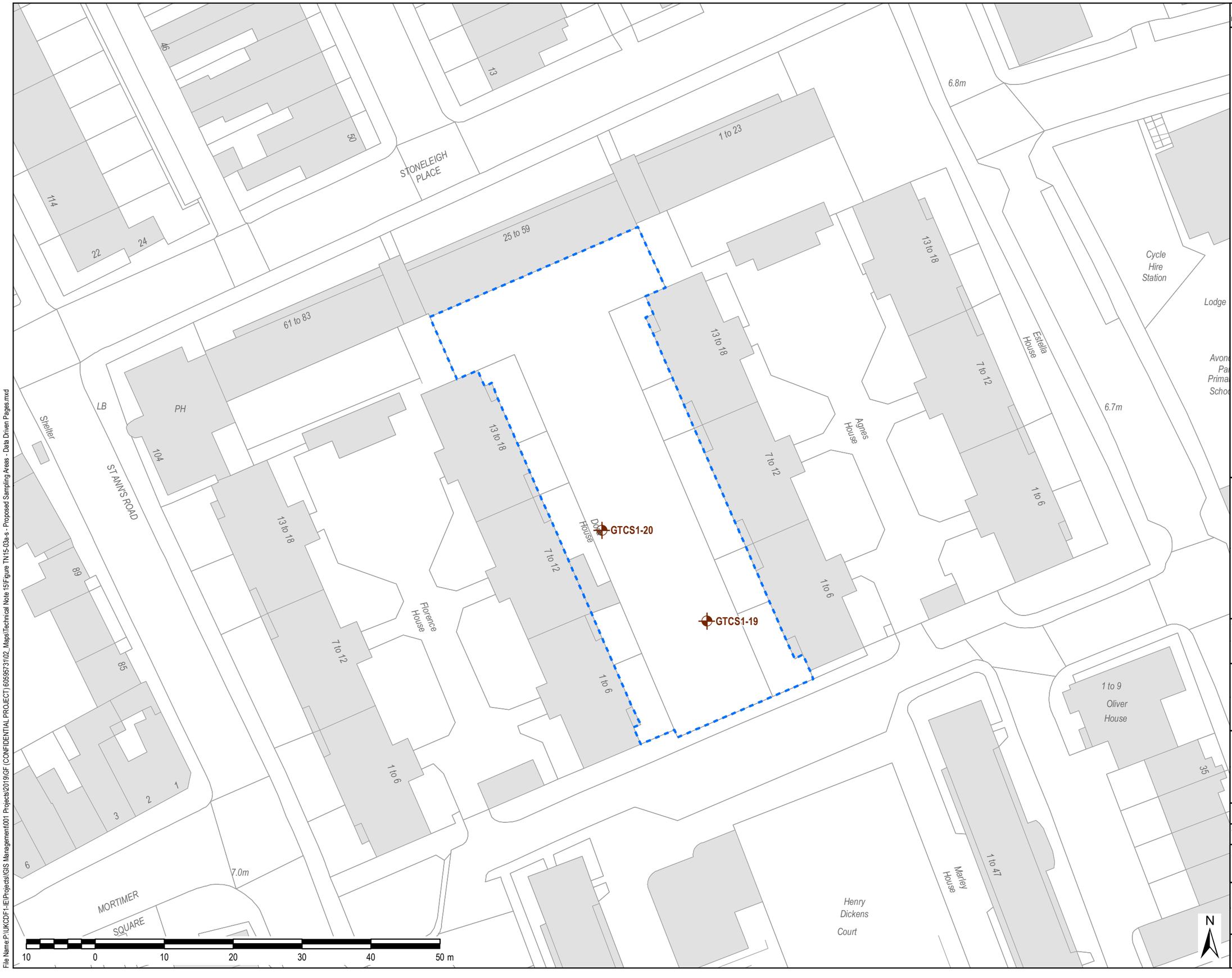
File Name:P:\UKCDF1-HE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT) 60595731\02_Maps\Technical Note 15\Figure TN15-03a-s - Proposed Sampling Areas - Data Driven Pages.mxd



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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNAL GARDEN AT HENRY DICKENS ESTATE (AREA 15) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03N

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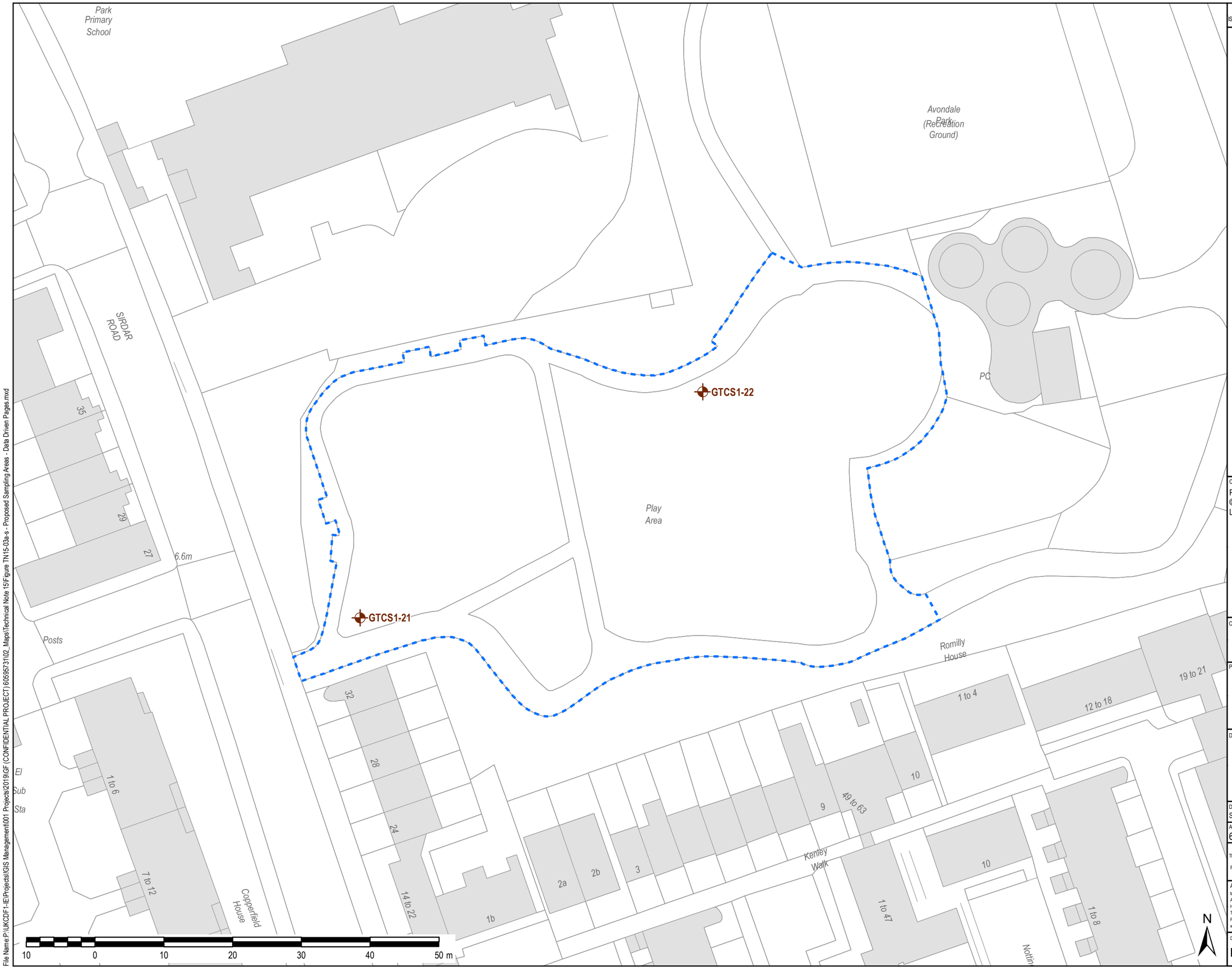

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LEGEND

- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
AVONDALE PARK
(AREA 16)
SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
SM	KB	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03O

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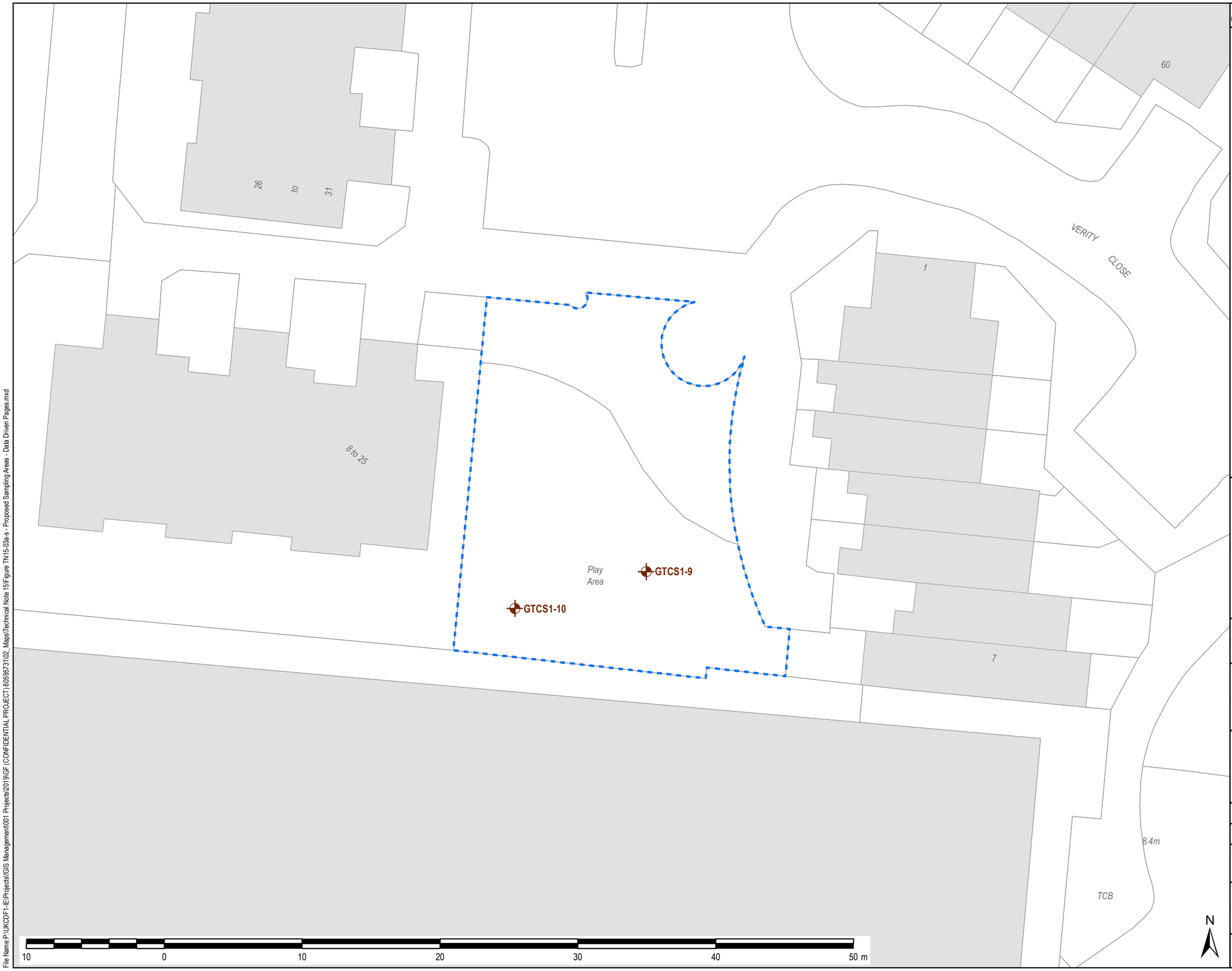

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- AECOM Sampling Location
- Indicative Sampling Areas

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
OPEN SPACE AT VERITY CLOSE (AREA 17) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
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AECOM Internal Project No.	Scale @ A3
60595731	1:250

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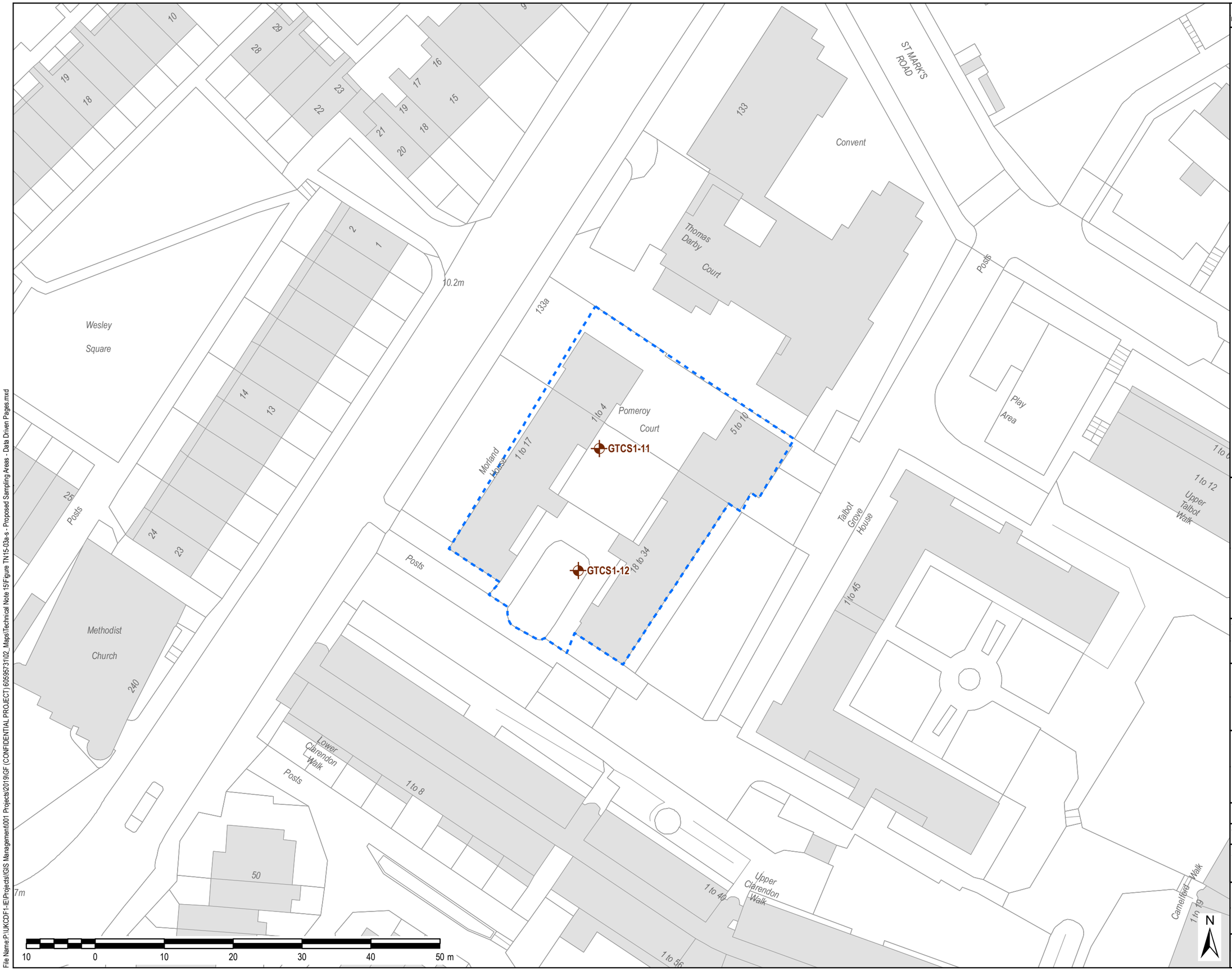
FIGURE TN15-03P	01

File Name:P:\UKCDF1-IE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT) 60595731\02_Maps\Technical Note 15\Figure TN15-03a-s - Proposed Sampling Areas - Data Driven Pages.mxd



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- AECOM Sampling Location
- Indicative Sampling Areas

Client
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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNAL OPEN SPACE AT MORLAND HOUSE (AREA 18) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
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AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03Q

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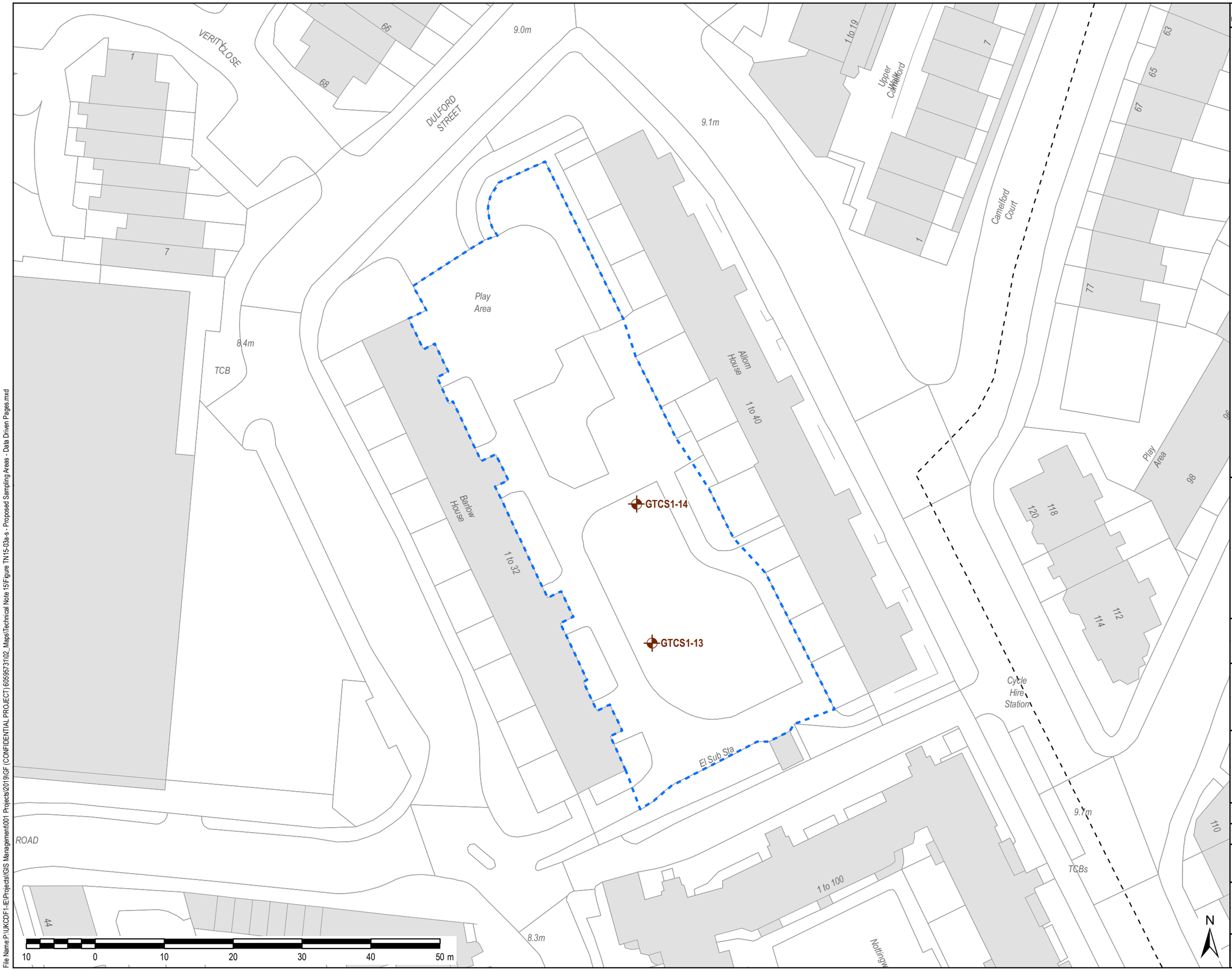

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- AECOM Sampling Location
- Indicative Sampling Areas

Client
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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNAL OPEN SPACE AT ALLOM HOUSE AND BARLOW HOUSE (AREA 19) SAMPLINGS LOCATIONS

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AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03R

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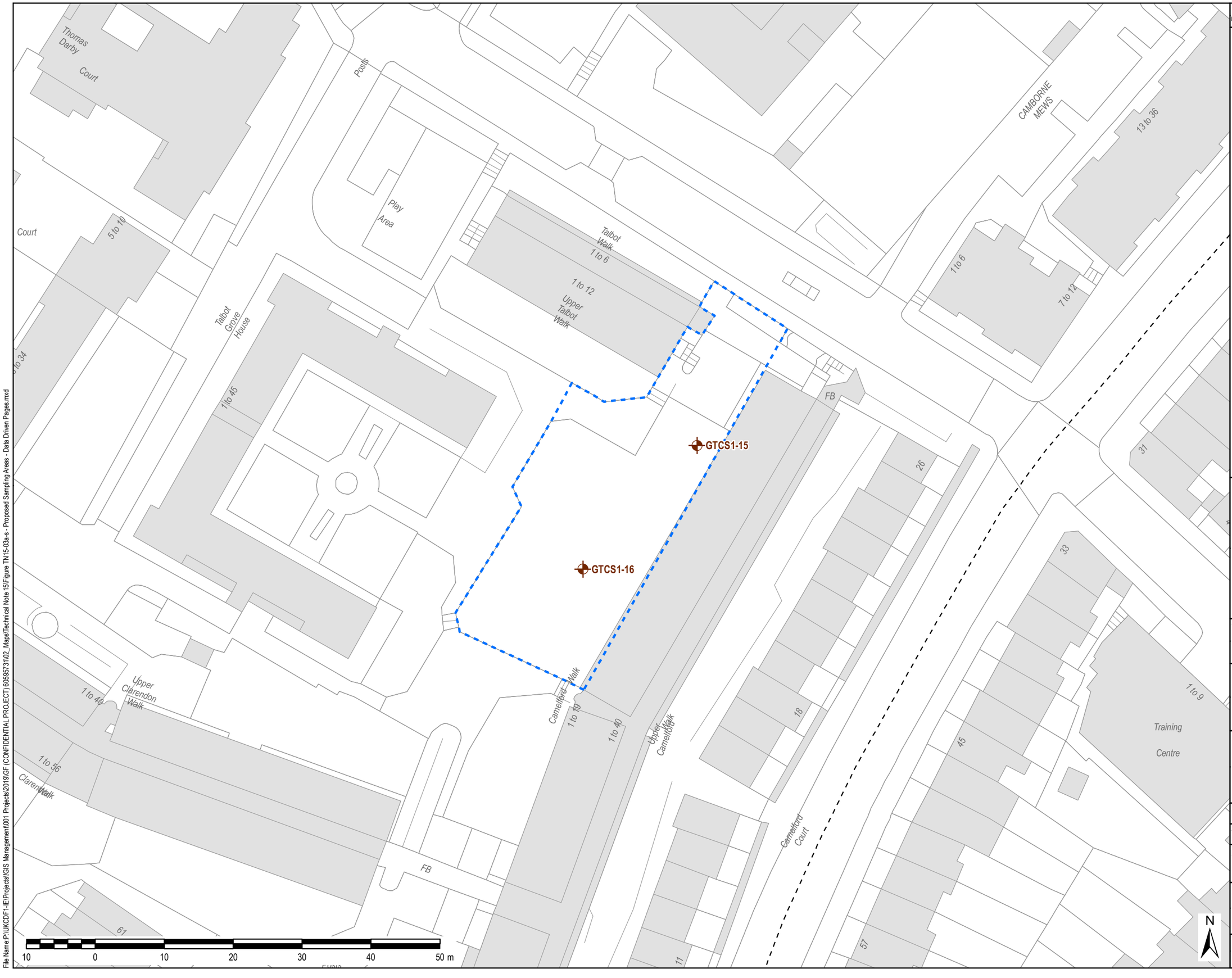

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- Indicative Sampling Areas

Client
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Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
COMMUNAL OPEN SPACE AT CAMELFORD WALK (AREA 20) SAMPLINGS LOCATIONS

Drawn	Checked	Approved	Date
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AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-03S

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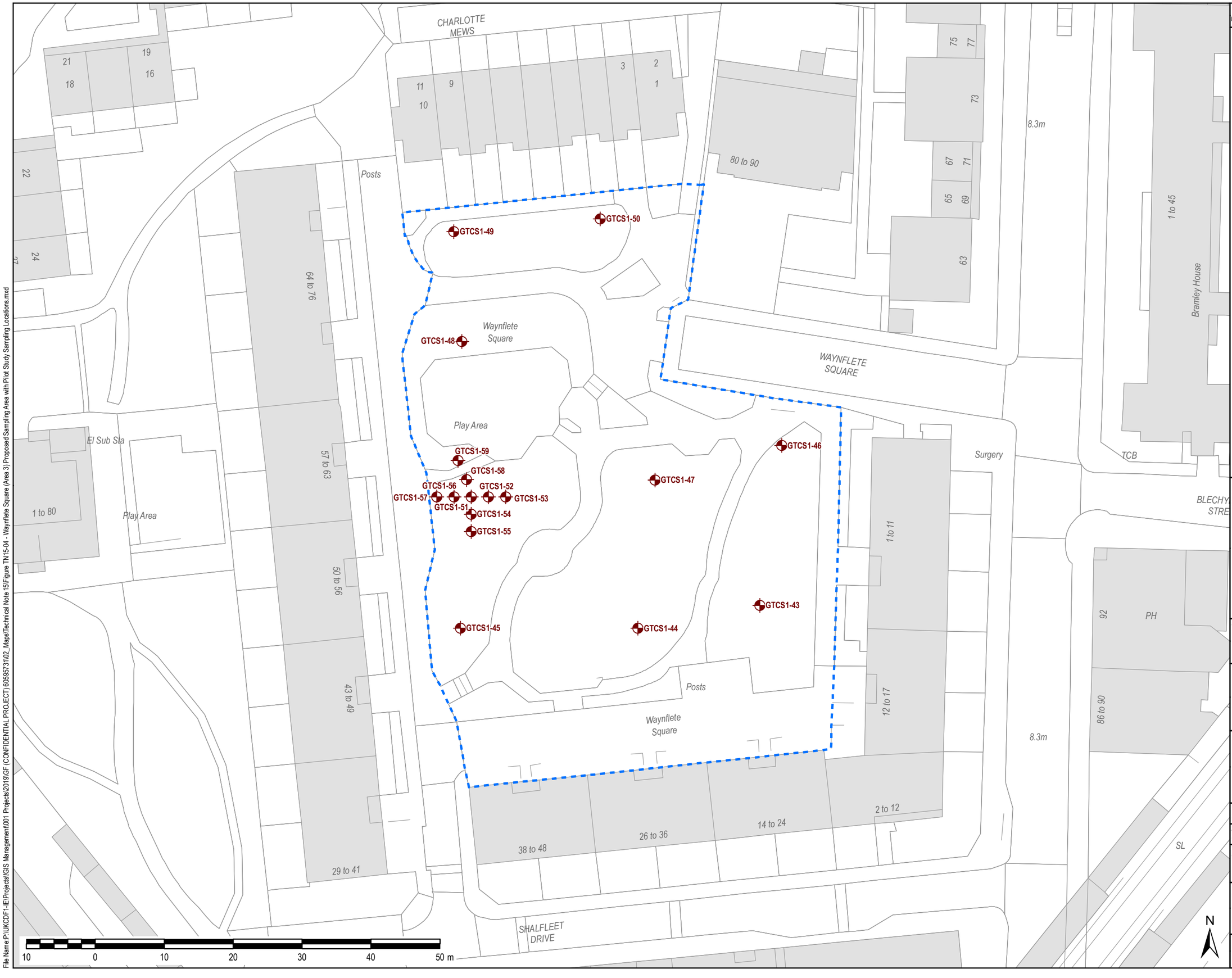
Figure TN15-04. Waynflete Square (Area 3) Pilot Study Sampling Locations



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LEGEND

- Proposed Sampling Area
- AECOM Sampling Locations

Client
ROYAL BOROUGH OF KENSINGTON & CHELSEA

Project Title
GRENFELL PART 2A ASSESSMENT

Drawing Title
WAYNFLETE SQUARE (AREA 3) PILOT STUDY SAMPLING LOCATIONS

Drawn	Checked	Approved	Date
SM	DD	DD	30/08/2019

AECOM Internal Project No.	Scale @ A3
60595731	1:500

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FIGURE TN15-04

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File Name:P:\UKCDF1-IE\Projects\GIS Management\001 Projects\2019\GF (CONFIDENTIAL PROJECT)\60595731\02_Maps\Technical Note 15\Figure TN15-04 - Waynflete Square (Area 3) Proposed Sampling Area with Pilot Study Sampling Locations.mxd

Appendix TN15-A - AECOM Sampling Methodology & Field Procedures

This is not a health and safety risk assessment

1. APPLICABILITY

This document describes the standard field procedure to be used by AECOM Remediation Services Practice personnel to collect soil samples for project 60595731. It relates specifically to the collection of soil samples from the following types of location:

- Surface or near-surface soil
- Sub-surface soil to a maximum depth of 15cm

2. SAFETY

All work must be undertaken in accordance with the requirements of the project Safety, Health and Environment (SHE) Plan.

3. OBJECTIVE

Soil samples are to be collected for subsequent laboratory analysis, and logging of the soil conditions. The objective is to collect a sample that is representative of the soil condition at the chosen sample location, including both the chemical composition and the geological consistency of the material. Identified sample locations are simple random sample locations chosen within the target area. The individual random samples should be of ground that appears to be representative of the typical ground conditions in the area being sampled. If there is visual and/or olfactory evidence of localised potentially contaminated soil, an additional targeted sample should be taken.

In all cases, care needs to be taken not to change the chemistry of the sample. This means minimising the disturbance of the soil and minimising the time taken to take the sample as far as reasonably practicable. It also means storing and transporting the sample as per the guidelines below.

4. SAMPLE COLLECTION

Equipment Decontamination

Prior to first use each day and after collection of each sample, all equipment that comes into contact with samples should be decontaminated (see AECOM FP07 *Decontamination of Equipment*). This will involve the use of de-ionised water supplied by the sub-contract laboratory.

A dedicated clean pair of disposable nitrile (powder free) gloves should be worn at each location and all reasonable measures taken when conducting the work to avoid cross-contamination of samples.

Sampling Locations

Sample areas will be indicated in the sampling plan. The precise sampling locations within each sampling area will be selected as part of the reconnaissance walkover and recorded in the presentation of factual sampling information (TN15). These locations will be subject to site conditions and constraints. If on the day of sampling specific locations are not accessible, alternative locations can be chosen. Consult with the Project Manager if this situation arises.

Sampling locations should be consistent with the overarching aims of the sampling (see above).

Sampling Frequency/Depth

For this specific sampling exercise, samples should be taken from the top 5cm of soil. For the 'pilot study' sample locations on a 20m grid at Waynflete Square, a second sample will be taken at each location at a depth of 10-15cm. Depths will be checked and confirmed using a tape measure. The near-surface sample (0-5cm depth) will include the root zone for turf and other shallow rooted plants that may be present. The soil will need to be carefully removed from the root zone at the sample location if this is the case. One sample will be taken from each location and depth increment (except where duplicates are scheduled).

Recording of Sampling Locations
Sampling locations should be photographed using a trial pit board with a colour scale. The sample location code must be as per the sample plan, and the sample location should be recorded by reference to a detailed site plan and relative distances for key features (e.g. building corners, kerb lines), so that the locations can be re-visited if necessary.

Specific health and safety measures
Refer to the project and task specific SHE Plan for full details. If the ground is damp, no specific measures are required. If the ground is dry and sampling activities visibly generate dust, damp down the ground before and during sampling using a hand-held water mister. Avoid excessive use of water which would make sample more difficult to handle.

Collection of Soil Samples from Test Pits or using Hand Tools
Disturbed soil samples should be collected from each location using a decontaminated stainless-steel hand trowel. [Only unpainted hand tools that are made of stainless-steel should be used]. A square area with minimum dimensions 25cm x 25cm should be removed on to a clean piece of plastic sheeting. The sample jar for VOC laboratory analysis should be filled immediately to minimise volatile losses. Plants (inc. roots) should then be removed as far as is reasonably practicable from the remainder of the sample. If the soil is sufficiently granular, the resulting soil should be thoroughly mixed on the sheet using the hand trowel before being placed in the required sample containers (see below for laboratory sample container requirements). See AECOM FP24 *Soil Sample Volume Reduction and Sub-sampling by Cone and Quartering* for a method for sample mixing. Because near-surface soil samples are being taken, volatile losses during sampling should be negligible for semi-volatile compounds relative to any losses already due to very shallow depth of soil. If the sample is cohesive and cannot be easily mixed this should be noted in the field records and the sample transferred to the sample containers without mixing.

Sample Size and Storage
Laboratories specify minimum requirements (volumes) and types of sample container for analytical methodologies, which should be checked prior to collection of samples. The sample containers required for one complete sample for all analyses for the exploratory and pilot trial sampling include:

- 1 x 1kg (950ml) plastic tub,
- 2 x 250g (260ml) glass jars and
- 5 x 60g (74ml) glass jars per sample

Oversize fractions of sample that cannot be sampled in the required containers should be described in the field notes for each individual sample.

Samples should be securely packaged for transportation as soon as possible using the appropriate packaging containers provided by the laboratory. Samples should be stored and transported according to the analytical laboratory guidance provided, including sealing to prevent evaporative losses and as far as possible maintenance of a stable temperature (generally in the range 0-4 degrees C).

Sample Labelling and Chain of Custody
Samples should be labelled in accordance with the chain of custody requirements of the analytical laboratory. As a minimum this should include:

- Project identification code or Project Name
- Sample identification code
- Sample depth
- Sample time and date

Project Name, project code and each individual sample time, date and identification code must also be recorded on the Chain of Custody for cross referencing.

Duplicate samples

Duplicate samples should be taken at a minimum frequency of 10%, with an absolute minimum of 8 duplicate samples for each sampling mobilisation. See AECOM FP26 *Field Sampling and Laboratory QA* for further information. These samples should be taken following the cone and quartering of the original sample, not by taking a further sample from the ground adjacent to the original sample.

Duplicate sampling information must be recorded with the site personnel's notes or on a detailed plan for future QA/QC procedures.

Reinstatement

Because the sample depths are shallow, reinstatement should be achieved by placing unneeded excavated soil back in the shallow sample depression and/or by scrapping surrounding surface soil into the shallow sample depression to form an even surface layer. A bagged supply of commercially available topsoil should be available to complete reinstatement as necessary. Any turf cut away for the purposes of sampling will be placed back on top of the restored soil level. The sampled area should be firmed down by walking over it.

5. References

AGS Guide to Environmental Sampling, Association of Geotechnical and Geoenvironmental Specialists, 2019

BS 101075:2011+A2:2017 Investigation of potentially contaminated sites – Code of practice, British Standards Institution Publication, 2017

BS ISO 18400-102:2017 Soil quality – Sampling. Part 102: Selection and application of sampling techniques, British Standards Institution Publication, 2017

BS ISO 18400-105:2017 Soil quality – Sampling. Part 105: Packaging, transport, storage and preservation of samples, British Standards Institution Publication, 2017

BS ISO 18400-201:2017 Soil quality – Sampling. Part 201: Physical pretreatment in the field, British Standards Institution Publication, 2017

BS ISO 18512:2007 Soil Quality – Guidance on long and short-term storage of soil samples, British Standards Institution Publication, 2007

This is not a health and safety risk assessment

1. APPLICABILITY

This document describes the standard field procedures used by AECOM EHS & Remediation Services group in the UK, Ireland and South Africa to decontaminate soil and groundwater sampling equipment such as:

- Hand tools (e.g. stainless steel trowels) used for soil sampling.
- Inertial (waterra) foot valves for groundwater sampling
- Groundwater sampling bailers (if not single-use or dedicated)
- Probe of water level dip meter or oil / water interface probe
- Field water quality testing equipment (e.g pH probe and flow through cell)
- Pressure vessel used for on-site filtration of water samples
- Down-hole drilling rods and sampling devices used by drillers.

This Field Procedure does not address personal decontamination.

2. SAFETY

All work must be conducted in accordance with the requirements of the project Health, Safety and Environment Plan (HSEP).

3. OBJECTIVE

The key objective of decontamination of soil and groundwater sampling equipment is to reduce the risk of cross-contamination of samples obtained during site investigation works. It also aims to minimise the distribution of hazardous substances into clean areas of the subject site.

If sampling equipment is not dedicated to an individual monitoring point, and is not single use, it must be decontaminated between sampling locations. The aim of this Field Procedure is to provide general guidelines for decontamination of soil and groundwater sampling equipment. In all cases, the decontamination procedures undertaken on site should be documented.

4. METHOD

Preparation

- Identify probable contaminant and / or hazardous material where possible.
- Ensure that suitable decontamination equipment is available on-site. Typically this may include potable water supply, jet wash / stream wash, brushes, DECON-90 or similar, deionised water, isopropanol, paper towels, latex gloves and protective glasses.
- Identify and agree with the client's site representative appropriate methods for disposal of contaminated clothing, gloves, equipment, rinse fluids, waste solids and solutions.
- Identify and agree with the client's site representative an appropriate location for decontamination to take place. Where the site is deemed to have hazardous material, decontamination locations should also be defined in the HSEP.
- Subject to the client's requirements it may be necessary to prepare a site-specific method statement for decontamination; for example, where collection of wastewater is required for off-site disposal.

Decontamination of Soil Sampling and Drilling Equipment

Decontamination of equipment owned and operated by subcontractors such as drilling companies should be undertaken by their own staff and supervised by AECOM personnel to check that appropriate procedures are followed.

- All sampling and drilling equipment materials must be decontaminated prior to commencement of work and following completion of sampling at each location.

- If required, remove gross contamination and lumps of soil from equipment, either by hand (whilst wearing appropriate gloves) or using brushes.
- Thoroughly wash and rinse the equipment with potable water or, where deemed necessary (for example, if there is contamination by petroleum hydrocarbons or other organic chemicals), using a steam or high-pressure hot water wash to remove residuals.
- Air dry on a suitable surface, e.g. polythene sheeting.

Decontamination of Water Sampling Equipment

The works described below should be undertaken over a clean surface where possible (e.g. polythene sheeting), to prevent migration of contaminated materials.

- Thoroughly wash the equipment with (potable) tap water, using a high pressure jet wash or steam cleaner if appropriate (note that additional personal protective equipment (PPE) may be required if high pressure or steam washers are used).
- Wash equipment with diluted *DECON-90* solution or similar non-phosphate laboratory detergents.
- Rinse with deionised water to remove the detergent.
- Deionised water final rinse as necessary.
- If isopropanol rinse is considered appropriate (for example, to remove oily contaminants), wipe the equipment dry with paper towels then rinse with isopropanol.
- Air dry on a suitable surface e.g. polythene sheeting.

Particularly on industrial sites, it may be necessary to obtain a sample of the water supply used to clean the equipment, and to schedule this sample for a suite of chemical analysis to ensure that the water supply is suitable.

Precautions

- Any modifications to the standard decontamination procedure should first be agreed with the Project Manager and should be documented in the field notes.
- Field personnel must wear appropriate PPE while decontaminating site equipment.
- The use of waters purchased from commercial vendors may be acceptable for decontamination of sampling equipment on condition that it has been verified by laboratory analysis to be free of contamination.
- Waste liquids and solids may need to be collected and properly disposed of depending on the characteristics of the contamination.
- All disposable items (e.g. gloves, paper towels, jars etc) must be disposed of appropriately.
- If for some reason equipment cannot be decontaminated on site it should be contained in a sealed bag for subsequent decontamination off site.

QA/QC

A rinsate blank is a specific type of quality control sample. Rinsate blanks are obtained by rinsing the sampling equipment with high specification deionised water after decontamination and submitting the rinsate blank for laboratory analysis to test for residual contamination.

5. ADDITIONAL INFORMATION

USEPA “Standard operating procedures; Sampling equipment decontamination” from SOP 2006, Rev. 3.0, 1/23/92.

This is not a health and safety risk assessment

1. APPLICABILITY

This document describes the standard field procedures used by AECOM EHS & Remediation Services group in the UK and Ireland to sample asbestos-containing material (ACM) or potential ACM in soil.

These procedures are to be used when asbestos or ACM is known or suspected to be present in the work area, whether above, on or below the ground surface. Where this is the case, a copy of this field procedure should be completed to document the procedures used to assess and manage potential asbestos-related risks associated the fieldwork.

This field procedure is not applicable to building surveys and/or the sampling of suspected ACM in buildings.

2. SAFETY

All work must be undertaken in accordance with the requirements of the project Health, Safety and Environment Plan (HSEP).

Work of this nature conducted in the UK must comply with the relevant parts of the *Control of Asbestos Regulations 2012*. This includes work likely to disturb asbestos or ACM, ancillary work, and supervision of such work.

3. METHOD

Step 1

Is asbestos or ACM known or suspected to be present in the work area, whether below, on or above the ground surface? Yes/No

If yes, go to Step 2. If no, further assessment is not required.

Step 2

Has a suitable and sufficient assessment been made within the health and safety documentation for the planned site works as to the type and condition of ACM likely to be present? Yes/No

If yes, provide brief details below (if in doubt, assume asbestos is present and that it is not just chrysotile asbestos that might be present)

If no, an assessment should be made and either included in the health and safety documentation or detailed below.

Step 3

Has a suitable and sufficient risk assessment been made into the exposure risks and steps required to mitigate those risks? (This should be included in the site specific safe work plan (SWP), job safety analysis (JSA) or health, safety and environment plan (HSEP)). Yes/No

If yes, briefly summarise below in terms of:

1. ACM type (asbestos type and material type)

2. Nature and degree of exposure that is likely to occur

3. Effects of control measures

4. Results of exposure monitoring (if applicable)

5. Steps to be taken to prevent or reduce exposure to “as low as reasonably practicable” (ALARP)

If no, make sure a risk assessment is completed (expand and use text box above as appropriate)

Step 4
Assess whether the work is likely to be licensed, notifiable or non-licensed work (**AECOM staff operating under this FP should only be undertaking non-licensed work**):

Licensed	Notifiable	Non-licensed
Exposure is not sporadic and of low intensity Control limit is likely to be exceeded Work on asbestos coatings, insulation board or insulation	Any work not captured by licensed or non-licensed categories	Exposure is sporadic and of low intensity Exposure will not exceed control limit Work is limited to: • Air monitoring and control activities • Collection and analysis of samples for testing
✓ / ✗	✓ / ✗	✓ / ✗

Step 5
Complete the following boxes identifying the site-specific methods of work proposed:

Nature and duration of work:

Location of work:

Method for hand digging to be applied where work involves the handling of ACM:

Sampling of potentially asbestos-containing soils should be in accordance with Field Procedure FP03 *Soil Sampling*, with additional requirements as follows:

- The work area should be subject to a walkover survey by someone suitably experienced (if not already carried out) to ascertain the type and prevalence of asbestos present. This work plan should be adjusted accordingly if the condition of the land is markedly different to that anticipated.
- Where ACM fragments are observed either at surface or in disturbed soil designed for sampling, these should be carefully picked out and bagged separately to the soil samples in accordance with HSE EM9.
- If soil is dry and dusty, dampen it with a handheld water mister (water should contain a wetting agent such as Decon90 or biodegradable washing up liquid) prior to sampling to minimise airborne fibre release.
- Hand-digging should be carried out in a non-aggressive manner to minimise the potential for asbestos fibre release.

- Spoil from hand-digging should be placed such that it does not contaminate adjacent soil with asbestos. This will only be relevant for evident hotspots of asbestos contamination, and should be mitigated by the use of disposable sheeting to hold the spoil temporarily prior to replacement in hole.
- Soil samples must be adequately labelled such that subsequent handlers of that sample are aware of the potential presence of asbestos in the samples. If a sample is only liable to contain trace amounts of dispersed fibres, label the laboratory chain of custody form and the sample container as "sample potentially containing trace asbestos fibres". If a sample is liable to contain more substantial amounts of asbestos fragments, this must be highlighted on the chain of custody form and the sample must be bagged and tagged in accordance with EM9.
- Each sample should be photographed and have a written field record of visual observations on characteristics of suspected ACM identified.
- Sampling equipment should be carefully wiped down with disposable damp cloths as per HSE EM7.

Detail other/additional site specific measures here:

Additional procedures for other sampling methods:

If other methods of sampling are being used, such as trial pitting or soil auguring, the principles of damping down and equipment decontamination must be adhered to. Fibre release from disturbed soil must be reduced to as low as reasonably practicable. The hand sampling method detailed above should be used when taking samples from the excavated soil or soil arisings.

Detail other/additional site specific measures here:

Equipment to be used for personal protective equipment (PPE) and decontamination

PPE must be consistent with guidance in HSE EM6 and commensurate with the assessed risk from the work activity being undertaken and the characteristics of suspected asbestos contamination present in soil. Refer to site-specific SWP/JSA/HSEP for further details.

Typical PPE should include:

- Disposable tyvek sui
- Disposal respirator mask conforming to EN149 (type FFP3) or EN1827 (type FMP3)
- Disposable nitrile gloves

Respirator only required if friable asbestos is visible at surface and conditions are dry and dusty, if dispersed fibres are known to be present (e.g. from previous assessment), or sampling method is likely to generate airborne dust (such as trial pitting).

Site staff must be fit tested for the specific respirator provided prior to the use and reliance on RPE.

Decontamination precautions for removal and disposal of PPE are only required if friable asbestos is visible at surface or in excavations and conditions are conducive to asbestos fibre transfer to clothing.

If a specific area of the site has been zoned as an asbestos-containing area, staff should avoid using asbestos dedicated PPE outside that demarcated zone. The use of segregated PPE minimises the risk of fibre transfer across work areas.

Detail other/additional site-specific PPE requirements here:

Measures intended to prevent or reduce exposure to ALARP

- Staff awareness training specific to planned tasks (office training and site-based briefing).
- Asbestos/ACM work area to be clearly demarcated and/or communicated.
- Decontamination zone and procedures established for removal of PPE prior to carrying out work outside of the asbestos work area.
- Dampening of dry dusty soil prior to sampling.
- Recognition of risk exacerbating conditions such as quantity of friable asbestos material at surface, dryness of soil, wind conditions.
- Use of specified PPE for tasks.
- Sampling practices designed to minimise soil disturbance.
- Adherence to good hygiene practices including provision of hand washing facilities, consumption of food and drink away from asbestos work area, no smoking permitted on-site, removal of disposable PPE on exit of asbestos work area and disposal. Provision of new disposable PPE which must be worn if re-entry of asbestos work area is required.
- Disposable PPE to be removed inside out and placed directly into designated waste bags.
- Boots and other external clothing/equipment to be wiped down with disposable damp cloths. Laced boots can be difficult to wipe down effectively. If necessary, laces should be taped prior to sampling work.

Detail other/additional site-specific measures here:

Measures intended to provide a clean work area post-work

- Minimise spread of excavation spoil
- Use disposable sheeting to hold spoil where appropriate
- Abide by asbestos work area and decontamination zone requirements

Detail other/additional site-specific measures here:

Sample labelling, handling, storage and transportation

- Asbestos samples should be labelled, handled, stored and transported in accordance with EM9 where appropriate
- Soil samples liable to contain trace asbestos fibres can be handled in accordance with standard soil sampling protocols and laboratory chain of custody requirements

Waste handling

- Asbestos contaminated waste (including disposable PPE) to be bagged separately and handled and disposed of in accordance with EM9 where appropriate

As far as reasonably practicable, the work must be carried out in accordance with this plan and any subsequent written changes to it.

Step 6
Training requirements for employees engaged in identified tasks:

(1) All staff must have received basic asbestos awareness training
(2) Health and safety briefing prior to site must be compliant with CAR 2012 Reg10

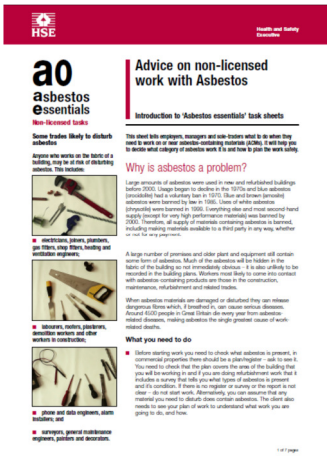
Is provision for the above included in SWP/JSA/HSEP? Yes/No

If no, ensure health and safety documentation is amended prior to site works commencing. All staff must be suitably trained prior to undertaking the works described in this field procedure.

4. FURTHER INFORMATION

For further information, refer to the HSE asbestos essentials information provided in A0, A11, and A38, and EM1, EM2, EM5, EM6, EM7, EM8 and EM9, located at:

http://www.hse.gov.uk/asbestos/essentials/index.htm


HSE Health and Safety Executive

a0 asbestos essentials
Non-licensed tasks

Advice on non-licensed work with Asbestos

Introduction to 'Asbestos essentials' task sheets

Some trades likely to disturb asbestos

Anyone who works on the fabric of a building, may be at risk of disturbing asbestos. This includes:

- electricians, joiners, plumbers, gas fitters, shop fitters, heating and ventilation engineers;
- labourers, roofers, plasterers, demolition workers and other workers in construction;
- phone and data engineers, alarm installers; and
- surveyors, general maintenance engineers, painters and decorators.

This sheet tells employers, managers and sole-traders what to do when they need to work on or near asbestos-containing materials (ACMs). It will help you to decide what category of asbestos work it is and how to plan the work safely.

Why is asbestos a problem?

Large amounts of asbestos were used in new and refurbished buildings before 2000. Usage began to decline in the 1970s and blue asbestos (crocidolite) had a voluntary ban in 1970. Blue and brown (amosite) asbestos were banned by law in 1985. Uses of white asbestos (chrysotile) were banned in 1999. Everything else and most second-hand supply (except for very high performance materials) was banned by 2000. Therefore, all supply of materials containing asbestos is banned, including making materials available to a third party in any way, whether or not for any payment.

A large number of premises and older plant and equipment still contain some form of asbestos. Much of the asbestos will be hidden in the fabric of the building so not immediately obvious - it is also unlikely to be recorded in the building plans. Workers most likely to come into contact with asbestos containing products are those in the construction, maintenance, refurbishment and related trades.

When asbestos materials are damaged or disturbed they can release dangerous fibres which, if breathed in, can cause serious diseases. Around 4500 people in Great Britain die every year from asbestos related diseases, making asbestos the single greatest cause of work-related deaths.

What you need to do

- Before starting work you need to check what asbestos is present, in commercial properties there should be a plan/register – ask to see it. You need to check that the plan covers the area of the building that you will be working in and if you are doing refurbishment work that it includes a survey that tells you what types of asbestos is present and it's condition. If there is no register or survey or the report is not clear – do not start work. Alternatively, you can assume that any material you need to disturb does contain asbestos. The client also needs to see your plan of work to understand what work you are going to do, and how.

1 of 7 pages


HSE Health and Safety Executive

a11 asbestos essentials
Non-licensed tasks

Removing asbestos cement (AC) debris

What this sheet covers

This sheet describes good practice when you need to clear up AC. This includes decontamination following a fire.

This sheet is NOT appropriate for cleaning debris from damaged asbestos lagging, insulation or insulating board. Use an HSE-licensed contractor for such work.

For fly-tipped AC waste, see sheet a38.

Preparing the work area

- Ensure safe access.
- Restrict access - minimise the number of people present.
- Cover traps and notices to warn others.
- Ensure adequate lighting.

Caution: AC roofs are always fragile and cannot bear weight.

Equipment

- Warning tape and notices;
- scoop, trowel or scraper;
- adhesive tape;
- garden-type sprayer containing wetting agent;
- bucket of water and rags;
- asbestos waste container, eg labelled polythene sack; and
- clear polythene sack.

Personal protective equipment (PPE) – see sheet en4

- Provide:
  - disposable overalls fitted with a hood; and
  - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required if there are only a few pieces of contamination in a small area, or the pieces are damp.
- For larger or heavily contaminated areas, a respirator is required.

Procedure

Caution: make sure the debris is AC only.

- Clean up visible contamination in occupied areas, eg houses and gardens nearby. In large contaminated areas, eg following a fire, you may be unable to remove all the AC.
- Dampen the AC debris with spray.

AC debris is common

1 of 7 pages


HSE Health and Safety Executive

a38 asbestos essentials
Non-licensed tasks

How to deal with fly-tipped asbestos waste

What this sheet covers

This sheet describes good practice when you recognise fly-tipped material as containing asbestos that you need to deal with.

Preparing the work area

- Restrict access - minimise the number of people present.
- Use tape and notices to warn others.

Equipment

- 1000-gauge polythene sheeting and duct tape;
- warning tape and notices;
- trowel;
- garden-type sprayer containing wetting agent, eg diluted washing-up liquid;
- bucket of water and rags;
- asbestos waste container, eg labelled polythene sack;
- asbestos warning (stickers); and
- clear polythene sack.

Personal protective equipment (PPE) – see sheet en5

- Provide:
  - disposable overalls fitted with a hood;
  - boots without laces (laced boots are hard to decontaminate); and
  - respiratory protective equipment.

Procedure

- Notify the relevant authority – see 'More help' on sheet a0.
- Estimate the amount and type of asbestos waste.
- If the waste is spread around or mixed with non-asbestos material, get an HSE-licensed contractor to deal with it.
- Disposal – see sheet en9.

Small amount of any asbestos-containing waste

- Dampen and place pieces in an asbestos waste container.
- Shovel damp residues into the container.

Large amount of asbestos-containing waste

- Cover the waste securely with 1000-gauge polythene sheet. Peg it down with tent pegs. Attach asbestos warning (stickers).
- Mark out an exclusion zone with warning tape.
- If the waste is in an inhabited area, make arrangements to secure the site until it is removed.

Asbestos cement sheets discarded irresponsibly

1 of 7 pages

HSE Health and Safety Executive

em1
asbestos essentials
Non-licensed tasks

What to do if you uncover or damage materials that may contain asbestos

Equipment and method sheet

What this sheet covers

This sheet shows some examples of where asbestos can be found. A chart describes what to do if you find asbestos materials during a job.

It also applies where asbestos materials get damaged by accident.

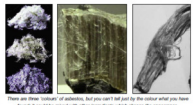
This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- Check it out before you start work.
- Read the safety checklist on the task sheet.



There are three 'colours' of asbestos, but you can't tell just by the colour what you have found; it could be mixed with other ingredients which change the appearance.

Don't assume there will always be warning signs. There could be undiscovered asbestos in buildings you work on.

Asbestos isn't always obvious. Would you spot an asbestos gasket on an old engine, asbestos cement pipes or an asbestos-containing fuse-board? If you're not sure, the premises owner needs to get it checked out!

Asbestos lagging on an old tank.

Asbestos insulating board (AIB) fire surround.

These asbestos cement pipes are labelled, so are the tiles, but you might not know until you start to lift them.

There could be sprayed limpet under this asbestos cement (AC) sheeting

1 of 2 pages

HSE Health and Safety Executive

em2
asbestos essentials
Non-licensed tasks

Training

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung disease.
- Read the safety checklist on the task sheet.
- You must be trained to work safely with asbestos materials.
- Young workers are at special risk due to lack of experience.

People that carry out any work on asbestos materials must be trained and supervised properly.

You need training even if you worked with asbestos in the past.

Procedures

- For information on training providers see 'More help'.

Training, supervision and information

- Training must include detailed information on:
  - recognising asbestos;
  - how asbestos can affect your health;
  - the added dangers of smoking;
  - the uses and likely locations for asbestos in buildings;
  - what work you are allowed to do by law;
  - what the law requires you to do;
  - procedures to protect yourself;
  - what methods to use;
  - what equipment you need to do the job properly;
  - how to choose, use and look after personal protective equipment;
  - recognising and dealing with other dangers, such as work at height;
  - decontamination of yourself and work areas;
  - emergency procedures; and
  - waste disposal.

MESOTHELIOMA DUE TO ASBESTOS EXPOSURE

Asbestos sticks in your lungs. The younger you are, the longer it remains to cause damage.

- Refresher training is needed every year, or more often if:
  - work methods change;
  - the type of equipment used changes; or
  - the type of work changes a lot.
- Supervise the task – make sure workers follow the rules.

Information for others

- Tell all other workers that may be nearby what you are doing, where and why.
- Tell them about other risks from the work, eg changes in fire exits.

1 of 2 pages

HSE Health and Safety Executive

em5
asbestos essentials
Non-licensed tasks

Wetting asbestos materials

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung disease.
- You must be trained to work safely with asbestos materials.
- Concentrated wetting agents may cause dermatitis. Read the safety data sheet or label. Avoid toxic or flammable wetting agents.

This sheet explains why you must wet asbestos materials before working on them, and how to do this.

The spraying technique can also be used when painting or sealing asbestos materials.

Damp asbestos materials release far fewer asbestos fibres into the air. Don't drench them and create a waste 'slurry'.

Electrical equipment in the area needs to be isolated and protected.

Equipment

- Wetting agent – for suppliers see 'More help' over the page, or you could use liquid detergent as an alternative;
- sprayer, either a garden type spray or a low pressure spraying machine less than 3.4 bar (50 psi); and
- brush or roller.

Procedures

- Wet the asbestos materials before starting any work. Don't work on dry asbestos materials.
- Wetting agents make it easier. Nuts, blue and brown asbestos don't absorb water easily.
- Some asbestos materials – eg board, sheet – cannot be wetted all the way through. So you need other methods to control dust exposure, eg Class H vacuum cleaner.

1 of 2 pages

HSE Health and Safety Executive

em6
asbestos essentials
Non-licensed tasks

Personal protective equipment (PPE)

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- You must be trained to work safely with asbestos materials.
- You must be trained to use PPE and RPE properly.

This sheet describes what personal protective equipment (PPE) you need.

It also describes respiratory protective equipment (RPE).

PPE and RPE are your last lines of defence against asbestos fibres. Follow the methods in the task guidance sheets to avoid fibres being released into the air.

A 'dust mask' doubled up for more protection is useless. You need a respirator.

Disposable RPE worn correctly

Overalls

- Disposable overalls, Type 5 (BS EN ISO 13982-1) are suitable. Cotton overalls hold dust and need specialist laundering.
- You may need waterproof overalls for outdoor work.
- Wear one size too big – this will help to prevent ripping at the seams.
- If the cuffs are loose, seal them with tape.
- Avoid wearing a long sleeved shirt – these are difficult to cover properly.
- Wear the overall legs over footwear. Tucking them in lets dust into footwear.
- Wear the hood over the RPE straps.
- Dispose of used overalls as asbestos waste.

Caution: Never take used overalls home.

Gloves

- If you wear protective gloves, use single-use disposable gloves. If you must use latex gloves, use only 'low protein powder free' gloves.
- Dispose of used gloves as asbestos waste.

Footwear

- Boots are preferable to disposable overshoes which cause a slipping risk.

Caution: Never use laced boots, these are very difficult to clean properly.

Respiratory protective equipment (RPE)

- Use suitable RPE with an Assigned Protection Factor of 20 or more.
- Suitable types of RPE:
  - disposable respirator to standards EN149 (type FFP3) or EN1827 (type FMP3);
  - half mask respirator (to standard EN140 with P3 filter; or
  - semi-disposable respirator (to EN405) with P3 filter.

1 of 2 pages

HSE Health and Safety Executive

em7
asbestos essentials
Non-licensed tasks

Using damp rags to clean surfaces of minor asbestos contamination

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- You must be trained to work safely with asbestos materials.
- Use each damp rag surface only once.

This sheet explains how to use rags to clean minor asbestos contamination from smooth, non-absorbent surfaces and equipment.

Equipment

- bucket of water;
- either cotton rags that do not shed fluff onto clean surfaces, or impregnated rags (eg 'Tak' rags);
- adhesive tape, to collect small dust deposits; and
- asbestos waste container, eg labelled polythene sack.

Procedure

- Pick up bigger pieces of debris and put them in a suitable waste container.

Rags

- Impregnated rags do not need soaking.
- Soak the rag in water. Fold in half or quarters. Wring it out.
- Wipe the contaminated surface.
- Re-fold the rag to give a clean surface.
- Repeat until you have used all the clean surfaces of the rag.
- Put the used rag in a bag. Get a clean rag, and repeat cleaning until all surfaces are clean.

Wiping up debris with a damp rag.

Caution: Never re-soak a contaminated rag. This contaminates the water.

Tape

- Tape is useful only for removing small dust deposits. Surfaces may need repeated tape applications.
- Place a strip of tape over the contaminated surface. Peel it off slowly.
- Put the used tape in a bag. Repeat with a fresh piece.

Wastes

- Put bags of used rags and tape in a suitable asbestos waste container.
- Tape the container closed.
- If you avoid contaminating the bucket of water, no special precautions are need for water disposal.
- See sheet em9 for disposal.

1 of 2 pages

HSE Health and Safety Executive

em8
asbestos essentials
Non-licensed tasks

Personal decontamination

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- You must be trained to work safely with asbestos materials.
- You must be trained to use PPE and RPE properly.
- Remove your respirator last.

This sheet describes how to decontaminate yourself after any work with asbestos materials.

Personal decontamination is easier when you wear the correct personal protective equipment (PPE).

You need to decontaminate yourself properly, otherwise you may take asbestos fibres home on your clothing and expose your family and friends.

Procedures

Removing and decontaminating personal protective equipment (PPE)

- Clean your boots with damp rags – see sheet em7.
- Where available, clean your overalls with the brush attachment on a Class H vacuum cleaner. Vacuum off the brush.
- Otherwise, use damp rags by a 'patting' action. Rubbing can disturb fibres.
- Where there are two workers, they can help to clean each other.
- Peel off disposable overalls. They should be inside out. Put them in a suitable asbestos waste container.
- Bag up re-usable overalls for a specialist laundry.
- Finally, remove your disposable respirator and place it in the asbestos waste container.
- Tape the container closed.

Personal decontamination

- Can you use site washing facilities? If so, they must be for your use only.
- Keep other people out during personal decontamination, and until you have cleaned the facilities.
- Wash every time you leave the work area.

Make sure you restrict access

'Buddy' cleaning using a Class H vacuum cleaner

1 of 2 pages

HSE Health and Safety Executive

em9
asbestos essentials
Non-licensed tasks

Disposal of asbestos waste

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.

This sheet describes good practice when you need to dispose of asbestos waste.

Any asbestos product or material that is ready for disposal is defined as asbestos waste. Asbestos waste also includes contaminated building materials, tools that cannot be decontaminated, personal protective equipment and damp rags used for cleaning. If in doubt, always treat waste as 'Hazardous' or 'Special'. See the table for more details. You can discharge waste water that may be contaminated with traces of asbestos to the sewage system.

Vehicle placard

Asbestos warning sign

England and Wales	■ Asbestos waste is 'Hazardous Waste' when it contains more than 0.1% asbestos. ■ The Hazardous Waste Regulations apply. Complete a Waste Consignment Note. ■ Contact the Environment Agency for more information.
Scotland	■ Asbestos waste is 'Special Waste' when it contains more than 0.1% asbestos. ■ The Special Waste Amendment (Scotland) Regulations apply. Complete a Waste Consignment Note. ■ Contact the Scottish Environment Protection Agency for more information.
England, Scotland and Wales	■ All asbestos waste is subject to Schedule 2 of the Control of Asbestos Regulations 2012 and most waste is subject to the Carriage of Dangerous Goods (etc) Regulations 2009 (CDG 2009). ■ Firmly bound asbestos – asbestos cement and articles with asbestos reinforcement – does not release hazardous or respirable fibres easily. CDG does not apply. ■ The Carriage of Dangerous Goods (etc) Regulations 2009 (CDG 2009) applies for all other asbestos waste. See 'More help'.

Caution: Don't mix asbestos waste with other waste to get below 0.1%.

■ Waste must be packed in UN approved packaging with a CDG hazard sign and asbestos code information visible.
■ Double-wrap and label asbestos waste. Standard practice is to use a red inner bag with asbestos warnings, and a clear outer bag with the CDG sign.

Caution: Don't overfill bags. Beware sharp objects that could puncture plastic.

1 of 2 pages

This is not a health and safety risk assessment

1. APPLICABILITY

This document describes the standard field procedures used by AECOM EHS & Remediation Services group in the UK and Ireland to sample asbestos-containing material (ACM) or potential ACM in soil.

These procedures are to be used when asbestos or ACM is known or suspected to be present in the work area, whether above, on or below the ground surface. Where this is the case, a copy of this field procedure should be completed to document the procedures used to assess and manage potential asbestos-related risks associated the fieldwork.

This field procedure is not applicable to building surveys and/or the sampling of suspected ACM in buildings.

2. SAFETY

All work must be undertaken in accordance with the requirements of the project Health, Safety and Environment Plan (HSEP).

Work of this nature conducted in the UK must comply with the relevant parts of the *Control of Asbestos Regulations 2012*. This includes work likely to disturb asbestos or ACM, ancillary work, and supervision of such work.

3. METHOD

Step 1

Is asbestos or ACM known or suspected to be present in the work area, whether below, on or above the ground surface? Yes/No

If yes, go to Step 2. If no, further assessment is not required.

Step 2

Has a suitable and sufficient assessment been made within the health and safety documentation for the planned site works as to the type and condition of ACM likely to be present? Yes/No

If yes, provide brief details below (if in doubt, assume asbestos is present and that it is not just chrysotile asbestos that might be present)

If no, an assessment should be made and either included in the health and safety documentation or detailed below.

Step 3

Has a suitable and sufficient risk assessment been made into the exposure risks and steps required to mitigate those risks? (This should be included in the site specific safe work plan (SWP), job safety analysis (JSA) or health, safety and environment plan (HSEP)). Yes/No

If yes, briefly summarise below in terms of:

1. ACM type (asbestos type and material type)

2. Nature and degree of exposure that is likely to occur

3. Effects of control measures

4. Results of exposure monitoring (if applicable)

5. Steps to be taken to prevent or reduce exposure to “as low as reasonably practicable” (ALARP)

If no, make sure a risk assessment is completed (expand and use text box above as appropriate)

Step 4
Assess whether the work is likely to be licensed, notifiable or non-licensed work (**AECOM staff operating under this FP should only be undertaking non-licensed work**):

Licensed	Notifiable	Non-licensed
Exposure is not sporadic and of low intensity Control limit is likely to be exceeded Work on asbestos coatings, insulation board or insulation	Any work not captured by licensed or non-licensed categories	Exposure is sporadic and of low intensity Exposure will not exceed control limit Work is limited to: • Air monitoring and control activities • Collection and analysis of samples for testing
✓ / ✗	✓ / ✗	✓ / ✗

Step 5
Complete the following boxes identifying the site-specific methods of work proposed:

Nature and duration of work:

Location of work:

Method for hand digging to be applied where work involves the handling of ACM:

Sampling of potentially asbestos-containing soils should be in accordance with Field Procedure FP03 *Soil Sampling*, with additional requirements as follows:

- The work area should be subject to a walkover survey by someone suitably experienced (if not already carried out) to ascertain the type and prevalence of asbestos present. This work plan should be adjusted accordingly if the condition of the land is markedly different to that anticipated.
- Where ACM fragments are observed either at surface or in disturbed soil designed for sampling, these should be carefully picked out and bagged separately to the soil samples in accordance with HSE EM9.
- If soil is dry and dusty, dampen it with a handheld water mister (water should contain a wetting agent such as Decon90 or biodegradable washing up liquid) prior to sampling to minimise airborne fibre release.
- Hand-digging should be carried out in a non-aggressive manner to minimise the potential for asbestos fibre release.

- Spoil from hand-digging should be placed such that it does not contaminate adjacent soil with asbestos. This will only be relevant for evident hotspots of asbestos contamination, and should be mitigated by the use of disposable sheeting to hold the spoil temporarily prior to replacement in hole.
- Soil samples must be adequately labelled such that subsequent handlers of that sample are aware of the potential presence of asbestos in the samples. If a sample is only liable to contain trace amounts of dispersed fibres, label the laboratory chain of custody form and the sample container as "sample potentially containing trace asbestos fibres". If a sample is liable to contain more substantial amounts of asbestos fragments, this must be highlighted on the chain of custody form and the sample must be bagged and tagged in accordance with EM9.
- Each sample should be photographed and have a written field record of visual observations on characteristics of suspected ACM identified.
- Sampling equipment should be carefully wiped down with disposable damp cloths as per HSE EM7.

Detail other/additional site specific measures here:

Additional procedures for other sampling methods:

If other methods of sampling are being used, such as trial pitting or soil auguring, the principles of damping down and equipment decontamination must be adhered to. Fibre release from disturbed soil must be reduced to as low as reasonably practicable. The hand sampling method detailed above should be used when taking samples from the excavated soil or soil arisings.

Detail other/additional site specific measures here:

Equipment to be used for personal protective equipment (PPE) and decontamination

PPE must be consistent with guidance in HSE EM6 and commensurate with the assessed risk from the work activity being undertaken and the characteristics of suspected asbestos contamination present in soil. Refer to site-specific SWP/JSA/HSEP for further details.

Typical PPE should include:

- Disposable tyvek sui
- Disposal respirator mask conforming to EN149 (type FFP3) or EN1827 (type FMP3)
- Disposable nitrile gloves

Respirator only required if friable asbestos is visible at surface and conditions are dry and dusty, if dispersed fibres are known to be present (e.g. from previous assessment), or sampling method is likely to generate airborne dust (such as trial pitting).

Site staff must be fit tested for the specific respirator provided prior to the use and reliance on RPE.

Decontamination precautions for removal and disposal of PPE are only required if friable asbestos is visible at surface or in excavations and conditions are conducive to asbestos fibre transfer to clothing.

If a specific area of the site has been zoned as an asbestos-containing area, staff should avoid using asbestos dedicated PPE outside that demarcated zone. The use of segregated PPE minimises the risk of fibre transfer across work areas.

Detail other/additional site-specific PPE requirements here:

Measures intended to prevent or reduce exposure to ALARP

- Staff awareness training specific to planned tasks (office training and site-based briefing).
- Asbestos/ACM work area to be clearly demarcated and/or communicated.
- Decontamination zone and procedures established for removal of PPE prior to carrying out work outside of the asbestos work area.
- Dampening of dry dusty soil prior to sampling.
- Recognition of risk exacerbating conditions such as quantity of friable asbestos material at surface, dryness of soil, wind conditions.
- Use of specified PPE for tasks.
- Sampling practices designed to minimise soil disturbance.
- Adherence to good hygiene practices including provision of hand washing facilities, consumption of food and drink away from asbestos work area, no smoking permitted on-site, removal of disposable PPE on exit of asbestos work area and disposal. Provision of new disposable PPE which must be worn if re-entry of asbestos work area is required.
- Disposable PPE to be removed inside out and placed directly into designated waste bags.
- Boots and other external clothing/equipment to be wiped down with disposable damp cloths. Laced boots can be difficult to wipe down effectively. If necessary, laces should be taped prior to sampling work.

Detail other/additional site-specific measures here:

Measures intended to provide a clean work area post-work

- Minimise spread of excavation spoil
- Use disposable sheeting to hold spoil where appropriate
- Abide by asbestos work area and decontamination zone requirements

Detail other/additional site-specific measures here:

Sample labelling, handling, storage and transportation

- Asbestos samples should be labelled, handled, stored and transported in accordance with EM9 where appropriate
- Soil samples liable to contain trace asbestos fibres can be handled in accordance with standard soil sampling protocols and laboratory chain of custody requirements

Waste handling

- Asbestos contaminated waste (including disposable PPE) to be bagged separately and handled and disposed of in accordance with EM9 where appropriate

As far as reasonably practicable, the work must be carried out in accordance with this plan and any subsequent written changes to it.

Step 6
Training requirements for employees engaged in identified tasks:

(1) All staff must have received basic asbestos awareness training
(2) Health and safety briefing prior to site must be compliant with CAR 2012 Reg10

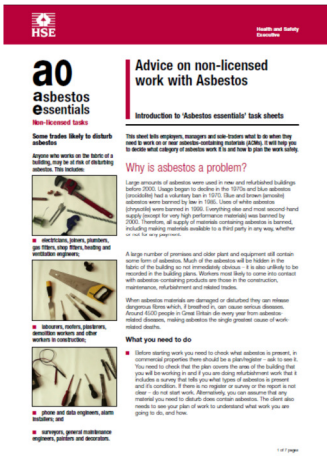
Is provision for the above included in SWP/JSA/HSEP? Yes/No

If no, ensure health and safety documentation is amended prior to site works commencing. All staff must be suitably trained prior to undertaking the works described in this field procedure.

4. FURTHER INFORMATION

For further information, refer to the HSE asbestos essentials information provided in A0, A11, and A38, and EM1, EM2, EM5, EM6, EM7, EM8 and EM9, located at:

http://www.hse.gov.uk/asbestos/essentials/index.htm


HSE Health and Safety Executive

a0 asbestos essentials
Non-licensed tasks

Advice on non-licensed work with Asbestos

Introduction to 'Asbestos essentials' task sheets

Some trades likely to disturb asbestos

Anyone who works on the fabric of a building, may be at risk of disturbing asbestos. This includes:

- electricians, joiners, plumbers, gas fitters, shop fitters, heating and ventilation engineers;
- labourers, roofers, plasterers, demolition workers and other workers in construction;
- phone and data engineers, alarm installers; and
- surveyors, general maintenance engineers, painters and decorators.

This sheet tells employers, managers and sole-traders what to do when they need to work on or near asbestos-containing materials (ACMs). It will help you to decide what category of asbestos work it is and how to plan the work safely.

Why is asbestos a problem?

Large amounts of asbestos were used in new and refurbished buildings before 2000. Usage began to decline in the 1970s and blue asbestos (crocidolite) had a voluntary ban in 1970. Blue and brown (amosite) asbestos were banned by law in 1985. Uses of white asbestos (chrysotile) were banned in 1999. Everything else and most second-hand supply (except for very high performance materials) was banned by 2000. Therefore, all supply of materials containing asbestos is banned, including making materials available to a third party in any way, whether or not for any payment.

A large number of premises and older plant and equipment still contain some form of asbestos. Much of the asbestos will be hidden in the fabric of the building so not immediately obvious - it is also unlikely to be recorded in the building plans. Workers most likely to come into contact with asbestos containing products are those in the construction, maintenance, refurbishment and related trades.

When asbestos materials are damaged or disturbed they can release dangerous fibres which, if breathed in, can cause serious diseases. Around 4500 people in Great Britain die every year from asbestos related diseases, making asbestos the single greatest cause of work-related deaths.

What you need to do

- Before starting work you need to check what asbestos is present, in commercial properties there should be a plan/register – ask to see it. You need to check that the plan covers the area of the building that you will be working in and if you are doing refurbishment work that it includes a survey that tells you what types of asbestos is present and it's condition. If there is no register or survey or the report is not clear – do not start work. Alternatively, you can assume that any material you need to disturb does contain asbestos. The client also needs to see your plan of work to understand what work you are going to do, and how.

1 of 7 pages


HSE Health and Safety Executive

a11 asbestos essentials
Non-licensed tasks

Removing asbestos cement (AC) debris

What this sheet covers

This sheet describes good practice when you need to clear up AC. This includes decontamination following a fire.

This sheet is NOT appropriate for cleaning debris from damaged asbestos lagging, insulation or insulating board. Use an HSE-licensed contractor for such work.

For fly-tipped AC waste, see sheet a38.

Preparing the work area

- Ensure safe access.
- Restrict access - minimise the number of people present.
- Cover traps and notices to warn others.
- Ensure adequate lighting.

Caution: AC roofs are always fragile and cannot bear weight.

Equipment

- Warning tape and notices;
- scoop, trowel or scraper;
- adhesive tape;
- garden-type sprayer containing wetting agent;
- bucket of water and rags;
- asbestos waste container, eg labelled polythene sack; and
- clear polythene sack.

Personal protective equipment (PPE) – see sheet en4

- Provide:
  - disposable overalls fitted with a hood; and
  - boots without laces (laced boots are hard to decontaminate).
- A respirator is not normally required if there are only a few pieces of contamination in a small area, or the pieces are damp.
- For larger or heavily contaminated areas, a respirator is required.

Procedure

Caution: make sure the debris is AC only.

- Clean up visible contamination in occupied areas, eg houses and gardens nearby. In large contaminated areas, eg following a fire, you may be unable to remove all the AC.
- Dampen the AC debris with spray.

AC debris is common

1 of 7 pages


HSE Health and Safety Executive

a38 asbestos essentials
Non-licensed tasks

How to deal with fly-tipped asbestos waste

What this sheet covers

This sheet describes good practice when you recognise fly-tipped material as containing asbestos that you need to deal with.

Preparing the work area

- Restrict access - minimise the number of people present.
- Use tape and notices to warn others.

Equipment

- 1000-gauge polythene sheeting and duct tape;
- warning tape and notices;
- trowel;
- garden-type sprayer containing wetting agent, eg diluted washing-up liquid;
- bucket of water and rags;
- asbestos waste container, eg labelled polythene sack;
- asbestos warning (stickers); and
- clear polythene sack.

Personal protective equipment (PPE) – see sheet en5

- Provide:
  - disposable overalls fitted with a hood;
  - boots without laces (laced boots are hard to decontaminate); and
  - respiratory protective equipment.

Procedure

- Notify the relevant authority – see 'More help' on sheet a0.
- Estimate the amount and type of asbestos waste.
- If the waste is spread around or mixed with non-asbestos material, get an HSE-licensed contractor to deal with it.
- Disposal – see sheet en9.

Small amount of any asbestos-containing waste

- Dampen and place pieces in an asbestos waste container.
- Shovel damp residues into the container.

Large amount of asbestos-containing waste

- Cover the waste securely with 1000-gauge polythene sheet. Peg it down with tent pegs. Attach asbestos warning (stickers).
- Mark out an exclusion zone with warning tape.
- If the waste is in an inhabited area, make arrangements to secure the site until it is removed.

Asbestos cement sheets discarded irresponsibly

1 of 7 pages

HSE Health and Safety Executive

em1
asbestos essentials
Non-licensed tasks

What to do if you uncover or damage materials that may contain asbestos

Equipment and method sheet

What this sheet covers

This sheet shows some examples of where asbestos can be found. A chart describes what to do if you find asbestos materials during a job.

It also applies where asbestos materials get damaged by accident.

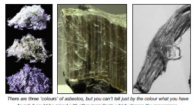
This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- Check it out before you start work.
- Read the safety checklist on the task sheet.



There are three 'colours' of asbestos, but you can't tell just by the colour what you have found; it could be mixed with other ingredients which change the appearance.

Don't assume there will always be warning signs. There could be undiscovered asbestos in buildings you work on.

Asbestos isn't always obvious. Would you spot an asbestos gasket on an old engine, asbestos cement pipes or an asbestos-containing fuse-board? If you're not sure, the premises owner needs to get it checked out!

Asbestos lagging on an old tank.

Asbestos insulating board (AIB) fire surround.

These asbestos cement pipes are labelled, so are the tiles, but you might not know until you start to lift them.

There could be sprayed limpet under this asbestos cement (AC) sheeting

1 of 2 pages

HSE Health and Safety Executive

em2
asbestos essentials
Non-licensed tasks

Training

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung disease.
- Read the safety checklist on the task sheet.
- You must be trained to work safely with asbestos materials.
- Young workers are at special risk due to lack of experience.

People that carry out any work on asbestos materials must be trained and supervised properly.

You need training even if you worked with asbestos in the past.

Procedures

- For information on training providers see 'More help'.

Training, supervision and information

- Training must include detailed information on:
  - recognising asbestos;
  - how asbestos can affect your health;
  - the added dangers of smoking;
  - the uses and likely locations for asbestos in buildings;
  - what work you are allowed to do by law;
  - what the law requires you to do;
  - procedures to protect yourself;
  - what methods to use;
  - what equipment you need to do the job properly;
  - how to choose, use and look after personal protective equipment;
  - recognising and dealing with other dangers, such as work at height;
  - decontamination of yourself and work areas;
  - emergency procedures; and
  - waste disposal.

MESOTHELIOMA DUE TO ASBESTOS EXPOSURE

Asbestos sticks in your lungs. The younger you are, the longer it remains to cause damage.

- Refresher training is needed every year, or more often if:
  - work methods change;
  - the type of equipment used changes; or
  - the type of work changes a lot.
- Supervise the task – make sure workers follow the rules.

Information for others

- Tell all other workers that may be nearby what you are doing, where and why.
- Tell them about other risks from the work, eg changes in fire exits.

1 of 2 pages

HSE Health and Safety Executive

em5
asbestos essentials
Non-licensed tasks

Wetting asbestos materials

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung disease.
- You must be trained to work safely with asbestos materials.
- Concentrated wetting agents may cause dermatitis. Read the safety data sheet or label. Avoid toxic or flammable wetting agents.

This sheet explains why you must wet asbestos materials before working on them, and how to do this.

The spraying technique can also be used when painting or sealing asbestos materials.

Damp asbestos materials release far fewer asbestos fibres into the air. Don't drench them and create a waste 'slurry'.

Electrical equipment in the area needs to be isolated and protected.

Equipment

- Wetting agent – for suppliers see 'More help' over the page, or you could use liquid detergent as an alternative;
- sprayer, either a garden type spray or a low pressure spraying machine less than 3.4 bar (50 psi); and
- brush or roller.

Procedures

- Wet the asbestos materials before starting any work. Don't work on dry asbestos materials.
- Wetting agents make it easier. Nuts, blue and brown asbestos don't absorb water easily.
- Some asbestos materials – eg board, sheet – cannot be wetted all the way through. So you need other methods to control dust exposure, eg Class H vacuum cleaner.

1 of 2 pages

HSE Health and Safety Executive

em6
asbestos essentials
Non-licensed tasks

Personal protective equipment (PPE)

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- You must be trained to work safely with asbestos materials.
- You must be trained to use PPE and RPE properly.

This sheet describes what personal protective equipment (PPE) you need.

It also describes respiratory protective equipment (RPE).

PPE and RPE are your last lines of defence against asbestos fibres. Follow the methods in the task guidance sheets to avoid fibres being released into the air.

A 'dust mask' doubled up for more protection is useless. You need a respirator.

Disposable RPE worn correctly

Overalls

- Disposable overalls, Type 5 (BS EN ISO 13982-1) are suitable. Cotton overalls hold dust and need specialist laundering.
- You may need waterproof overalls for outdoor work.
- Wear one size too big – this will help to prevent ripping at the seams.
- If the cuffs are loose, seal them with tape.
- Avoid wearing a long sleeved shirt – these are difficult to cover properly.
- Wear the overall legs over footwear. Tucking them in lets dust into footwear.
- Wear the hood over the RPE straps.
- Dispose of used overalls as asbestos waste.

Caution: Never take used overalls home.

Gloves

- If you wear protective gloves, use single-use disposable gloves. If you must use latex gloves, use only 'low protein powder free' gloves.
- Dispose of used gloves as asbestos waste.

Footwear

- Boots are preferable to disposable overshoes which cause a slipping risk.

Caution: Never use laced boots, these are very difficult to clean properly.

Respiratory protective equipment (RPE)

- Use suitable RPE with an Assigned Protection Factor of 20 or more.
- Suitable types of RPE:
  - disposable respirator to standards EN149 (type FFP3) or EN1827 (type FMP3);
  - half mask respirator (to standard EN140 with P3 filter; or
  - semi-disposable respirator (to EN405) with P3 filter.

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HSE Health and Safety Executive

em7
asbestos essentials
Non-licensed tasks

Using damp rags to clean surfaces of minor asbestos contamination

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out this work if you are properly trained and have the right equipment.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- You must be trained to work safely with asbestos materials.
- Use each damp rag surface only once.

This sheet explains how to use rags to clean minor asbestos contamination from smooth, non-absorbent surfaces and equipment.

Equipment

- bucket of water;
- either cotton rags that do not shed fluff onto clean surfaces, or impregnated rags (eg 'Tak' rags);
- adhesive tape, to collect small dust deposits; and
- asbestos waste container, eg labelled polythene sack.

Procedure

- Pick up bigger pieces of debris and put them in a suitable waste container.

Rags

- Impregnated rags do not need soaking.
- Soak the rag in water. Fold in half or quarters. Wring it out.
- Wipe the contaminated surface.
- Re-fold the rag to give a clean surface.
- Repeat until you have used all the clean surfaces of the rag.
- Put the used rag in a bag. Get a clean rag, and repeat cleaning until all surfaces are clean.

Wiping up debris with a damp rag.

Caution: Never re-soak a contaminated rag. This contaminates the water.

Tape

- Tape is useful only for removing small dust deposits. Surfaces may need repeated tape applications.
- Place a strip of tape over the contaminated surface. Peel it off slowly.
- Put the used tape in a bag. Repeat with a fresh piece.

Wastes

- Put bags of used rags and tape in a suitable asbestos waste container.
- Tape the container closed.
- If you avoid contaminating the bucket of water, no special precautions are need for water disposal.
- See sheet em9 for disposal.

1 of 2 pages

HSE Health and Safety Executive

em8
asbestos essentials
Non-licensed tasks

Personal decontamination

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.
- You must be trained to work safely with asbestos materials.
- You must be trained to use PPE and RPE properly.
- Remove your respirator last.

This sheet describes how to decontaminate yourself after any work with asbestos materials.

Personal decontamination is easier when you wear the correct personal protective equipment (PPE).

You need to decontaminate yourself properly, otherwise you may take asbestos fibres home on your clothing and expose your family and friends.

Procedures

Removing and decontaminating personal protective equipment (PPE)

- Clean your boots with damp rags – see sheet em7.
- Where available, clean your overalls with the brush attachment on a Class H vacuum cleaner. Vacuum off the brush.
- Otherwise, use damp rags by a 'patting' action. Rubbing can disturb fibres.
- Where there are two workers, they can help to clean each other.
- Peel off disposable overalls. They should be inside out. Put them in a suitable asbestos waste container.
- Bag up re-usable overalls for a specialist laundry.
- Finally, remove your disposable respirator and place it in the asbestos waste container.
- Tape the container closed.

Personal decontamination

- Can you use site washing facilities? If so, they must be for your use only.
- Keep other people out during personal decontamination, and until you have cleaned the facilities.
- Wash every time you leave the work area.

Make sure you restrict access

'Buddy' cleaning using a Class H vacuum cleaner

1 of 2 pages

HSE Health and Safety Executive

em9
asbestos essentials
Non-licensed tasks

Disposal of asbestos waste

Equipment and method sheet

What this sheet covers

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Remember:

- Asbestos fibres can cause lung cancer and lung diseases.

This sheet describes good practice when you need to dispose of asbestos waste.

Any asbestos product or material that is ready for disposal is defined as asbestos waste. Asbestos waste also includes contaminated building materials, tools that cannot be decontaminated, personal protective equipment and damp rags used for cleaning. If in doubt, always treat waste as 'Hazardous' or 'Special'. See the table for more details. You can discharge waste water that may be contaminated with traces of asbestos to the sewage system.

Vehicle placard

Asbestos warning sign

England and Wales	■ Asbestos waste is 'Hazardous Waste' when it contains more than 0.1% asbestos. ■ The Hazardous Waste Regulations apply. Complete a Waste Consignment Note. ■ Contact the Environment Agency for more information.
Scotland	■ Asbestos waste is 'Special Waste' when it contains more than 0.1% asbestos. ■ The Special Waste Amendment (Scotland) Regulations apply. Complete a Waste Consignment Note. ■ Contact the Scottish Environment Protection Agency for more information.
England, Scotland and Wales	■ All asbestos waste is subject to Schedule 2 of the Control of Asbestos Regulations 2012 and most waste is subject to the Carriage of Dangerous Goods (etc) Regulations 2009 (CDG 2009). ■ Firmly bound asbestos – asbestos cement and articles with asbestos reinforcement – does not release hazardous or respirable fibres easily. CDG does not apply. ■ The Carriage of Dangerous Goods (etc) Regulations 2009 (CDG 2009) applies for all other asbestos waste. See 'More help'.

Caution: Don't mix asbestos waste with other waste to get below 0.1%.

■ Waste must be packed in UN approved packaging with a CDG hazard sign and asbestos code information visible.
■ Double-wrap and label asbestos waste. Standard practice is to use a red inner bag with asbestos warnings, and a clear outer bag with the CDG sign.

Caution: Don't overfill bags. Beware sharp objects that could puncture plastic.

1 of 2 pages

This is not a health and safety risk assessment

1. APPLICABILITY

This document details the standard field procedures used by AECOM EHS & Remediation Services group in the UK and Ireland to undertake cone and quartering of soil or aggregate samples. Cone and quartering is the process of reducing a representative sample (that is too large for transit and/or laboratory testing) to a smaller, more conveniently sized sample that remains sufficiently representative of the original material sampled.

2. SAFETY

All work must be conducted in accordance with the requirements of the project Health, Safety and Environment Plan (HSEP), which should include details of any specific safety procedures or risk management measures to be adopted during sampling.

3. OBJECTIVE

The key objective of cone and quartering is to obtain a small representative sample by systematically reducing the size of a larger original sample.

4. METHOD

Required Equipment and Materials

- Plastic sheet or plastic tray
- Spade or hand trowel or scoop (dependent on size of original sample and nature of material being sampled)

General Procedure

Step 1: Take a large enough sample from the material being sampled such that the sample adequately incorporates (in proportion) all components and size fractions of the material, and dependent on the size of the original sample, place that original sample either on plastic sheeting on the ground or in a plastic tray.

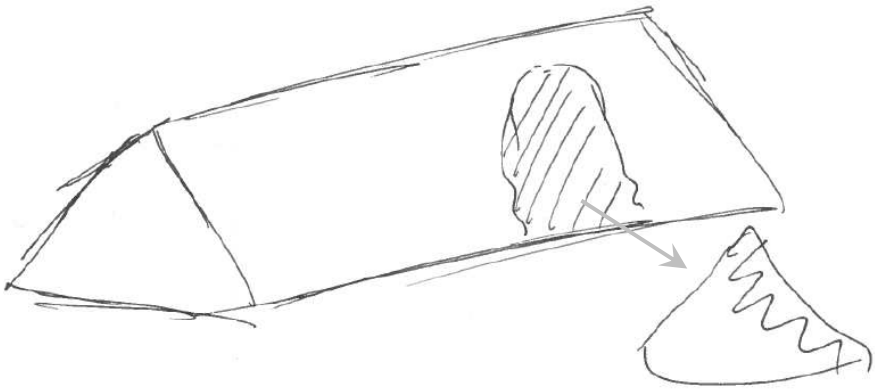
Step 2: Thoroughly mix the sample using a spade or trowel or small scoop as appropriate, and shape the mixed material into a cone-shaped pile permitting the material to cascade symmetrically without bias down the face of the cone.

Step 3: Flatten the pile into a disc shape.

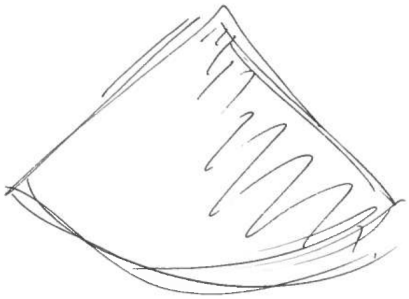
Step 4: Divide the disc into four quarters.

Step 5: Remove and discard two opposite quarters (or retain if duplicate samples are required), and combine the remaining two quarters into a separate pile. If the combined pile from the two remaining quarters is the desired weight and/or volume required for the laboratory sample, place the combined sample in the required sampling containers for transit to the laboratory. If the combined pile from the two remaining quarters is still too big for the required laboratory sample containers, mix the remaining two opposite quarters together and repeat steps 2-5 until the required sampled volume and/or weight is achieved.

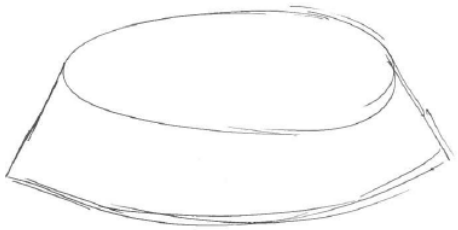
Step 1



Step 2

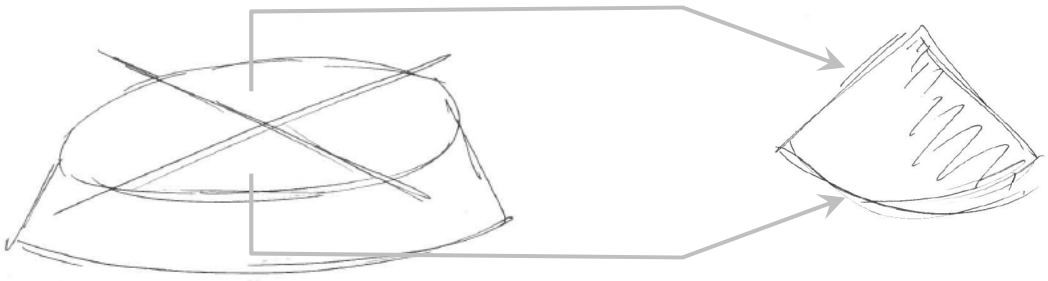


Step 3



Step 4

Step 5



5. ADDITIONAL INFORMATION

Gerlach R.W, Dobb D.E, Raab G.A, Nocerino J.M, Gy sampling theory in environmental studies. 1. Assessing soil splitting protocols, Journal of Chemometrics, 2002, Vol 16, 321-328.

This is not a health and safety risk assessment

1. PURPOSE AND SCOPE

This document describes the procedures that are necessary to ensure the quality of AECOM's field sampling activities (Quality Assurance (QA)) as used by AECOM Environmental Liability Solutions (ELS), within the Environment & Ground Engineering group in the UK and Ireland. These procedures help to ensure that field sampling, laboratory analysis and reporting are conducted using proper procedures, resulting in the collection of representative samples and meeting Data Quality Objectives (DQO).

Quality Control (QC) procedures are used to verify the quality of the output of the sampling activities. Adherence to these procedures forms the basis for an acceptable field sampling quality assurance program.

The procedures contained in this document are to be used by AECOM field staff when collecting and handling samples (e.g. soil and water matrices) in the field. This Fieldwork Procedure does not cover in detail the preparation (e.g. calibration) or use of sampling equipment that may need to be employed, nor the specific sample collection procedures themselves. Reference to the relevant Fieldwork Procedures should be made for such purposes. Related Field procedures are referenced in the body of this document and listed in Section 6. Reference should also be made to the Laboratory Quality Manual for ELS, which provides additional technical and supporting information.

This procedure applies to field monitoring activities using hand-held field instruments as well as to sampling of environmental media for shipment to laboratories.

2. SAFETY

All work must be conducted in accordance with the requirements of the project Health, Safety and Environment Plan (HSEP). Safety requirements will be dependent upon the nature of the sampling undertaken.

Relevant AECOM SH&E Procedures may include but are not limited to the following:

- S3EMIA-117-PR1 Hazardous Waste Operations
- S3EMIA-208-PR1 Personal Protective Equipment
- SMS 027 Work over water
- SMS 053 Marine safety and Boat operations
- S3EMIA-303-PR1 Excavation and Trenching

It should be stressed that the above listing is only illustrative in nature.

Note also that special provisions apply in the case of sampling asbestos-containing material in soil including (in the UK) compliance with the relevant parts of the Control of Asbestos Regulations 2012. Reference must be made to Field Procedure FP17 Sampling Asbestos-Containing material in Soil as well as the relevant HSE documentation referenced in this procedure

3. TERMS AND DEFINITIONS

Data Quality Objectives	Qualitative and quantitative statements that define the study objectives and appropriate type of data, and specify levels of potential errors that will be acceptable as the basis for establishing the quality and quantity of data needed to support decisions.
Sampling or Monitoring Plan	A plan identifying the type, location and rationale for each sample, and the method by which that sample should be taken.

Analytical Schedule	The identification of which field and/or laboratory testing should be carried out for each sample. This will influence the size and type of sample required.
Composite sample	A sample collected over a temporal or spatial range that usually consists of a series of discrete, equal samples which are then combined together. The purpose of composite samples is to represent the average characteristics of the material being sampled.
Deionised water	Laboratory reagent grade water that has been treated by passing it through a standard deionising resin column or similar, and as a minimum, should contain no detectable inorganic or organic compounds.
Grab sample	An individual sample collected from a single location at a specific time or period of time.
Sample	A portion of material selected from a larger quantity of material.
Variability	The distribution or range of results around the mean value obtained from samples within a population. The range of results due to changes in contaminant concentrations over time is called temporal variability, changes as a function of their location is called spatial variability and changes due to the sample collection and handling techniques is called sample handling variability.
Chain of custody	The Chain of Custody (COC) details an unbroken trail of accountability that ensures the physical security of samples, data, and records. Can be either electronic and/or paper. Each analytical laboratory has its own format and style.
Holding time	Maximum recommended time between the sampling event and the sample extraction by the laboratory.
Replicate sample	Replicate samples are obtained and apportioned, after mixing (if appropriate) into two (i.e. duplicates) or more (e.g. triplicates) separate samples or sequentially and repeating the sample acquisition technique for each (i.e. in a manner to minimize differences). Typically, the field duplicate sample is sent as an unknown ('blind sample') to the primary laboratory to assess the variability or homogeneity of a sample matrix, together with the sampling and laboratory analysis precision. A triplicate sample is sent to a secondary laboratory as a check of the analytical performance of the primary laboratory and to estimate the inter-laboratory analysis precision.
Field blank	A field blank is a sample that is prepared in the field to evaluate the potential for contamination of a sample by site environmental conditions (e.g. air-borne dust which could contaminate a water sample, discharge of volatile organic compounds (VOCs) from a vent) or from the handling of the sampling containers. A field blank sample is obtained by pouring uncontaminated deionised into the appropriate sample containers at pre-designated locations at the site.
Filter blank	A filter blank is obtained to assess the potential for contamination during field filtration such as during the collection of water samples for dissolved contaminants such as metals.

	A filter blank sample is obtained by passing deionised water through at least one filter from each lot and collected in appropriate containers and submitted for the same analyses. (For chlorophyll sampling, filters should be prepared using deionised water and submitted for the same chlorophyll analysis).
Trip blank	A trip blank is only required where water samples are collected for VOC analysis. Trip blanks estimate the potential contamination during sample handling, storage and transportation from field to laboratory, but can also identify any contamination from the sample containers and preservatives used for VOC analysis. A trip a blank differs from field and filter blanks as it is not opened to the environment during the sampling process. The sample is prepared by the laboratory with reagent water free of the analyte of interest and the blank is shipped with the sampling containers to the field and returned unopened to the laboratory for analysis.
Equipment blank (or Rinsate Blank)	Rinsate blanks estimate field decontamination procedures whenever field sampling equipment is decontaminated and re-used in the field. A rinsate blank is collected by rinsing the exposed part of the sampling equipment with deionised water (after it has been decontaminated according to standard field procedures for sample operations). The rinse water is collected and analysed for the same suite of contaminants as for the samples taken by the equipment concerned.
Matrix spike	The Matrix Spike (MS) is a separate aliquot of the sample spiked with known concentrations of the target analytes which is treated exactly as the other samples in terms of preparation and analysis. The purpose of the matrix spike is to determine if the recoveries of the compound are within acceptable limits and the effects of the matrix on the degree of recovery. A Matrix Spike Duplicate (MSD) is used to assess analytical precision for each analyte within the particular matrix concerned.

4. PROCEDURES

Sampling Plan and Analytical Schedule

Field staff must be provided with a Sampling Plan and an Analytical Schedule for the field work and must familiarise themselves with and understanding the Plan and Schedule prior to the work commencing. The Sampling Plan and Analytical Schedule should form part of the wider Project Execution Plan or Work Plan for the works.

Review of Previous Site Information

Field staff should familiarise themselves with previous information about the site and encountered ground conditions, including the results of previous sampling or monitoring events if available, such that they able to recognise field conditions that are different on-site to those that might be expected and thereby be able to identify whether a modification to the Sampling Plan and/or Analytical Schedule may be required.

Sampling/Monitoring

Sampling and/or monitoring should be undertaken in accordance with applicable field procedure for the particular task. This includes the monitoring and/or sampling method and the required records (for

example equipment calibration records, field monitoring proformas and chain of custody). Refer to Field Procedures FP03 (soil sampling), FP05 (Surface Water, Tap Water and Sediment Sampling) or FP11 Groundwater Gauging and Sampling. For sampling of excavations on petrol filling stations reference should be made to FP21 Fuel Station Excavation, Sampling and Backfilling. Instructions on cone and quartering of soil or aggregate samples, where appropriate are provided in Field Procedure FP 24 Soils Sample Volume Reduction and Sub-sampling by Cone and Quartering.

Scheduling of replicate samples, blanks and spikes

The inclusion and recommended frequency of collection of QA/QC samples during field work is summarised the table below. Where there are client or regulator-specific requirements for greater frequencies these should take precedence.

Sample Type	Purpose	Frequency
Replicate samples (QC)	To assess reproducibility of laboratory and field procedures and degree of non-homogeneity of matrix.	At a minimum, field duplicates of aqueous samples should be obtained at a frequency of one per round or 1 in 20, if >20 samples.. The requirement for soil replicates should be determined on a project basis and in some instances it may be preferable to schedule MS/MSD as a means of assessing precision/matrix effects
Replicate samples (other requirements)	Aside from specific QA/QC requirements it is good practice to take duplicate samples in cases where: • Highly elevated concentrations of a particular determinand are likely to be present necessitating dilution by the lab and thereby raising he reporting limit for other target compounds • The presence of an interfering substance is suspected, e.g. where colorimetric methods are used	Only where such instances are suspected. Note that the contract laboratory may require duplicates in certain instances for such purposes.
Field blank	To check potential for contamination of a sample primarily by site environmental conditions, during sample collection, but potentially (and in most instances for volatiles only) sample shipment, and in the laboratory	The requirement for field blanks should be evaluated according to site specific circumstances and the taking of other blanks such as rinsate blanks (see below). It may be nullified for analytes/matrices where potential for contamination is deemed insignificant (e.g. for most sites, heavy metals in soil). Where necessary, a field blank should be obtained for each group of samples per round of sampling, or at a rate of 1 in 20

Sample Type	Purpose	Frequency
		samples collected per matrix (in most cases water only). However this frequency should be modified to take into account the vulnerability of a particular sample to contamination from say fugitive emissions, such as one taken close to a vent. Additionally, if an equipment blank is also taken, then a field blank taken at the same location may be put on hold (pending holding time requirements) and analysed only if contamination is detected in the equipment blank
Filter blank	To check the potential for contamination during field filtration.	Filter blanks are not routinely required, although for certain low level determinations of specific analytes there may be a requirement to assess any contamination arising from the filtering equipment. Where this is required then a filter blank should be obtained for each round of water samples, or at a rate of 1 in 20 samples collected. Where an equipment blank is also taken then the filter blank sample may be put on hold and analysed only if contamination is detected in the equipment blank
Trip blank	To check potential contamination during sample handling, storage and transportation from field to laboratory (**required only where water samples are collected for VOC analysis**)	At a minimum, one trip blank (sample vial) should accompany each consignment (cool box/container) of samples being shipped to the laboratory for VOC analysis.
Equipment (rinsate) blank	To check field decontamination procedures.	Requirement is dependent upon the potential for contamination arising from any equipment used for sampling the environmental medium (e.g. a bailer used for groundwater sampling). Frequency as per field blank (see above). Refer to Field Procedure FP07, Decontamination of Equipment for further information
Matrix spike/Matrix Spike Duplicate	Recoverability of contaminant from matrix (MS) /precision (MSD)	Project specific requirement: typically used for assessing unusual matrices which may

Sample Type	Purpose	Frequency
(MS/MSD)		reduce degree of recoverability (e.g. highly organic soil), large scale projects with multi-soil samples or for organics analyses where lab does not routinely include surrogates. If required then a MS/MSD should be included at a frequency of 1 in 20 samples collected per matrix.

Sample ID

Sample nomenclature used in the labelling of samples and records of field monitoring should accord with the naming conventions established in the Sampling Plan. Field staff must familiarise themselves with the required naming convention prior to undertaking the works. Make sure that:

- Designations are clear and simple
- Designations are consistent with any previous ID nomenclature for the site and/or project
- Each unique sample location is distinct
- IDs are consistent across field notes, maps, logs, monitoring records, sample containers and chain of custody documentation.

The use of electronic methods to record sample ID through the use of bar coding in the field is to be encouraged as this lessens the potential for logging in errors at the laboratory.

Checking of Field Measurements on Collection

A 'reality check' should be performed on the data from field measurements (including for example temperature, redox potential, oxygen etc.) at the time of collection to assess whether they are within the expected range for the relevant parameter and/or there are any conflicting results such as elevated oxygen and low redox. Also at the time of collection, data should be compared to previous results (if available) in order to identify any anomalies. Where such checks indicate that readings appear to be anomalous site staff should attempt to resolve, or contact the Project Manager for direction.

Checking of Field Records

The complete field records should then be checked by the originator on the day of the field work, and identified anomalies/inconsistencies with previous data and/or the conceptual model for the site communicated to the Project Manager as soon as reasonably practicable. Field records should also be confirmed as being complete before leaving site. Any deviation from the original scope of work should be communicated to the PM.

Completed field notes and field sample data sheets including but not limited to, daily activity logs, operations and maintenance records, site walkover checklists, survey data, and boring logs, should be returned to the office and placed in a designated location for review prior to Technical Review, finalizing, scanning, uploading, and filing.

Review of field notes should be completed as soon as possible, generally within 5 days of the field event. The review should include the following tasks:

- Performing a detailed check of field data sheets for completeness, accuracy, and any potential safety observations that may be added into Industry Safe. It is recommended that the Checker be someone other than the field person who completed the work, and who is tasked with checking field notes and sample data sheets on a regular basis. Checkers should only be tasked with checking field notes and field data sheets for tasks generally consistent with the Checker's area of expertise and experience.
- Field data sheets and field screening values should be verified to check that observations are in keeping with standard methods, if any, specific to local requirements (i.e., stability of indicator

parameters prior to sample collection, as in the case of low-flow groundwater sampling). Exceptions should be reviewed with the PM to determine if any outliers are significant.

- Field measurements that are outside-range for equipment should be flagged and addressed with the PM and field personnel.
- Data collected for permit compliance (or other regulatory requirement) should be checked for compliance before tabulating and reporting data. The PM should be notified of any non-compliance.
- Chain of custody confirmation reports from analytical laboratories should be checked for consistency with the Sampling Plan and Analytical Schedule on the day of receipt and errors/omissions should be communicated to the laboratory and resolved within the sampling holding time.

Selection of Analytical Laboratory and Analytical Method

Sub-contract laboratories should be selected on the basis of AECOM's procedure for approved suppliers. For UK/Ireland the laboratory should be selected from the Tier 1 list for routine analysis or from the Tier 2 List for specialist services.

Checking of Laboratory Records

A Data Validation Summary Report (DVSR, Attachment 1) should be completed, filed and retained in the project files in accordance with project document retention requirements. The DVSR should be used for the checking of information as it becomes available in order that any issues can be responded to without further delay, as well as providing an ultimate record of data validation, once the final package has been received. It is recommended that the DVSR is completed in conjunction with the QA reporting tool in ESdat, where this is available, as this completes most of the data checks automatically. Further details are provided in the Laboratory Quality Manual for ELS, UK & Ireland

1.	Chain of Custody	The chain of custody requires signature and date of each transfer of custody. An analytical result form is necessary for each parameter requested on the chain of custody. ,
2	Sample IDs	Sample ID's should be checked against field records.
3	Sample temperatures on receipt	The reviewer should verify that the samples were received at an acceptable temperature, For elevated temperatures, (and particularly any above 10°C), sample temperatures recorded on site should be reviewed accordingly, in order to assess whether the condition of samples as received is acceptable.
4	Holding Times	The time between sample collection and sample extraction/digestion (or direct analysis) is referred to as holding time. When the holding time has been exceeded the sample is deemed as deviating and should be flagged accordingly. Professional judgement must then be used to assess data usability
5	Unit consistency	The verifier should check that the units of measurement correspond to the laboratory's schedule as previously provided to AECOM , are consistent for all analyses conducted for a specific determinand and appear realistic (or within expectations) in terms of their magnitude (e.g. µg/l versus mg/l).
6.	Detection (reporting) limits	The reporting limits should be checked against the laboratory's schedule as previously provided to AECOM. Where it is necessary to deviate from these, there should be clear explanation, e.g.as a result of dilution of a

concentrated sample. Typically, data are compared to screening criteria, so the laboratory reporting limit should therefore be less than the latter, Dilution resulting in non-detect results greater than the screening criteria is considered unacceptable unless there is no alternative available (including the provision of a field duplicate). .

7 Accreditation and methodology

The laboratory certificate should reference the analytical method used and whether or not the results are accredited. The verifier should check that method details correspond to the laboratory's schedule as previously issued to AECOM.

8 Consistency with historical data

In the case where data are being generated on a regular basis, the verifier should compare the current results and concentrations to historical information to assess consistency. In the absence of any specific explanations, changes greater than 3 standard deviations may be considered questionable. Any significant changes in analytical concentrations should be brought to the PM's attention, preferably verbal followed by written documentation via email.

9 Comparison of data with visual/olfactory evidence

The verifier should check that data are consistent with any visual or olfactory indications of contamination in the field including vapour headspace (PID) readings, odours, colouration and presence of free product

10 Duplicate samples identified

Duplicate samples should be readily identifiable alongside the original sample, according to the field sampler's notation

11 Duplicate sample frequency

Duplicate samples should correspond to a frequency of at least 1 in 20 in the case of water samples or as identified in the project plan

12 RPD acceptable

Relative percent differences (RPDs) should be in accordance with the following guidelines:

Sample concentration	RPD Acceptability criteria
If sample concentration <10x MRL	RPD not critical
If sample concentration >10x<20x MRL	RPD<50%
If sample concentration >20x MRL	RPD<30%

MRL = method reporting limit

13 Trip blank results acceptable

No analytical constituents should be detected in the Trip blank. In the event that a specific analyte is detected, all concentrations detected in the sample below or equal to the trip blank concentration should be flagged and treated as less than or equal to their reported value. Any sample data that are up to five times higher than the trip blank concentration should be flagged and professional judgement used to assess their usability.

14	Field and equipment (rinsate) blanks.	No analytical constituents should be detected in the blanks. In the event that a specific analyte is detected in the equipment blank, analysis of the field blank should be scheduled (if not done previously), to evaluate source of contamination. All concentrations detected in the sample that are below or equal to the field/equipment blank concentration should be flagged and treated as less than or equal to their reported value. Any sample data that are up to five times higher than the blank concentration should be flagged and professional judgement used to assess their usability.
15	Laboratory blank (where details provided)	Lab. blanks are checked through the laboratory's internal QC system and the information is not routinely provided with the lab certificates. For instances where data are available then in the event that concentrations of a specific analyte are detected, all concentrations detected in the sample that are below or equal to the method blank concentration should be flagged and treated as less than or equal to their reported value. For common laboratory contaminants, methylene chloride (dichloromethane), acetone, 2-butanone and naphthalene, sample concentrations that are up to twice the reported value in the blank should be flagged and reported as less than twice their reported value in the blank.
16.	Laboratory Surrogate	All surrogate percent recoveries should be within the listed laboratory generated control limits. Whilst these are normally checked through the Laboratory Information Management System (LIMS), a manual check should be performed by the AECOM verifier where surrogate recovery is less than 30%, Any percent recovery less than the 10% would be normally be considered unacceptable
17	Laboratory Control Samples	All laboratory control spike percent recoveries should be within the listed laboratory generated control limits (normally within three standard deviations, or not successively greater than two standard deviations). Typically this information is not routinely available to the verifier, but for guidance purposes, any target compounds returning recoveries of below 30% should be checked against the laboratory's control limits.
18	Matrix Spike / Matrix Spike	All matrix spike percent recoveries should be within the listed laboratory generated control limits. The generally accepted range is 60-140% for organics[1] and 75-125% for inorganics[2]. Any percent recovery less than 30% should be considered unacceptable, unless the laboratory generated limit was less than 30%. Matrix Spike Duplicates should be compared against Matrix Spikes by calculating the RPD

[1] USEPA (2014) National Functional Guidelines for Superfund Organic Methods Data Review. Office of Superfund Remediation and Technology Innovation (OSRTI), Ref EPA-540-R-014-002 August 2014. United States Environmental Protection Agency (EPA), Washington DC

[2] USEPA (2014) National Functional Guidelines for Inorganic Superfund Data Review. Office of Superfund Remediation and Technology Innovation (OSRTI), Ref EPA-540-R-013-001 August 2014. United States Environmental Protection Agency (EPA), Washington DC

		and comparing against the relevant criteria (refer to RPD assessment details)
19	Deviations: Case Narrative	Any deviation from laboratory standard operating procedures or quality control procedures should be reviewed for implications on data usability and the data flagged accordingly. The information may be incorporated within the laboratory certificate or provided as a Case Narrative. The Case Narrative follows the cover letter of the data report and chronicles the laboratory processes that were taken to generate the data. Any deviation from laboratory standard operating procedures may be conveyed to the data user on this form as well as any deviation from laboratory quality control parameters.

The data reviewer may consider data acceptable for use when all items have no issues, outliers, or anomalies. Flags or issues must be elevated to the PM to determine the significance. When appropriate, written explanations of outliers or anomalies may be requested from the laboratory supplying the data. Unacceptable outliers may result in rejection of the data from further use. The project team may consider re-sampling to replace the data.

Review of laboratory analytical data should be completed as soon as possible, generally within 5 days of receipt. Once the laboratory data report has been reviewed and verified to be free of qualifiers or errors, the data may be entered into tables for comparison with historical concentrations and/or regulatory limits or other project–specific criteria.

Whether tables with analytical data are generated manually or using automated databases, a final check of the data against the original lab report is warranted to ensure no transcription errors have occurred. As a guide a minimum of 10% of line entries should be checked.

Tables which have not had a final QA/QC completed should be labelled DRAFT for clarity.

5. RECORDS

The official records that are generated and support this procedure are:

- Field equipment calibration record
- Field monitoring record
- Chain of custody record
- Field records QA/QC technical review record
- Data Validation Summary Report (Attachment 1)

6. REFERENCES

Laboratory Quality Manual for ELS

The following Field Procedures should be referred to in conjunction with this Procedure where applicable.

FP03 Soil Sampling

FP05 Surface Water, Tap Water and Sediment Sampling

FP07, Decontamination of Equipment

FP11 Groundwater Gauging and Sampling

FP17 Sampling Asbestos-Containing Material in Soil

FP21 Fuel Station Excavation, Sampling and Backfilling

FP 24 Soils Sample Volume Reduction and Sub-sampling by Cone and Quartering

7. ATTACHMENTS

Data Validation Summary Report

AECOM

DATA VALIDATION SUMMARY REPORT

Site name:		**Samples collected by:**	
Project number:		Date	
Project Manager:		Signed	
Matrix type:		**Analytical data checked by:**	
Primary samples:		Date	
Laboratory used:		Signed	
Lab batch reference (s):		**Project Manager:**	
		Date	
		Signed	

General Issues	Task Name	Errors (Y/N)	Comments	Completed by
1	Deliverables checked against chain of custody			
2	Sample IDs reviewed			
3	Sample temperature on receipt checked			
4	Holding times acceptable (including subcontracted analyses)			
5	Unit consistency reviewed			
6	Check LOD / MDL are as expected.			
7	Are the results accredited?			
8	Do the results fit with previous concentration trends?			
9	Comparison of data to visual/ olfactory evidence			

Specific Issues	Task Name	Errors (Y/N)	Comments	Completed by
10	Duplicate samples identified			
11	Duplicate frequency appropriate (1 in 20 samples)			
12	RPD assessment acceptable			
13	Trip blanks results acceptable			
14	Field & Equipment/Rinsate blank results acceptable			
15	Laboratory blank acceptable			
16	Surrogate laboratory data acceptable			
17	AQC data acceptable			
18	Matrix spike (and Matrix Spike duplicate) data acceptable (optional)			
19	Relevant data added to table footnotes & any deviation issues identified			

Specific Issues	Task Name	Errors (Y/N)	Comments	Completed by
20	10% minimum check of tabulated laboratory data against lab certificates			
21	Tabulated field data (e.g. water quality parameters) checked for input errors			

Other Observations

Approvals			
The data set is considered appropriate for reporting			Assessor
The data set is considered appropriate for reporting with the identified issue			Assesssor

Appendix TN15-B - Photographic Logs and Sampling Records

Grenfell Potential Land Contamination Sampling Notes and Photographic Record

Project Reference:	**60595731**	
Date: 05 / 06 / 19	Time Start: 16:20	Time complete 16:50
Weather Conditions:	Dry, cloudy.	
Sample Area:	**Area 1: Bramley House (1st sample)**	
Primary Sample	**GTCS 1 - 25a**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	J Storey
	1st down hole & turf & plastic sheet of soil	
	2nd all tubs filled	

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose black and light brown slightly gravelly clayey sand. Sand is fine to coarse. Gravel is fine to medium flint. Occasional brick and plastic and decomposing wood present (Topsoil / Made Ground)	
Observed CoPC: (note of any ash etc.)	No	
AOB: New location – moved from original where a Jasmin plant has been regularly watered.		

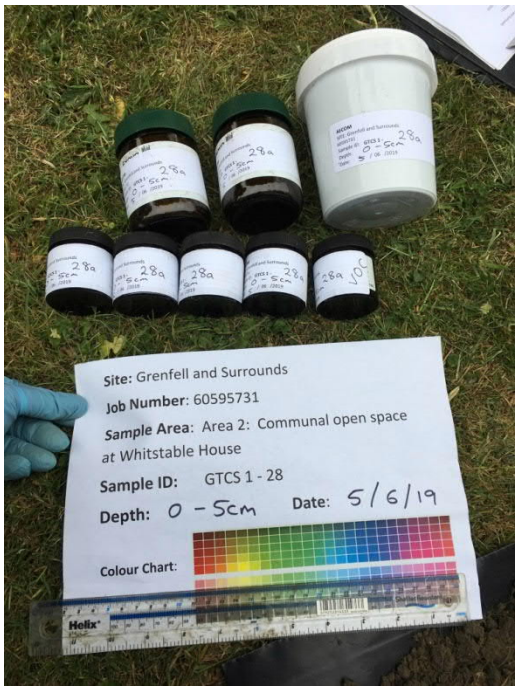
Grenfell Potential Land Contamination Community Engagement Information Record Sheet

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 16:55	Time complete 17:25	
Weather Conditions:	Grey, light wind, dry.		
Sample Area:	**Area 1: Bramley House (2nd sample)**		
Primary Sample	**GTCS 1 - 26a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose very dark brown silty sand. Sand is sub-angular to sub-rounded. Occasional gravels of chert, plastic, organic material, food wrappers, sandstone, brick, paper, tarmac. Possible cladding (in VOC sample jar).	
Observed CoPC: (note of any ash etc.)	Possible cladding fragments Tarmac	
AOB:		

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
18:20</td><td colspan="2">Time complete
18:35</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Overcast, slight breeze</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Area 2: Communal open space at Whitstable House (1st sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 - 27 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">J Storey</td></tr>
<tr><td>1st down hole & turf & plastic sheet of soil</td><td colspan="2"> 
</td></tr>
<tr><td>2nd all tubs filled</td><td colspan="2"> 
</td></tr>
</table>

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs, D Dyson	
Sample Log:	Turf over loose light brown slightly silty gravelly fine to coarse sand. Gravel is sub-angular to sub-rounded. Inclusions of plastic, glass, clinker, coal, rootlets, a marble (toy) and a pencil sharpener.	
Observed CoPC: (note of any ash etc.)	Clinker and coal	
AOB: n/a		

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 17:30	Time complete 18:15	
Weather Conditions:	Cloudy, dry, light wind		
Sample Area:	**Area 2: Communal open space at Whitstable House (2nd sample)**		
Primary Sample	**GTCS 1 - 28 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Dense dark brown slightly sandy silt with occasional sub-angular to sub-rounded flint. Inclusions of plastic, glass and wood.	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**		
Date: 07 / 06 / 19	Time Start: 10:50	Time complete 11:15	
Weather Conditions:	Raining, moderate wind, approximately 15˚C		
Sample Area:	**Area 4: Communal open space at Markland House (1st sample)**		
Primary Sample	**GTCS 1 - 31 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Craggs	
Sample Log:	Light brown slightly silty sand with frequent gravel of flint and brick. Occasional fragments of glass, plastic, shells and rare fragments of shiny black material and grey vesicular charred material.	
Observed CoPC: (note of any ash etc.)	Small shiny black fragments possibly slag. Grey vesicular possibly charred material/slag.	
AOB: n/a		

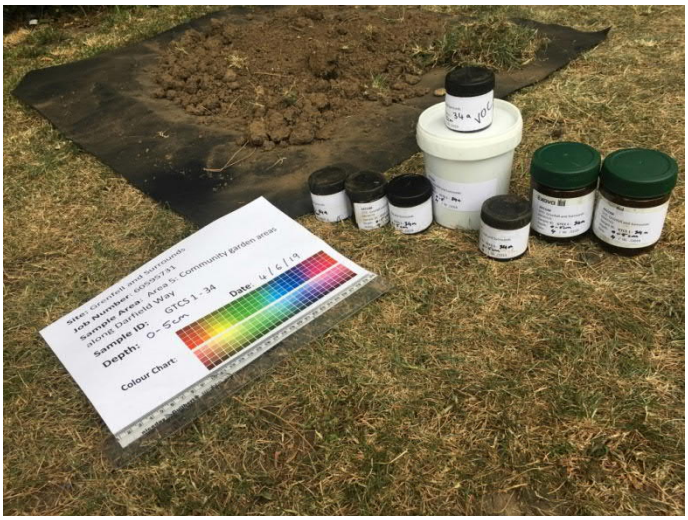
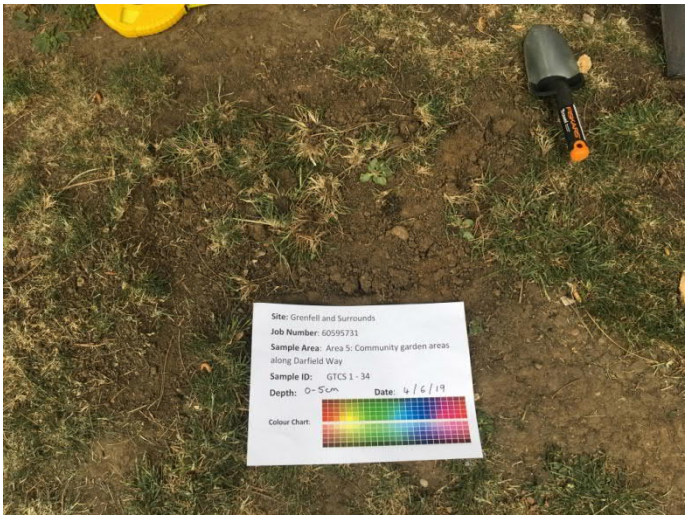
Project Reference:	**60595731**		
Date: 07 / 06 / 19	Time Start: 10:45	Time complete 11:10	
Weather Conditions:	Cloudy, cool.		
Sample Area:	**Area 4: Communal open space at Markland House (2nd sample)**		
Primary Sample	**GTCS 1 - 32 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey	
Sample Log:	Turf over loose light brown silty sand with occasional flint gravel. Occasional ceramic, wood, plastic, fabric. Rare white ashy material.	
Observed CoPC: (note of any ash etc.)	Rare white ashy material.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 09:30	Time complete 10:20	
Weather Conditions:	Grey, light rain, slight breeze		
Sample Area:	**Area 5: Community garden areas along Darfield Way (1st sample)**		
Primary Sample	**GTCS 1 - 33 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	W Hartas, D Dyson, K Bruce, J Storey	
Sample Log:	Grass over light brown medium dense sandy silt with rootlets and occasional gravels. Gravels are sub-angular to sub-rounded of brick, sandstone with occasional fabric and glass (Made Ground).	
Observed CoPC: (note of any ash etc.)		
AOB: n/a		

Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 10:30	Time complete 11:00	
Weather Conditions:	Grey, light rain, light breeze.		
Sample Area:	**Area 5: Community garden areas along Darfield Way (2nd sample)**		
Primary Sample	**GTCS 1 - 34 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	W Hartas, D Dyson, K Bruce, J Storey	
Sample Log:	Patchy grass over loose light brown fine sandy silt with occasional gravel. Gravel is angular fine of chert with rare fragments of brick and glass. Tree root t 3cm depth (Topsoil / Made Ground).	
Observed CoPC: (note of any ash etc.)		
AOB: n/a		

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 04 / 06 / 19</td><td>Time Start:
11:25</td><td colspan="2">Time complete
11:50</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Overcast, moderate breeze, approximately 18˚C</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Area 6: Robinson House (1st sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 - 35 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">J Storey</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2">  </td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2">  </td></tr>
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Project Reference:	**60595731**	
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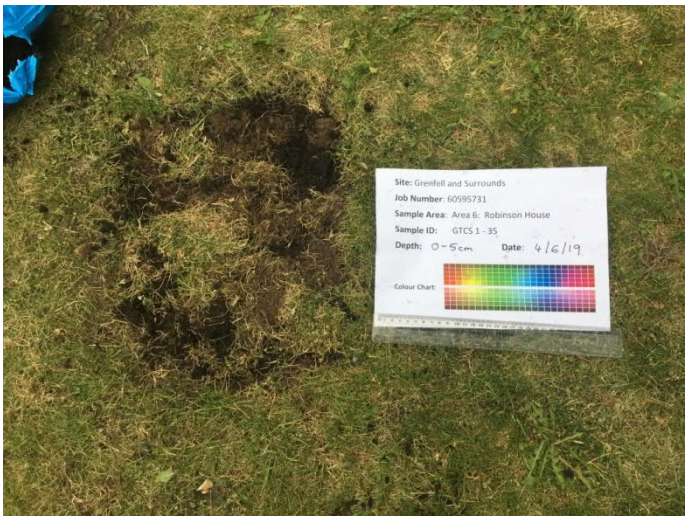
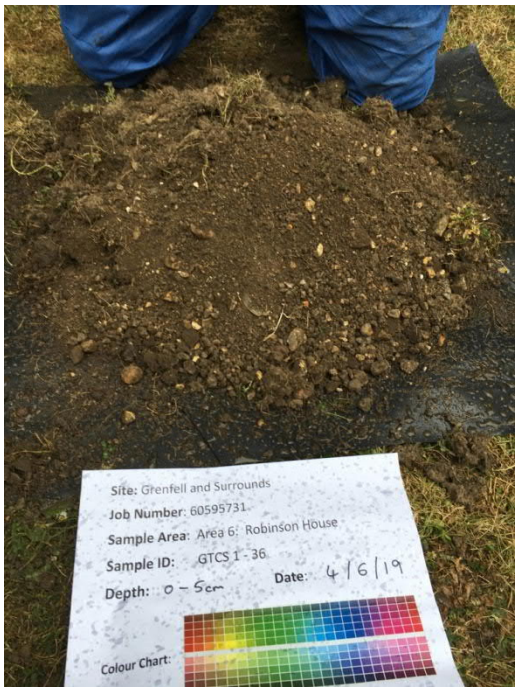
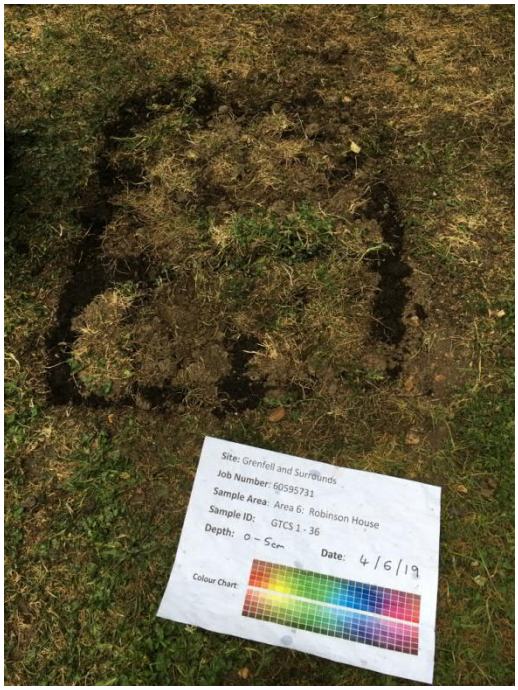
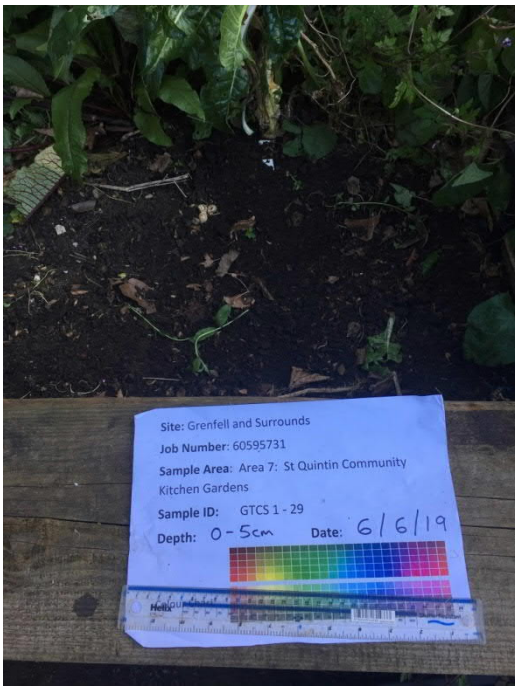
	4th reinstatement	
Field team:	J Storey, W Hartas	
Sample Log:	Dense brown gravelly sandy silt. Gravel is sub-angular to sub-rounded of mixed lithology. Fragments of brick, glass, plastic and occasional ash.	
Observed CoPC: (note of any ash etc.)	Occasional ash.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 11:53	Time complete 12:30	
Weather Conditions:	Overcast, very light rain, breezy, approximately 18˚C		
Sample Area:	**Area 6: Robinson House (2nd sample)**		
Primary Sample	**GTCS 1 - 36 a**		
Duplicate (y/n)	**Yes**		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	J Storey, W Hartas, D Dyson	
Sample Log:	Very dense light brown gravelly sandy silt topsoil. Gravel is angular to sub-rounded of mixed lithology. Fragments of brick, concrete, limestone, ash, glass & plastic with occasional ceramics.	
Observed CoPC: (note of any ash etc.)	Ash	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 15:30	Time complete 16:35	
Weather Conditions:	Sunny, dry, warm		
Sample Area:	**Area 7: St Quintin Community Kitchen Gardens (1st sample)**		
Primary Sample	**GTCS 1 - 29 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

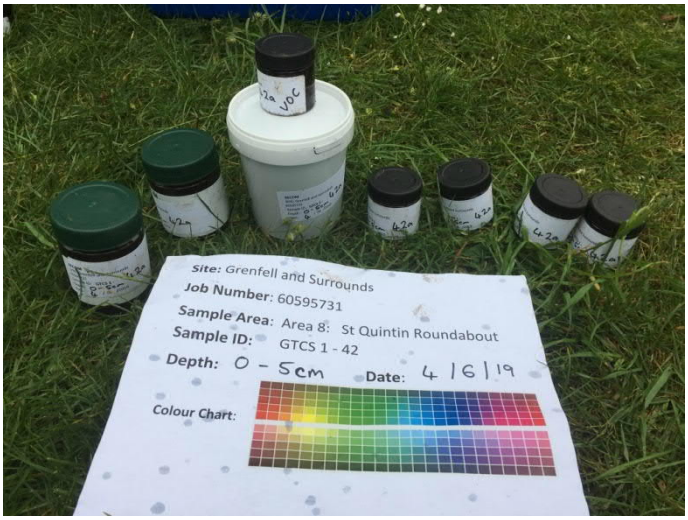
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose dark brown clayey silty medium to coarse sand. Occasional sub-rounded to angular gravel of flint, metal, plastic, frequent ash, clinker, wood. Rare brick fragments. One piece of concrete.	
Observed CoPC: (note of any ash etc.)	Ash / clinker	
AOB:		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 14:35	Time complete 15:25	
Weather Conditions:	Dry, sunny, warm		
Sample Area:	**Area 7: St Quintin Community Kitchen Gardens (2nd sample)**		
Primary Sample	**GTCS 1 - 30 a**		
Duplicate (y/n)	**Yes**		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Dark brown clayey gravelly sand. Sand is fine to course. Gravel is angular to sub-rounded of flint, brick, ceramic, metal, wood, ash and clinker, charcoal and concrete fragments frequent throughout (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	Ash, clinker and charcoal.	
AOB: n/a.		

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 04 / 06 / 19</td><td>Time Start:
14:45</td><td colspan="2">Time complete
15:30</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Rainy, fairly still, approximately 18˚C</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Area 8: St Quintin Roundabout (1st sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 - 41 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">Yes</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">J Storey</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2">  </td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2">  </td></tr>
</table>

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	W Hartas, J Storey	
Sample Log:	Loose brown very silty fine sand with occasional gravel. Gravel is sub-angular to sub-rounded of brick and quartz. Rootlets and plant bulbs. Ants nest present.	
Observed CoPC: (note of any ash etc.)	None	
AOB: n/a		

Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 16:00	Time complete 16:20	
Weather Conditions:	Rainy, fairly still, approximately 18˚C		
Sample Area:	**Area 8: St Quintin Roundabout (2nd sample)**		
Primary Sample	**GTCS 1 - 42 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, W Hartas, D Dyson	
Sample Log:	Loose mid-brown very clayey fine sand. Very occasional fine sub-angular to sub-rounded gravel. Occasional brick, plastic fragments, rootlets and a glass bottle (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	None	
AOB: n/a		

Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 13:30	Time complete 14:00	
Weather Conditions:	Overcast		
Sample Area:	**Area 9: Kensington Memorial Park (St Marks Park) (1st sample)**		
Primary Sample	**GTCS 1 - 37 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	W Hartas, J Storey	
Sample Log:	Very loose dark brown gravelly very sandy silt. Gravel of chert, mica, quartz, glass. Organic matter of wood, sticks and rootlets (Topsoil).	
Observed CoPC: (note of any ash etc.)		
AOB: n/a		

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 04 / 06 / 19</td><td>Time Start:
14:15</td><td colspan="2">Time complete
14:30</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Overcast, damp, approximately 15˚C</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Area 9: Kensington Memorial Park (St Marks Park) (2nd sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 - 38 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">J Storey</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2">  </td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2"> 
</td></tr>
</table>

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	W Hartas, J Storey	
Sample Log:	Firm brown slightly sandy clay with rootlets (Topsoil).	
Observed CoPC: (note of any ash etc.)	None	
AOB: n/a		

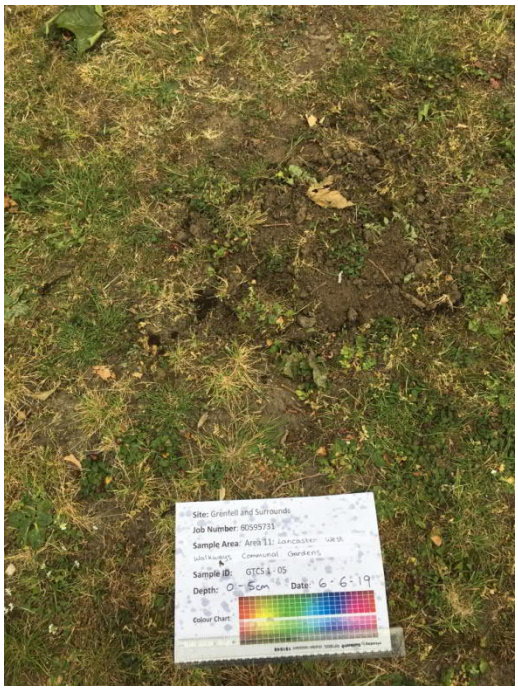
Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 16:20	Time complete 17:10	
Weather Conditions:	Raining		
Sample Area:	**Area 10: West London Bowling Club (1st sample)**		
Primary Sample	**GTCS 1 - 39 a**		
Duplicate (y/n)	**Yes**		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	W Hartas, J Storey	
Sample Log:	Loose dark brown organic silty sand with occasional gravel. Gravel is sub-angular to sub-rounded of mixed lithologies. Occasional brick, plastic and cloth (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	None	
AOB: n/a		

Project Reference:	**60595731**		
Date: 04 / 06 / 19	Time Start: 17:15	Time complete 17:45	
Weather Conditions:	Initial rain followed by dry and sunny		
Sample Area:	**Area 10: West London Bowling Club (2nd sample)**		
Primary Sample	**GTCS 1 - 40 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey, W Hartas	
Sample Log:	Loose medium brown slightly gravelly very silty sand with organic matter and abundant rootlets. Gravel of flint, quartzite and sandstone with ash and glass bottle.	
Observed CoPC: (note of any ash etc.)	Ash and charcoal	
AOB: n/a		

Project Reference:	**60595731**	
Date: 06 / 06 / 19	Time Start: 10:10	Time complete 10:48
Weather Conditions:	Dry and sunny	
Sample Area:	**Area 11: Communal Gardens at Lancaster West Walkways (1st sample)**	
Primary Sample	**GTCS 1 - 5 a**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	J Storey
	1st down hole & turf & plastic sheet of soil	
	2nd all tubs filled	

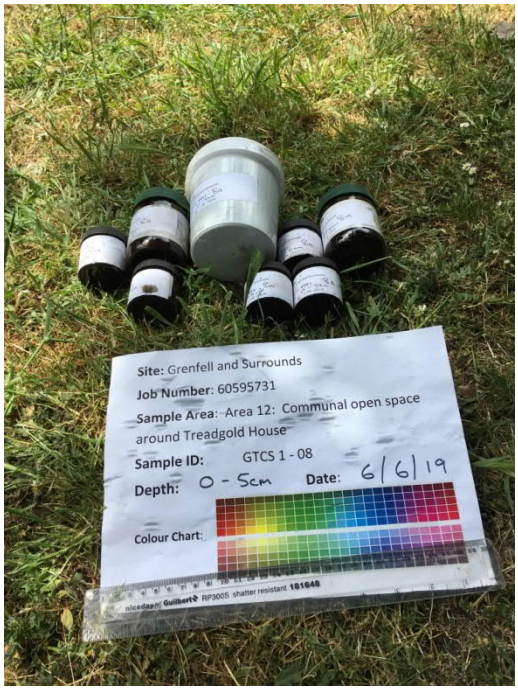
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Scruffy turf over loose light brown very silty fine to medium sand with abundant tree roots and occasional plastic, metal, wood, wire, clinker, porous black/grey ashy debris (1cm max).	
Observed CoPC: (note of any ash etc.)	Clinker fragments, porous black/grey ashy debris (1cm max).	
AOB: n/a		

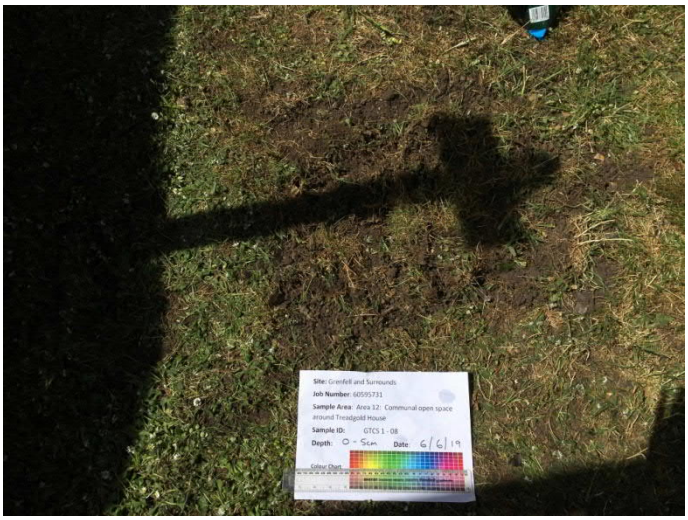
Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 09:30	Time complete 10:00	
Weather Conditions:	Dry, sunny		
Sample Area:	**Area 11: Communal Gardens at Lancaster West Walkways (2nd sample)**		
Primary Sample	**GTCS 1 - 6 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Turf over loose light brown very silty fine to medium sand with occasional flint, glass, brick, plastic and wood. Some fragments of friable, porous ashy grey debris.	
Observed CoPC: (note of any ash etc.)	Possible black lagging / insulation fragments, some very small, some up to 2pence coin size. Some larger lumps of debris.	
AOB: New location from original walkover.		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 11:10	Time complete 11:35	
Weather Conditions:	Sunny, bright		
Sample Area:	**Area 12: Communal open space around Treadgold House (1st sample)**		
Primary Sample	**GTCS 1 - 7 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose greyish brown gravelly very silty sand. Sand is fine to medium. Gravel is sub-angular fine to medium with occasional flint, glass, plastic, grey black ashy material, brick, concrete, black charcoal / burnt fragments, grey porous debris.	
Observed CoPC: (note of any ash etc.)	Grey black ashy material, black charcoal / burnt fragments of grey porous debris.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 11:50	Time complete 12:30	
Weather Conditions:	Sunny, dry		
Sample Area:	**Area 12: Communal open space around Treadgold House (2nd sample)**		
Primary Sample	**GTCS 1 - 8 a**		
Duplicate (y/n)	**Yes**		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose dark brown sandy silt with occasional gravels. Sand is fine to medium. Gravel is sub-angular to sub-rounded of brick, metal, glass, clinker, ash and flint.	
Observed CoPC: (note of any ash etc.)	Ash, clinker, burnt material, porous ashy material.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 10:40	Time complete 11:10	
Weather Conditions:	Cloudy, sunny intervals, still		
Sample Area:	**Area 13: Community garden at Portland Road (northern) (1st sample)**		
Primary Sample	**GTCS 1 - 17 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose brown slightly gravelly clayey sand. Sand is fine to coarse. Gravel is fine to medium sub-angular to angular flint and brick. Rare glass, plastic and charcoal present (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	Charcoal fragments present.	
AOB: n/a		

Project Reference:	**60595731**	
Date: 05 / 06 / 19	Time Start: 11:10	Time complete 12:10
Weather Conditions:	Sunny and dry	
Sample Area:	**Area 13: Community garden at Portland Road (northern) (2nd sample)**	
Primary Sample	**GTCS 1 - 18 a**	
Duplicate (y/n)	**Yes**	
Photos Taken:	Photographer name (camera ID if different)	J Storey
	1st down hole & turf & plastic sheet of soil	
	2nd all tubs filled	

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	J Storey, J Craggs	
Sample Log:	Sub-angular to rounded fine to medium flint gravels at surface. Dark brown slightly gravelly sandy clay. Sand is coarse. Gravel is fine to medium sub-rounded to angular flint, brick, glass, ceramic and coal. Occasional rootlets and wood fragments present. Rare tarmac / asphalt material present (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	Coal, tarmac / asphalt	
AOB: n/a		

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 08:50	Time complete 09:50	
Weather Conditions:	Cloudy, dry		
Sample Area:	**Area 14: Communal space at Avondale Park (residential road) (1st sample)**		
Primary Sample	**GTCS 1 - 23 a**		
Duplicate (y/n)	**Yes**		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose brown slightly gravelly sandy clay. Gravel is angular to sub-rounded fine to coarse of brick and flint. Occasional fragments of metal, glass and plastic. Rare fragments of coal. Rootlets frequent throughout (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	Coal fragments	
AOB: n/a		

Project Reference: **60595731**		
Date: 05 / 06 / 19	Time Start: 09:50	Time complete 10:25
Weather Conditions:	Cloudy, dry	
Sample Area:	**Area 14: Communal space at Avondale Park (residential road) (2nd sample)**	
Primary Sample	**GTCS 1 - 24 a**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	J Storey
	1st down hole & turf	
	2nd plastic sheet of soil	

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose brown sandy clay with rare gravels. Gravel is fine angular to sub-angular brick and flint. Glass, bone and metal (bottle cap) fragments at base. Rootlets very frequent (Made Ground / Topsoil).	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
14:45</td><td colspan="2">Time complete
15:15</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Cloudy, warm, dry</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Area 15: Communal garden at Henry Dickins Estate (1st sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 - 19 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">J Storey</td></tr>
<tr><td>1st down hole & turf & plastic sheet of soil</td><td colspan="2">  </td></tr>
<tr><td>2nd all tubs filled</td><td colspan="2"> 
</td></tr>
</table>

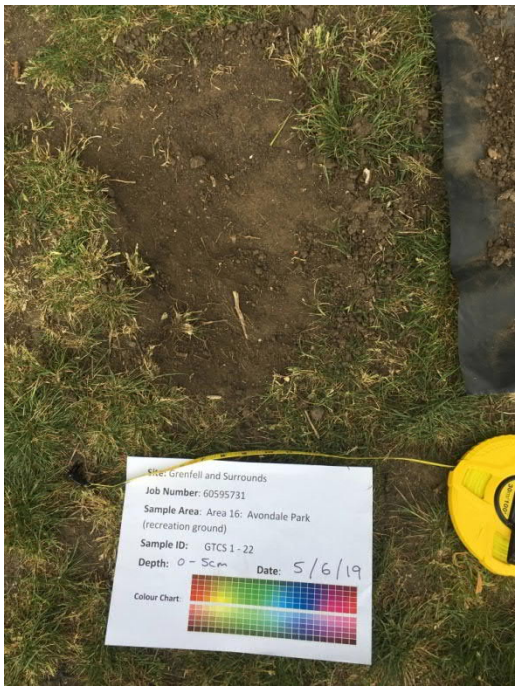
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Slightly loose dark greyish brown silty sand with small fragments of coal.	
Observed CoPC: (note of any ash etc.)	Small fragments of coal.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 15:20	Time complete 15:55	
Weather Conditions:	Dry, warm, cloudy		
Sample Area:	**Area 15: Communal garden at Henry Dickins Estate (2nd sample)**		
Primary Sample	**GTCS 1 - 20 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose dark brown gravelly sandy clay. Sand is fine to coarse. Gravel is angular to sub-angular fine to medium of flint, glass, brick and concrete with frequent wood chippings throughout. Rare coal and occasional cigarette butts (Made Ground / Topsoil) Sandstone and concrete sub-base layer at base of strata (Made Ground)	
Observed CoPC: (note of any ash etc.)	Rare coal and occasional cigarette butts l	
AOB: New location: sample areas determined through original method – dividing the site into 10 quadrants and a using random number generator to select the two locations (GTCS 1 - 19 and GTCS 1 - 20)		

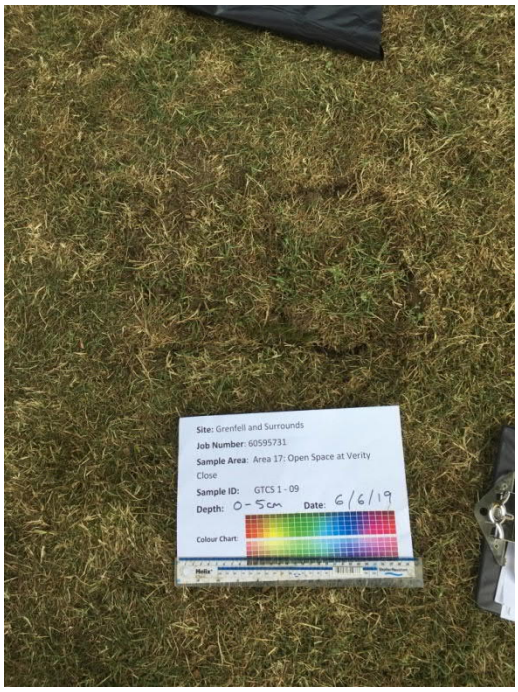
<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
12:30</td><td colspan="2">Time complete
13:00</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Cloudy, dry</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Area 16: Avondale Park (recreation ground) (1st sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 - 21 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">J Storey</td></tr>
<tr><td>1st down hole & turf & plastic sheet of soil</td><td colspan="2">  </td></tr>
<tr><td>2nd all tubs filled</td><td colspan="2"> 
</td></tr>
</table>

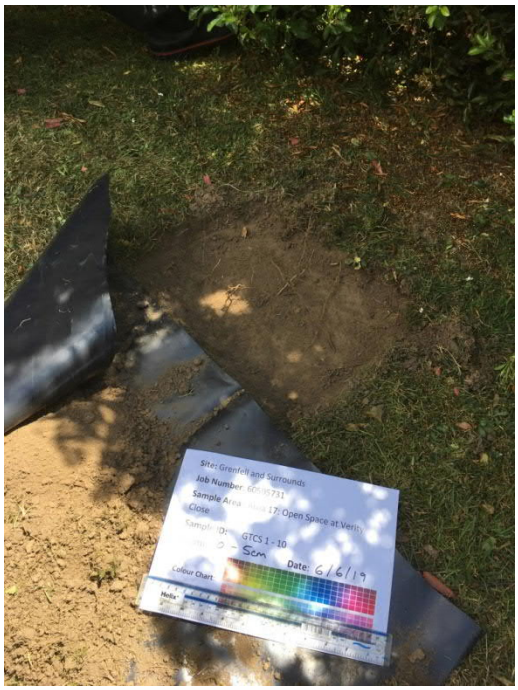
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Brown clayey fine to coarse sand with rare gravels. Gravel is angular fine to medium brick and sub-rounded flint. Rare fragments of plastic and concrete present (Turf / Topsoil / Made Ground).	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

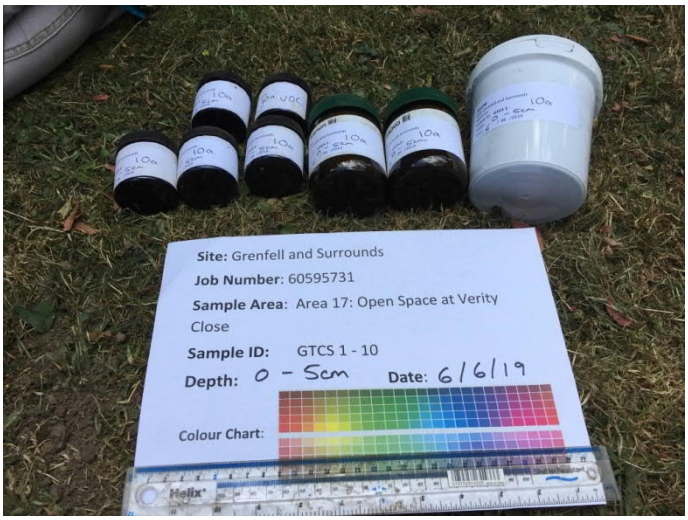
Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 13:05	Time complete 13:30	
Weather Conditions:	Cloudy, warm		
Sample Area:	**Area 16: Avondale Park (recreation ground) (2nd sample)**		
Primary Sample	**GTCS 1 - 22 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose brown clayey gravelly fine to coarse sand. Gravel is fine to coarse angular to sub-rounded flint. Occasional brick, coal, plastic and wood present. Rare shell fragments. Rootlets frequent at the surface (Turf/ Topsoil / Made Ground)	
Observed CoPC: (note of any ash etc.)	Coal	
AOB: n/a		

Project Reference: **60595731**		
Date: 06 / 06 / 19	Time Start: 13:05	Time complete 13:30
Weather Conditions:	Sunny spells, warm, dry	
Sample Area:	**Area 17: Open space at Verity Close (1st sample)**	
Primary Sample	**GTCS 1 - 9 a**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	J Storey
	1st down hole & turf	
	2nd plastic sheet of soil	

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose light brown slightly sandy silt. Sand is fine. Occasional small fragments of ash, charcoal, brick and glass.	
Observed CoPC: (note of any ash etc.)	Ash and charcoal	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 13:35	Time complete 14:10	
Weather Conditions:	Dry, sunny		
Sample Area:	**Area 17: Open space at Verity Close (2nd sample)**		
Primary Sample	**GTCS 1 - 10 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

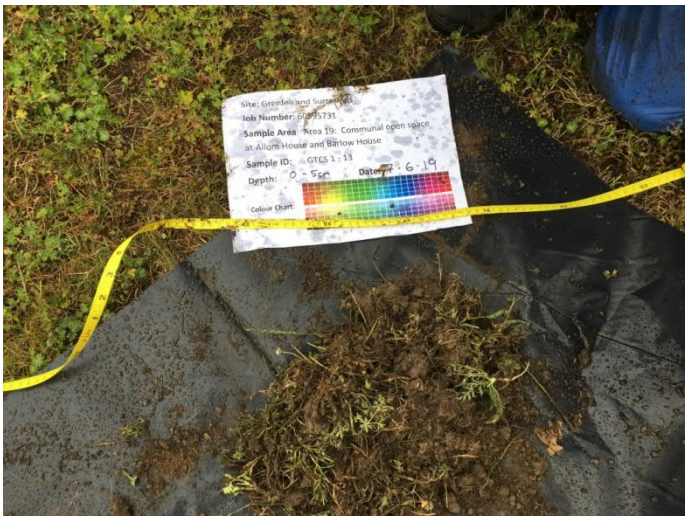
Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose light brown slightly sandy silt. Sand is fine. Occasional gravel of charcoal, brick, flint and plastic.	
Observed CoPC: (note of any ash etc.)	Charcoal	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 17:00	Time complete 17:25	
Weather Conditions:	Dry, sunny		
Sample Area:	**Area 18: Communal open space at Morland House (1st sample)**		
Primary Sample	**GTCS 1 - 11 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

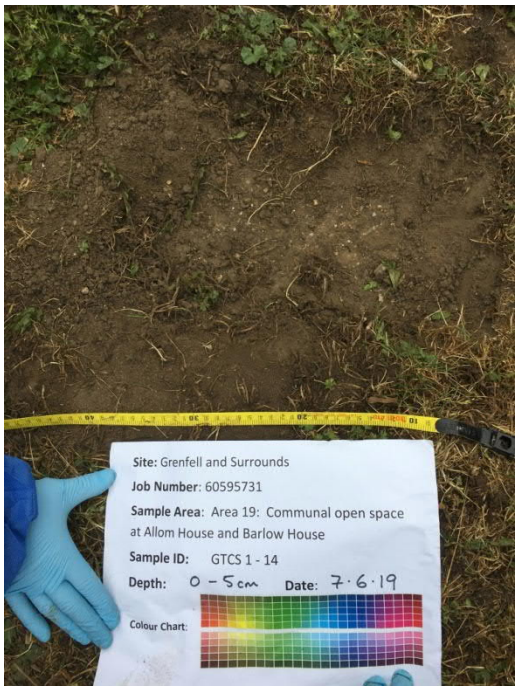
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Bark over loose slightly clayey gravelly fine to medium sand. Gravel is sub-angular to sub-rounded of brick, coal, glass and flint.	
Observed CoPC: (note of any ash etc.)	Coal	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 17:27	Time complete 18:10	
Weather Conditions:	Sunny		
Sample Area:	**Area 18: Communal open space at Morland House (2nd sample)**		
Primary Sample	**GTCS 1 - 12 a**		
Duplicate (y/n)	**Yes**		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	K Bruce, J Storey, J Craggs	
Sample Log:	Loose dark brown slightly silty gravelly fine to coarse sand. Gravel is sub-angular to sub-rounded of flint, wood, ash and possible cladding.	
Observed CoPC: (note of any ash etc.)	Ash and possible cladding.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 07 / 06 / 19	Time Start: 09:00	Time complete 09:35	
Weather Conditions:	Wet, cloudy		
Sample Area:	**Area 19: Communal open space at Allom House and Barlow House (1st sample)**		
Primary Sample	**GTCS 1 - 13 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	J Storey	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey	
Sample Log:	Turf over loose light brown very silty sand with occasional gravel of flint, rare plastic and rare tiny ash particles.	
Observed CoPC: (note of any ash etc.)	Rare tiny ash particles.	
AOB: n/a		

Project Reference:	**60595731**	
Date: 07 / 06 / 19	Time Start: 09:40	Time complete 10:25
Weather Conditions:	Raining, cloudy	
Sample Area:	**Area 19: Communal open space at Allom House and Barlow House (2nd sample)**	
Primary Sample	**GTCS 1 - 14 a**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	J Storey
	1st down hole & turf	
	2nd plastic sheet of soil	

Project Reference:	**60595731**	
	3rd all tubs filled	
	4th reinstatement	
Field team:	K Bruce, J Storey	
Sample Log:	Turf over loose light brown very silty fine to coarse sand. Occasional angular to rounded gravels, rare wood and brick. Occasional tiny white ash particles.	
Observed CoPC: (note of any ash etc.)	Occasional tiny white ash particles.	
AOB: n/a		

Project Reference:	**60595731**		
Date: 07 / 06 / 19	Time Start: 09:10	Time complete 09:40	
Weather Conditions:	Raining, breezy, approximately 15˚C		
Sample Area:	**Area 20: Camelford Walk (1st sample)**		
Primary Sample	**GTCS 1 - 15 a**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	J Craggs, D Dyson	
Sample Log:	Light brown clayey gravelly sand. Sand is fine to medium. Frequent angular to sub-rounded gravel of flint. Fragments of brick, metal, plastic, ceramic, slate, foam, coal.	
Observed CoPC: (note of any ash etc.)	Coal – two medium sized gravel fragments	
AOB: n/a		

<table>
<tr><td colspan="3">Project Reference: 60595731</td></tr>
<tr><td>Date: 07 / 06 / 19</td><td>Time Start:
09:45</td><td>Time complete
10:15</td></tr>
<tr><td>Weather Conditions:</td><td colspan="2">Overcast, breezy, light rain, approximately 15˚C</td></tr>
<tr><td>Sample Area:</td><td colspan="2">Area 20: Camelford Walk (2nd sample)</td></tr>
<tr><td>Primary Sample</td><td colspan="2">GTCS 1 - 16 a</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="2">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td>D Dyson</td></tr>
<tr><td>1st down hole & turf & plastic sheet of soil</td><td>  </td></tr>
<tr><td>2nd all tubs filled</td><td> 
</td></tr>
</table>

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	J Craggs, D Dyson	
Sample Log:	Light brown clayey gravelly fine to medium sand. Gravel is angular to sub-rounded fine to coarse flint. Frequent fragments of glass, clinker, red brick, plastic, stone. Occasional small gravel sized fragments of clinker and black shiny charred material.	
Observed CoPC: (note of any ash etc.)	Small fragments of shiny black, vesicular charred material.	
AOB: n/a		

Grenfell Potential Land Contamination Pilot Trial Sampling Notes and Photographic Record

Project Reference:	**60595731**	
Date: 05 / 06 / 19	Time Start: 08:50	Time complete 09:45
Weather Conditions:	Sunny, approximately 18˚C, very light breeze	
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**	
Primary Samples	**GTCS 1 – 43** **Shallow: 0.05m** **Deep: 0.10 – 0.15m**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	D Dyson
	1st down hole & turf & plastic sheet of soil	
	2nd all tubs filled – 0.05m	

Project Reference:	**60595731**	
	3rd all tubs filled 0.10-0.15m	
	4th reinstatement	
Field team:	D Dyson, W Hartas	
Sample Log:	0 – 0.05m Light brown silty fine sand with frequent gravel and occasional small cobbles. Gravel is angular to sub-rounded of flint, brick, ceramic and clinker. Some ash. 0.05 – 0.15 Becoming more gravelly with increasing depth.	
Observed CoPC: (note of any ash etc.)	Ash, clinker and coal.	
AOB: n/a		

Grenfell Potential Land Contamination Community Engagement Information Record Sheet

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 09:50	Time complete 10:30	
Weather Conditions:	Sunny spells		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 44** **Shallow: 0.05m** **Deep: 0.10 – 0.15m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled – 0.05m	
	4th all tubs filled 0.10-0.15m	
	5th reinstatement	
Field team:	D Dyson, W Hartas	

Project Reference: 60595731	
Sample Log:	0 – 0.05m Light brown silty topsoil with frequent rootlets and occasional wood fragments 0.05 – 0.15 Light brown silty sand with frequent gravel of brick, concrete, flint and rare plastic and charcoal fragments. Gravel is angular to rounded fine to coarse. Frequent rootlets.
Observed CoPC: (note of any ash etc.)	Charcoal seen rarely from approximately 0.05 to 0.10m to base.
AOB: n/a	

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
10:30</td><td colspan="2">Time complete
11:10</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Sunny spells</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Pilot Trial - Area 3: Waynflete Square</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 – 45
Shallow: 0.05m
Deep: 0.10 – 0.15m</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">D Dyson</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2"> 
</td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2"> 
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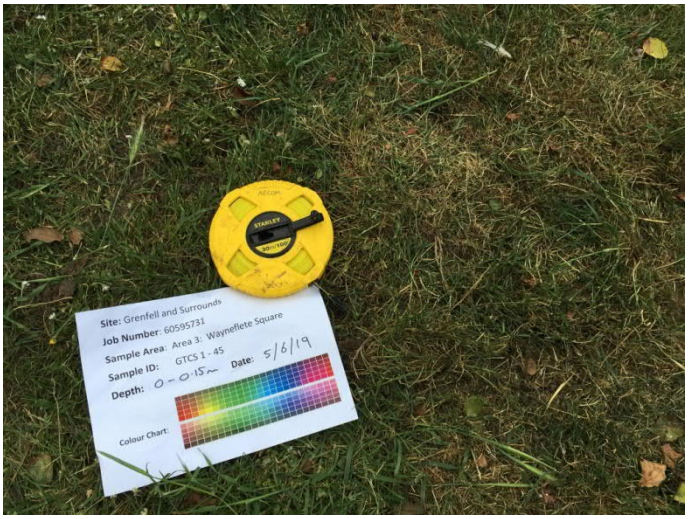
Project Reference:	**60595731**	
	3rd all tubs filled – 0.05m	
	4th all tubs filled 0.10-0.15m	
	5th reinstatement	
Field team:	D Dyson, W Hartas	

Project Reference: 60595731	
Sample Log:	0 – 0.05m Fairly loose light brown silty sand. 0.10 Becoming fairly loose light brown silty gravelly sand. Sand is fine, gravel is angular to sub-rounded of brick, concrete, glass, plastic, ash and ceramic fragments (Made Ground).
Observed CoPC: (note of any ash etc.)	Ash
AOB: n/a	

<table>
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<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
11:35</td><td colspan="2">Time complete
12:10</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Sunny, approximately 18˚C, breezy</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Pilot Trial - Area 3: Waynflete Square</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 – 46
Shallow: 0.05m
Deep: 0.10 – 0.15m</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">D Dyson</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2"> 
</td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2">  </td></tr>
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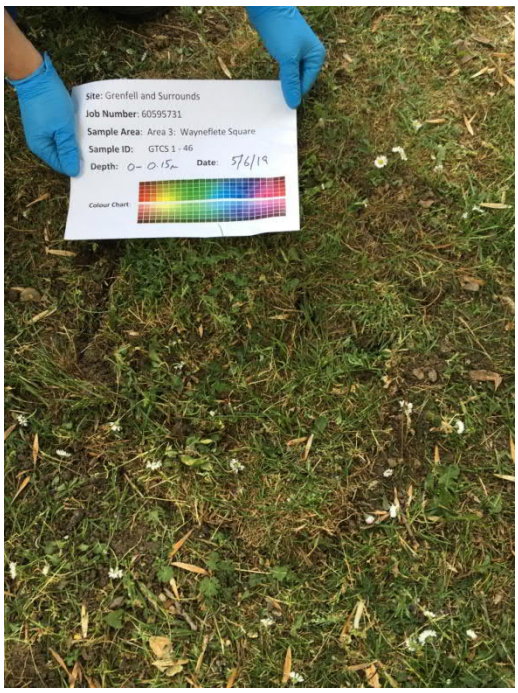
Project Reference:	**60595731**	
	3rd all tubs filled – 0.05m	
	4th all tubs filled 0.10-0.15m	
	5th reinstatement	
Field team:	W Hartas, D Dyson	

Project Reference: 60595731	
Sample Log:	0 – 0.10m Grass over light brown silty sand (Topsoil) 0.10 – 0.15 Light brown fairly loose slightly silty slightly gravelly fine sand. Gravel is of brick, concrete and flint. Fragments of ash, plastic, charcoal, metal and rootlets (Made Ground)
Observed CoPC: (note of any ash etc.)	Ash and charcoal.
AOB: n/a	

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
12:35</td><td colspan="2">Time complete
13:25</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Overcast, approximately 18˚C, slight breeze</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Pilot Trial - Area 3: Waynflete Square</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 – 47
Shallow: 0.05m
Deep: 0.10 – 0.15m</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">D Dyson</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2"> 
</td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2"> 
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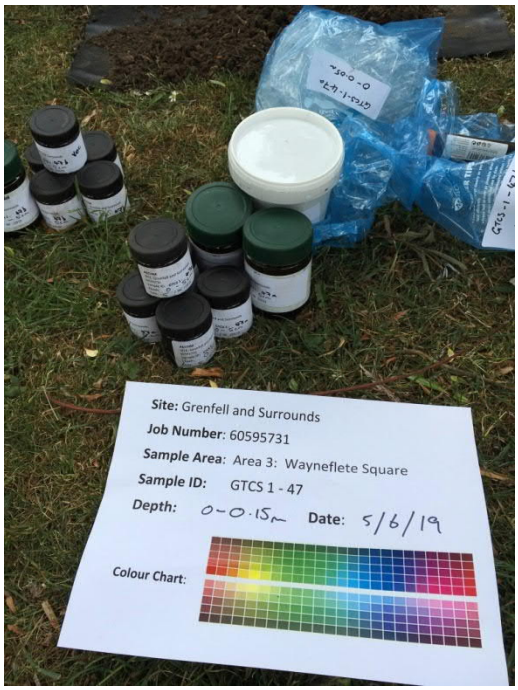
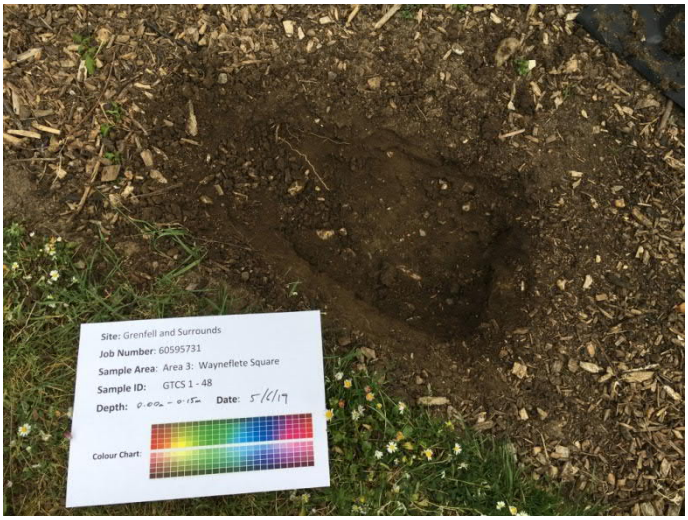
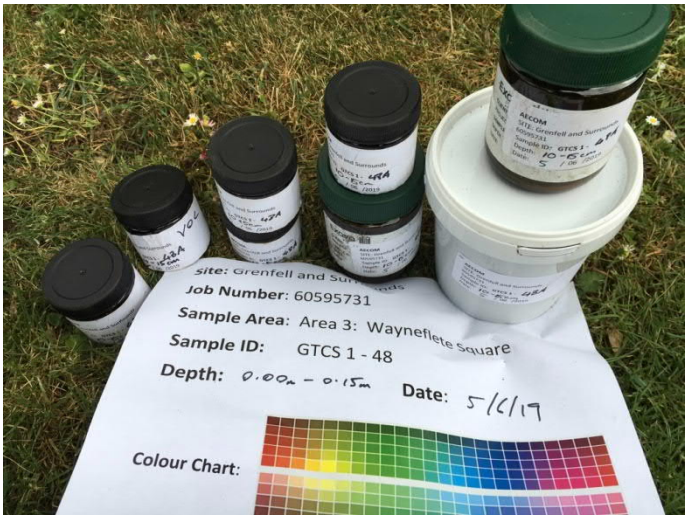
</table>

Project Reference: 60595731		
	3rd all tubs filled - 0.05m	
	4th all tubs filled 0.10-0.15m	
	5th reinstatement	
Field team:	D Dyson, W Hartas	

Project Reference: 60595731	
Sample Log:	0 – 0.15m Very loose medium brown highly organic slightly gravelly silty sand. Gravel is sub-angular of brick, flint, occasional plastic, abundant rootlets and timber fragments (Made Ground) 0.15m becoming more gravelly
Observed CoPC: (note of any ash etc.)	
AOB: n/a	

Project Reference:	**60595731**		
Date: 05 / 06 / 19	Time Start: 13:25	Time complete 14:00	
Weather Conditions:	Overcast, light breeze		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 48** **Shallow: 0.05m** **Deep: 0.10 – 0.15m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf		
	2nd plastic sheet of soil		

Project Reference:	**60595731**	
	3rd all tubs filled – 0.05m	
	4th all tubs filled 0.10-0.15m	
	5th reinstatement	
Field team:	D Dyson, W Hartas	

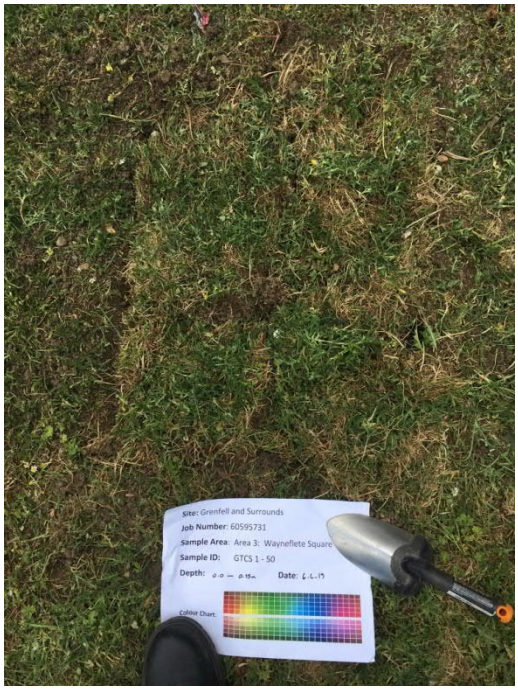
Project Reference: 60595731	
Sample Log:	0 – 0.05m Very loose brown silty sand with gravel and fragments of metal (Topsoil) 0.05 – 0.15 Very loose medium brown silty gravelly sand with clay pockets and occasional cobbles. Gravel is of mixed lithologies including fragments of brick, metal, plastic, ceramic, some ash, rootlets and timber fragments (Made Ground)
Observed CoPC: (note of any ash etc.)	Ash
AOB: n/a	

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 05 / 06 / 19</td><td>Time Start:
14:05</td><td colspan="2">Time complete
14:45</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Overcast, slight breeze</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Pilot Trial - Area 3: Waynflete Square</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 – 49
Shallow: 0.05m
Deep: 0.10 – 0.15m</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">D Dyson</td></tr>
<tr><td>1st down hole & turf</td><td colspan="2"> 
</td></tr>
<tr><td>2nd plastic sheet of soil</td><td colspan="2"> 
</td></tr>
</table>

Project Reference:	**60595731**	
	3rd all tubs filled – 0.05m	
	4th all tubs filled 0.10-0.15m	
	5th reinstatement	
Field team:	D Dyson, W Hartas	

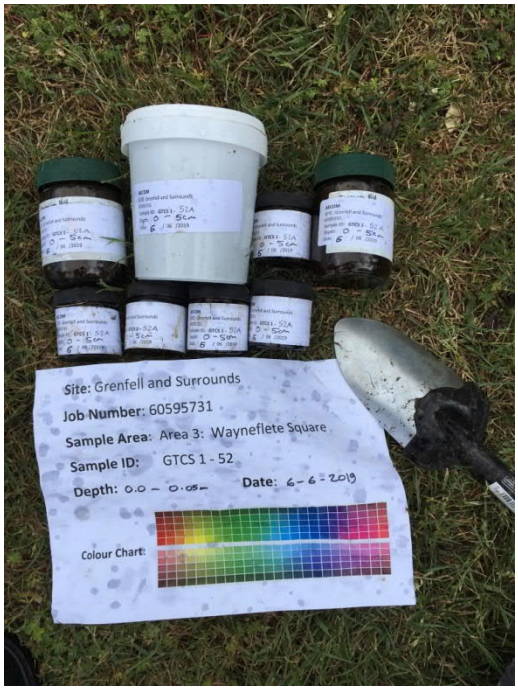
Project Reference: 60595731	
Sample Log:	0 – 0.15m Grass over dense slightly silty very gravelly fine brown sand. Occasional cobbles. Gravel is sub-angular to sub-rounded of flint, mica, sandstone and concrete. Fragments of ash, glass, plastic, metal, ceramic and cloth and occasional clinker. Some rootlets (Made Ground)
Observed CoPC: (note of any ash etc.)	Ash, clinker
AOB: n/a	

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 14:15	Time complete 14:55	
Weather Conditions:	Sun / cloud, windy		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 50** **Shallow: 0.05m** **Deep: 0.10 – 0.15m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

Project Reference:	**60595731**	
	3rd all tubs filled 0.10-0.15m	
	4th reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is fine to coarse sub-angular to rounded flint, plastic, glass, ceramic, brick. Quite dry. 0.05 – 0.15 Dark grey brown silty sandy angular to sub-rounded fine to coarse gravel with fine rootlets. Gravel comprises plastic, flint, brick. Slightly damp.	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 09:40	Time complete 10:40	
Weather Conditions:	Sunny, mild, slight wind, becoming cloudy, occasional rain.		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 51** **Shallow: 0.05m** **Deep: 0.10 – 0.15m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

Project Reference:	**60595731**	
	3rd all tubs filled 0.10-0.15m	
	4th reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.06m Grass over dark grey slightly gravelly silty fine to medium sand with abundant desiccated roots. Gravel is fine to coarse angular to sub-rounded flint, brick, tile, glass. Abundant roots.	
Observed CoPC: (note of any ash etc.)		
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 10:45	Time complete 11:05	
Weather Conditions:	Cloudy, occasional rain		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 52** **Shallow: 0.05m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

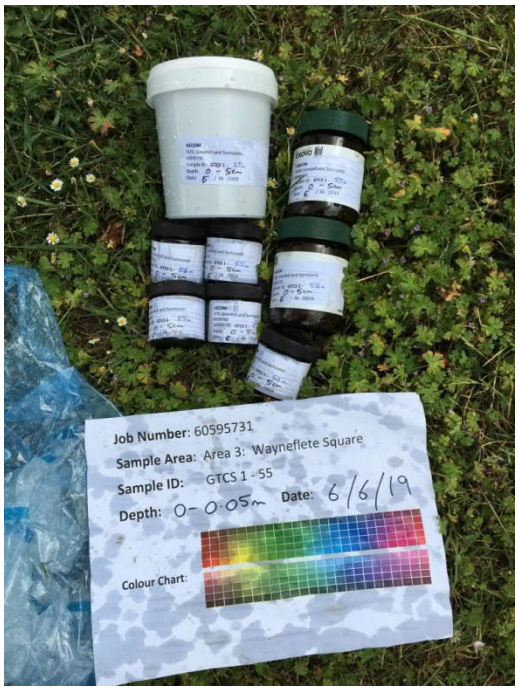
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey silty gravelly fine to medium sand. Gravel is angular to sub-rounded fine to medium flint, occasional brick and ceramic fragments and abundant roots. Quite dry.	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 11:05	Time complete 11:25	
Weather Conditions:	Mixed – sun, cloud, rain, slight wind		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 53** **Shallow: 0.05m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

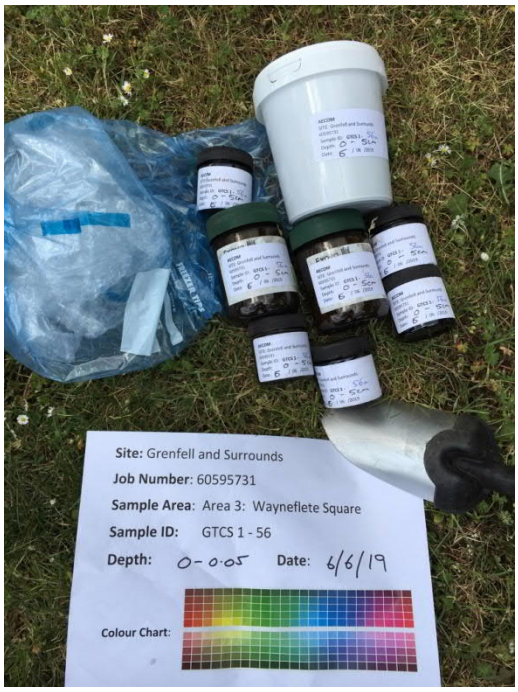
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey gravelly silty fine to medium sand. Gravel is angular to sub-rounded fine to medium flint, wood, brick and abundant roots. Quite dry.	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**	
Date: 06 / 06 / 19	Time Start: 11:25	Time complete 11:50
Weather Conditions:	Sun, warm, slight wind	
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**	
Primary Sample	**GTCS 1 – 54** **Shallow: 0.05m**	
Duplicate (y/n)	No	
Photos Taken:	Photographer name (camera ID if different)	D Dyson
	1st down hole & turf & plastic sheet of soil	
	2nd all tubs filled – 0.05m	

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey brown silty gravelly fine to medium sand with abundant roots and larvae. Gravel is angular to sub-rounded fine to medium flint, plastic, brick, and tile. Dry	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a.		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 11:50	Time complete 12:15	
Weather Conditions:	Sun and occasional heavy rain showers		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 55** **Shallow: 0.05m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

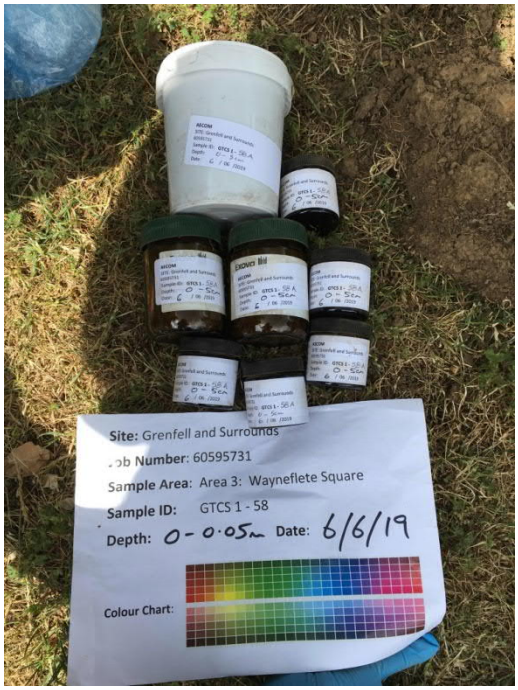
Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is angular to sub-rounded fine to medium chalk, brick and plastic. Also with occasional larvae and red ants. Dry	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

<table>
<tr><td colspan="4">Project Reference: 60595731</td></tr>
<tr><td>Date: 06 / 06 / 19</td><td colspan="2">Time Start:
12:25</td><td>Time complete
12:45</td></tr>
<tr><td>Weather Conditions:</td><td colspan="3">Sun, warm, slight wind</td></tr>
<tr><td>Sample Area:</td><td colspan="3">Pilot Trial - Area 3: Waynflete Square</td></tr>
<tr><td>Primary Sample</td><td colspan="3">GTCS 1 – 56
Shallow: 0.05m</td></tr>
<tr><td>Duplicate (y/n)</td><td colspan="3">No</td></tr>
<tr><td rowspan="3">Photos Taken:</td><td>Photographer name (camera ID if different)</td><td colspan="2">D Dyson</td></tr>
<tr><td>1st down hole & turf & plastic sheet of soil</td><td colspan="2"> 
</td></tr>
<tr><td>2nd all tubs filled – 0.05m</td><td colspan="2"> 
</td></tr>
</table>

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson and J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is angular to sub-rounded fine to coarse flint, brick and plastic. Dry	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 12:55	Time complete 13:15	
Weather Conditions:	Sun / cloud, mild, slight wind		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 57** **Shallow: 0.05m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

Project Reference: 60595731		
	3rd reinstatement	No photo
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is sub-rounded to sub-angular fine to medium flint, plastic, glass, ceramic, metal, twine. Dry	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 13:18	Time complete 13:40	
Weather Conditions:	Sun, windy, dark clouds		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 58** **Shallow: 0.05m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Grass over dark grey brown silty gravelly fine to medium sand with abundant roots. Gravel is angular to sub-rounded medium to coarse flint, plastic, wood. Dry	
Observed CoPC: (note of any ash etc.)	No	
AOB: n/a		

Project Reference:	**60595731**		
Date: 06 / 06 / 19	Time Start: 13:45	Time complete 14:10	
Weather Conditions:	Sun / cloud, windy		
Sample Area:	**Pilot Trial - Area 3: Waynflete Square**		
Primary Sample	**GTCS 1 – 59** **Shallow: 0.05m**		
Duplicate (y/n)	No		
Photos Taken:	Photographer name (camera ID if different)	D Dyson	
	1st down hole & turf & plastic sheet of soil		
	2nd all tubs filled – 0.05m		

Project Reference:	**60595731**	
	3rd reinstatement	
Field team:	D Dyson, J Andrews	
Sample Log:	0 – 0.05m Dark grey brown slightly gravelly silty fine to medium sand with abundant pine needles. Gravel is sub-angular to sub-rounded fine to medium flint, wood fragments, foil, burnt wood, glass.	
Observed CoPC: (note of any ash etc.)	Burnt wood fragments	
AOB: n/a		

Appendix TN15-C - Laboratory Scheduling and Chains of Custody

Laboratory Analytical Scheduling

Analyte/Group	preliminary cordon samples	wider Stage 1 exploratory samples
Metals {Al, As, Ba, Be, Cd, Cr, Cu, Hg, Ni, Pb, Se, V, Zn, water soluble B, Cr VI, Cr III}	Y	Y
VOCs (US EPA target list (US Government Publishing Office) plus tentatively identified compounds)	Y	Y
SVOCs (US EPA target list (US Government Publishing Office) plus tentatively identified compounds)	Y	Y
PAHs (US EPA priority 16 (US Government Publishing Office) plus coronene)	Y	Y
SVOC forensic scan	Y	Y
PCB 7 (Dutch 7 congeners: 101,118,138,153,180,28,52)	N	Y
PCB (WHO12) 12 congeners: 77,81,105,114,118,123,126,156,157,167,169,189	Y	Y
Chlorinated Dioxins and furans	Y	Y
Brominated Dioxins and furans	N	Y
Organophosphorus flame retardants	N	Y
Brominated flame retardants (PBDEs: 2,2',4,4',6-pentabromodiphenyl ether, 2,2',4,4',6-pentabromodiphenyl ether, 2,2',3,4,4',5'hexabromodiphenyl ether, 2,2',3,4,4',5'hexabromodiphenyl ether, 2,2',4,4',5,5'hexabromodiphenyl ether, 2,2',4,4',5,5'-hexabromodiphenyl ether, 2,2',4,4',5,6'-hexabromodiphenyl ether, 2,2',4,4',5,6'-hexabromodiphenyl ether, 2,4,4'-tribromodiphenyl ether, 2,4,4'-tribromodiphenyl ether, 2,2',4,4'-tetrabromodiphenyl ether, 2,2',4,4'-tetrabromodiphenyl ether, 2,3',4,4'-tetrabromodiphenyl ether, 2,3',4,4'-tetrabromodiphenyl ether, 2,2',3,4,4'-pentabromodiphenyl ether, 2,2',3,4,4'-pentabromodiphenyl ether, 2,2',4,4',5-pentabromodiphenyl ether, 2,2',4,4',5-pentabromodiphenyl ether, 2,2',3,4,4',5',6-heptabromodiphenyl ether, 2,2',3,4,4',5',6-heptabromodiphenyl ether)	N	Y
Polybrominated biphenyls (PBBs):	N	Y
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	N	Y
4,4'-dibromobiphenyl (PBB 15)	N	Y
2,2',5-tribromobiphenyl (PBB 18)	N	Y
2,2'-dibromobiphenyl (PBB 4)	N	Y
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	N	Y
Tetrabromobisphenol A	N	Y
hexabromocyclododecane (1,2,5,6,9,10-)	N	Y
Isocyanates	N	Y
Cyanides (total, free and thiocyanate)	Y (total only)	Y
Asbestos	Y	Y
Synthetic Vitreous Fibres (SVF) / Man-made Mineral Fibres (MMMF)	N	Y
Total Organic Carbon	Y	Y
Asbestos quantification (where required/ requested)	N	Y

CHAIN OF CUSTODY

CLIENT: AECOM
ADDRESS: St George's House, 5 St George's Road, Wimbledon, SW19 4DR
PROJECT MANAGER (PM): David Dyson
MOBILE:
PROJECT ID: 60595731
SITE: Grenfell Tower - Preliminary Sampling

If Electronic File Required please select file format below: EDIT ✓
EQUIS
CROSSTAB ✓
CLIENT
AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below) ✓

SAMPLER: Rhys Plummer
MOBILE: 07867858630
EMAIL REPORT TO: Simon.Cole@AECOM.com
cc REPORT TO: Rhys.Plummer@AECOM.com
INVOICE TO: (if different to report)
QUOTE NUMBER: P.O No: 60595731

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 1 of 1

TURNAROUND - please tick

10 DAY		4 DAY		Other	
5 DAY	✓	3 DAY			

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY
AVERAGE COOL BOX TEMP.(if required):
SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

ANALYSIS REQUIRED including SUITE names

Asbestos risk: High | Medium | Low

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos ID Bulk + ACM	CLEA Metals	Cyanides	PAH 17	VOC / TICs	SVOC	Dioxins + Furans	WHO 7 TEQ	TOC	
GTCS101					S	10/4		0-.05m	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
GTCS102					S	↓		↓	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
GTCS103					S				N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
GTCS104					S				N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
DUP01					S				N	✓	✓	✓	✓	✓	✓	✓	✓	✓	
GTCD101								—	N	✓									TBC
GTCD102								—	N	✓									TBC
GTCD103						↓		—	N	✓									TBC

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:		RECIEVED BY:		METHOD of SHIPMENT
Name:	Date:	Name:	Date:	Consignment note No:
Of:	Time:	Of:	Time:	Courier Company:

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Exova Jones Environmental
Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA Tel: 0044 1244 833 780
Reg Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL Company Reg No: SC070429

JEL 164170

CHAIN OF CUSTODY

Exova JONES ENVIRONMENTAL

CLIENT: AECOM IKE UK LTD	If Electronic File Required please select file format below		SAMPLER: JS & WH
ADDRESS: 5 ST. GEORGE'S ROAD, SW19 4DR.			MOBILE:
	EQUIS		EMAIL REPORT TO: Simon.cole@aecom.com
PROJECT MANAGER (PM): NEIL COOPER.	CROSSTAB		cc REPORT TO: david.dyson@aecom.com
MOBILE: 07825 534 321	CLIENT	X	INVOICE TO: (if different to report)
PROJECT ID: 60595731	AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)		QUOTE NUMBER: 15573 HJ AECOM V3 P.O No: 60595731
SITE: Grenfell			ANALYSIS REQUIRED including SUITE names

Chain of Custody sheet page 1 of 2

TURNAROUND - please tick: 10 DAY | 4 DAY | Other ✓ | 5 DAY | 3 DAY

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY
AVERAGE COOL BOX TEMP.(if required):
SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk: High	Medium	Low	As per quote ref. above.
GTCS 1 - 35a					S	4/6/19	11:20	-0.05	N		✓		
GTCS 1 - 35b					S	"	11:20	"	N		✓		
GTCS 1 - 36a					S	"	11:53	"	N		✓		
GTCS 1 - 36b					S	"	11:53	"	N		✓		
GTCS 1 - 36c					S	"	"	"	N		✓		
GTCS 1 - 36d					S	"	"	"	N		✓		
GTCS 1 - 36e					S	"	"	"	N		✓		
GTCS 1 - 33a					S	"	09:30	"	N		✓		
GTCS 1 - 33b					S	"	09:30	"	N		✓		
GTCS 1 - 34a					S	"	10:30	"	N		✓		
GTCS 1 - 34b					S	"	10:30	"	N		✓		
GTCS 1 - 38a					S	"	14:15	"	N		✓		
GTCS 1 - 38b					S	"	14:15	"	N		✓		
GTCS 1 - 37a					S	"	13:30	"	N		✓		
GTCS 1 - 37b					S	"	13:30	"	N		✓		
GTCS 1 - 42a					S	"	16:00	"	N		✓		
GTCS 1 - 42b					S	"	16:00	"	N		✓		
~~GTCS 1 - 39a~~					~~S~~	"	~~15:30~~	"	~~N~~		~~✓~~		
~~GTCS 1 - 39b~~					~~S~~	"	~~15:30~~	"	~~N~~		~~✓~~		

ALL SAMPLES FOR TESTING EXCEPT 'b' SAMPLES - 'b' SAMPLES FOR LONG TERM STORAGE

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:		RECEIVED BY:		METHOD of SHIPMENT
Name: DAVID DYSON	Date: 4/6/19	Name:	Date:	Consignment note No: 001855
Of: AECOM	Time: 16:00	Of:	Time:	Courier Company: APC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

JEL 166751

CHAIN OF CUSTODY

CLIENT:	AECOM I&E UK LTD	If Electronic File Required please select file format below	SAMPLER: JS & WH
ADDRESS:	5 ST. GEORGE'S ROAD, SW19 4DR.		MOBILE:
		EQUIS	EMAIL REPORT TO: simon.cole@aecom.com
PROJECT MANAGER (PM):	Neil Cooper	CROSSTAB	cc REPORT TO: david.dyson@aecom.com
MOBILE:	07825 534 321	CLIENT X	INVOICE TO: (if different to report)
PROJECT ID:	60595731	AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	QUOTE NUMBER: 15573 HJ AECOM V3 P.O No: 60595731
SITE:	Grenfell		ANALYSIS REQUIRED including SUITE names

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 2 of 2

TURNAROUND - please tick: 10 DAY | 4 DAY | Other ✓ | 5 DAY | 3 DAY

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY
AVERAGE COOL BOX TEMP.(if required):
SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk: High	Medium	Low
GTCS1 [illegible]					[illegible]	[illegible]	[illegible]	0-0.05	N		✓	
GTCS1 [illegible]					S	4/6/19	[illegible]	0-0.05	N		✓	
[illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	
GTCS1 [illegible]					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	
GTCS 1 - 41a					S	4/6/19	14:45	0-0.05	N		✓	
GTCS 1 - 41b					S	"	14:45	"	N		✓	
GTCS 1 - 41c					S	"	14:45	"	N		✓	
GTCS 1 - 41d					S	"	14:45	"	N		✓	
GTCS 1 - 41e					S	"	14:45	"	N		✓	

As per quote ref above.

ALL SAMPLES FOR TESTING EXCEPT 'b' SAMPLE. 'b' SAMPLE FOR LONG TERM STORAGE.

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:		RECEIVED BY:	METHOD of SHIPMENT
Name: DAVID DYSON	Date: 4/6/19	Name:	Date: Consignment note No: 0018155
Of: AECOM	Time: 16:00	Of:	Time: Courier Company: APC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Exova Jones Environmental
Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA Tel: 0044 1244 833 780
Reg Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL Company Reg No: SC070429

JEL 166752

CHAIN OF CUSTODY

Exova JONES ENVIRONMENTAL

CLIENT: AECOM IXE UK LTD	If Electronic File Required please select file format below	SAMPLER: WH & DD	
ADDRESS: 5 ST. GEORGE'S ROAD, SW19 4DR		MOBILE: 07799 647173	
	EQUIS	EMAIL REPORT TO: Simon.cole@aecom.com	
PROJECT MANAGER (PM): NEIL COOPER	CROSSTAB	cc REPORT TO: david.dyson@aecom.com	
MOBILE: 07825 534 321	CLIENT X	INVOICE TO: (if different to report)	
PROJECT ID: 60595731	AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	QUOTE NUMBER: 15573 HJ AECOM V4	P.O No: 60595731
SITE: Grenfell		ANALYSIS REQUIRED including SUITE names	Chain of Custody sheet page 1 of 3

TURNAROUND - please tick: 10 DAY | 4 DAY | Other ✓ | 5 DAY | 3 DAY

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY

AVERAGE COOL BOX TEMP.(if required):

SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

Asbestos risk: High | Medium | Low

as per quote ref above

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

Sample ID	AGS SAMPTYPE	AGS SAMPREF	Shaken	Settled	S/GW/SW/L/E/OW/P	Date	Time	Depth in Metres	Preservation	Medium
GTCS1 - 43a					S	5/6/19		0-0.05	N	✓
GTCS1 - 43b					"	"		0-0.05	N	✓
GTCS1 - 44a					"	"		0-0.05	N	✓
GTCS1 - 44b					"	"		0-0.05	N	✓
GTCS1 - 45a					"	"		"	N	✓
GTCS1 - 45b					"	"		"	N	✓
GTCS1 - 46a					"	"		"	N	✓
GTCS1 - 46b					"	"		"	N	✓
GTCS1 - 47a					"	"		"	N	✓
GTCS1 - 48a					"	"		"	N	✓
GTCS1 - 47b					"	"		"	N	✓
GTCS1 - 48b					"	"		"	N	✓
GTCS1 - 49a					"	"		"	N	✓
GTCS1 - 49b					"	"		"	N	✓
GTCS1 - 40a					"	4/6/19	16:00	"	N	✓
GTCS1 - 40b					"	"	16:00	"	N	✓
GTCS1 - 39a					"	"	16:45	"	N	✓
GTCS1 - 39b					"	"	16:45	"	N	✓
GTCS1 - 39c					"	"	16:45	"	N	✓

ALL SAMPLES FOR TESTING EXCEPT 'b' SAMPLES. 'b' SAMPLES FOR LONG TERM STORAGE

RELINQUISHED BY:		RECEIVED BY:		METHOD of SHIPMENT
Name: DAVID DYSON	Date: 5/6/19	Name:	Date:	Consignment note No: 0018199
Of: AECOM	Time: 16:00	Of:	Time:	Courier Company: APC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Exova Jones Environmental
Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA Tel: 0044 1244 833 780
Reg Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL Company Reg No: SC070429

JEL 166753

CHAIN OF CUSTODY

CLIENT: AECOM INTERNATIONAL	If Electronic File Required please select file format below	SAMPLER: WH DDD JS, JC	
ADDRESS: 55 ST GEORGE'S ROAD, SW19 4DR		MOBILE: 07799 647 473	
	EQUIS	EMAIL REPORT TO: simon.cole@aecom.com	
PROJECT MANAGER (PM): NEIL GOBBER	CROSSTAB	cc REPORT TO: david.dyson@aecom.com	
MOBILE: 07825 534 321	CLIENT X	INVOICE TO: (if different to report)	
PROJECT ID: 60595731	AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	QUOTE NUMBER: 55578 JS AECOM V4	P.O No: 60595731
SITE: Greenfield		ANALYSIS REQUIRED including SUITE names	

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 2 of 3

TURNAROUND - please tick: 10 DAY | 4 DAY | Other ✓ | 5 DAY | 3 DAY

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY

AVERAGE COOL BOX TEMP.(if required):

SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk: High	Medium	Low	As per quote ref 1 above
GTCS1 - 39d					S	4/6/19	16:45	0-0.05	N		✓		ALL SAMPLES FOR TESTING EXCEPT 'D' SAMPLES EXCEPT 'D' SAMPLES FOR LONG TERM STORAGE
GTCS1 - 39e					S	"	16:45	0-0.05	N		✓		
GTCS1 - 43a					S	5/6/19		0.1-0.15	N		✓		
GTCS1 - 43b					S	"		0.1-0.15	N		✓		
GTCS1 - 44a					S	"		"	N		✓		
GTCS1 - 44b					S	"		"	N		✓		
GTCS1 - 45a					S	"		"	N		✓		
GTCS1 - 46d					S	"		"	N		✓		
GTCS1 - 47b					S	"		"	N		✓		
GTCS1 - 46b					S	"		"	N		✓		
GTCS1 - 47a					S	"		"	N		✓		
GTCS1 - 47b					S	"		"	N		✓		
GTCS1 - 48a					S	"		"	N		✓		
GTCS1 - 48b					S	"		"	N		✓		
GTCS1 - 49a					S	4/6/19		"	N		✓		
GTCS1 - 49b					S	"		"	N		✓		
GTCS1 - 17aa					S	"	10:40	"	N		✓		
GTCS1 - 17b					S	"	10:40	"	N		✓		
GTCS1 - 39c					"	"		"	N				

RELINQUISHED BY:

Name: DAVID JS DYSON JSN

Of: AECOM

Date: 5/6/19

Time: 18:00

RECEIVED BY:

Name:

Of:

Date:

Time:

METHOD of SHIPMENT

Consignment note No: 0018199

Courier Company: APC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

CHAIN OF CUSTODY

CLIENT: AECOM UK LTD

ADDRESS: 5 ST GEORGE'S ROAD SW19 4DR

PROJECT MANAGER (PM): NEIL COOPER

MOBILE: 07523 [illegible] 3241

PROJECT ID: 60595783 31

SITE: Grenfell Grenfell

If Electronic File Required please select file format below

EQUIS	
CROSSTAB	
CLIENT	X
AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	

SAMPLER: JS, KB, JC J

MOBILE:

EMAIL REPORT TO: Simon.Cole

cc REPORT TO: David.Dyson

INVOICE TO: (if different to report)

QUOTE NUMBER: 15573 HJ Aecom V4 P.O No: 60595783 1

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 3 of 3

ANALYSIS REQUIRED including SUITE names

TURNAROUND - please tick

10 DAY		4 DAY		Other	✓
5 DAY		3 DAY			

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY

AVERAGE COOL BOX TEMP.(if required):

SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk: High	Asbestos risk: Medium	Asbestos risk: Low	ANALYSIS REQUIRED including SUITE names
GTCS1 - 18a					S	5/6/19	11:10	0-0.05	N		✓		As per quote ref above
GTCS1 - 18b					"	"	11:10	0.05	N		✓		ALL SAMPLES TO BE
GTCS1 - 18c					"	5/6/19	11:10	0.5	N		✓		TESTED FOR
GTCS1 - 18d					"	"	11:10	1.0	N		✓		TESTING EXCEPT
GTCS1 - 18e					"	"	11:10	"	N		✓		EXCEPT FOR
GTCS1 - 23a					"	"	08:50	"	N		✓		SAMPLES
GTCS1 - 23b					"	"	08:50	"	N		✓		
GTCS1 - 23c					"	"	08:50	"	N		✓		
GTCS1 - 23d					"	"	08:50	"	N		✓		
GTCS1 - 23e					"	"	08:50	"	N		✓		
GTCS1 - 24a					"	"	09:50	"	N		✓		
GTCS1 - 24b					"	"	09:50	"	N		✓		
GTCS1 - 19a					"	"	14:45	"	N		✓		
GTCS1 - 19b					"	"	14:45	"	N		✓		
GTCS1 - 20a					"	"	15:20	"	N		✓		
GTCS1 - 20b					"	"	15:20	"	N		✓		
GTCS1 - 21a					"	"	12:30	"	N		✓		
GTCS1 - 21b					"	"	12:30	"	N		✓		
GTCS1 - 22a					"	"	13:05	"	N		✓		
GTCS1 - 22b					"	"	13:05	"	N		✓		

FOR LONG TERM STORAGE -

RELINQUISHED BY:

Name: DAVID DYSON

Of: AECOM

Date: 5/6/19

Time: 16:00

RECEIVED BY:

Name:

Of:

Date:

Time:

METHOD of SHIPMENT

Consignment note No: 0018199

Courier Company: APC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Exova Jones Environmental

Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA Tel: 0044 1244 833 780

Reg Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL Company Reg No: SC070429

JEL 166755

CHAIN OF CUSTODY

CLIENT: AECOM IKE UK LTD	If Electronic File Required please select file format below	SAMPLER: DJ & JS	
ADDRESS: 5 ST GEORGE'S ROAD, SW19 4DR		MOBILE: 07799 647 173	
	EQUIS	EMAIL REPORT TO: Simon Cole	
PROJECT MANAGER (PM): NEIL COOPER	CROSSTAB	cc REPORT TO: David Dyson	
MOBILE: 07825 534 321	CLIENT X	INVOICE TO: (if different to report)	
PROJECT ID: 60595731	AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	QUOTE NUMBER: 15573 HJ Aecom V4	P.O No: 60595731
SITE: Greenfell		ANALYSIS REQUIRED including SUITE names	

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 1 of 3

TURNAROUND - please tick: 10 DAY | 4 DAY | Other ✓ | 5 DAY | 3 DAY

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY

AVERAGE COOL BOX TEMP.(if required):

SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

Asbestos risk: High | Medium | Low

As per quote ref QUOTE/V4

Sample ID	AGS SAMPTYPE	AGS SAMPREF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preservation	High	Medium	Low
GTCS1 - 50a					S	5/6/19	14:15	0-0.05	N		✓	
GTCS1 - 50b					S	"	14:15	0-0.05	N		✓	
GTCS1 - 50c					S	"	14:25	0.1-0.15	N		✓	
GTCS1 - 50d					S	"	14:25	0.1-0.15	N		✓	
GTCS1 - 51a					S	"	0940	0-0.05	N		✓	
GTCS1 - 51b					S	"	0940	0-0.05	N		✓	
GTCS1 - 51c					S	"	0950	0.1-0.15	N		✓	
GTCS1 - 51d					S	"	0950	0.1-0.15	N		✓	
GTCS1 - 52a					S	"	1045	0-0.05	N		✓	
GTCS1 - 52b					S	"	1045	"	N		✓	
GTCS1 - 53a					S	"	1105	"	N		✓	
GTCS1 - 53b					S	"	1105	"	N		✓	
GTCS1 - 54a					S	"	1125	"	N		✓	
GTCS1 - 54b					S	"	1125	"	N		✓	
GTCS1 - 55a					S	"	1150	"	N		✓	
GTCS1 - 55b					S	"	1150	"	N		✓	
GTCS1 - 56a					S	"	1225	"	N		✓	
GTCS1 - 56b					S	"	1225	"	N		✓	
GTCS1 - 22a					"	"	1505	"	N		✓	
GTCS1 - 22b					"	"	1505	"	N		✓	

ALL 'a' SAMPLES TO BE SCHEDULED FOR TESTING.

ALL 'b' SAMPLES FOR LONG TERM STORAGE.

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:		RECEIVED BY:		METHOD of SHIPMENT
Name: DAVID DYSON	Date: 6/6/19	Name:	Date:	Consignment note No: 0018257
Of: AECOM	Time: 600	Of:	Time:	Courier Company: APC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

CHAIN OF CUSTODY

CLIENT: AECOM INF UK LTD.
ADDRESS: 5 ST. GEORGE'S ROAD, SW19 4DR

PROJECT MANAGER (PM): NEIL COOPER
MOBILE: 07825 534 321
PROJECT ID: 60595731
SITE: Grenfell

If Electronic File Required please select file format below

EQUIS	
CROSSTAB	
CLIENT	X
AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	

SAMPLER: KB, JS, [illegible] JC
MOBILE:
EMAIL REPORT TO: Simon Cole
cc REPORT TO: David Dyson.
INVOICE TO: (if different to report)
QUOTE NUMBER: 15573 HJ AECOM V4 P.O No: 60595731

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 2 of 3

TURNAROUND - please tick

10 DAY		4 DAY		Other	✓
5 DAY		3 DAY			

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY
AVERAGE COOL BOX TEMP.(if required):
SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

ANALYSIS REQUIRED including SUITE names

As per quote ref above

ALL 'a' SAMPLES FOR TESTING

ALL 'b' SAMPLES FOR LONG TERM STORAGE.

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk: High	Medium	Low
GTCS1 - 25 a					S	5/6/19	16:20	0-0.05	N		✓	
GTCS1 - 26 a					S	"	16:55	"	N		✓	
GTCS1 - 25 b					S	"	16:20	"	N		✓	
GTCS1 - 26 b					S	"	16:55	"	N		✓	
GTCS1 - 27 a					S	"	18:20	"	N		✓	
GTCS1 - 27 b					S	"	18:20	"	N		✓	
GTCS1 - 28 a					S	"	17:30	"	N		✓	
GTCS1 - 28 b					S	"	17:30	"	N		✓	
GTCS1 - 46 a					S	"	11:35	"	N		✓	
GTCS1 - 46 b					S	"	11:35	"	N		✓	
GTCS1 - 46 a					S	"	11:45	0.1-0.15	N		✓	
GTCS1 - 46 b					S	"	11:45	0.1-0.15	N		✓	

RELINQUISHED BY: DAVID DYSON
Name:
Of: AECOM
Date: 6/6/19
Time: 16:00

RECEIVED BY:
Name:
Of:
Date:
Time:

METHOD of SHIPMENT
Consignment note No: 0018237
Courier Company: AP

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Exova Jones Environmental
Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA Tel: 0044 1244 833 780
Reg Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL Company Reg No: SC070429

JEL 166758

CHAIN OF CUSTODY

CLIENT: AECOM I&E UK LTD	If Electronic File Required please select file format below		SAMPLER: DDS * JAS
ADDRESS: 5 - 5 ST GEORGES RD SW19 4DR			MOBILE: 07799 647173
		EQUIS	EMAIL REPORT TO: SIMON COLE
PROJECT MANAGER (PM): NEIL COOPER		CROSSTAB	cc REPORT TO: D. DAVID DYSON
MOBILE: 07825 534321		CLIENT X	INVOICE TO: (if different to report)
PROJECT ID: 60595731		AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	QUOTE NUMBER: P.O No: 60595731
SITE: GRENFELL			ANALYSIS REQUIRED including SUITE names

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page B of 3

TURNAROUND - please tick

10 DAY		4 DAY		Other	✓
5 DAY		3 DAY			

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY

AVERAGE COOL BOX TEMP.(if required):

SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk High	Asbestos risk Medium	Asbestos risk Low	ANALYSIS REQUIRED including SUITE names
GTCS1 - 57A					S	6/6/19	1255	0-0.05	N		✓		As per quote Ref above
GTCS1 - 57B					S	6/6/19	1255	0-0.05	N		✓		ALL A SAMPLES
GTCS1 - 58A					S	6/6/19	1318	0-0.05	N		✓		TO BE SCHEDULED
GTCS1 - 58B					S	6/6/19	1318	0-0.05	N		✓		FOR TESTING
GTCS1 - 59A					S	6/6/19	1345	0-0.05	N		✓		
GTCS1 - 59B					S	6/6/19	1345	0-0.05	N		✓		ALL B SAMPLES
													FOR LONG
													TERM STORAGE

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:		RECEIVED BY:	METHOD of SHIPMENT
Name: DAVID DYSON	Date: 6/6/19	Name:	Consignment note No: 0018237
Of: AECOM	Time: 16:00	Of:	Courier Company: APC
			Date: Time:

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

CHAIN OF CUSTODY

CLIENT: AECOM INFRASTRUCTURE & ENVIRONMENT UK LTD
ADDRESS: 5 ST GEORGE'S ROAD, SW19 4DR
PROJECT MANAGER (PM): NEIL COOPER
MOBILE: 07525078255341321
PROJECT ID: 60595731
SITE: Grenfell

If Electronic File Required please select file format below

EQUIS	
CROSSTAB	
CLIENT	X
AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)	

SAMPLER: DDS, JS, JSG, KB
MOBILE:
EMAIL REPORT TO: SIMON COLE
cc REPORT TO: DAVID DYSON
INVOICE TO: (if different to report)
QUOTE NUMBER: 15573 HJ AECOM P.O No: 60595731

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 1 of 2

TURNAROUND - please tick

10 DAY		4 DAY		Other	✓
5 DAY		3 DAY			

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY
AVERAGE COOL BOX TEMP.(if required):
SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

ANALYSIS REQUIRED including SUITE names

Asbestos risk: High | Medium | Low

AS per quote ref above

ALL SAMPLES FOR TESTING

EXCERT SAMPLES FOR LONG TERM STORAGE

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	High	Medium	Low
GTCS1-29a					S	5/6/19	15:30	0-0.05	N		✓	✓
GTCS1-29b					S	"	15:30	0-0.05	N		✓	✓
GTCS1-30a					S	"	14:35	"	N		✓	✓
GTCS1-30b					S	"	14:35	"	N		✓	✓
GTCS1-30c					S	"	14:35	"	N		✓	✓
GTCS1-30d					S	"	14:35	"	N		✓	✓
GTCS1-30e					S	"	14:35	"	N		✓	✓
GTCS1-31a					S	"	17:00	"	N		✓	✓
GTCS1-31b					S	"	17:00	"	N		✓	✓
GTCS1-32a					S	"	17:27	"	N		✓	✓
GTCS1-32b					S	"	17:27	"	N		✓	✓
GTCS1-32c					S	"	17:27	"	N		✓	✓
GTCS1-32d					S	"	17:27	"	N		✓	✓
GTCS1-32e					S	"	17:27	"	N		✓	✓
~~GTCS1-33~~									N			

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:
Name: DAVID DYSON
Of:
Date: 7/6/19
Time: 13:00

RECEIVED BY:
Name:
Of:
Date:
Time:

METHOD of SHIPMENT
Consignment note No: 00188257
Courier Company: ARC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Exova Jones Environmental
Unit 3 Deeside Point, Zone 3 Deeside Industrial Park, Deeside, CH5 2UA Tel: 0044 1244 833 780
Reg Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL Company Reg No: SC070429

JEL 166759

CHAIN OF CUSTODY

CLIENT: AECOM INFRASTRUCTURE & ENVIRONMENT UK LTD	If Electronic File Required please select file format below		SAMPLER: DD, JJS, JEC, KBS
ADDRESS: 5 ST GEORGE'S ROAD, SWRY 4DR UK			MOBILE:
	EQUIS		EMAIL REPORT TO: SIMON COLES
PROJECT MANAGER (PM): NEIL COOPER	CROSSTAB		cc REPORT TO: DAVID DYSON
MOBILE: 07825 [illegible] 5586 321 321	CLIENT	X	INVOICE TO: (if different to report)
PROJECT ID: 60595731	AGS (please also fill in AGS SAMP_TYPE & SAMP_REF below)		QUOTE NUMBER: 15573 HJ AECOM V4 P.O No: 60595731
SITE: GTC Phase 1			ANALYSIS REQUIRED including SUITE names

Exova JONES ENVIRONMENTAL

Chain of Custody sheet page 1 of 2

TURNAROUND - please tick

10 DAY		4 DAY		Other	✓
5 DAY		3 DAY			

All waters - tick for samples to be tested shaken or settled

FOR LABORATORY USE ONLY

AVERAGE COOL BOX TEMP.(if required):

SAMPLE RECIEPT CONDITION:

MATRIX:- S=Soil, GW=GroundWater, SW=SurfaceWater, L/E=Leachate/Effluent, OW=OtherWater, P=Product/Oil)

Sample ID	AGS SAMPT YPE	AGS SAMPR EF	Shaken	Settled	S/GW/SW/ L/E/OW/P	Date	Time	Depth in Metres	Preserv ation	Asbestos risk High	Asbestos risk Medium	Asbestos risk Low
GTCS1 - 1Sa					S	7/6/19	0900	0-0.05	N		✓	✓
GTCS1 - 1Sb					S	"	0900	"	N		✓	✓
GTCS1 - 14a					S	"	0940	"	N		✓	✓
GTCS1 - 14b					S	"	0940	"	N		✓	✓
GTCS1 - 32a					S	"	1045	"	N		✓	✓
GTCS1 - 32b					S	"	1045	"	N		✓	✓
GTCS1 - 31a					S	"	1050	"	N		✓	✓
GTCS1 - 31b					S	"	1050	"	N		✓	✓
GTCS1 - 15a					S	"	0910	"	N		✓	✓
GTCS1 - 15b					S	"	0910	"	N		✓	✓
GTCS1 - 16a					S	"	0945	"	N		✓	✓
GTCS1 - 16b					S	"	0945	"	N		✓	✓
GTCS1 - 12a					S	"	1020	"	N			✓
GTCS1 - 12b					S	"	1020	"	N			✓
[illegible]									N			✓

Asbestos quotes ref above..

a) SAMPLES FOR FULL SUITE TESTING

b) SAMPLES FOR TESTING FOR LONG TERM STORAGE

c) SAMPLES FOR LONG TERM STORAGE

SOILS -We are MCERTS accredited for samples predominantly made up of sand, loam and clay (no other matrices). Please request an MCERTS report if required. WATERS - we are accredited for surface and groundwaters (leachates and effluents are accredited for some tests, please see UKAS schedule). Please tick whether analysis is required on settled or shaken samples

RELINQUISHED BY:		RECEIVED BY:	METHOD of SHIPMENT
Name: DAVID DYSON	Date: 7/6/19	Name:	Date: Consignment note No: 0018325
Of: AECOM	Time: 13:00	Of:	Time: Courier Company: ANC

Health & Safety instructions including known hazards (eg suspected asbestos). Please let us know if samples are heavily contaminated, High PAHs expected, provide PID readings if available

Appendix TN15-D – Laboratory Analytical Certificates

1.0 Scope

This procedure describes the preparation of a homogenous sub-sample of soil. The technique to be adopted will vary depending on the analysis required to be undertaken on the sub sample. In general the techniques to be adopted will vary based on the following;

- Unstable Determinands; which include organic substances such as VOC and SVOC
- Stable Determinands; which include TOC, LOI and inorganic substances such as metals
- Asbestos

2.0 Unstable Determinands – Volatile Substances

Principle

This procedure shall be adopted to obtain sub samples of soil which will be used for the preparation of as 'received samples' for the analysis of 'Unstable Determinands' comprising of VOC and adopting process methods PM10, PM12 & PM23. Throughout the process the sample should be prepared with minimal handling.

Equipment

2.1 Foil tray
2.2 Metal Spatula

Procedure

2.3 Samples should not be physically mixed in order to minimise loss of volatiles during sub-sampling.
2.4 Sub samples should be obtained by removing the top third of the sample and placing this onto a clean foil tray.
2.5 Take the required amount of soil from the remaining soil within the sample jar keeping away from the sides of the jar if possible
2.6 Place the soil on the foil tray back into the sample jar and screw the lid back on in case further analysis is required.

3.0 Unstable Determinands – Semi Volatile Substances

Principle

This procedure shall be adopted to obtain sub samples of soil, not scheduled for an asbestos screen, which will be used for the preparation of as 'received samples' for the analysis of 'Unstable Determinands' comprising predominantly of SVOC and adopting process methods PM05, PM06, PM08, PM11 & PM21. Throughout the process the sample should be prepared with minimal handling.

Equipment

3.1 Foil tray
3.2 Metal Spatula

Procedure

3.3 Where practical i.e. loose granular soils – the whole sample is mixed in the sample jar using a metal spatula. If necessary to allow mixing any large stones can be removed from the sample jar and set aside on a clean foil tray. The sample is then mixed in the jar for approximately 10 seconds or until the sample appears homogenous incorporating any sample which may be sticking to the edges of the sample jar.

3.4 Once mixed take the required amount of soil from the homogenised soil within the sample jar. After sampling replace any large stones which were previously removed back into the sample jar and place the lid back onto the sample jar.

3.5 Where it is not practical to mix samples within the sample jar i.e. for dense or cohesive soils the top portion of the sample, at least 50%, is removed from the sample jar onto a new disposable foil tray. The sample is then mixed in the foil tray with a metal spatula for approximately 10 seconds or until the sample appears homogenous. Where the sample comprises very stiff clays the sample shall first be broken up using either the point of the spatula or a small hammer.

3.6 Once mixed take the required amount of soil from the homogenised soil within the foil tray. After sampling replace the homogenised soil in the foil tray back into the sample jar and place the lid back onto the sample jar.

4.0 Stable Determinands

Principle

This procedure shall be adopted to obtain sub samples of which will be used for the preparation of 'dried and crushed samples' for the analysis of 'Stable Determinands' comprising predominantly of TOC, LOI and inorganics such as metals and adopting process methods PM077.

Equipment

4.1 Foil tray

4.2 Metal Spatula

Procedure

4.3 Where practical the whole sample is mixed in the sample jar using a metal spatula for approximately 10 seconds or until the sample appears homogenous incorporating any sample which may be sticking to the edges of the sample jar.

4.4 Where it is not practical to mix samples within the sample jar the top portion of the sample, at least 50%, is removed from the sample jar onto a new disposable foil tray. The sample is then mixed in the foil tray with a metal spatula for approximately 10 seconds or until the sample appears homogenous. Where the sample comprises very stiff clays the sample shall first be broken up using either the point of the spatula or a small hammer.

4.5 Once mixed take the required amount of soil from the homogenised soil including where possible a representative fraction of stones. The sub sample can then be dried, crushed, ground and sieved as per PM04 HK07.

4.6 After sampling replace any remaining homogenised soil in the foil tray back into the sample jar and place the lid back onto the sample jar.

5.0 Asbestos Sub Sampling Procedure - Coning and Quartering

This procedure shall be adopted to obtain sub samples of soil which will be used for Asbestos analysis. The technique to be adopted is known as coning and quartering. Where samples are also scheduled for other analysis such as SVOC and stable determinands the remaining sample from the cone and quartering, that is not used within the asbestos analysis, can also be directly used without further homogenisation for obtaining sub samples for these other analysis.

Equipment

5.1 Foil tray
5.2 Small shovel

Procedure

3.1 Empty the entire contents of the sample container into a foil tray.
3.2 Pile the entire sample into a cone-shaped heap.
3.3 Using a small shovel, transfer the sample from this cone and pile up into a new cone.
3.4 Always take material from the top of the first heap and place it on the growing peak of the new cone.
3.5 The operation is repeated to form a third cone to complete the mixing.
3.6 Press the edge of the small shovel vertically into the top of the cone, rotate the shovel several degrees and withdraw it. Repeat this exercise until the top of the cone is flattened.
3.7 Draw two lines at right angles across the flattened top of the heap.
3.8 Divide the heap along the lines to form four smaller heaps of equal size.
3.9 Discard two of the heaps from opposite sides and combine the remaining two heaps into a new cone.
3.10 The coning and quartering cycle is repeated for the new cone until the desired amount of sub-sample remains.

6.0 Interferences

Carryover from previous samples that may interfere with the analytical process shall be kept to a minimum through the use of disposable laboratory equipment (e.g. foil trays etc). All non-disposable equipment shall be cleaned thoroughly prior to use. Spatulas are cleaned using blue paper, polished (VOC) or di water and kick start-2.

7.0 Health, Safety and Environmental Control

The safe method of working identified by the Risk Assessment included within the process method for which the sub sample is being obtained shall be understood and adhered to at all times. Notwithstanding any Process Method specific controls the following shall be adopted as a minimum:

- Personal Protective Equipment (PPE) comprising laboratory coat-fastened, gloves- disposable nitrile gloves 89/686/EEC and EN374-2, eye protection- BS EN 166:2001 must be worn. Gloves must be checked for damage and regularly changed;
- Work stations/benches must be kept clean and tidy and free from erroneous soil;
- Good laboratory hygiene practices shall be observed at all times but particularly before and after comfort breaks;
- Highly odorous soils shall be sub sampled in fume cupboards or using an extraction arm as appropriate.

If the soil sample has a strange non-soil like colour or a non-soil like odour immediately place the soil back into the sample jar and put the lid back on. Contact a supervisor and seek guidance on how best to proceed.

8.0 References

Standing Committee of Analysts, The preparation and pre-treatment of potentially contaminated soils and associated materials (2015).

Element Materials Technology
Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

P: +44 (0) 1244 833780
F: +44 (0) 1244 833781
W: www.element.com

AECOM
9th Floor Reception
Sunley House
4 Bedford Park
Croydon
CR0 2AP

Attention :	David Dyson
Date :	17th July, 2019
Your reference :	60595731
Our reference :	Test Report 19/9004 Batch 1
Location :	Grenfell
Date samples received :	5th June, 2019
Status :	Final report
Issue :	1

Twenty six samples were received for analysis on 5th June, 2019 of which eighteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
Aluminium	9603	-	-	-	14330	17230	10400	25210	7627	19870	<50	mg/kg	TM30/PM15
Arsenic #M	17.2	-	-	-	14.6	12.0	15.8	16.1	11.7	24.3	<0.5	mg/kg	TM30/PM15
Barium #M	186	-	-	-	222	111	139	168	143	266	<1	mg/kg	TM30/PM15
Beryllium	1.3	-	-	-	1.4	1.1	0.9	1.8	0.8	1.9	<0.5	mg/kg	TM30/PM15
Cadmium #M	0.7	-	-	-	0.7	0.8	0.9	0.5	0.7	1.0	<0.1	mg/kg	TM30/PM15
Chromium #M	97.8	-	-	-	101.4	83.0	99.0	88.8	95.4	101.7	<0.5	mg/kg	TM30/PM15
Copper #M	90	-	-	-	92	50	61	54	54	91	<1	mg/kg	TM30/PM15
Lead #M	312	-	-	-	275	96	172	214	178	517	<5	mg/kg	TM30/PM15
Mercury #M	0.7	-	-	-	0.5	0.1	0.2	0.5	0.3	0.9	<0.1	mg/kg	TM30/PM15
Nickel #M	26.1	-	-	-	26.4	24.4	21.0	30.8	18.7	33.8	<0.7	mg/kg	TM30/PM15
Selenium #M	2	-	-	-	<1	2	2	2	<1	3	<1	mg/kg	TM30/PM15
Vanadium	56	-	-	-	53	55	38	95	35	80	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	2.5	-	-	-	2.7	2.7	3.9	3.7	9.8	2.4	<0.1	mg/kg	TM74/PM32
Zinc #M	243	-	-	-	298	166	246	160	199	365	<5	mg/kg	TM30/PM15
Aluminium	-	13789	12830	13120	-	-	-	-	-	-	<50	mg/kg	TM30/PM62
Arsenic	-	16.1	18.4	18.0	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	235	209	230	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Beryllium	-	1.4	1.3	1.3	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Cadmium	-	0.7	0.8	0.8	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	34.0	35.4	33.5	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	110	95	98	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	-	341	385	327	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	-	0.3	0.4	0.4	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	26.4	24.7	28.0	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	1	1	<1	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Vanadium	-	53	49	52	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Water Soluble Boron	-	2.2	2.3	2.3	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	337	325	312	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Aluminium	-	9831	9865	10450	-	-	-	-	-	-	<50	mg/kg	TM30/PM42
Arsenic	-	15.0	14.2	15.1	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM42
Barium	-	175	187	175	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Beryllium	-	1.1	1.1	1.1	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM42
Cadmium	-	0.6	0.6	0.6	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM42
Chromium	-	28.8	30.5	29.2	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM42
Copper	-	83	87	85	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Lead	-	296	321	294	-	-	-	-	-	-	<5	mg/kg	TM30/PM42
Mercury	-	<0.1	<0.1	0.1	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM42
Nickel	-	22.7	23.4	22.6	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM42
Selenium	-	<1	1	<1	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Vanadium	-	41	42	44	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Water Soluble Boron	-	2.6	2.6	2.5	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM42
Zinc	-	271	270	269	-	-	-	-	-	-	<5	mg/kg	TM30/PM42

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
PAH MS													
Naphthalene #M	0.16	0.15	0.11	0.10	0.14	<0.04	0.13	<0.04	<0.04	0.16	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.57	0.38	0.20	0.18	0.32	0.04	0.08	0.17	0.25	0.73	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.23	0.07	0.11	0.07	0.12	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	mg/kg	TM4/PM8
Fluorene #M	0.27	0.08	0.10	0.06	0.10	<0.04	<0.04	0.07	0.08	0.12	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	6.24	1.22	1.24	0.88	1.08	0.13	0.25	1.04	0.83	2.10	<0.03	mg/kg	TM4/PM8
Anthracene #	2.33	0.57	0.45	0.32	0.51	<0.04	0.09	0.29	0.37	0.81	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	10.09	3.72	2.34	2.08	2.76	0.34	0.59	2.32	2.09	6.09	<0.03	mg/kg	TM4/PM8
Pyrene #	7.95	3.40	2.05	1.90	2.58	0.31	0.50	1.86	1.76	5.35	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	4.32	2.00	1.18	1.14	1.73	0.22	0.38	1.04	1.03	3.06	<0.06	mg/kg	TM4/PM8
Chrysene #M	4.01	2.12	1.26	1.25	1.85	0.21	0.37	1.13	1.18	3.59	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	7.07	4.97	2.61	2.69	4.08	0.41	0.76	2.04	2.46	7.26	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	3.97	2.81	1.43	1.47	2.22	0.21	0.38	1.10	1.22	3.80	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	2.48	2.08	1.03	1.14	1.75	0.17	0.32	0.70	0.91	2.86	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.71	0.41	0.18	0.22	0.47	<0.04	0.07	0.16	0.20	0.56	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	2.48	2.07	1.09	1.22	1.98	0.20	0.36	0.70	0.96	3.00	<0.04	mg/kg	TM4/PM8
Coronene	0.38	0.46	0.23	0.21	0.42	0.07	0.11	0.16	0.22	0.72	<0.04	mg/kg	TM4/PM8
PAH 16 Total	52.9	26.1	15.4	14.7	21.7	2.2	4.3	12.6	13.3	39.6	<0.6	mg/kg	TM4/PM8
PAH 17 Total	53.26	26.51	15.61	14.93	22.11	2.31	4.39	12.78	13.56	40.32	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	5.09	3.58	1.88	1.94	2.94	0.30	0.55	1.47	1.77	5.23	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.98	1.39	0.73	0.75	1.14	0.11	0.21	0.57	0.69	2.03	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	99	98	88	119	98	96	94	96	97	<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	ND	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	11.7	9.7	10.6	11.0	8.8	18.0	9.1	32.7	20.0	17.3	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	97.8	-	-	-	101.4	83.0	99.0	88.8	95.4	101.7	<0.5	mg/kg	NONE/NONE
Chromium III	-	34.0	35.4	33.5	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Chromium III	-	28.8	30.5	29.2	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
Total Organic Carbon #	5.33	-	-	-	5.01	3.10	5.16	5.83	11.73	6.51	<0.02	%	TM21/PM24
Total Organic Carbon	-	3.87	3.59	4.56	-	-	-	-	-	-	<0.02	%	TM21/PM89
Thiocyanate	0.9	0.9	1.0	1.0	0.8	<0.6	1.2	1.7	4.1	1.6	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	5.11	7.1	7.25	<0.685	5.89	3.93	3.68	5.92	2.13	10.9		ng/kg	Subcontracted
12378-PCDF*	3.44	2.84	<0.405	6.81	3.69	2.33	2.61	0.865	<0.354	1.65		ng/kg	Subcontracted
23478-PCDF*	4.7	5.68	5.31	8.54	5.64	3.63	3.88	4.42	2.68	9.45		ng/kg	Subcontracted
123478-HxCDF*	4.89	5.36	5.69	7.9	4.68	2.71	4.61	3.95	2.79	9.19		ng/kg	Subcontracted
123678-HxCDF*	4.24	4.09	3.56	6.51	3.88	2.87	3.65	4.13	2.25	8.85		ng/kg	Subcontracted
234678-HxCDF*	4.18	4.96	4.1	7.51	4.45	2.88	4.61	2.77	2.59	9.24		ng/kg	Subcontracted
123789-HxCDF*	0.552	<0.313	<0.400	<0.337	0.98	<0.237	<0.315	<0.338	<0.332	<0.545		ng/kg	Subcontracted
1234678-HpCDF*	33.6	36.3	33.4	60.5	29.8	19	23.7	19.3	28.7	80.8		ng/kg	Subcontracted
1234789-HpCDF*	1.49	1.64	1.94	0.276	1.91	1.18	1.78	1.26	1.23	2.54		ng/kg	Subcontracted
OCDF*	25.9	31	26.3	35.8	24	24.3	27.3	11.8	48.1	70.6		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.312	<0.344	<0.373	0.291	<0.274	<0.182	<0.201	<0.430	<0.252	<0.587		ng/kg	Subcontracted
12378-PCDD*	1.63	<0.503	1.7	<0.642	1.08	0.603	<0.400	2.31	<0.486	<0.852		ng/kg	Subcontracted
123478-HxCDD*	1.1	1.4	2.35	<0.467	1.73	1.04	1.11	1.42	1.08	2.97		ng/kg	Subcontracted
123678-HxCDD*	3.51	3.85	3.28	6.99	4.39	2.12	2.62	2.96	4.38	7.03		ng/kg	Subcontracted
123789-HxCDD*	2.2	2.27	2.25	<0.519	3.08	1.74	1.94	2.09	<0.586	4.05		ng/kg	Subcontracted
1234678-HpCDD*	51.5	75.4	75.1	84.2	61.8	47.1	43.6	35.5	117	72.4		ng/kg	Subcontracted
OCDD*	380	579	587	580	450	332	290	116	941	362		ng/kg	Subcontracted
TEQ(1) (NATO)*	7.5	8.25	8.5	10.4	8.14	5.2	5.73	6.88	5.92	13.1		ng/kg	Subcontracted
TEQ(2) (NATO)*	7.18	7.63	8.07	9.57	7.86	4.99	5.3	6.42	5.31	12		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	2.81	3.39	2.62	4.91	2.33	2.13	2.22	2.25	3.78	5.03		ng/kg	Subcontracted
12378-PBDF*	1.75	1.95	1.84	2.77	1.61	1.7	1.51	1.24	2	2.87		ng/kg	Subcontracted
23478-PBDF*	0.9	1.6	0.85	1.65	0.88	0.84	0.67	0.71	1.35	1.7		ng/kg	Subcontracted
123478-HxBDF*	0.61	0.89	0.66	0.94	0.55	0.55	0.55	0.55	0.88	1.44		ng/kg	Subcontracted
123678-HxBDF*	0.58	0.67	0.6	0.75	0.63	0.54	0.6	0.49	0.79	1.39		ng/kg	Subcontracted
234678-HxBDF*	<0.410	0.48	0.44	0.44	<0.390	<0.450	<0.440	<0.480	0.47	0.46		ng/kg	Subcontracted
123789-HxBDF*	<0.330	0.37	<0.550	<0.500	<0.500	<0.500	<0.530	<0.500	<0.520	0.41		ng/kg	Subcontracted
1234678-HpBDF*	<0.450	0.51	<0.460	<0.390	<0.400	<0.410	<0.400	<0.390	<0.380	<0.400		ng/kg	Subcontracted
1234789-HpBDF*	<0.570	<0.500	<0.460	<0.470	<0.460	<0.470	<0.460	<0.470	<0.450	<0.420		ng/kg	Subcontracted
OBDF*	<0.620	<0.610	<0.530	<0.590	<0.590	<0.580	<0.590	<0.530	<0.590	<0.530		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.440	<0.490	<0.460	0.42	<0.450	<0.470	<0.480	<0.470	<0.460	<0.490		ng/kg	Subcontracted
12378-PBDD*	<0.490	<0.470	<0.480	<0.426	<0.500	<0.500	<0.500	<0.500	<0.500	<0.470		ng/kg	Subcontracted
123478-HxBDD*	<0.520	<0.500	<0.540	<0.550	<0.540	<0.540	<0.540	<0.530	<0.540	<0.500		ng/kg	Subcontracted
123678-HxBDD*	<0.480	<0.520	<0.470	<0.450	<0.490	<0.470	<0.470	<0.440	<0.500	<0.480		ng/kg	Subcontracted
123789-HxBDD*	<0.460	<0.510	<0.490	<0.490	<0.450	<0.480	<0.490	<0.480	<0.460	<0.470		ng/kg	Subcontracted
1234678-HpBDD*	<0.570	0.59	<0.580	<0.550	<0.590	<0.590	<0.600	<0.550	<0.520	0.58		ng/kg	Subcontracted
OBDD*	<0.880	<0.790	<0.860	<0.830	<0.850	<0.830	<0.850	<0.800	<0.800	<0.800		ng/kg	Subcontracted
PCB-81*	1.25	1.53	1.9	<0.271	1.07	<0.305	1.72	0.823	1.33	2.02		ng/kg	Subcontracted
PCB-77*	33.2	52	55.2	66.5	47.8	62.9	136	36.2	41.4	75.2		ng/kg	Subcontracted
PCB-123*	25.1	17.4	12.9	17.9	20.9	36	67.6	9.76	18.1	44.1		ng/kg	Subcontracted
PCB-118*	1220	747	708	767	728	1340	2780	432	534	1030		ng/kg	Subcontracted
PCB-114*	11	6.77	8.44	8.59	8.79	19.9	24.1	4.4	8.75	5.93		ng/kg	Subcontracted
PCB-105*	523	356	350	368	350	634	1340	197	258	486		ng/kg	Subcontracted
PCB-126*	6.9	8.42	8.7	<0.529	10.4	12	30.2	9.1	5.89	17.1		ng/kg	Subcontracted
PCB-167*	72.3	71.9	70.7	77.2	70.4	133	283	31.5	44.9	95.7		ng/kg	Subcontracted
PCB-156*	194	163	155	163	157	320	703	74.4	96.7	233		ng/kg	Subcontracted
PCB-157*	44.8	42.6	40.6	46.2	40.9	81	175	17	25.5	52.7		ng/kg	Subcontracted
PCB-169*	1.54	1.52	<0.127	<0.245	1.92	0.913	1.68	0.701	0.305	<0.289		ng/kg	Subcontracted
PCB-189*	14.2	19.5	19.2	19.9	19.2	27.9	37.1	7.86	10.9	26.1		ng/kg	Subcontracted
Isocyanic Acid-d	78	81	84	84	110	115	84	95	77	83	<0	%	TM192/PM0
Methyl Isocyanate-d	80	82	100	86	145	143	107	108	79	85	<0	%	TM192/PM0
Ethyl Isocyanate-d	112	106	98	108	155	158	103	102	99	106	<0	%	TM192/PM0
Propyl Isocyanate-d	113	101	107	114	137	134	105	111	97	107	<0	%	TM192/PM0
Phenyl Isocyanate-d	81	72	95	88	134	148	78	99	68	67	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	79	82	85	86	128	124	90	94	81	78	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	86	97	139++	119++	259	238	226++	226++	93	78	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	80	77	86	101	141	119	91	92	81	76	<0	%	TM192/PM0
Isophorone Diisocyanate-d	78	84	90	84	125	116	88	89	88	80	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	85	88	101	133	166	144	100	104	84	53	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.58	7.63	7.74	7.71	7.74	7.82	6.99	6.67	7.36	6.85	<0.01	pH units	TM73/PM11

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, chalk, vegetation	stones, chalk, vegetation	stones, chalk, vegetation, clinker	stones, vegetation, debris	stones, vegetation, brick	stones, vegetation	stones, vegetation, glass	stones, vegetation	stones, vegetation	stones, vegetation, debris		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.50	<0.10	<0.80	<0.15		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	137-144	153-160	161-168	169-176	177	178	179	180			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	CRM639-30G VOCS	CRM022-20G CYANIDE	CRM045-50G TRACE METALS	SQC003-40G BNAS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V	V	V	V					
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Sample Type	Clayey Loam	Clay	Clay	Clay	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Aluminium	16920	17060	17890	17570	-	-	21490	-			<50	mg/kg	TM30/PM15
Arsenic #M	19.7	20.7	20.2	21.2	-	-	20.4	-			<0.5	mg/kg	TM30/PM15
Barium #M	258	258	266	269	-	-	93	-			<1	mg/kg	TM30/PM15
Beryllium	1.7	1.7	1.7	1.7	-	-	1.4	-			<0.5	mg/kg	TM30/PM15
Cadmium #M	0.8	0.9	0.9	0.9	-	-	1.8	-			<0.1	mg/kg	TM30/PM15
Chromium #M	106.0	102.5	112.4	97.2	-	-	90.4	-			<0.5	mg/kg	TM30/PM15
Copper #M	98	103	103	101	-	-	123	-			<1	mg/kg	TM30/PM15
Lead #M	552	571	556	564	-	-	46	-			<5	mg/kg	TM30/PM15
Mercury #M	1.0	2.4	0.9	1.0	-	-	0.7	-			<0.1	mg/kg	TM30/PM15
Nickel #M	28.9	29.4	29.4	29.7	-	-	196.9	-			<0.7	mg/kg	TM30/PM15
Selenium #M	2	2	2	2	-	-	2	-			<1	mg/kg	TM30/PM15
Vanadium	70	72	74	73	-	-	30	-			<1	mg/kg	TM30/PM15
Water Soluble Boron #M	2.5	2.7	2.4	2.6	-	-	-	-			<0.1	mg/kg	TM74/PM32
Zinc #M	347	362	357	364	-	-	349	-			<5	mg/kg	TM30/PM15
Aluminium	-	-	-	-	-	-	-	-			<50	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-	-	-			<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-	-	-			<1	mg/kg	TM30/PM62
Beryllium	-	-	-	-	-	-	-	-			<0.5	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-	-	-			<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-	-	-			<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-	-	-			<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-	-	-			<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-	-	-			<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-	-	-			<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-	-	-			<1	mg/kg	TM30/PM62
Vanadium	-	-	-	-	-	-	-	-			<1	mg/kg	TM30/PM62
Water Soluble Boron	-	-	-	-	-	-	-	-			<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-	-	-			<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	137-144	153-160	161-168	169-176	177	178	179	180			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	CRM639-30G VOCS	CRM022-20G CYANIDE	CRM045-50G TRACE METALS	SQC003-40G BNAS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V	V	V	V					
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Sample Type	Clayey Loam	Clay	Clay	Clay	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
PAH MS													
Naphthalene #M	0.23	0.23	0.20	0.23	-	-	-	2.91			<0.04	mg/kg	TM4/PM8
Acenaphthylene	1.14	1.13	1.04	1.02	-	-	-	7.20			<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.12	0.11	0.10	0.11	-	-	-	4.62			<0.05	mg/kg	TM4/PM8
Fluorene #M	0.17	0.15	0.14	0.15	-	-	-	8.55			<0.04	mg/kg	TM4/PM8
Phenanthrene #M	2.44	2.31	2.17	2.03	-	-	-	2.28			<0.03	mg/kg	TM4/PM8
Anthracene #	1.15	1.18	1.05	1.02	-	-	-	6.62			<0.04	mg/kg	TM4/PM8
Fluoranthene #M	7.35	7.38	6.90	6.69	-	-	-	7.42			<0.03	mg/kg	TM4/PM8
Pyrene #	6.31	6.43	5.95	5.78	-	-	-	8.62			<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	4.00	4.14	3.95	3.69	-	-	-	5.26			<0.06	mg/kg	TM4/PM8
Chrysene #M	4.51	4.64	4.38	4.27	-	-	-	6.79			<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	9.75	10.02	9.49	9.24	-	-	-	17.63			<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	5.11	5.34	5.04	4.88	-	-	-	4.38			<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	3.93	4.18	3.97	3.81	-	-	-	4.25			<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	1.00	0.87	0.80	0.79	-	-	-	1.83			<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	3.99	4.40	4.06	3.91	-	-	-	3.13			<0.04	mg/kg	TM4/PM8
Coronene	1.04	0.99	0.92	1.05	-	-	-	<0.04			<0.04	mg/kg	TM4/PM8
PAH 16 Total	51.2	52.5	49.2	47.6	-	-	-	91.5			<0.6	mg/kg	TM4/PM8
PAH 17 Total	52.24	53.50	50.16	48.67	-	-	-	91.49			<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	7.02	7.21	6.83	6.65	-	-	-	12.69			<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	2.73	2.81	2.66	2.59	-	-	-	4.94			<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	94	91	86	87	-	-	-	95			<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	-	-	-				None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	-	-	-	-				None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	-	-	-	-			<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	-	-	-	-			<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	-	-	-	-			<35	ug/kg	TM17/PM8
Natural Moisture Content	19.5	19.0	19.8	20.9	<0.1	<0.1	-	<0.1			<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	-	-	-	-			<0.3	mg/kg	TM38/PM20
Chromium III	106.0	102.5	112.4	97.2	-	-	-	-			<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	-	-			<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	-			<0.5	mg/kg	TM89/PM45
Total Cyanide #M	1.0	0.8	0.8	0.8	-	22.2	-	-			<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	137-144	153-160	161-168	169-176	177	178	179	180			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	CRM639-30G VOCS	CRM022-20G CYANIDE	CRM045-50G TRACE METALS	SQC003-40G BNAS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V	V	V	V					
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Sample Type	Clayey Loam	Clay	Clay	Clay	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Total Organic Carbon #	7.01	6.58	6.64	7.17	-	-	-	-			<0.02	%	TM21/PM24
Total Organic Carbon	-	-	-	-	-	-	-	-			<0.02	%	TM21/PM89
Thiocyanate	2.5	2.6	2.8	2.5	-	-	-	-			<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	11.8	12.8	8.02	10.2	-	-	-	-				ng/kg	Subcontracted
12378-PCDF*	6.87	7.24	6.87	7.53	-	-	-	-				ng/kg	Subcontracted
23478-PCDF*	13	12.1	11.2	10.4	-	-	-	-				ng/kg	Subcontracted
123478-HxCDF*	11.9	9.48	10.2	6.41	-	-	-	-				ng/kg	Subcontracted
123678-HxCDF*	9.9	9.02	8.35	7.47	-	-	-	-				ng/kg	Subcontracted
234678-HxCDF*	10.4	8.61	10	7.41	-	-	-	-				ng/kg	Subcontracted
123789-HxCDF*	<0.378	<0.442	0.756	0.577	-	-	-	-				ng/kg	Subcontracted
1234678-HpCDF*	55.6	56.8	50.6	49.2	-	-	-	-				ng/kg	Subcontracted
1234789-HpCDF*	3.08	3.49	2.3	2.86	-	-	-	-				ng/kg	Subcontracted
OCDF*	62	57.8	53.8	54.2	-	-	-	-				ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.644	<0.457	0.99	<0.461	-	-	-	-				ng/kg	Subcontracted
12378-PCDD*	<0.746	1.89	3.63	4.12	-	-	-	-				ng/kg	Subcontracted
123478-HxCDD*	3.12	2.07	1.89	2.5	-	-	-	-				ng/kg	Subcontracted
123678-HxCDD*	8.41	7.88	7.29	8.22	-	-	-	-				ng/kg	Subcontracted
123789-HxCDD*	6.35	5.03	5.02	4.89	-	-	-	-				ng/kg	Subcontracted
1234678-HpCDD*	84.8	78.6	78.7	68.1	-	-	-	-				ng/kg	Subcontracted
OCDD*	397	377	413	367	-	-	-	-				ng/kg	Subcontracted
TEQ(1) (NATO)*	16	15.2	15.7	14.5	-	-	-	-				ng/kg	Subcontracted
TEQ(2) (NATO)*	14.9	14.6	15.7	14	-	-	-	-				ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	5.92	6.09	4.98	4.4	-	-	-	-				ng/kg	Subcontracted
12378-PBDF*	3.29	3.81	3.66	3.31	-	-	-	-				ng/kg	Subcontracted
23478-PBDF*	2.01	2.13	2.46	2.87	-	-	-	-				ng/kg	Subcontracted
123478-HxBDF*	1.48	1.79	2.03	2.66	-	-	-	-				ng/kg	Subcontracted
123678-HxBDF*	1.49	1.6	1.89	2.06	-	-	-	-				ng/kg	Subcontracted
234678-HxBDF*	0.77	<0.420	<0.450	1.44	-	-	-	-				ng/kg	Subcontracted
123789-HxBDF*	<0.500	<0.500	<0.520	<0.500	-	-	-	-				ng/kg	Subcontracted
1234678-HpBDF*	<0.410	<0.420	<0.460	<0.490	-	-	-	-				ng/kg	Subcontracted
1234789-HpBDF*	<0.480	<0.490	<0.560	<0.600	-	-	-	-				ng/kg	Subcontracted
OBDF*	<0.550	<0.550	<0.600	<0.580	-	-	-	-				ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	137-144	153-160	161-168	169-176	177	178	179	180			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	CRM639-30G VOCS	CRM022-20G CYANIDE	CRM045-50G TRACE METALS	SQC003-40G BNAS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V	V	V	V					
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Sample Type	Clayey Loam	Clay	Clay	Clay	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Dioxins (Brominated)													
2378-TBDD*	<0.470	<0.470	<0.500	<0.510	-	-	-	-				ng/kg	Subcontracted
12378-PBDD*	<0.500	<0.500	<0.470	<0.470	-	-	-	-				ng/kg	Subcontracted
123478-HxBDD*	<0.550	<0.550	<0.590	<0.620	-	-	-	-				ng/kg	Subcontracted
123678-HxBDD*	<0.490	<0.460	<0.480	<0.540	-	-	-	-				ng/kg	Subcontracted
123789-HxBDD*	<0.510	<0.520	<0.550	<0.490	-	-	-	-				ng/kg	Subcontracted
1234678-HpBDD*	0.88	<0.600	<0.580	<0.660	-	-	-	-				ng/kg	Subcontracted
OBDD*	<0.800	<0.800	<0.790	<0.830	-	-	-	-				ng/kg	Subcontracted
PCB-81*	2.31	2.11	4.38	3.65	-	-	-	-				ng/kg	Subcontracted
PCB-77*	69.7	66.7	73.7	65.8	-	-	-	-				ng/kg	Subcontracted
PCB-123*	36	30.4	35.6	23.9	-	-	-	-				ng/kg	Subcontracted
PCB-118*	915	881	953	839	-	-	-	-				ng/kg	Subcontracted
PCB-114*	6.65	3.77	7.02	3.63	-	-	-	-				ng/kg	Subcontracted
PCB-105*	447	426	467	411	-	-	-	-				ng/kg	Subcontracted
PCB-126*	13.8	14.5	14	14.4	-	-	-	-				ng/kg	Subcontracted
PCB-167*	83.3	79.1	86	75.9	-	-	-	-				ng/kg	Subcontracted
PCB-156*	197	190	203	183	-	-	-	-				ng/kg	Subcontracted
PCB-157*	45.6	44.2	47	41.2	-	-	-	-				ng/kg	Subcontracted
PCB-169*	2.36	2.6	0.699	<0.243	-	-	-	-				ng/kg	Subcontracted
PCB-189*	21.5	20.3	22.8	19.4	-	-	-	-				ng/kg	Subcontracted
Isocyanic Acid-d	72	98	86	98	-	-	-	-			<0	%	TM192/PM0
Methyl Isocyanate-d	74	116	118	125	-	-	-	-			<0	%	TM192/PM0
Ethyl Isocyanate-d	88	131	137	144	-	-	-	-			<0	%	TM192/PM0
Propyl Isocyanate-d	97	109	112	125	-	-	-	-			<0	%	TM192/PM0
Phenyl Isocyanate-d	60	85	90	96	-	-	-	-			<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	69	97	104	110	-	-	-	-			<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	59	118	140	148	-	-	-	-			<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	56	75	88	84	-	-	-	-			<0	%	TM192/PM0
Isophorone Diisocyanate-d	76	102	116	117	-	-	-	-			<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	33	82	101	100	-	-	-	-			<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	-	-	-	-			<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	-	-	-	-			<250	ug/kg	TM192/PM0
pH #M	6.59	6.64	6.39	6.39	-	-	-	-			<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	137-144	153-160	161-168	169-176	177	178	179	180			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	CRM639-30G VOCS	CRM022-20G CYANIDE	CRM045-50G TRACE METALS	SQC003-40G BNAS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V	V	V	V					
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Sample Type	Clayey Loam	Clay	Clay	Clay	Soil	Soil	Soil	Soil					
Batch Number	1	1	1	1	1	1	1	1					
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019					
Sample Type	Clayey Loam	Clay	Clay	Clay	-	-	-	-				None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	-	-	-	-				None	PM13/PM0
Other Items	stones, vegetation	stones, vegetation	stones, vegetation	stones, vegetation	-	-	-	-				None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	-	-	-	-				mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	-	-	-	-				mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	-	-	-	-				mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	-	-	-	-				mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	-	-	-	-				mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	-	-	-	-				mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.5	<0.20	<0.20	<0.20	-	-	-	-				mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	-	-	-	-				mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	18	<10	<10	<10	25	20	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	136	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10	<10	598	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	47	121	146	61	108	15	28	32	24	107	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	626	613	812	1121	766	340	610	155	527	924	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	152	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	57	112	797	82	381	<10	131	203	116	366	<10	ug/kg	TM16/PM8
Dibenzofuran #M	25	56	122	30	90	<10	52	38	19	67	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	117	123	113	119	116	113	110	115	120	118	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	117	126	119	124	123	115	121	119	122	124	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	137-144	153-160	161-168	169-176							LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE									
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45									
Sample Type	Clayey Loam	Clay	Clay	Clay									
Batch Number	1	1	1	1									
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019									
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	24	21	22	29							<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	104	100	91	104							<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	637	520	540	491							<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100							<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100							<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100							<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100							<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100							<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Carbazole	362	359	357	365							<10	ug/kg	TM16/PM8
Dibenzofuran #M	98	93	81	88							<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10							<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	118	117	122	121							<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	124	125	126	123							<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	1-8	17-24	33-40	41-48	49-56	57-64	73-80	89-96	105-112	121-128	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-33A	GTCS 1-34A	GTCS 1-38A	GTCS 1-37A	GTCS 1-42A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 11:25	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 11:53	04/06/2019 09:30	04/06/2019 10:30	04/06/2019 14:15	04/06/2019 13:30	04/06/2019 16:00			
Sample Type	Clayey Loam	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay	Clay			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	6	19	6	6	4	5	7	36	50	7	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	7	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	93	85	92	90	84	90	84	86	80	79	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	72	66	72	71	66	73	63	68	61	58	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	137-144	153-160	161-168	169-176	177						LOD/LOR	Units	Method No.
Sample ID	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	CRM639-30G VOCS								
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05									
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V								
Sample Date	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	04/06/2019 14:45	05/06/2019								
Sample Type	Clayey Loam	Clay	Clay	Clay	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019								
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2						<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	144						<6	ug/kg	TM15/PM10
Chloromethane #	27	30	28	33	100						<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2						<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1						<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	114						<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	120						<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	62						<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	<30	<30						<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	158						<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	192						<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	114						<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	161						<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5						<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3						<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	184						<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	103						<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	183						<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5						<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	31						<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	96						<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	92						<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	33						<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3						<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	31						<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	196						<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	141						<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	88						<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	60						<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5						<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	196						<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	198						<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	35						<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	100						<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	182						<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	91						<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	49						<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	182						<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	113						<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3						<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	91						<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3						<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5						<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	44						<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	41						<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	207						<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	64						<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	80						<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4						<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	134						<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7						<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	88	69	90	87	100						<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	66	52	66	65	103						<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 6
Sample identity: GTCS 1-35A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	89	361

Job number: 19/9004 **Method:** SVOC
Sample number: 22 **Matrix:** Solid
Sample identity: GTCS 1-36 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2381-21-7	Pyrene, 1-methyl-	12.183	95	280
192-97-2	Benzo[e]pyrene	14.954	91	574

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 38 **Matrix:** Solid
Sample identity: GTCS 1-36 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	91	374
2531-84-2	Phenanthrene, 2-methyl-	10.897	94	217
832-69-9	Phenanthrene, 1-methyl-	10.963	96	332
612-94-2	Naphthalene, 2-phenyl-	11.134	89	135
314-42-1	Isocil	11.436	92	281
33543-31-6	Fluoranthene, 2-methyl-	12.183	94	533
2381-21-7	Pyrene, 1-methyl-	12.306	96	302
227-86-1	Anthra(1,2-b)thiophene	12.940	95	415
3351-28-8	Chrysene, 1-methyl-	13.866	83	307
192-97-2	Benzo[e]pyrene	14.954	94	1062

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 46 **Matrix:** Solid
Sample identity: GTCS 1-36 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	87	433
192-97-2	Benzo[e]pyrene	14.954	90	594

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 54 **Matrix:** Solid
Sample identity: GTCS 1-36 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	95	392
2531-84-2	Phenanthrene, 2-methyl-	10.831	94	264
832-69-9	Phenanthrene, 1-methyl-	10.859	95	248
613-12-7	Anthracene, 2-methyl-	10.897	90	169
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	86	165
3442-78-2	Pyrene, 2-methyl-	12.079	95	244
33543-31-6	Fluoranthene, 2-methyl-	12.183	96	707
227-86-1	Anthra(1,2-b)thiophene	12.940	95	445
3351-28-8	Chrysene, 1-methyl-	13.866	89	337
192-97-2	Benzo[e]pyrene	14.675	98	2669

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 78
Sample identity: GTCS 1-34A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.850	95	224
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	94	395
192-97-2	Benzo[e]pyrene	14.954	90	815

Job number: 19/9004
Sample number: 94
Sample identity: GTCS 1-38A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.831	93	252
192-97-2	Benzo[e]pyrene	14.954	90	664

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 110
Sample identity: GTCS 1-37A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	89	372
134-96-3	Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	9.493	96	424
458-36-6	2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	9.887	96	784
87345-53-7	3,5-Dimethoxy-4-hydroxycinnamaldehyde	10.992	95	300
98496-82-3	Antra-9,10-quinone, 1-(3-hydrohy-3-phenyl-1-triazenyl)-	16.070	86	894

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 126
Sample identity: GTCS 1-42A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	95	204
832-69-9	Phenanthrene, 1-methyl-	10.831	96	381
610-48-0	Anthracene, 1-methyl-	10.897	95	279
2531-84-2	Phenanthrene, 2-methyl-	10.963	97	482
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	94	229
107919-92-6	Indole, 5-methyl-2-(4-pyridyl)-	11.691	81	238
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	94	396
3442-78-2	Pyrene, 2-methyl-	12.079	93	395
243-17-4	11H-Benzo[b]fluorene	12.183	89	1078
2381-21-7	Pyrene, 1-methyl-	12.306	97	483
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	96	765
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	12.978	86	548
479-79-8	11H-Benzo[a]fluoren-11-one	13.025	91	755
3351-28-8	Chrysene, 1-methyl-	13.856	95	738
3697-24-3	Chrysene, 5-methyl-	13.896	83	460
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.784	95	2128
192-97-2	Benzo[e]pyrene	14.954	96	2286

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 142 **Matrix:** Solid
Sample identity: GTCS 1-41 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	90	300
832-69-9	Phenanthrene, 1-methyl-	10.831	96	507
2531-84-2	Phenanthrene, 2-methyl-	10.963	97	428
84-65-1	9,10-Anthracenedione	11.077	90	215
612-94-2	Naphthalene, 2-phenyl-	11.133	89	284
314-42-1	Isocil	11.436	89	296
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	94	575
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	89	286
238-84-6	11H-Benzo[a]fluorene	12.183	94	1129
243-17-4	11H-Benzo[b]fluorene	12.259	93	410
2381-21-7	Pyrene, 1-methyl-	12.306	96	458
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	96	1102
239-01-0	11H-Benzo[a]carbazole	13.223	92	527
2541-69-7	Benz[a]anthracene, 7-methyl-	13.866	96	786
3351-28-8	Chrysene, 1-methyl-	13.896	95	437
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.794	95	2141
192-97-2	Benzo[e]pyrene	14.954	96	2453

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 158 **Matrix:** Solid
Sample identity: GTCS 1-41 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	90	244
832-69-9	Phenanthrene, 1-methyl-	10.831	96	484
2531-84-2	Phenanthrene, 2-methyl-	10.850	98	409
84-65-1	9,10-Anthracenedione	11.077	90	199
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	95	631
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.938	95	412
2381-21-7	Pyrene, 1-methyl-	12.079	93	444
33543-31-6	Fluoranthene, 2-methyl-	12.183	93	1169
243-17-4	11H-Benzo[b]fluorene	12.259	93	478
479-79-8	11H-Benzo[a]fluoren-11-one	12.779	92	281
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	96	584
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	91	1002
2541-69-7	Benz[a]anthracene, 7-methyl-	13.866	92	979
3351-28-8	Chrysene, 1-methyl-	13.896	95	470
192-97-2	Benzo[e]pyrene	14.954	98	2636

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 166 **Matrix:** Solid
Sample identity: GTCS 1-41 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
5912-86-7	Phenol, 2-methoxy-4-(1-propenyl)-, (Z)-	8.467	98	327
139-66-2	Diphenyl sulfide	9.275	90	394
6627-88-9	Phenol, 2,6-dimethoxy-4-(2-propenyl)-	9.765	91	727
458-36-6	2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	9.887	98	783
2531-84-2	Phenanthrene, 2-methyl-	10.831	95	413
610-48-0	Anthracene, 1-methyl-	10.897	95	218
3423-06-1	Isoquinoline, 7-ethoxy-1,2,3,4-tetrahydro-6-methoxy-1-(p-methoxybenzyl)-2-methyl-	10.935	83	294
832-69-9	Phenanthrene, 1-methyl-	10.954	95	252
87345-53-7	3,5-Dimethoxy-4-hydroxycinnamaldehyde	10.992	96	413
84-65-1	9,10-Anthracenedione	11.077	89	313
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	95	496
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	96	446
243-17-4	11H-Benzo[b]fluorene	12.079	93	485
238-84-6	11H-Benzo[a]fluorene	12.183	94	1160
2381-21-7	Pyrene, 1-methyl-	12.306	96	331
479-79-8	11H-Benzo[a]fluoren-11-one	12.779	92	235
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	93	562
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	89	758
2422-79-9	Benz[a]anthracene, 12-methyl-	13.866	95	794
3351-28-8	Chrysene, 1-methyl-	13.896	93	488
192-97-2	Benzo[e]pyrene	14.954	96	1991

Job number: 19/9004 **Method:** SVOC
Sample number: 174 **Matrix:** Solid
Sample identity: GTCS 1-41 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
139-66-2	Diphenyl sulfide	9.275	95	250
2531-84-2	Phenanthrene, 2-methyl-	10.850	98	393
610-48-0	Anthracene, 1-methyl-	10.897	97	187
612-94-2	Naphthalene, 2-phenyl-	11.124	91	345
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	95	583
107919-92-6	Indole, 5-methyl-2-(4-pyridyl)-	11.692	95	267
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.938	95	455
2381-21-7	Pyrene, 1-methyl-	12.079	91	438
238-84-6	11H-Benzo[a]fluorene	12.183	94	1232
243-17-4	11H-Benzo[b]fluorene	12.259	93	387
64401-21-4	Pyrene, 1,3-dimethyl-	12.722	93	370
479-79-8	11H-Benzo[a]fluoren-11-one	12.779	93	284
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	96	739
2541-69-7	Benz[a]anthracene, 7-methyl-	13.856	95	835
3351-28-8	Chrysene, 1-methyl-	13.896	94	441
191-30-0	1,2,9,10-Dibenzopyrene	14.445	90	742
192-97-2	Benzo[e]pyrene	14.954	96	2335

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

Signed on behalf of Element Materials Technology:

Ryan Butterworth
Asbestos Team Leader

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	1	GTCS 1-35A	0.00-0.05	8	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-36 PRIMARY SAMPLE	0.00-0.05	24	12/06/2019	**General Description (Bulk Analysis)**	soil-stones
					12/06/2019	**Synthetic/MMMF**	Absent
					12/06/2019	**Asbestos Fibres**	Fibre Bundles
					12/06/2019	**Asbestos ACM**	NAD
					12/06/2019	**Asbestos Type**	Amosite
					12/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Potentially Respirable Fibres per gram**	0
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					25/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					25/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	1	GTCS 1-36 LAB DUPLICATE	0.00-0.05	40	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	Fibre Bundles
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	Amosite
					06/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Potentially Respirable Fibres per gram**	0
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					25/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					25/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	1	GTCS 1-36 FIELD DUPLICATE	0.00-0.05	48	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	ACM Debris
					06/06/2019	**Asbestos Type**	Chrysotile
					06/06/2019	**Asbestos Level Screen**	less than 0.1%

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	1	GTCS 1-36 FIELD DUPLICATE	0.00-0.05	48	25/06/2019	**Potentially Respirable Fibres per gram**	0
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	0.001 (mass %)
					25/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					25/06/2019	**Asbestos Gravimetric & PCOM Total**	0.001 (mass %)
19/9004	1	GTCS 1-36 LAB FIELD DUPLICATE	0.00-0.05	56	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-33A	0.00-0.05	64	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-34A	0.00-0.05	80	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-38A	0.00-0.05	96	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-37A	0.00-0.05	112	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Present
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-42A	0.00-0.05	128	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-41 PRIMARY SAMPLE	0.00-0.05	144	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	1	GTCS 1-41 PRIMARY SAMPLE	0.00-0.05	144	06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-41 LAB DUPLICATE	0.00-0.05	160	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-41 FIELD DUPLICATE	0.00-0.05	168	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD
19/9004	1	GTCS 1-41 LAB FIELD DUPLICATE	0.00-0.05	176	06/06/2019	**General Description (Bulk Analysis)**	soil.stones
					06/06/2019	**Synthetic/MMMF**	Absent
					06/06/2019	**Asbestos Fibres**	NAD
					06/06/2019	**Asbestos ACM**	NAD
					06/06/2019	**Asbestos Type**	NAD
					06/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 19/9004						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 19/9004

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods 325.2 (Chloride), 375.4 (Sulphate), 365.2 (o-Phosphate), 353.1 (TON), 354.1 (Nitrite), 350.1 (NH4+) comparable to BS ISO 15923-1, 7196A (Hex Cr)	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D and BS1377:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

EMT Job No: 19/9004

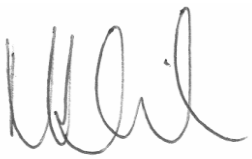
Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM119	As received solid samples are extracted with 1M NaOH by orbital shaker for Sulphide and Thiocyanate analysis.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	Yes
TM192	Isocyanates by LCMS	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						Yes
Subcontracted	See attached subcontractor report for accreditation status and provider.					AR	Yes
TM15_A	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

Certificate of Analysis

Report No.:	**19-83948-2**
Issue No.:	**2**
Date of Issue	**27/06/2019**
Customer Details:	Exova Environmental UK Ltd, Unit 3, Deeside Point, Deeside Indust. Estate Zone 3, Chester, Flintshire, CH5 2UA
Customer Contact:	Bethan Perry
Customer Order No.:	19/9004
Customer Reference:	19/9004
Quotation Reference:	190118/05
Description:	14 soil samples
Date Received:	06/06/2019
Date Started:	07/06/2019
Date Completed:	24/06/2019
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	This report replaces issue 1 in its entirety



Approved By: **Matthew Hickson, Laboratory Manager**

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Results Summary

Report No.: 19-83948-2

Customer Reference: 19/9004

Customer Order No: 19/9004

Determinand	CAS No	Codes	SOP	Units	RL	Customer Sample No	19/9004 Sample 7	19/9004 Sample 23	19/9004 Sample 39	19/9004 Sample 47	19/9004 Sample 55	19/9004 Sample 63	19/9004 Sample 79	19/9004 Sample 95
						Customer Sample ID	GTCS1-35A	GTCS1-36 Primary Sa	GTCS1-36 Lab Duplic	GTCS1-36 Field Dupl	GTCS1-36 Field Dupl	GTCS1-33 Field Dupl	GTCS1-34 Field Dupl	GTCS1-38 Field Dupl
						RPS Sample No	405661	405662	405663	405664	405665	405666	405667	405668
						Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Sample Depth (m)	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m
						Sampling Date	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019
dry solids (at 105øC)		N	397	% w/w			91.8	91.6	91.2	90.6	91.5	84.4	94.0	77.9
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1		< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.50	< 0.10
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results Summary

Report No.: 19-83948-2

Customer Reference: 19/9004

Customer Order No: 19/9004

					Customer Sample No	**19/9004 Sample 111**	**19/9004 Sample 127**	**19/9004 Sample 143**	**19/9004 Sample 159**	**19/9004 Sample 167**	**19/9004 Sample 175**
					Customer Sample ID	GTCS1-37 Field Dupl	GTCS1-42 Field Dupl	GTCS1-41 Primary Sa	GTCS1-41 Lab Duplic	GTCS1-41 Field Dupl	GTCS1-41 Lab Field
					RPS Sample No	405669	405670	405671	405672	405673	405674
					Sample Type	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
					Sample Depth (m)	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m
					Sampling Date	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019
Determinand	**CAS No**	**Codes**	**SOP**	**Units**	**RL**						
dry solids (at 105øC)		N	397	% w/w		82.7	86.2	82.3	82.3	82.9	83.4
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.80	< 0.15	< 0.15	< 0.20	< 0.20	< 0.20
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Comments

Report No.: 19-83948-2

Customer Reference: 19/9004

Customer Order No: 19/9004

Job	Description	Job Comments
19-83948	14 soil samples	Reporting limit for Fyrol_PCF has been raised due to matrix interference.

Deviating Samples

Report No.: 19-83948-2

Customer Reference: 19/9004

Customer Order No: 19/9004

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
405661	19/9004 Sample 7		04/06/2019	250ml amber glass jar	No	
405662	19/9004 Sample 23		04/06/2019	250ml amber glass jar	No	
405663	19/9004 Sample 39		04/06/2019	250ml amber glass jar	No	
405664	19/9004 Sample 47		04/06/2019	250ml amber glass jar	No	
405665	19/9004 Sample 55		04/06/2019	250ml amber glass jar	No	
405666	19/9004 Sample 63		04/06/2019	250ml amber glass jar	No	
405667	19/9004 Sample 79		04/06/2019	250ml amber glass jar	No	
405668	19/9004 Sample 95		04/06/2019	250ml amber glass jar	No	
405669	19/9004 Sample 111		04/06/2019	250ml amber glass jar	No	
405670	19/9004 Sample 127		04/06/2019	250ml amber glass jar	No	
405671	19/9004 Sample 143		04/06/2019	250ml amber glass jar	No	
405672	19/9004 Sample 159		04/06/2019	250ml amber glass jar	No	
405673	19/9004 Sample 167		04/06/2019	250ml amber glass jar	No	
405674	19/9004 Sample 175		04/06/2019	250ml amber glass jar	No	

Key Code	Description
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
F	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
N	Not Accredited Test
O	Marine Management Organisation (MMO) Validated
S	Subcontracted to approved laboratory
US	Subcontracted to approved laboratory UKAS Accredited for the test
MS	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SI	Subcontracted to internal RPS Group laboratory
USI	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
MSI	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1387
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-35A & 19/9004-4 0.00-0.05
Sample No: 1387
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.11	0.573	81	**2378-TCDD**	*	0.312	99
12378-PCDF	3.44	0.431	79	**12378-PCDD**	1.63	0.426	93
23478-PCDF	4.7	0.277	96	**123478-HxCDD**	1.1	0.440	94
123478-HxCDF	4.89	0.309	89	**123678-HxCDD**	3.51	0.451	87
123678-HxCDF	4.24	0.305	87	**123789-HxCDD**	2.2	0.441	
234678-HxCDF	4.18	0.281	90	**1234678-HpCDD**	51.5	0.497	77
123789-HxCDF	0.552	0.352	83	**OCDD**	380	0.782	69
1234678-HpCDF	33.6	0.235	74				
1234789-HpCDF	1.49	0.283	76				
OCDF	25.9	0.399					
Total 2,3,7,8-Furans	**88.1**			**Total 2,3,7,8-Dioxins**	**440**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**7.5**	**7.18**	**TEQ (WHO)- Mammals**	**7.02**	**6.71**
			TEQ (WHO)- Fish	**7.15**	**6.84**
			TEQ (WHO)- Birds	**14.2**	**13.9**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

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Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1387
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-35A & 19/9004-4 0.00-0.05
Sample No: 1387
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.25	0.370	85
PCB-77	33.2	0.388	80
PCB-123	25.1	0.752	89
PCB-118	1220	0.739	83
PCB-114	11	0.734	93
PCB-105	523	0.702	91
PCB-126	6.9	0.647	87
PCB-167	72.3	0.346	92
PCB-156	194	0.381	93
PCB-157	44.8	0.380	95
PCB-169	1.54	0.194	84
PCB-189	14.2	0.412	98

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.803**	**0.803**
TEQ (WHO)- Fish	**0.049**	**0.049**
TEQ (WHO)- Birds	**2.57**	**2.57**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1388
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-36 Primary Sample & 19/9004-20 0.00-0.05
Sample No: 1388
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	7.1	0.501	85	**2378-TCDD**	*	0.344	120
12378-PCDF	2.84	0.378	77	**12378-PCDD**	*	0.503	82
23478-PCDF	5.68	0.311	78	**123478-HxCDD**	1.4	0.441	104
123478-HxCDF	5.36	0.285	109	**123678-HxCDD**	3.85	0.459	98
123678-HxCDF	4.09	0.295	101	**123789-HxCDD**	2.27	0.450	
234678-HxCDF	4.96	0.270	108	**1234678-HpCDD**	75.4	0.494	99
123789-HxCDF	*	0.313	101	**OCDD**	579	0.951	76
1234678-HpCDF	36.3	0.227	95				
1234789-HpCDF	1.64	0.266	93				
OCDF	31	0.397					
Total 2,3,7,8-Furans	**98.9**			**Total 2,3,7,8-Dioxins**	**662**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.25**	**7.63**	**TEQ (WHO)- Mammals**	**6.88**	**6.01**
			TEQ (WHO)- Fish	**6.93**	**6.05**
			TEQ (WHO)- Birds	**16.2**	**15.3**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1388
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-36 Primary Sample & 19/9004-20 0.00-0.05
Sample No: 1388
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.53	0.308	85
PCB-77	52	0.277	86
PCB-123	17.4	0.641	95
PCB-118	747	0.642	92
PCB-114	6.77	0.647	100
PCB-105	356	0.617	98
PCB-126	8.42	0.559	115
PCB-167	71.9	0.652	97
PCB-156	163	0.726	99
PCB-157	42.6	0.717	101
PCB-169	1.52	0.169	93
PCB-189	19.5	0.327	97

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.936**	**0.936**
TEQ (WHO)- Fish	**0.0553**	**0.0553**
TEQ (WHO)- Birds	**3.66**	**3.66**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1389
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-36 Lab Duplicate & 19/9004-36 0.00-0.05
Sample No: 1389
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	7.25	0.545	83	**2378-TCDD**	*	0.373	96
12378-PCDF	*	0.405	89	**12378-PCDD**	1.7	0.549	88
23478-PCDF	5.31	0.348	86	**123478-HxCDD**	2.35	0.440	116
123478-HxCDF	5.69	0.306	111	**123678-HxCDD**	3.28	0.490	107
123678-HxCDF	3.56	0.302	114	**123789-HxCDD**	2.25	0.479	
234678-HxCDF	4.1	0.277	115	**1234678-HpCDD**	75.1	0.664	91
123789-HxCDF	*	0.400	90	**OCDD**	587	1.067	82
1234678-HpCDF	33.4	0.259	95				
1234789-HpCDF	1.94	0.333	89				
OCDF	26.3	0.486					
Total 2,3,7,8-Furans	**87.5**			**Total 2,3,7,8-Dioxins**	**672**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.5**	**8.07**	**TEQ (WHO)- Mammals**	**7.85**	**7.43**
			TEQ (WHO)- Fish	**8.2**	**7.77**
			TEQ (WHO)- Birds	**16.9**	**16.5**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1389
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-36 Lab Duplicate & 19/9004-36 0.00-0.05
Sample No: 1389
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.9	0.223	99
PCB-77	55.2	0.227	91
PCB-123	12.9	0.618	97
PCB-118	708	0.571	95
PCB-114	8.44	0.610	102
PCB-105	350	0.585	101
PCB-126	8.7	0.773	76
PCB-167	70.7	0.451	97
PCB-156	155	0.495	98
PCB-157	40.6	0.502	100
PCB-169	*	0.127	84
PCB-189	19.2	0.439	103

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.921**	**0.917**
TEQ (WHO)- Fish	**0.0568**	**0.0568**
TEQ (WHO)- Birds	**3.88**	**3.88**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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371 Millbrook Rd West
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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1390
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-36 Field Duplicate & 19/9004-44 0.00-0.05
Sample No: 1390
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.685	94	**2378-TCDD**	*	0.291	118
12378-PCDF	6.81	0.549	85	**12378-PCDD**	*	0.642	82
23478-PCDF	8.54	0.448	91	**123478-HxCDD**	*	0.467	111
123478-HxCDF	7.9	0.298	110	**123678-HxCDD**	6.99	0.530	90
123678-HxCDF	6.51	0.303	106	**123789-HxCDD**	*	0.519	
234678-HxCDF	7.51	0.275	108	**1234678-HpCDD**	84.2	0.533	84
123789-HxCDF	*	0.337	98	**OCDD**	580	0.819	66
1234678-HpCDF	60.5	0.225	89				
1234789-HpCDF	*	0.276	89				
OCDF	35.8	0.357					
Total 2,3,7,8-Furans	**134**			**Total 2,3,7,8-Dioxins**	**672**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**10.4**	**9.57**	**TEQ (WHO)- Mammals**	**8.43**	**7.29**
			TEQ (WHO)- Fish	**8.87**	**7.63**
			TEQ (WHO)- Birds	**14**	**12.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1390
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-36 Field Duplicate & 19/9004-44 0.00-0.05
Sample No: 1390
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	*	0.271	91
PCB-77	66.5	0.244	90
PCB-123	17.9	1.005	94
PCB-118	767	0.955	92
PCB-114	8.59	1.022	97
PCB-105	368	0.930	98
PCB-126	*	0.529	98
PCB-167	77.2	0.468	98
PCB-156	163	0.532	100
PCB-157	46.2	0.535	100
PCB-169	*	0.245	93
PCB-189	19.9	0.743	100

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.111**	**0.0507**
TEQ (WHO)- Fish	**0.0168**	**0.014**
TEQ (WHO)- Birds	**3.47**	**3.39**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1391
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-36 Lab Field Duplicate & 19/9004-52 0.00-0.05
Sample No: 1391
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.89	0.445	88	**2378-TCDD**	*	0.274	118
12378-PCDF	3.69	0.378	80	**12378-PCDD**	1.08	0.532	78
23478-PCDF	5.64	0.324	80	**123478-HxCDD**	1.73	0.471	107
123478-HxCDF	4.68	0.245	110	**123678-HxCDD**	4.39	0.482	96
123678-HxCDF	3.88	0.243	108	**123789-HxCDD**	3.08	0.472	
234678-HxCDF	4.45	0.229	109	**1234678-HpCDD**	61.8	0.402	99
123789-HxCDF	0.98	0.269	103	**OCDD**	450	0.701	81
1234678-HpCDF	29.8	0.214	93				
1234789-HpCDF	1.91	0.270	90				
OCDF	24	0.312					
Total 2,3,7,8-Furans	**85**			**Total 2,3,7,8-Dioxins**	**522**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.14**	**7.86**	**TEQ (WHO)- Mammals**	**7.15**	**6.87**
			TEQ (WHO)- Fish	**7.42**	**7.15**
			TEQ (WHO)- Birds	**15.5**	**15.2**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1391
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-36 Lab Field Duplicate & 19/9004-52 0.00-0.05
Sample No: 1391
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.07	0.296	98
PCB-77	47.8	0.272	98
PCB-123	20.9	0.454	96
PCB-118	728	0.444	92
PCB-114	8.79	0.480	98
PCB-105	350	0.452	99
PCB-126	10.4	0.563	100
PCB-167	70.4	0.374	99
PCB-156	157	0.433	99
PCB-157	40.9	0.431	101
PCB-169	1.92	0.139	90
PCB-189	19.2	0.330	101

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.15**	**1.15**
TEQ (WHO)- Fish	**0.0644**	**0.0644**
TEQ (WHO)- Birds	**3.6**	**3.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Marchwood Scientific Services
371 Millbrook Rd West
Southampton
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1392
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-33A & 19/9004-60 0.00-0.05
Sample No: 1392
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.93	0.373	90	**2378-TCDD**	*	0.182	120
12378-PCDF	2.33	0.302	93	**12378-PCDD**	0.603	0.360	86
23478-PCDF	3.63	0.232	99	**123478-HxCDD**	1.04	0.321	111
123478-HxCDF	2.71	0.217	109	**123678-HxCDD**	2.12	0.356	100
123678-HxCDF	2.87	0.220	105	**123789-HxCDD**	1.74	0.349	
234678-HxCDF	2.88	0.197	109	**1234678-HpCDD**	47.1	0.389	97
123789-HxCDF	*	0.237	102	**OCDD**	332	0.685	87
1234678-HpCDF	19	0.133	94				
1234789-HpCDF	1.18	0.152	96				
OCDF	24.3	0.285					
Total 2,3,7,8-Furans	**62.8**			**Total 2,3,7,8-Dioxins**	**385**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.2**	**4.99**	**TEQ (WHO)- Mammals**	**4.48**	**4.27**
			TEQ (WHO)- Fish	**4.63**	**4.42**
			TEQ (WHO)- Birds	**9.98**	**9.77**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1392
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-33A & 19/9004-60 0.00-0.05
Sample No: 1392
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	*	0.305	102
PCB-77	62.9	0.303	97
PCB-123	36	1.010	87
PCB-118	1340	0.992	83
PCB-114	19.9	1.011	93
PCB-105	634	1.006	90
PCB-126	12	0.652	108
PCB-167	133	0.590	91
PCB-156	320	0.662	91
PCB-157	81	0.666	94
PCB-169	0.913	0.257	98
PCB-189	27.9	0.510	94

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.31**	**1.31**
TEQ (WHO)- Fish	**0.0795**	**0.0793**
TEQ (WHO)- Birds	**4.5**	**4.47**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1393
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-34A & 19/9004-76 0.00-0.05
Sample No: 1393
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.68	0.394	85	**2378-TCDD**	*	0.201	109
12378-PCDF	2.61	0.442	72	**12378-PCDD**	*	0.400	73
23478-PCDF	3.88	0.337	76	**123478-HxCDD**	1.11	0.382	102
123478-HxCDF	4.61	0.295	105	**123678-HxCDD**	2.62	0.391	96
123678-HxCDF	3.65	0.295	103	**123789-HxCDD**	1.94	0.383	
234678-HxCDF	4.61	0.274	103	**1234678-HpCDD**	43.6	0.465	92
123789-HxCDF	*	0.315	100	**OCDD**	290	1.060	69
1234678-HpCDF	23.7	0.204	93				
1234789-HpCDF	1.78	0.266	88				
OCDF	27.3	0.444					
Total 2,3,7,8-Furans	**75.8**			**Total 2,3,7,8-Dioxins**	**339**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.73**	**5.3**	**TEQ (WHO)- Mammals**	**4.88**	**4.25**
			TEQ (WHO)- Fish	**5.1**	**4.47**
			TEQ (WHO)- Birds	**10.3**	**9.71**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1393
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-34A & 19/9004-76 0.00-0.05
Sample No: 1393
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.72	0.409	90
PCB-77	136	0.416	81
PCB-123	67.6	1.388	90
PCB-118	2780	1.333	86
PCB-114	24.1	1.387	96
PCB-105	1340	1.341	92
PCB-126	30.2	0.664	100
PCB-167	283	0.670	94
PCB-156	703	0.793	95
PCB-157	175	0.783	96
PCB-169	1.68	0.286	76
PCB-189	37.1	1.070	97

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**3.25**	**3.25**
TEQ (WHO)- Fish	**0.193**	**0.193**
TEQ (WHO)- Birds	**10.2**	**10.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1394
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-38A & 19/9004-92 0.00-0.05
Sample No: 1394
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.92	0.569	106	**2378-TCDD**	*	0.430	108
12378-PCDF	0.865	0.464	111	**12378-PCDD**	2.31	0.585	110
23478-PCDF	4.42	0.420	100	**123478-HxCDD**	1.42	0.467	105
123478-HxCDF	3.95	0.312	107	**123678-HxCDD**	2.96	0.528	89
123678-HxCDF	4.13	0.300	105	**123789-HxCDD**	2.09	0.517	
234678-HxCDF	2.77	0.285	104	**1234678-HpCDD**	35.5	0.360	102
123789-HxCDF	*	0.338	99	**OCDD**	116	1.089	86
1234678-HpCDF	19.3	0.222	89				
1234789-HpCDF	1.26	0.243	95				
OCDF	11.8	0.430					
Total 2,3,7,8-Furans	**54.4**			**Total 2,3,7,8-Dioxins**	**160**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**6.88**	**6.42**	**TEQ (WHO)- Mammals**	**7.04**	**6.58**
			TEQ (WHO)- Fish	**7.42**	**6.96**
			TEQ (WHO)- Birds	**14.8**	**14.4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1394
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-38A & 19/9004-92 0.00-0.05
Sample No: 1394
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.823	0.366	91
PCB-77	36.2	0.352	90
PCB-123	9.76	0.464	85
PCB-118	432	0.459	80
PCB-114	4.4	0.461	89
PCB-105	197	0.454	86
PCB-126	9.1	1.016	89
PCB-167	31.5	0.618	89
PCB-156	74.4	0.705	91
PCB-157	17	0.697	91
PCB-169	0.701	0.218	104
PCB-189	7.86	0.275	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.958**	**0.958**
TEQ (WHO)- Fish	**0.0535**	**0.0535**
TEQ (WHO)- Birds	**2.84**	**2.84**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1395
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-37A & 19/9004-108 0.00-0.05
Sample No: 1395
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	2.13	0.408	76	**2378-TCDD**	*	0.252	97
12378-PCDF	*	0.354	72	**12378-PCDD**	*	0.486	82
23478-PCDF	2.68	0.254	83	**123478-HxCDD**	1.08	0.528	90
123478-HxCDF	2.79	0.276	91	**123678-HxCDD**	4.38	0.599	86
123678-HxCDF	2.25	0.281	91	**123789-HxCDD**	*	0.586	
234678-HxCDF	2.59	0.255	92	**1234678-HpCDD**	117	0.702	81
123789-HxCDF	*	0.332	81	**OCDD**	941	1.415	62
1234678-HpCDF	28.7	0.262	81				
1234789-HpCDF	1.23	0.338	79				
OCDF	48.1	0.604					
Total 2,3,7,8-Furans	**90.4**			**Total 2,3,7,8-Dioxins**	**1060**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.92**	**5.31**	**TEQ (WHO)- Mammals**	**4.93**	**4.09**
			TEQ (WHO)- Fish	**4.1**	**3.3**
			TEQ (WHO)- Birds	**7.04**	**6.18**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1395
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-37A & 19/9004-108 0.00-0.05
Sample No: 1395
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.33	0.332	81
PCB-77	41.4	0.336	76
PCB-123	18.1	0.685	89
PCB-118	534	0.695	84
PCB-114	8.75	0.705	94
PCB-105	258	0.694	90
PCB-126	5.89	0.809	74
PCB-167	44.9	0.359	95
PCB-156	96.7	0.393	95
PCB-157	25.5	0.406	95
PCB-169	0.305	0.132	88
PCB-189	10.9	0.345	98

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.632**	**0.632**
TEQ (WHO)- Fish	**0.0392**	**0.0392**
TEQ (WHO)- Birds	**2.84**	**2.84**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1396
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-42A & 19/9004-124 0.00-0.05
Sample No: 1396
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	10.9	0.925	83	**2378-TCDD**	*	0.587	99
12378-PCDF	1.65	0.829	71	**12378-PCDD**	*	0.852	79
23478-PCDF	9.45	0.614	80	**123478-HxCDD**	2.97	0.763	104
123478-HxCDF	9.19	0.488	95	**123678-HxCDD**	7.03	0.781	95
123678-HxCDF	8.85	0.511	86	**123789-HxCDD**	4.05	0.765	
234678-HxCDF	9.24	0.465	93	**1234678-HpCDD**	72.4	0.727	76
123789-HxCDF	*	0.545	87	**OCDD**	362	1.503	55
1234678-HpCDF	80.8	0.370	76				
1234789-HpCDF	2.54	0.447	76				
OCDF	70.6	0.833					
Total 2,3,7,8-Furans	**203**			**Total 2,3,7,8-Dioxins**	**449**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**13.1**	**12**	**TEQ (WHO)- Mammals**	**11.3**	**9.79**
			TEQ (WHO)- Fish	**12.1**	**10.6**
			TEQ (WHO)- Birds	**26.3**	**24.8**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1396
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-42A & 19/9004-124 0.00-0.05
Sample No: 1396
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.02	0.450	88
PCB-77	75.2	0.424	88
PCB-123	44.1	1.147	87
PCB-118	1030	1.133	83
PCB-114	5.93	1.208	93
PCB-105	486	1.117	88
PCB-126	17.1	0.970	104
PCB-167	95.7	0.464	94
PCB-156	233	0.543	94
PCB-157	52.7	0.547	94
PCB-169	*	0.289	89
PCB-189	26.1	0.291	100

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.79**	**1.78**
TEQ (WHO)- Fish	**0.104**	**0.104**
TEQ (WHO)- Birds	**5.76**	**5.76**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1397
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-41 Primary Sample & 19/9004-140 0.00-0.05
Sample No: 1397
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	11.8	1.044	77	**2378-TCDD**	*	0.644	86
12378-PCDF	6.87	0.808	64	**12378-PCDD**	*	0.746	76
23478-PCDF	13	0.600	70	**123478-HxCDD**	3.12	0.746	94
123478-HxCDF	11.9	0.347	95	**123678-HxCDD**	8.41	0.769	85
123678-HxCDF	9.9	0.356	96	**123789-HxCDD**	6.35	0.753	
234678-HxCDF	10.4	0.328	95	**1234678-HpCDD**	84.8	0.547	79
123789-HxCDF	*	0.378	90	**OCDD**	397	1.214	57
1234678-HpCDF	55.6	0.274	86				
1234789-HpCDF	3.08	0.381	80				
OCDF	62	0.473					
Total 2,3,7,8-Furans	**185**			**Total 2,3,7,8-Dioxins**	**500**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**16**	**14.9**	**TEQ (WHO)- Mammals**	**13.3**	**11.9**
			TEQ (WHO)- Fish	**14.5**	**13.1**
			TEQ (WHO)- Birds	**31.7**	**30.3**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1397
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-41 Primary Sample & 19/9004-140 0.00-0.05
Sample No: 1397
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.31	0.423	81
PCB-77	69.7	0.403	79
PCB-123	36	1.458	88
PCB-118	915	1.441	83
PCB-114	6.65	1.538	92
PCB-105	447	1.448	88
PCB-126	13.8	0.774	84
PCB-167	83.3	0.649	94
PCB-156	197	0.718	94
PCB-157	45.6	0.748	93
PCB-169	2.36	0.277	88
PCB-189	21.5	0.446	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.51**	**1.51**
TEQ (WHO)- Fish	**0.0861**	**0.0861**
TEQ (WHO)- Birds	**5.18**	**5.18**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1398
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-41 Lab Duplicate & 19/9004-156 0.00-0.05
Sample No: 1398
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 13/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	12.8	0.914	81	**2378-TCDD**	*	0.457	99
12378-PCDF	7.24	0.582	79	**12378-PCDD**	1.89	0.659	90
23478-PCDF	12.1	0.429	90	**123478-HxCDD**	2.07	0.636	98
123478-HxCDF	9.48	0.405	104	**123678-HxCDD**	7.88	0.676	90
123678-HxCDF	9.02	0.413	98	**123789-HxCDD**	5.03	0.661	
234678-HxCDF	8.61	0.391	98	**1234678-HpCDD**	78.6	0.547	85
123789-HxCDF	*	0.442	96	**OCDD**	377	0.956	65
1234678-HpCDF	56.8	0.300	84				
1234789-HpCDF	3.49	0.358	85				
OCDF	57.8	0.425					
Total 2,3,7,8-Furans	**177**			**Total 2,3,7,8-Dioxins**	**472**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**15.2**	**14.6**	**TEQ (WHO)- Mammals**		**13.2**	**12.7**
				TEQ (WHO)- Fish		**14**	**13.5**
				TEQ (WHO)- Birds		**32.1**	**31.6**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ[2]	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1398
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-41 Lab Duplicate & 19/9004-156 0.00-0.05
Sample No: 1398
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.11	0.370	105
PCB-77	66.7	0.390	92
PCB-123	30.4	0.580	86
PCB-118	881	0.565	81
PCB-114	3.77	0.558	92
PCB-105	426	0.542	88
PCB-126	14.5	0.620	95
PCB-167	79.1	0.664	95
PCB-156	190	0.760	96
PCB-157	44.2	0.757	97
PCB-169	2.6	0.269	95
PCB-189	20.3	0.345	100

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.59**	**1.59**
TEQ (WHO)- Fish	**0.0887**	**0.0887**
TEQ (WHO)- Birds	**5.08**	**5.08**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1399
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-41 FIELD DUPLICATE & 19/9004-164 0.00-0.05
Sample No: 1399
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 14/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	8.02	0.872	84	**2378-TCDD**	0.99	0.555	108
12378-PCDF	6.87	0.752	84	**12378-PCDD**	3.63	0.873	79
23478-PCDF	11.2	0.632	81	**123478-HxCDD**	1.89	0.742	103
123478-HxCDF	10.2	0.391	107	**123678-HxCDD**	7.29	0.798	101
123678-HxCDF	8.35	0.391	110	**123789-HxCDD**	5.02	0.781	
234678-HxCDF	10	0.368	108	**1234678-HpCDD**	78.7	0.539	97
123789-HxCDF	0.756	0.456	102	**OCDD**	413	1.159	81
1234678-HpCDF	50.6	0.324	88				
1234789-HpCDF	2.3	0.447	84				
OCDF	53.8	0.477					
Total 2,3,7,8-Furans	**162**			**Total 2,3,7,8-Dioxins**	**511**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**15.7**	**15.7**	**TEQ (WHO)- Mammals**	**14.8**	**14.8**
			TEQ (WHO)- Fish	**15.6**	**15.6**
			TEQ (WHO)- Birds	**28.7**	**28.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1399
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-41 FIELD DUPLICATE & 19/9004-164 0.00-0.05
Sample No: 1399
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	4.38	0.406	92
PCB-77	73.7	0.410	89
PCB-123	35.6	0.945	95
PCB-118	953	0.923	90
PCB-114	7.02	0.956	100
PCB-105	467	0.924	96
PCB-126	14	0.896	111
PCB-167	86	0.658	101
PCB-156	203	0.781	100
PCB-157	47	0.775	101
PCB-169	0.699	0.325	102
PCB-189	22.8	0.407	106

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.48**	**1.48**
TEQ (WHO)- Fish	**0.0886**	**0.0886**
TEQ (WHO)- Birds	**5.6**	**5.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1400
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-41 LAB FIELD DUPLICATE & 19/9004-172 0.00-0.05
Sample No: 1400
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 130619

Date of Receipt : 07/06/19
Date of Analysis : 14/06/19
Date of Report : 14/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	10.2	0.754	81	**2378-TCDD**	*	0.461	87
12378-PCDF	7.53	0.522	92	**12378-PCDD**	4.12	0.661	89
23478-PCDF	10.4	0.425	92	**123478-HxCDD**	2.5	0.523	101
123478-HxCDF	6.41	0.312	97	**123678-HxCDD**	8.22	0.560	96
123678-HxCDF	7.47	0.299	93	**123789-HxCDD**	4.89	0.548	
234678-HxCDF	7.41	0.288	94	**1234678-HpCDD**	68.1	0.473	81
123789-HxCDF	0.577	0.339	88	**OCDD**	367	0.736	67
1234678-HpCDF	49.2	0.274	71				
1234789-HpCDF	2.86	0.335	70				
OCDF	54.2	0.347					
Total 2,3,7,8-Furans	**156**			**Total 2,3,7,8-Dioxins**	**454**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**14.5**	**14**	**TEQ (WHO)- Mammals**	**14**	**13.6**
			TEQ (WHO)- Fish	**14.9**	**14.4**
			TEQ (WHO)- Birds	**29.4**	**29**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1400
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-41 LAB FIELD DUPLICATE & 19/9004-172 0.00-0.05
Sample No: 1400
Order No:
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 17/06/19
Date of Report : 18/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.65	0.317	84
PCB-77	65.8	0.289	84
PCB-123	23.9	0.608	95
PCB-118	839	0.593	91
PCB-114	3.63	0.609	101
PCB-105	411	0.596	97
PCB-126	14.4	0.774	118
PCB-167	75.9	0.627	101
PCB-156	183	0.727	101
PCB-157	41.2	0.727	101
PCB-169	*	0.243	125
PCB-189	19.4	0.384	106

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.5**	**1.5**
TEQ (WHO)- Fish	**0.0884**	**0.0884**
TEQ (WHO)- Birds	**5.17**	**5.17**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Element Materials Technology
Unit 3 Deeside Point
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AECOM
9th Floor Reception
Sunley House
4 Bedford Park
Croydon
CR0 2AP

Attention :	David Dyson
Date :	17th July, 2019
Your reference :	60595731
Our reference :	Test Report 19/9004 Batch 2
Location :	Grenfell
Date samples received :	6th June, 2019
Status :	Final report
Issue :	1

Fifty three samples were received for analysis on 6th June, 2019 of which thirty one were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Aluminium	-	12470	11600	-	12790	-	15970	-	19970	-	<50	mg/kg	TM30/PM15
Arsenic #M	-	13.3	16.0	-	15.3	-	25.8	-	32.6	-	<0.5	mg/kg	TM30/PM15
Barium #M	-	179	172	-	172	-	563	-	361	-	<1	mg/kg	TM30/PM15
Beryllium	-	1.2	1.1	-	1.4	-	2.2	-	2.7	-	<0.5	mg/kg	TM30/PM15
Cadmium #M	-	1.8	0.8	-	3.3	-	1.0	-	0.9	-	<0.1	mg/kg	TM30/PM15
Chromium #M	-	104.5	72.1	-	58.4	-	70.5	-	68.9	-	<0.5	mg/kg	TM30/PM15
Copper #M	-	67	58	-	64	-	76	-	71	-	<1	mg/kg	TM30/PM15
Lead #M	-	232	318	-	137	-	1311	-	431	-	<5	mg/kg	TM30/PM15
Mercury #M	-	0.6	0.9	-	1.3	-	2.1	-	3.0	-	<0.1	mg/kg	TM30/PM15
Nickel #M	-	26.3	24.5	-	23.1	-	30.0	-	34.6	-	<0.7	mg/kg	TM30/PM15
Selenium #M	-	2	1	-	2	-	2	-	2	-	<1	mg/kg	TM30/PM15
Vanadium	-	49	53	-	49	-	59	-	82	-	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	-	2.3	2.0	-	4.4	-	4.3	-	4.3	-	<0.1	mg/kg	TM74/PM32
Zinc #M	-	233	231	-	253	-	318	-	308	-	<5	mg/kg	TM30/PM15
Aluminium	16479	-	-	9007	-	12335	-	13595	-	17285	<50	mg/kg	TM30/PM62
Arsenic	27.1	-	-	13.0	-	18.9	-	27.4	-	30.7	<0.5	mg/kg	TM30/PM62
Barium	291	-	-	148	-	188	-	252	-	220	<1	mg/kg	TM30/PM62
Beryllium	1.6	-	-	0.8	-	1.5	-	1.5	-	2.1	<0.5	mg/kg	TM30/PM62
Cadmium	14.5	-	-	0.8	-	1.1	-	0.6	-	0.7	<0.1	mg/kg	TM30/PM62
Chromium	98.3	-	-	23.8	-	36.9	-	29.1	-	35.8	<0.5	mg/kg	TM30/PM62
Copper	215	-	-	55	-	105	-	58	-	71	<1	mg/kg	TM30/PM62
Lead	553	-	-	257	-	298	-	342	-	392	<5	mg/kg	TM30/PM62
Mercury	1.2	-	-	0.6	-	1.2	-	2.7	-	3.2	<0.1	mg/kg	TM30/PM62
Nickel	49.0	-	-	17.5	-	32.0	-	23.1	-	27.8	<0.7	mg/kg	TM30/PM62
Selenium	2	-	-	1	-	1	-	1	-	1	<1	mg/kg	TM30/PM62
Vanadium	67	-	-	38	-	57	-	57	-	66	<1	mg/kg	TM30/PM62
Water Soluble Boron	2.6	-	-	8.0	-	1.8	-	4.6	-	4.1	<0.1	mg/kg	TM74/PM61
Zinc	610	-	-	211	-	1357	-	246	-	290	<5	mg/kg	TM30/PM62
Aluminium	12090	-	-	7261	-	10160	-	13720	-	13090	<50	mg/kg	TM30/PM42
Arsenic	22.8	-	-	13.2	-	16.6	-	30.3	-	28.2	<0.5	mg/kg	TM30/PM42
Barium	249	-	-	133	-	165	-	200	-	201	<1	mg/kg	TM30/PM42
Beryllium	1.3	-	-	0.9	-	1.2	-	1.8	-	1.6	<0.5	mg/kg	TM30/PM42
Cadmium	11.3	-	-	0.8	-	1.0	-	0.7	-	0.6	<0.1	mg/kg	TM30/PM42
Chromium	78.2	-	-	22.3	-	32.0	-	34.4	-	32.5	<0.5	mg/kg	TM30/PM42
Copper	166	-	-	56	-	70	-	66	-	58	<1	mg/kg	TM30/PM42
Lead	603	-	-	215	-	250	-	398	-	373	<5	mg/kg	TM30/PM42
Mercury	1.1	-	-	0.3	-	0.4	-	1.9	-	2.3	<0.1	mg/kg	TM30/PM42
Nickel	38.5	-	-	17.0	-	24.5	-	26.3	-	23.5	<0.7	mg/kg	TM30/PM42
Selenium	2	-	-	1	-	1	-	1	-	1	<1	mg/kg	TM30/PM42
Vanadium	53	-	-	35	-	49	-	61	-	60	<1	mg/kg	TM30/PM42
Water Soluble Boron	2.1	-	-	6.6	-	2.0	-	3.7	-	3.8	<0.1	mg/kg	TM30/PM42
Zinc	471	-	-	188	-	1344	-	285	-	258	<5	mg/kg	TM30/PM42

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
PAH MS													
Naphthalene #M	0.15	0.07	2.67	0.13	0.05	0.10	0.06	0.08	0.09	0.09	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.41	0.25	0.35	0.32	0.21	0.27	0.22	0.37	0.42	0.38	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	0.07	<0.05	1.08	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	0.08	<0.04	0.66	0.06	0.07	0.04	<0.04	0.05	0.06	0.06	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	1.38	0.55	8.41	1.08	0.99	0.80	0.65	0.85	0.86	0.92	<0.03	mg/kg	TM4/PM8
Anthracene #	0.57	0.23	2.22	0.44	0.39	0.34	0.25	0.36	0.41	0.37	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	4.29	1.81	10.97	3.15	2.40	2.09	1.83	2.68	2.87	2.81	<0.03	mg/kg	TM4/PM8
Pyrene #	3.61	1.61	9.26	2.73	2.08	1.82	1.61	2.39	2.63	2.52	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	2.10	0.95	6.38	1.90	1.33	1.56	0.96	1.34	1.63	1.44	<0.06	mg/kg	TM4/PM8
Chrysene #M	2.42	1.09	5.68	1.92	1.34	1.23	1.07	1.61	1.71	1.60	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	5.37	2.28	10.20	3.96	2.61	2.69	2.14	3.08	3.26	3.22	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	2.75	1.25	5.55	2.16	1.46	1.43	1.12	1.66	1.76	1.71	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	2.44	0.94	3.52	1.41	0.97	1.13	0.84	1.13	1.27	1.22	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.44	0.22	0.96	0.36	0.23	0.29	0.16	0.21	0.28	0.37	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	2.61	0.94	3.70	1.36	0.93	1.13	0.79	1.17	1.23	1.22	<0.04	mg/kg	TM4/PM8
Coronene	0.67	0.25	0.67	0.30	0.23	0.27	0.20	0.28	0.29	0.28	<0.04	mg/kg	TM4/PM8
PAH 16 Total	28.7	12.2	71.6	21.0	15.1	14.9	11.7	17.0	18.5	17.9	<0.6	mg/kg	TM4/PM8
PAH 17 Total	29.36	12.44	72.28	21.28	15.37	15.19	11.90	17.26	18.77	18.21	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	3.87	1.64	7.34	2.85	1.88	1.94	1.54	2.22	2.35	2.32	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.50	0.64	2.86	1.11	0.73	0.75	0.60	0.86	0.91	0.90	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	93	101	91	91	90	94	94	92	93	92	<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND	See Attached	See Attached	See Attached	See Attached		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	7	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	22	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	27	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	23	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	15	<5	<5	<5	11	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	11	<5	<5	<5	10	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	17	<5	<5	<5	6	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	43	<35	<35	<35	106	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	13.1	15.5	10.5	15.4	13.9	8.2	16.7	16.1	14.8	15.0	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	104.5	72.1	-	58.4	-	70.5	-	68.9	-	<0.5	mg/kg	NONE/NONE
Chromium III	98.3	-	-	23.8	-	36.9	-	29.1	-	35.8	<0.5	mg/kg	NONE/NONE
Chromium III	78.2	-	-	22.3	-	32.0	-	34.4	-	32.5	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	1.2	0.8	1.0	1.0	2.1	<0.5	0.9	0.8	0.7	0.7	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Total Organic Carbon #	-	4.10	3.76	-	6.80	-	7.05	-	7.45	-	<0.02	%	TM21/PM24
Total Organic Carbon	4.83	-	-	4.52	-	3.74	-	6.38	-	6.94	<0.02	%	TM21/PM89
Thiocyanate	0.8	<0.6	0.9	1.0	1.0	<0.6	2.2	1.3	1.4	1.5	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	14.5	3.05	8.78	6.83	<0.427	3.63	8.5	6.88	11.3	7.37		ng/kg	Subcontracted
12378-PCDF*	5.52	4.18	5.13	5.09	3.63	2.99	3.67	5.98	6.47	7.17		ng/kg	Subcontracted
23478-PCDF*	15.6	3.33	7.52	4.71	2.97	5.07	6.25	6.84	7.4	8.86		ng/kg	Subcontracted
123478-HxCDF*	11	3.55	9.16	5.56	4.33	4.67	5.96	6.53	7.22	7.13		ng/kg	Subcontracted
123678-HxCDF*	10.8	2.47	5.49	3.57	3.27	3.65	1.41	6.21	3.21	6.08		ng/kg	Subcontracted
234678-HxCDF*	13.1	3.27	2.74	4.45	3.46	4.33	5.48	5.62	5.46	5.84		ng/kg	Subcontracted
123789-HxCDF*	1.79	<0.443	<0.465	<0.517	0.545	0.51	0.655	<0.362	0.395	0.909		ng/kg	Subcontracted
1234678-HpCDF*	170	25.6	29.3	73.4	59.9	41.2	38.4	31.4	31.8	30.8		ng/kg	Subcontracted
1234789-HpCDF*	8.46	<0.724	3.36	4.25	5.49	1.31	0.723	2.18	1.64	2.69		ng/kg	Subcontracted
OCDF*	167	20.4	29.4	135	141	47.9	50.2	33.8	36.9	31.1		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.291	<0.204	<0.171	<0.149	<0.398	<0.442	<0.288	<0.646	<0.545	<0.444		ng/kg	Subcontracted
12378-PCDD*	2.12	<0.676	0.761	1.15	<0.631	1.25	1.62	2.03	2.18	2.33		ng/kg	Subcontracted
123478-HxCDD*	3.82	1.08	1.15	1.41	0.868	1.89	2.37	2.66	3.25	1.61		ng/kg	Subcontracted
123678-HxCDD*	13.6	3.07	4.02	6.51	8.82	6.1	6.7	6.8	6.05	6.34		ng/kg	Subcontracted
123789-HxCDD*	6.96	1.66	2.15	2.3	4.79	2.96	4.46	<0.649	4.84	4.57		ng/kg	Subcontracted
1234678-HpCDD*	232	68	60.5	212	278	86.7	134	76.4	81.5	75		ng/kg	Subcontracted
OCDD*	1840	483	449	1940	2920	624	981	563	578	544		ng/kg	Subcontracted
TEQ(1) (NATO)*	23.1	5.72	9.38	11.4	11.5	8.49	10.7	10.6	11.6	12		ng/kg	Subcontracted
TEQ(2) (NATO)*	22.8	5.13	9.16	11.2	10.8	8.05	10.4	9.9	11.1	11.6		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	0.98	2.51	3.01	8.93	7.14	3.18	2.48	2.29	3.81	3.42		ng/kg	Subcontracted
12378-PBDF*	1	0.98	1.25	4.56	4.12	2.29	1.99	2.08	2.47	2.14		ng/kg	Subcontracted
23478-PBDF*	<0.500	0.78	1.1	2.33	2.09	1.58	1.03	1.14	1.34	1.19		ng/kg	Subcontracted
123478-HxBDF*	<0.550	0.6	0.75	1.54	1.33	0.89	0.82	<0.660	0.7	0.78		ng/kg	Subcontracted
123678-HxBDF*	<0.490	0.52	0.68	1.29	1.4	0.65	0.79	0.71	0.91	1.03		ng/kg	Subcontracted
234678-HxBDF*	<0.460	<0.490	0.47	0.91	1.06	0.62	<0.750	0.8	0.72	0.9		ng/kg	Subcontracted
123789-HxBDF*	<0.440	<0.450	<0.480	0.56	<0.570	<0.570	<0.820	<0.590	<0.600	<0.640		ng/kg	Subcontracted
1234678-HpBDF*	<0.480	<0.500	<0.530	0.5	0.5	<0.530	<0.830	<0.550	<0.590	<0.630		ng/kg	Subcontracted
1234789-HpBDF*	<0.550	<0.560	<0.600	<0.580	<0.600	<0.660	<0.740	<0.680	<0.640	<0.690		ng/kg	Subcontracted
OBDF*	<0.650	<0.680	<0.700	<0.700	<0.720	<0.720	<0.850	<0.740	<0.780	<0.800		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.470	<0.500	<0.550	<0.580	<0.600	<0.600	<0.820	<0.640	<0.660	<0.660		ng/kg	Subcontracted
12378-PBDD*	<0.520	<0.530	<0.530	<0.550	<0.570	<0.590	<0.790	<0.600	<0.650	<0.690		ng/kg	Subcontracted
123478-HxBDD*	<0.540	<0.550	<0.570	<0.600	<0.590	<0.570	<0.790	<0.590	<0.580	<0.640		ng/kg	Subcontracted
123678-HxBDD*	<0.590	<0.600	<0.610	0.63	0.6	<0.600	<0.840	<0.620	<0.600	<0.620		ng/kg	Subcontracted
123789-HxBDD*	<0.480	<0.530	<0.550	0.61	0.67	<0.540	<0.780	<0.580	<0.570	<0.680		ng/kg	Subcontracted
1234678-HpBDD*	<0.600	<0.610	0.63	0.92	0.77	<0.600	<0.800	<0.630	<0.620	<0.700		ng/kg	Subcontracted
OBDD*	<0.810	<0.800	<0.780	<0.800	<0.780	<0.790	<0.800	<0.800	<0.780	<0.820		ng/kg	Subcontracted
PCB-81*	6.22	2.29	0.936	0.818	223	2.96	0.963	3.45	3.68	3.31		ng/kg	Subcontracted
PCB-77*	218	67.4	39.6	41.9	5240	93.2	39.3	52	47.8	48		ng/kg	Subcontracted
PCB-123*	81.1	26	28.3	28.9	843	179	14	14.6	13.9	17.2		ng/kg	Subcontracted
PCB-118*	3480	725	1210	1060	33300	10100	548	560	519	589		ng/kg	Subcontracted
PCB-114*	29	3.81	9.5	7.21	938	195	5.45	7.08	7.12	5.81		ng/kg	Subcontracted
PCB-105*	1570	359	543	446	22300	4310	263	294	274	301		ng/kg	Subcontracted
PCB-126*	40	7.58	6.03	7.85	169	16.8	9.84	13.7	11.9	11.5		ng/kg	Subcontracted
PCB-167*	646	89.7	105	118	823	504	41.3	41.3	40.2	43		ng/kg	Subcontracted
PCB-156*	941	177	238	226	2000	1510	91.9	95.8	88.3	97.5		ng/kg	Subcontracted
PCB-157*	417	58.5	72.2	78.3	579	340	22.5	22.7	22.4	23.5		ng/kg	Subcontracted
PCB-169*	3.43	0.256	1.1	1.03	1.52	1.76	2.55	2.45	1.29	1.69		ng/kg	Subcontracted
PCB-189*	207	19.3	21.1	30.6	109	63.6	9.29	9.8	8.8	9.78		ng/kg	Subcontracted
Isocyanic Acid-d	95	96	84	78	84	101	85	88	82	82	<0	%	TM192/PM0
Methyl Isocyanate-d	126	117	86	80	86	132	86	90	84	84	<0	%	TM192/PM0
Ethyl Isocyanate-d	135	110	116	105	106	131	108	104	103	109	<0	%	TM192/PM0
Propyl Isocyanate-d	111	114	103	109	107	122	99	95	107	106	<0	%	TM192/PM0
Phenyl Isocyanate-d	85	98	85	78	81	121	76	75	74	79	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	99	91	87	85	89	107	86	89	82	83	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	115	226++	105	101	119++	164	102	119++	103	112	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	76	91	84	83	99	106	81	85	85	91	<0	%	TM192/PM0
Isophorone Diisocyanate-d	102	86	91	89	97	103	92	91	81	81	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	76	102	94	59	100	109	87	86	42	62	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.57	7.70	7.60	7.99	7.64	7.79	7.37	7.43	7.44	7.42	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, vegetation	vegetation	vegetation, stones	stones, vegetation, chalk	wood, vegetation	stones, vegetation	stones, wood, vegetation, debris	stones, vegetation	stones, vegetation	stones, chalk		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15	<0.15	<0.50	<0.15	<0.10	<0.15	<0.15	<0.15	<0.15	<0.15		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Aluminium	-	-	26240	5096	7847	12170	-	9583	-	-	<50	mg/kg	TM30/PM15
Arsenic #M	-	-	12.8	6.7	13.6	12.5	-	27.0	-	-	<0.5	mg/kg	TM30/PM15
Barium #M	-	-	158	77	181	189	-	272	-	-	<1	mg/kg	TM30/PM15
Beryllium	-	-	2.0	0.6	0.9	1.3	-	2.1	-	-	<0.5	mg/kg	TM30/PM15
Cadmium #M	-	-	1.2	0.4	0.7	3.7	-	0.9	-	-	<0.1	mg/kg	TM30/PM15
Chromium #M	-	-	76.6	240.5	88.2	101.1	-	80.9	-	-	<0.5	mg/kg	TM30/PM15
Copper #M	-	-	65	26	45	64	-	183	-	-	<1	mg/kg	TM30/PM15
Lead #M	-	-	111	115	385	176	-	492	-	-	<5	mg/kg	TM30/PM15
Mercury #M	-	-	0.3	0.3	0.5	1.8	-	0.4	-	-	<0.1	mg/kg	TM30/PM15
Nickel #M	-	-	52.1	16.6	18.6	23.2	-	38.4	-	-	<0.7	mg/kg	TM30/PM15
Selenium #M	-	-	2	1	2	2	-	2	-	-	<1	mg/kg	TM30/PM15
Vanadium	-	-	94	30	37	48	-	66	-	-	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	-	-	1.0	0.9	4.6	1.8	-	1.8	-	-	<0.1	mg/kg	TM74/PM32
Zinc #M	-	-	142	104	201	250	-	339	-	-	<5	mg/kg	TM30/PM15
Aluminium	16029	19986	-	-	-	-	11696	-	18258	19022	<50	mg/kg	TM30/PM62
Arsenic	29.1	40.6	-	-	-	-	19.4	-	47.4	55.4	<0.5	mg/kg	TM30/PM62
Barium	210	537	-	-	-	-	209	-	991	948	<1	mg/kg	TM30/PM62
Beryllium	1.8	2.2	-	-	-	-	1.3	-	4.0	4.1	<0.5	mg/kg	TM30/PM62
Cadmium	0.7	46.2 AB	-	-	-	-	1.1	-	2.0	2.1	<0.1	mg/kg	TM30/PM62
Chromium	36.5	271.4	-	-	-	-	33.3	-	59.9	59.6	<0.5	mg/kg	TM30/PM62
Copper	69	474 AB	-	-	-	-	82	-	518 AB	484 AB	<1	mg/kg	TM30/PM62
Lead	393	757	-	-	-	-	298	-	1785	1528	<5	mg/kg	TM30/PM62
Mercury	3.0	1.8	-	-	-	-	1.1	-	4.1	4.2	<0.1	mg/kg	TM30/PM62
Nickel	28.5	103.4	-	-	-	-	29.3	-	62.6	61.6	<0.7	mg/kg	TM30/PM62
Selenium	1	2	-	-	-	-	1	-	2	2	<1	mg/kg	TM30/PM62
Vanadium	67	95	-	-	-	-	55	-	95	90	<1	mg/kg	TM30/PM62
Water Soluble Boron	3.7	1.6	-	-	-	-	1.5	-	3.7	4.3	<0.1	mg/kg	TM74/PM61
Zinc	287	1283	-	-	-	-	1418	-	1092	1070	<5	mg/kg	TM30/PM62
Aluminium	14080	18370	-	-	-	-	10730	-	15320	16350	<50	mg/kg	TM30/PM42
Arsenic	31.9	36.6	-	-	-	-	17.4	-	38.5	39.7	<0.5	mg/kg	TM30/PM42
Barium	197	455	-	-	-	-	182	-	815	885	<1	mg/kg	TM30/PM42
Beryllium	1.6	2.0	-	-	-	-	1.3	-	3.5	3.6	<0.5	mg/kg	TM30/PM42
Cadmium	0.7	44.1 AB	-	-	-	-	0.9	-	1.6	1.8	<0.1	mg/kg	TM30/PM42
Chromium	35.6	232.2	-	-	-	-	33.3	-	52.6	57.1	<0.5	mg/kg	TM30/PM42
Copper	63	487 AB	-	-	-	-	83	-	658 AB	527 AB	<1	mg/kg	TM30/PM42
Lead	375	637	-	-	-	-	429	-	1231	1455	<5	mg/kg	TM30/PM42
Mercury	2.0	1.4	-	-	-	-	0.2	-	2.4	2.4	<0.1	mg/kg	TM30/PM42
Nickel	26.9	95.4	-	-	-	-	27.5	-	51.9	56.8	<0.7	mg/kg	TM30/PM42
Selenium	2	2	-	-	-	-	1	-	2	2	<1	mg/kg	TM30/PM42
Vanadium	65	86	-	-	-	-	52	-	79	85	<1	mg/kg	TM30/PM42
Water Soluble Boron	4.0	1.6	-	-	-	-	1.7	-	4.3	3.3	<0.1	mg/kg	TM30/PM42
Zinc	287	1111	-	-	-	-	1359	-	971	989	<5	mg/kg	TM30/PM42

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
PAH MS													
Naphthalene #M	0.08	0.61	0.06	0.09	0.11	0.07	0.20	<0.04	0.07	0.11	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.44	0.79	0.24	0.32	0.36	0.36	0.52	0.13	0.24	0.27	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	0.39	<0.05	0.06	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	0.07	0.43	<0.04	0.06	0.06	0.07	0.18	<0.04	<0.04	0.06	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	1.00	5.74	0.77	1.27	0.96	1.30	3.36	0.16	0.68	0.77	<0.03	mg/kg	TM4/PM8
Anthracene #	0.40	2.01	0.25	0.44	0.46	0.56	0.82	0.12	0.31	0.39	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	3.08	13.80	2.18	3.63	3.48	2.93	4.94	0.46	1.72	1.69	<0.03	mg/kg	TM4/PM8
Pyrene #	2.70	11.79	1.91	3.23	3.16	2.58	4.15	0.43	1.72	1.63	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.49	8.55	1.06	2.06	1.89	1.55	2.18	0.33	1.20	1.07	<0.06	mg/kg	TM4/PM8
Chrysene #M	1.72	7.76	1.05	2.38	1.96	1.61	1.98	0.36	1.36	1.18	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	3.31	15.67	2.57	5.32	4.01	3.28	4.17	0.88	3.12	2.75	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.86	8.61	1.40	3.13	2.30	1.78	2.24	0.49	1.48	1.35	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	1.22	7.08	1.03	2.67	1.59	1.33	1.53	0.42	1.32	1.22	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.32	1.51	0.20	0.69	0.38	0.23	0.34	0.10	0.33	0.25	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.23	7.43	0.99	2.49	1.55	1.30	1.53	0.46	1.47	1.36	<0.04	mg/kg	TM4/PM8
Coronene	0.29	1.48	0.25	0.43	0.40	0.28	0.37	0.10	0.33	0.33	<0.04	mg/kg	TM4/PM8
PAH 16 Total	18.9	92.2	13.7	27.8	22.3	19.0	28.3	4.3	15.0	14.1	<0.6	mg/kg	TM4/PM8
PAH 17 Total	19.21	93.65	13.96	28.27	22.67	19.23	28.62	4.44	15.35	14.43	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	2.38	11.28	1.85	3.83	2.89	2.36	3.00	0.63	2.25	1.98	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.93	4.39	0.72	1.49	1.12	0.92	1.17	0.25	0.87	0.77	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	102	97	92	93	92	99	98	98	102	95	<0	%	TM4/PM8
VOC TICs	See Attached	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	19	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	8	<5	<5	<5	22	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	8	<5	<5	<5	19	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	<5	42	<5	<5	<5	16	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	33	<5	<5	<5	13	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	59	<5	<5	<5	9	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	150	<35	<35	<35	98	<35	<35	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	14.9	13.3	13.7	7.3	20.3	16.9	8.4	15.5	23.7	22.8	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	-	76.6	240.5	88.2	101.1	-	80.9	-	-	<0.5	mg/kg	NONE/NONE
Chromium III	36.5	271.4	-	-	-	-	33.3	-	59.9	59.6	<0.5	mg/kg	NONE/NONE
Chromium III	35.6	232.2	-	-	-	-	33.3	-	52.6	57.1	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	0.7	4.9$_{AA}$	0.6	<0.5	1.0	3.6	<0.5	1.0	1.6$_{AA}$	1.8$_{AA}$	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Total Organic Carbon #	-	-	3.68	1.36	4.71	2.34	-	4.93	-	-	<0.02	%	TM21/PM24
Total Organic Carbon	6.67	4.80	-	-	-	-	3.79	-	8.83	9.42	<0.02	%	TM21/PM89
Thiocyanate	1.5	<0.6	<0.6	0.6	0.7	<0.6	<0.6	1.6	1.4	1.5	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	8.6	29.9	2.55	8.32	7.08	3.51	5.41	3.11	26.5	22.6		ng/kg	Subcontracted
12378-PCDF*	4.6	17.4	<0.320	6.3	6.25	4.56	3.38	3.68	18.3	15.7		ng/kg	Subcontracted
23478-PCDF*	8	29.7	2.91	7.5	6.15	4.59	7.1	6.6	33.4	33.8		ng/kg	Subcontracted
123478-HxCDF*	6.2	23.5	3.22	9.66	8.78	6.72	6.58	6.03	28.1	22.4		ng/kg	Subcontracted
123678-HxCDF*	4.78	16.5	2.54	4.6	3.98	3.29	5.43	5.18	23.2	20.4		ng/kg	Subcontracted
234678-HxCDF*	5.68	18.1	2.3	4.09	3.53	4.29	5.5	5.37	28.1	27.7		ng/kg	Subcontracted
123789-HxCDF*	0.684	2.49	0.314	0.876	<0.265	0.901	1.02	<0.388	1.34	1.74		ng/kg	Subcontracted
1234678-HpCDF*	30.2	396	16.3	24.9	53.7	86.1	54.8	75.4	228	170		ng/kg	Subcontracted
1234789-HpCDF*	1.82	16.9	1.04	2.58	4	6.86	2.19	1.89	3.48	4.99		ng/kg	Subcontracted
OCDF*	34.2	476	16.2	28	131	187	67.7	73.7	107	97.2		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.427	2.36	<0.339	<0.206	<0.228	<0.236	<0.428	<0.433	<1.426	<1.505		ng/kg	Subcontracted
12378-PCDD*	1.63	8.54	0.859	1.36	1.03	0.58	1.41	1.27	9.44	2.83		ng/kg	Subcontracted
123478-HxCDD*	2.19	7.76	1.29	0.726	1.26	1.91	1.63	0.898	7.06	7.13		ng/kg	Subcontracted
123678-HxCDD*	6.72	30.1	2.47	3.82	5.02	11	7.43	3.68	13.7	10.5		ng/kg	Subcontracted
123789-HxCDD*	4.05	16.7	1.67	2.06	0.996	3.54	3.99	2.69	11.8	8.34		ng/kg	Subcontracted
1234678-HpCDD*	77.6	557	39.6	52	162	356	92.4	62.9	108	102		ng/kg	Subcontracted
OCDD*	567	5300	331	443	1690	4280	700	474	579	515		ng/kg	Subcontracted
TEQ(1) (NATO)*	11.1	52.3	4.79	9.63	11.2	15.5	10.8	9.24	41.8	36.1		ng/kg	Subcontracted
TEQ(2) (NATO)*	10.6	52.3	4.44	9.42	11	15.3	10.4	8.76	40.4	34.6		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	2.86	17.5	1.01	2.55	3.76	6.23	2.09	2.31	7.34	6.34		ng/kg	Subcontracted
12378-PBDF*	2.4	8.34	0.87	1.36	1.77	4.18	1.36	1.16	6.23	5.87		ng/kg	Subcontracted
23478-PBDF*	1.04	4.91	1.19	1.7	1.19	2.18	0.81	0.68	3.3	2.51		ng/kg	Subcontracted
123478-HxBDF*	0.66	6.12	0.9	0.75	1.39	1.69	1.29	1.5	2.72	3.5		ng/kg	Subcontracted
123678-HxBDF*	1.4	3	1.46	1.99	3.01	1.44	0.8	1.01	2.11	2.79		ng/kg	Subcontracted
234678-HxBDF*	1.25	<0.740	<0.780	<0.800	0.74	0.9	<0.770	<0.800	1.05	1.31		ng/kg	Subcontracted
123789-HxBDF*	<0.670	1.29	<0.720	<0.750	<0.760	<0.780	<0.800	<0.780	1.44	0.99		ng/kg	Subcontracted
1234678-HpBDF*	<0.690	2.27	<0.680	<0.690	<0.670	<0.700	<0.750	<0.760	<0.760	<0.770		ng/kg	Subcontracted
1234789-HpBDF*	<0.700	3.16	<0.730	<0.720	<0.700	<0.790	<0.790	<0.820	<0.800	<0.800		ng/kg	Subcontracted
OBDF*	<0.780	1.11	<0.820	<0.800	<0.770	<0.820	<0.810	<0.840	<0.820	<0.800		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.690	<0.710	<0.750	<0.740	<0.700	<0.750	<0.720	<0.750	<0.770	<0.790		ng/kg	Subcontracted
12378-PBDD*	<0.720	<0.750	<0.780	<0.800	<0.770	<0.800	<0.770	<0.800	<0.810	<0.800		ng/kg	Subcontracted
123478-HxBDD*	<0.650	<0.680	<0.660	<0.690	<0.680	<0.770	<0.740	<0.750	<0.760	<0.750		ng/kg	Subcontracted
123678-HxBDD*	<0.620	<0.630	<0.650	<0.700	<0.700	<0.690	<0.690	<0.720	<0.750	<0.720		ng/kg	Subcontracted
123789-HxBDD*	<0.700	<0.700	<0.700	<0.740	<0.700	<0.730	<0.700	<0.710	<0.700	<0.680		ng/kg	Subcontracted
1234678-HpBDD*	<0.730	1.81	<0.710	<0.730	<0.810	0.92	<0.800	<0.780	<0.800	0.86		ng/kg	Subcontracted
OBDD*	<0.800	<0.840	<0.800	<0.810	<0.800	<0.800	<0.740	<0.780	<0.820	<0.800		ng/kg	Subcontracted
PCB-81*	3.22	15.5	1.23	0.682	1.24	85.6	2.06	2.19	11.3	10.5		ng/kg	Subcontracted
PCB-77*	49	477	50.1	38.6	35.4	1870	70.8	39.2	91.6	86.3		ng/kg	Subcontracted
PCB-123*	14.7	222	24.1	21.6	21.4	660	42.8	21.7	46	36.8		ng/kg	Subcontracted
PCB-118*	533	4970	516	989	856	17200	1960	633	1280	1010		ng/kg	Subcontracted
PCB-114*	7.14	51.2	6.41	11.3	6.55	379	24.7	3.05	25.6	13.8		ng/kg	Subcontracted
PCB-105*	282	2640	267	452	383	11200	898	295	701	556		ng/kg	Subcontracted
PCB-126*	11.7	49.7	1.76	6.12	6.29	85.6	11.4	13.2	38.7	43		ng/kg	Subcontracted
PCB-167*	39.5	1830	74.4	87.6	93.4	773	126	65.8	153	134		ng/kg	Subcontracted
PCB-156*	88.7	1600	150	219	181	1540	307	153	391	332		ng/kg	Subcontracted
PCB-157*	20.4	1120	49.2	65	68.8	529	92.3	34.6	89.5	73.5		ng/kg	Subcontracted
PCB-169*	2.64	11.5	0.884	1.25	1.4	1.47	0.557	2.14	6.84	9.08		ng/kg	Subcontracted
PCB-189*	9.23	620	15.6	17.7	24.6	136	29.1	16.4	41.8	42.5		ng/kg	Subcontracted
Isocyanic Acid-d	65	56	76	75	68	75	43	57	70	81	<0	%	TM192/PM0
Methyl Isocyanate-d	80	73	87	96	78	88	47	90	89	92	<0	%	TM192/PM0
Ethyl Isocyanate-d	75	65	80	89	73	87	42	83	84	84	<0	%	TM192/PM0
Propyl Isocyanate-d	79	65	97	102	81	90	48	96	95	99	<0	%	TM192/PM0
Phenyl Isocyanate-d	47	32	79	75	59	74	47	58	57	75	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	63	51	73	75	65	73	40	64	76	82	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	77	43	102	99	57	139++	42	51	90	124	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	55	42	74	78	56	69	43	57	69	83	<0	%	TM192/PM0
Isophorone Diisocyanate-d	72	62	73	78	83	82	40	82	81	87	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	64	43	88	86	61	71	46	79	132	87	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.40	7.93	7.82	7.72	8.17	7.80	8.06	7.74	7.73	7.77	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, vegetation	stones	stones, vegetation, slate	stones, chalk, vegetation	stones, vegetation	stones, vegetation	stones, vegetation	stones, chalk, vegetation	stones, vegetation	stones, vegetation		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15	<0.50	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.77	0.23	0.20		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Aluminium	-	-	12090	11560	-	-	13720	8970	10260	10030	<50	mg/kg	TM30/PM15
Arsenic #M	-	-	18.4	19.1	-	-	23.1	16.7	19.2	13.9	<0.5	mg/kg	TM30/PM15
Barium #M	-	-	540	564	-	-	269	171	249	186	<1	mg/kg	TM30/PM15
Beryllium	-	-	1.3	1.3	-	-	1.6	1.1	1.4	1.1	<0.5	mg/kg	TM30/PM15
Cadmium #M	-	-	0.9	0.8	-	-	1.0	1.1	0.8	1.1	<0.1	mg/kg	TM30/PM15
Chromium #M	-	-	71.5	71.1	-	-	68.2	69.3	117.8	66.9	<0.5	mg/kg	TM30/PM15
Copper #M	-	-	93	88	-	-	76	68	90	81	<1	mg/kg	TM30/PM15
Lead #M	-	-	2099	2151	-	-	659	290	434	1200	<5	mg/kg	TM30/PM15
Mercury #M	-	-	0.8	1.8	-	-	1.8	0.8	0.6	0.9	<0.1	mg/kg	TM30/PM15
Nickel #M	-	-	24.9	24.9	-	-	27.4	25.6	28.3	23.3	<0.7	mg/kg	TM30/PM15
Selenium #M	-	-	1	1	-	-	2	1	2	<1	<1	mg/kg	TM30/PM15
Vanadium	-	-	53	53	-	-	62	53	58	44	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	-	-	6.4	6.1	-	-	2.7	2.0	3.5	4.5	<0.1	mg/kg	TM74/PM32
Zinc #M	-	-	499	444	-	-	285	229	292	299	<5	mg/kg	TM30/PM15
Aluminium	17423	19023	-	-	12510	11124	-	-	-	-	<50	mg/kg	TM30/PM62
Arsenic	58.6	61.5	-	-	20.2	19.3	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	866	944	-	-	613	560	-	-	-	-	<1	mg/kg	TM30/PM62
Beryllium	4.1	4.0	-	-	1.3	1.2	-	-	-	-	<0.5	mg/kg	TM30/PM62
Cadmium	7.0	2.1	-	-	0.8	0.8	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	57.8	63.4	-	-	30.6	30.1	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	470$_{AB}$	504$_{AB}$	-	-	86	92	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	1459	1519	-	-	2621	2539	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	3.5	3.3	-	-	0.9	0.8	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	73.1	85.3	-	-	23.9	23.1	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	2	2	-	-	<1	1	-	-	-	-	<1	mg/kg	TM30/PM62
Vanadium	90	92	-	-	59	59	-	-	-	-	<1	mg/kg	TM30/PM62
Water Soluble Boron	3.8	3.7	-	-	7.4	6.5	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	5153$_{AB}$	1184	-	-	451	444	-	-	-	-	<5	mg/kg	TM30/PM62
Aluminium	18250	16400	-	-	9670	11210	-	-	-	-	<50	mg/kg	TM30/PM42
Arsenic	50.7	46.6	-	-	17.2	16.3	-	-	-	-	<0.5	mg/kg	TM30/PM42
Barium	945	883	-	-	486	517	-	-	-	-	<1	mg/kg	TM30/PM42
Beryllium	3.9	3.7	-	-	1.1	1.2	-	-	-	-	<0.5	mg/kg	TM30/PM42
Cadmium	1.9	1.9	-	-	0.6	0.6	-	-	-	-	<0.1	mg/kg	TM30/PM42
Chromium	57.4	54.1	-	-	28.3	31.0	-	-	-	-	<0.5	mg/kg	TM30/PM42
Copper	501$_{AB}$	539$_{AB}$	-	-	79	79	-	-	-	-	<1	mg/kg	TM30/PM42
Lead	1780	1472	-	-	2092	2371	-	-	-	-	<5	mg/kg	TM30/PM42
Mercury	3.1	2.6	-	-	0.5	0.4	-	-	-	-	<0.1	mg/kg	TM30/PM42
Nickel	62.1	55.4	-	-	21.1	21.9	-	-	-	-	<0.7	mg/kg	TM30/PM42
Selenium	2	2	-	-	<1	<1	-	-	-	-	<1	mg/kg	TM30/PM42
Vanadium	92	79	-	-	51	53	-	-	-	-	<1	mg/kg	TM30/PM42
Water Soluble Boron	3.5	3.5	-	-	4.2	4.9	-	-	-	-	<0.1	mg/kg	TM30/PM42
Zinc	1058	1000	-	-	369	382	-	-	-	-	<5	mg/kg	TM30/PM42

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
PAH MS													
Naphthalene #M	0.07	0.07	0.29	0.38	0.39	0.32	0.28	0.15	0.08	0.05	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.23	0.21	1.69	1.76	1.74	1.54	1.04	1.40	0.27	0.17	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	0.16	0.19	0.12	0.15	0.16	0.07	0.13	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	0.20	0.21	0.19	0.19	0.16	0.10	0.11	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.43	0.43	2.85	3.07	3.00	3.15	2.56	1.65	1.65	0.46	<0.03	mg/kg	TM4/PM8
Anthracene #	0.26	0.24	1.74	1.77	1.72	1.72	1.24	1.12	0.50	0.19	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	1.20	1.19	9.69	10.15	10.10	9.67	8.11	7.09	3.68	1.37	<0.03	mg/kg	TM4/PM8
Pyrene #	1.22	1.21	8.80	9.15	9.11	8.90	7.19	6.20	3.13	1.19	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.79	0.79	5.55	5.92	6.03	5.66	4.40	4.03	1.71	0.72	<0.06	mg/kg	TM4/PM8
Chrysene #M	0.91	0.93	5.77	6.12	6.19	6.08	4.53	3.75	1.82	0.80	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	2.26	2.24	12.85	13.77	13.97	12.57	9.96	8.23	3.61	1.68	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.06	1.09	7.43	7.68	7.82	7.05	5.75	4.52	2.04	0.90	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	1.01	1.01	5.22	5.84	5.84	5.06	4.20	3.20	1.35	0.67	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.19	0.24	1.01	1.25	1.49	1.31	1.06	0.67	0.32	0.18	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.14	1.12	5.46	6.15	5.95	5.13	4.34	3.26	1.40	0.68	<0.04	mg/kg	TM4/PM8
Coronene	0.24	0.27	1.23	1.13	1.43	0.91	1.04	0.76	0.25	0.18	<0.04	mg/kg	TM4/PM8
PAH 16 Total	10.8	10.8	68.7	73.4	73.7	68.5	55.0	45.4	21.8	9.1	<0.6	mg/kg	TM4/PM8
PAH 17 Total	11.01	11.04	69.94	74.54	75.09	69.41	56.02	46.20	22.05	9.24	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.63	1.61	9.25	9.91	10.06	9.05	7.17	5.93	2.60	1.21	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.63	0.63	3.60	3.86	3.91	3.52	2.79	2.30	1.01	0.47	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	98	96	100	99	101	92	96	98	101	99	<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND	See Attached	ND	ND	ND		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	21.5	18.3	15.0	12.5	11.1	12.6	15.2	13.2	21.4	13.8	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	-	71.5	71.1	-	-	68.2	69.3	117.8	66.9	<0.5	mg/kg	NONE/NONE
Chromium III	57.8	63.4	-	-	30.6	30.1	-	-	-	-	<0.5	mg/kg	NONE/NONE
Chromium III	57.4	54.1	-	-	28.3	31.0	-	-	-	-	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	1.5_{AA}	1.8_{AA}	0.8	0.7	<0.5	0.6	0.6	<0.5	<0.5	0.7	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Total Organic Carbon #	-	-	6.14	5.81	-	-	5.84	5.57	4.88	4.09	<0.02	%	TM21/PM24
Total Organic Carbon	8.57	9.51	-	-	7.08	5.75	-	-	-	-	<0.02	%	TM21/PM89
Thiocyanate	1.2	1.3	1.7	1.5	1.4	1.5	1.8	1.6	0.8	0.8	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	28.1	19.2	7.74	9.95	10.4	9.98	12.8	5.7	6.52	6.49		ng/kg	Subcontracted
12378-PCDF*	26.7	16.6	5.51	5.79	2.02	7.71	9.94	5.06	4.84	4.43		ng/kg	Subcontracted
23478-PCDF*	57.6	27.8	8.98	4.06	7.61	9.49	8.96	6.95	6.15	7.29		ng/kg	Subcontracted
123478-HxCDF*	37.5	21.4	8.85	6.71	5.23	8.58	10.9	6.86	6.81	6.17		ng/kg	Subcontracted
123678-HxCDF*	35	16.8	6.54	7.42	7.3	7.66	9.62	5.63	4.38	4.09		ng/kg	Subcontracted
234678-HxCDF*	56.7	21.4	7.47	7.59	6.44	7.46	9.24	6.1	5.39	4.05		ng/kg	Subcontracted
123789-HxCDF*	2.25	0.939	<0.333	0.88	<0.608	0.877	0.943	0.799	<0.505	0.547		ng/kg	Subcontracted
1234678-HpCDF*	232	155	50.1	45	46.7	57.8	54.7	55	60.2	46		ng/kg	Subcontracted
1234789-HpCDF*	5.65	3.25	2.8	1.67	2.6	1.3	2.64	2.6	2.48	2.17		ng/kg	Subcontracted
OCDF*	88.9	87.6	33.1	31.8	36.8	74.4	40.1	37.4	43.2	42.3		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	4.61	3.16	<0.377	<0.334	<0.230	<0.225	<0.235	<0.226	<0.218	<0.218		ng/kg	Subcontracted
12378-PCDD*	12.5	12.2	2.05	0.918	1.84	2.2	2.68	0.643	1.51	1.07		ng/kg	Subcontracted
123478-HxCDD*	12	7.8	2.07	1.85	2.01	1.66	2.71	1.36	0.917	1.82		ng/kg	Subcontracted
123678-HxCDD*	20	11.6	3.63	4.91	4.29	5.29	6.17	4.12	3.56	3.09		ng/kg	Subcontracted
123789-HxCDD*	13.9	10	2.13	2.69	3.36	3.68	5.17	2.67	2	2.27		ng/kg	Subcontracted
1234678-HpCDD*	132	86.6	53.2	56.6	57.4	65.5	55.8	58.7	62.3	67.5		ng/kg	Subcontracted
OCDD*	524	489	327	350	354	385	270	381	319	450		ng/kg	Subcontracted
TEQ(1) (NATO)*	65.9	37.9	11.5	8.73	10.5	12.7	13.8	9.18	8.91	9.12		ng/kg	Subcontracted
TEQ(2) (NATO)*	65.9	37.9	11.1	8.39	10.2	12.5	13.5	8.95	8.64	8.9		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	6.99	4.8	1.98	1.55	1.7	1.58	3.08	2.65	1.97	2.87		ng/kg	Subcontracted
12378-PBDF*	6.14	4.87	1.54	1.17	1.28	1.25	1.66	1.7	1.41	1.75		ng/kg	Subcontracted
23478-PBDF*	2.24	2.59	0.83	0.76	0.88	0.76	1.19	0.98	0.77	0.89		ng/kg	Subcontracted
123478-HxBDF*	3.06	3.81	0.62	1.38	1.6	1.75	1.9	2	2.3	2.1		ng/kg	Subcontracted
123678-HxBDF*	2.29	2	0.79	1.72	2.19	2.6	2.27	2.53	2.21	1.85		ng/kg	Subcontracted
234678-HxBDF*	1.82	2.13	<0.780	<0.800	<0.800	<0.830	<0.880	<0.810	<0.770	<0.750		ng/kg	Subcontracted
123789-HxBDF*	1.48	1.19	<0.820	<0.840	<0.800	<0.820	<0.820	<0.790	<0.800	<0.810		ng/kg	Subcontracted
1234678-HpBDF*	<0.790	<0.770	<0.740	<0.770	<0.790	<0.770	<0.790	<0.840	<0.780	<0.770		ng/kg	Subcontracted
1234789-HpBDF*	<0.810	<0.810	<0.800	<0.800	<0.820	<0.800	<0.830	<0.800	<0.810	<0.790		ng/kg	Subcontracted
OBDF*	<0.780	<0.820	<0.840	<0.790	<0.810	<0.840	<0.850	<0.820	<0.840	<0.850		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.770	<0.760	<0.780	<0.790	<0.770	<0.790	<0.800	<0.800	<0.780	<0.800		ng/kg	Subcontracted
12378-PBDD*	<0.800	<0.820	<0.810	<0.840	<0.800	<0.800	<0.810	<0.780	<0.800	<0.780		ng/kg	Subcontracted
123478-HxBDD*	<0.710	<0.760	<0.790	<0.790	<0.770	<0.790	<0.770	<0.760	<0.750	<0.770		ng/kg	Subcontracted
123678-HxBDD*	<0.730	<0.730	<0.760	<0.770	<0.740	<0.780	<0.790	<0.800	<0.780	<0.780		ng/kg	Subcontracted
123789-HxBDD*	<0.690	<0.660	<0.690	<0.750	<0.800	<0.730	<0.730	<0.770	<0.770	<0.710		ng/kg	Subcontracted
1234678-HpBDD*	1.22	0.99	<0.800	<0.800	<0.830	<0.800	<0.780	<0.840	<0.830	<0.800		ng/kg	Subcontracted
OBDD*	<0.780	<0.800	<0.820	<0.840	<0.800	<0.820	<0.820	<0.820	<0.800	<0.820		ng/kg	Subcontracted
PCB-81*	18.3	9.94	2.06	1.84	0.73	0.941	2.66	2.81	4.43	0.997		ng/kg	Subcontracted
PCB-77*	211	73	33.1	36.2	34.1	34.5	33.9	73.1	92.7	57.6		ng/kg	Subcontracted
PCB-123*	63.6	29.8	12.7	15.4	15.1	14.1	17.2	40.2	40	14.9		ng/kg	Subcontracted
PCB-118*	1880	851	512	581	471	480	507	1040	1090	554		ng/kg	Subcontracted
PCB-114*	43.5	12.6	5.77	6.39	5.17	5.49	4.66	9.05	10.6	8.14		ng/kg	Subcontracted
PCB-105*	1060	498	248	281	226	231	228	431	545	269		ng/kg	Subcontracted
PCB-126*	63.3	37.7	6.46	7.59	6.36	11	11.9	19.2	13.3	8.08		ng/kg	Subcontracted
PCB-167*	154	114	60.3	57.4	51.4	52.9	48.1	122	93.1	51.1		ng/kg	Subcontracted
PCB-156*	398	280	128	133	104	111	104	245	214	101		ng/kg	Subcontracted
PCB-157*	92.5	66.5	34.7	39.5	33.2	33.8	30.1	71.4	59.2	34.2		ng/kg	Subcontracted
PCB-169*	18.1	7.36	1.52	1.17	2.68	2.15	2.11	1.87	1.53	0.795		ng/kg	Subcontracted
PCB-189*	43.5	33.2	19.2	16.6	14.9	15.6	14.4	28.1	18.9	18.3		ng/kg	Subcontracted
Isocyanic Acid-d	78	80	71	60	69	70	67	77	79	81	<0	%	TM192/PM0
Methyl Isocyanate-d	97	99	86	76	86	87	79	96	77	99	<0	%	TM192/PM0
Ethyl Isocyanate-d	92	94	83	74	84	82	74	89	77	92	<0	%	TM192/PM0
Propyl Isocyanate-d	104	107	88	75	84	90	86	96	94	101	<0	%	TM192/PM0
Phenyl Isocyanate-d	76	77	60	46	55	50	53	65	73	83	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	82	83	69	57	64	66	65	77	81	85	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	126	119	66	43	59	76	75	100	117	135	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	79	84	61	45	57	58	59	74	78	87	<0	%	TM192/PM0
Isophorone Diisocyanate-d	84	86	84	73	78	81	81	87	87	88	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	87	89	58	44	57	56	65	76	82	96	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	373	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.73	7.82	7.60	7.59	7.57	7.59	7.27	7.13	8.06	7.73	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, vegetation	stones, vegetation	stones, vegetation	stones, vegetation	stones, vegetation	stones, wood	stones, vegetation	stones, vegetation	stones, vegetation	stones, vegetation		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15	<0.15	<0.15	<0.15	<0.15	<0.20	<0.15	<0.50	<0.15	<0.15		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	0.23	0.22	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : **Solid**

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	590-597												
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Aluminium	11170										<50	mg/kg	TM30/PM15
Arsenic #M	15.4										<0.5	mg/kg	TM30/PM15
Barium #M	138										<1	mg/kg	TM30/PM15
Beryllium	1.0										<0.5	mg/kg	TM30/PM15
Cadmium #M	0.9										<0.1	mg/kg	TM30/PM15
Chromium #M	72.0										<0.5	mg/kg	TM30/PM15
Copper #M	58										<1	mg/kg	TM30/PM15
Lead #M	168										<5	mg/kg	TM30/PM15
Mercury #M	0.3										<0.1	mg/kg	TM30/PM15
Nickel #M	22.4										<0.7	mg/kg	TM30/PM15
Selenium #M	1										<1	mg/kg	TM30/PM15
Vanadium	44										<1	mg/kg	TM30/PM15
Water Soluble Boron #M	3.8										<0.1	mg/kg	TM74/PM32
Zinc #M	243										<5	mg/kg	TM30/PM15
Aluminium	-										<50	mg/kg	TM30/PM62
Arsenic	-										<0.5	mg/kg	TM30/PM62
Barium	-										<1	mg/kg	TM30/PM62
Beryllium	-										<0.5	mg/kg	TM30/PM62
Cadmium	-										<0.1	mg/kg	TM30/PM62
Chromium	-										<0.5	mg/kg	TM30/PM62
Copper	-										<1	mg/kg	TM30/PM62
Lead	-										<5	mg/kg	TM30/PM62
Mercury	-										<0.1	mg/kg	TM30/PM62
Nickel	-										<0.7	mg/kg	TM30/PM62
Selenium	-										<1	mg/kg	TM30/PM62
Vanadium	-										<1	mg/kg	TM30/PM62
Water Soluble Boron	-										<0.1	mg/kg	TM74/PM61
Zinc	-										<5	mg/kg	TM30/PM62

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	590-597										LOD/LOR	Units	Method No.
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												
PAH MS													
Naphthalene #M	<0.04										<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.10										<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05										<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04										<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.82										<0.03	mg/kg	TM4/PM8
Anthracene #	0.22										<0.04	mg/kg	TM4/PM8
Fluoranthene #M	1.71										<0.03	mg/kg	TM4/PM8
Pyrene #	1.47										<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.81										<0.06	mg/kg	TM4/PM8
Chrysene #M	0.89										<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	1.75										<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.95										<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.62										<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.16										<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.67										<0.04	mg/kg	TM4/PM8
Coronene	0.12										<0.04	mg/kg	TM4/PM8
PAH 16 Total	10.2										<0.6	mg/kg	TM4/PM8
PAH 17 Total	10.29										<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.26										<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.49										<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	99										<0	%	TM4/PM8
VOC TICs	ND											None	TM15/PM10
SVOC TICs	See Attached											None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100										<100	ug/kg	TM16/PM8
PCB 28 #	<5										<5	ug/kg	TM17/PM8
PCB 52 #	<5										<5	ug/kg	TM17/PM8
PCB 101 #	<5										<5	ug/kg	TM17/PM8
PCB 118 #	<5										<5	ug/kg	TM17/PM8
PCB 138 #	<5										<5	ug/kg	TM17/PM8
PCB 153 #	<5										<5	ug/kg	TM17/PM8
PCB 180 #	<5										<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35										<35	ug/kg	TM17/PM8
Natural Moisture Content	9.5										<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3										<0.3	mg/kg	TM38/PM20
Chromium III	72.0										<0.5	mg/kg	NONE/NONE
Chromium III	-										<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5										<0.5	mg/kg	TM89/PM45
Total Cyanide #M	0.7										<0.5	mg/kg	TM89/PM45

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	590-597												
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Total Organic Carbon #	5.75										<0.02	%	TM21/PM24
Total Organic Carbon	-										<0.02	%	TM21/PM89
Thiocyanate	1.3										<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	<0.234											ng/kg	Subcontracted
12378-PCDF*	1.01											ng/kg	Subcontracted
23478-PCDF*	<0.242											ng/kg	Subcontracted
123478-HxCDF*	<0.217											ng/kg	Subcontracted
123678-HxCDF*	<0.225											ng/kg	Subcontracted
234678-HxCDF*	0.997											ng/kg	Subcontracted
123789-HxCDF*	<0.245											ng/kg	Subcontracted
1234678-HpCDF*	18.5											ng/kg	Subcontracted
1234789-HpCDF*	0.946											ng/kg	Subcontracted
OCDF*	23.8											ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.104											ng/kg	Subcontracted
12378-PCDD*	<0.400											ng/kg	Subcontracted
123478-HxCDD*	<0.394											ng/kg	Subcontracted
123678-HxCDD*	1.96											ng/kg	Subcontracted
123789-HxCDD*	0.583											ng/kg	Subcontracted
1234678-HpCDD*	50.8											ng/kg	Subcontracted
OCDD*	419											ng/kg	Subcontracted
TEQ(1) (NATO)*	2.11											ng/kg	Subcontracted
TEQ(2) (NATO)*	1.55											ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	0.98											ng/kg	Subcontracted
12378-PBDF*	1.14											ng/kg	Subcontracted
23478-PBDF*	<0.800											ng/kg	Subcontracted
123478-HxBDF*	0.79											ng/kg	Subcontracted
123678-HxBDF*	<0.800											ng/kg	Subcontracted
234678-HxBDF*	<0.770											ng/kg	Subcontracted
123789-HxBDF*	<0.800											ng/kg	Subcontracted
1234678-HpBDF*	<0.790											ng/kg	Subcontracted
1234789-HpBDF*	<0.740											ng/kg	Subcontracted
OBDF*	<0.830											ng/kg	Subcontracted

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	590-597										LOD/LOR	Units	Method No.
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												
Dioxins (Brominated)													
2378-TBDD*	<0.800											ng/kg	Subcontracted
12378-PBDD*	<0.790											ng/kg	Subcontracted
123478-HxBDD*	<0.770											ng/kg	Subcontracted
123678-HxBDD*	<0.800											ng/kg	Subcontracted
123789-HxBDD*	<0.740											ng/kg	Subcontracted
1234678-HpBDD*	<0.800											ng/kg	Subcontracted
OBDD*	<0.800											ng/kg	Subcontracted
PCB-81*	0.617											ng/kg	Subcontracted
PCB-77*	53.2											ng/kg	Subcontracted
PCB-123*	15.5											ng/kg	Subcontracted
PCB-118*	520											ng/kg	Subcontracted
PCB-114*	3.69											ng/kg	Subcontracted
PCB-105*	241											ng/kg	Subcontracted
PCB-126*	13											ng/kg	Subcontracted
PCB-167*	57.7											ng/kg	Subcontracted
PCB-156*	109											ng/kg	Subcontracted
PCB-157*	39.4											ng/kg	Subcontracted
PCB-169*	1.25											ng/kg	Subcontracted
PCB-189*	12.6											ng/kg	Subcontracted
Isocyanic Acid-d	89										<0	%	TM192/PM0
Methyl Isocyanate-d	114										<0	%	TM192/PM0
Ethyl Isocyanate-d	111										<0	%	TM192/PM0
Propyl Isocyanate-d	115										<0	%	TM192/PM0
Phenyl Isocyanate-d	93										<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	87										<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	135										<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	91										<0	%	TM192/PM0
Isophorone Diisocyanate-d	94										<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	101										<0	%	TM192/PM0
Isocyanic Acid	<250										<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250										<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250										<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250										<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250										<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250										<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250										<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250										<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500										<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250										<250	ug/kg	TM192/PM0
pH #M	7.42										<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	590-597												
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Sample Type	Clayey Loam											None	PM13/PM0
Sample Colour	Medium Brown											None	PM13/PM0
Other Items	stones, vegetation											None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50											mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50											mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50											mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50											mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50											mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10											mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10											mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10											mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10											mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10											mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10											mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10											mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10											mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10											mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10											mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10											mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10											mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50											mg/kg	Subcontracted
triphenylphosphate*	<0.10											mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15											mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10											mg/kg	Subcontracted

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	67	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	246	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	310	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	98	82	57	1425	25	53	35	49	61	90	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	1002	611	911	355	1001	443	282	<100	<100	141	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	698	<100	<100	<100	617	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	167	76	71	3290	75	81	75	93	103	93	<10	ug/kg	TM16/PM8
Dibenzofuran #M	77	36	40	3082	26	48	27	37	47	51	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	104	116	102	111	107	112	109	119	122	125	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	121	125	115	126	120	126	124	113	116	127	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	76	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	64	232	36	55	266	49	88	22	74	75	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	122	516	140	221	206	551	202	587	567	639	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	135	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	1520	<100	<100	<100	980	<100	<100	<100	177	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	22	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	82	636	128	92	131	70	141	25	53	53	<10	ug/kg	TM16/PM8
Dibenzofuran #M	40	249	51	50	93	36	79	21	38	36	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	113	117	113	112	113	119	122	120	109	105	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	115	127	122	116	120	129	122	120	112	111	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	72	195	162	141	126	116	131	87	98	43	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	634	731	399	394	307	337	384	418	287	571	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	453	119	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	58	54	329	451	226	291	238	250	296	61	<10	ug/kg	TM16/PM8
Dibenzofuran #M	36	60	139	164	136	132	107	89	142	28	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	83	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	105	105	112	110	119	118	112	107	101	107	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	113	115	127	124	125	130	130	122	114	120	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	590-597										LOD/LOR	Units	Method No.
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												
SVOC MS													
Phenols													
2-Chlorophenol #M	<10										<10	ug/kg	TM16/PM8
2-Methylphenol	<10										<10	ug/kg	TM16/PM8
2-Nitrophenol	<10										<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10										<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10										<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10										<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10										<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10										<10	ug/kg	TM16/PM8
4-Methylphenol	<10										<10	ug/kg	TM16/PM8
4-Nitrophenol	<10										<10	ug/kg	TM16/PM8
Pentachlorophenol	<10										<10	ug/kg	TM16/PM8
Phenol #M	<10										<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10										<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	21										<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	1546										<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100										<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100										<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100										<100	ug/kg	TM16/PM8
Diethyl phthalate	<100										<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100										<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10										<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10										<10	ug/kg	TM16/PM8
2-Nitroaniline	<10										<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10										<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10										<10	ug/kg	TM16/PM8
3-Nitroaniline	<10										<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10										<10	ug/kg	TM16/PM8
4-Chloroaniline	<10										<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10										<10	ug/kg	TM16/PM8
4-Nitroaniline	<10										<10	ug/kg	TM16/PM8
Azobenzene	<10										<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10										<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10										<10	ug/kg	TM16/PM8
Carbazole	39										<10	ug/kg	TM16/PM8
Dibenzofuran #M	15										<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10										<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10										<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10										<10	ug/kg	TM16/PM8
Hexachloroethane	<10										<10	ug/kg	TM16/PM8
Isophorone #M	<10										<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10										<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10										<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	107										<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	115										<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	181-188	197-204	213-220	229-236	237-244	261-268	277-284	293-300	310-317	318-325	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 LAB DUPLICATE	GTCS 1-39 FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019 16:00	04/06/2019 16:45	04/06/2019 16:45	04/06/2019 16:45			
Sample Type	Clay	Clay	Clay	Clay	Clay	Clay	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	10	10	13	14	10	6	27	12	13	10	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4	26	226	45	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	82	70	86	71	75	91	75	74	74	76	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	65	55	68	54	59	74	61	57	56	57	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	326-333	334-341	350-357	366-373	382-389	398-405	414-421	430-437	446-453	462-469	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 LAB DUPLICATE			
Depth	0.00-0.05	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	04/06/2019 16:45	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019 10:40	05/06/2019 11:10	05/06/2019 11:10			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clay	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	10	6	<3	<3	5	<3	<3	9	26	14	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	9	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	12	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	6	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	16	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	78	87	97	89	87	91	94	79	82	83	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	60	70	81	73	65	76	75	63	61	62	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	470-477	478-485	486-493	502-509	510-517	518-525	526-533	542-549	558-565	574-581	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	05/06/2019 11:10	05/06/2019 11:10	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 08:50	05/06/2019 09:50	05/06/2019 14:45	05/06/2019 15:20	05/06/2019 12:30			
Sample Type	Clayey Loam	Clayey Loam	Clay	Clay	Clay	Clayey Loam	Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	2	2	2	2	2	2	2	2	2	2			
Date of Receipt	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	11	19	16	18	11	34	7	12	21	7	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	3	3	<3	3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	68	75	70	70	78	71	85	82	73	88	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	52	55	52	53	58	53	64	61	50	68	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	590-597										LOD/LOR	Units	Method No.
Sample ID	GTCS 1-22A												
Depth	0.00-0.05												
COC No / misc													
Containers	V J T												
Sample Date	05/06/2019 13:05												
Sample Type	Clayey Loam												
Batch Number	2												
Date of Receipt	06/06/2019												
VOC MS													
Dichlorodifluoromethane	<2										<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6										<6	ug/kg	TM15/PM10
Chloromethane #	8										<3	ug/kg	TM15/PM10
Vinyl Chloride	<2										<2	ug/kg	TM15_A/PM10
Bromomethane	<1										<1	ug/kg	TM15/PM10
Chloroethane #M	<6										<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3										<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6										<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30										<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3										<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6										<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7										<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4										<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4										<4	ug/kg	TM15/PM10
Chloroform #M	<5										<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5										<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3										<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4										<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5										<5	ug/kg	TM15/PM10
Benzene #M	<5										<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5										<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4										<4	ug/kg	TM15/PM10
Dibromomethane #M	<4										<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4										<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4										<4	ug/kg	TM15/PM10
Toluene #M	<3										<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3										<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4										<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3										<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4										<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5										<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3										<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4										<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5										<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3										<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4										<4	ug/kg	TM15/PM10
o-Xylene #M	<4										<4	ug/kg	TM15/PM10
Styrene	<3										<3	ug/kg	TM15_A/PM10
Bromoform	<4										<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3										<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3										<3	ug/kg	TM15/PM10
Bromobenzene	<2										<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4										<4	ug/kg	TM15/PM10
Propylbenzene #	<4										<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3										<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3										<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3										<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5										<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6										<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4										<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4										<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4										<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4										<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4										<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4										<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4										<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7										<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4										<4	ug/kg	TM15/PM10
Naphthalene	<27										<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7										<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	80										<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	63										<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 277
Sample identity: GTCS 1-40A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: VOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
80-56-8	.alpha.-Pinene	6.359	97	216

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** VOC
Sample number: 293 **Matrix:** Solid
Sample identity: GTCS 1-39 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
470-82-6	Eucalyptol	7.083	99	317

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** VOC
Sample number: 310 **Matrix:** Solid
Sample identity: GTCS 1-39 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
590-86-3	Butanal, 3-methyl-	4.196	87	152
470-82-6	Eucalyptol	7.083	99	2367

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** VOC
Sample number: 318 **Matrix:** Solid
Sample identity: GTCS 1-39 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
470-82-6	Eucalyptol	7.083	99	447

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** VOC
Sample number: 326 **Matrix:** Solid
Sample identity: GTCS 1-39 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
470-82-6	Eucalyptol	7.083	99	614

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 526
Sample identity: GTCS 1-24A
Sample depth: 0.00-0.05
Sample Type: Loam
Units: ug/kg

Method: VOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
1120-21-4	Undecane	7.242	96	386

Job number: 19/9004
Sample number: 186
Sample identity: GTCS 1-43A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.831	90	191
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.938	86	235
2381-21-7	Pyrene, 1-methyl-	12.079	93	362
243-17-4	11H-Benzo[b]fluorene	12.183	95	632
479-79-8	11H-Benzo[a]fluoren-11-one	12.770	89	146
217-59-4	Triphenylene	13.299	98	1585
3351-28-8	Chrysene, 1-methyl-	13.856	95	409
593-45-3	Octadecane	14.385	93	484
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.954	96	1735
544-76-3	Hexadecane	15.174	91	1467

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 202
Sample identity: GTCS 1-44A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
1137-12-8	1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1.alpha.,2.alpha.,3a.beta.,4.alpha.,8a.beta.,9R*)]-	8.242	99	4677
475-20-7	Longifolene	8.455	99	7933
128-37-0	Butylated Hydroxytoluene	8.892	98	1566
334-48-5	n-Decanoic acid	9.117	92	2983
489-39-4	Aromandendrene	9.887	91	1425
544-63-8	Tetradecanoic acid	10.129	93	2707
57-10-3	n-Hexadecanoic acid	11.058	99	196284
32624-67-2	10,18-Bisnorabieta-8,11,13-triene	11.483	96	3492
6566-19-4	10,18-Bisnorabieta-5,7,9(10),11,13-pentaene	11.710	99	1968
57-11-4	Octadecanoic acid	11.900	99	147477
1235-74-1	Methyl dehydroabietate	12.713	98	5678
1740-19-8	Dehydroabietic acid	13.138	99	47248
514-10-3	Abietic acid	13.394	95	8872
65899-10-7	trans-1,2-Bis(methyldichlorosilyl)ethylene	14.205	93	8137
646-31-1	Tetracosane	15.174	95	2884
629-94-7	Heneicosane	15.958	93	5074

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 218
Sample identity: GTCS 1-45A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
610-48-0	Anthracene, 1-methyl-	10.831	91	159
832-69-9	Phenanthrene, 1-methyl-	10.859	90	159
832-64-4	Phenanthrene, 4-methyl-	10.963	95	196
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	91	267
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	86	144
33543-31-6	Fluoranthene, 2-methyl-	12.183	96	450
483-65-8	Retene	12.221	93	286
2381-21-7	Pyrene, 1-methyl-	12.259	93	182
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	95	236
217-59-4	Triphenylene	13.299	97	1155
3351-28-8	Chrysene, 1-methyl-	13.866	95	314
629-94-7	Heneicosane	14.385	92	454
544-76-3	Hexadecane	14.794	91	1311
198-55-0	Perylene	14.954	95	630
629-78-7	Heptadecane	15.173	90	2103

Job number: 19/9004
Sample number: 234
Sample identity: GTCS 1-47A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
92-52-4	Biphenyl	8.092	95	276
575-43-9	Naphthalene, 1,6-dimethyl-	8.288	97	583
581-42-0	Naphthalene, 2,6-dimethyl-	8.371	96	826
582-16-1	Naphthalene, 2,7-dimethyl-	8.395	96	379
581-40-8	Naphthalene, 2,3-dimethyl-	8.503	95	752
259-79-0	Biphenylene	8.539	91	2580
829-26-5	Naphthalene, 2,3,6-trimethyl-	9.005	98	257
2245-38-7	Naphthalene, 1,6,7-trimethyl-	9.033	98	503
2131-41-1	Naphthalene, 1,4,5-trimethyl-	9.117	96	432
1689-64-1	9H-Fluoren-9-ol	9.506	87	730
14562-09-5	2,4,6-Cycloheptatrien-1-one, 2-phenyl-	9.588	87	1122
486-25-9	9H-Fluoren-9-one	10.036	96	1634
234-41-3	Naphtho[1,2-b]thiophene	10.151	96	1910
6574-36-3	Cyclobuta[1",2":3,4:3",4":3',4']dicyclobuta[1,2:1',2']dibenzene, 4b,4c,8b,8c-tetrahydro-	10.623	94	1665
832-69-9	Phenanthrene, 1-methyl-	10.831	97	4246
949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	10.897	96	1760
2531-84-2	Phenanthrene, 2-methyl-	10.954	97	3412
84-65-1	9,10-Anthracenedione	11.077	95	1864
612-94-2	Naphthalene, 2-phenyl-	11.124	93	3093
1576-67-6	Phenanthrene, 3,6-dimethyl-	11.361	91	2284
5737-13-3	Cyclopenta(def)phenanthrenone	11.436	95	5053
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.720	93	546
200-23-7	Benzo[kl]xanthene	11.796	94	4578
205-39-0	Benzo(b)naphtho(1,2-d)furan	11.871	95	1400
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	96	2865
2381-21-7	Pyrene, 1-methyl-	12.183	96	5147
64401-21-4	Pyrene, 1,3-dimethyl-	12.855	97	634
82-05-3	7H-Benz[de]anthracen-7-one	12.912	97	2001
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	98	3939
195-19-7	Benzo[c]phenanthrene	12.978	91	2561

Job number: 19/9004
Sample number: 234
Sample identity: GTCS 1-47A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
479-79-8	11H-Benzo[a]fluoren-11-one	13.035	97	4093
239-01-0	11H-Benzo[a]carbazole	13.224	96	4085
217-59-4	Triphenylene	13.271	95	32197
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	90	4726
191-37-7	Naphtho[2,1,8,7-klmn]xanthene	13.597	94	1664
54811-45-9	11H-Benzo[a]fluoren-11-one, 10-methyl-	13.647	95	1544
3351-28-8	Chrysene, 1-methyl-	13.866	97	4408
2498-66-0	Benz(A)anthracene-7,12-dione	14.195	89	921
544-76-3	Hexadecane	14.385	94	1976
7476-08-6	Benz(a)anthracene-7-carbonitrile	14.475	86	1671
192-97-2	Benzo[e]pyrene	14.794	97	6399
205-99-2	Benz[e]acephenanthrylene	14.954	92	6397
198-55-0	Perylene	15.100	99	4791
80039-31-2	n-Pentafluorosulfanyl-S,S-diphenoxysufilimine	15.307	90	1790
14113-80-5	Cyclodecacyclododecene, 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18-octadecahydro-	16.203	93	3094
215-58-7	Benzo[b]triphenylene	16.437	96	2785
191-26-4	Dibenzo[def,mno]chrysene	16.782	95	1950

Job number: 19/9004
Sample number: 242
Sample identity: GTCS 1-48A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
243-17-4	11H-Benzo[b]fluorene	12.183	83	353
5385-75-1	Dibenz(a,e)aceanthrylene	12.656	98	2408
189-64-0	3,4:8,9-Dibenzopyrene	13.035	99	1671
203-11-2	Indeno[1,2,3-fg]naphthacene	14.116	93	1132
192-65-4	1,2:4,5-Dibenzopyrene	14.475	96	6277
189-55-9	Dibenzo(a,i)pyrene	14.744	93	978
629-92-5	Nonadecane	15.174	92	1174

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 266
Sample identity: GTCS 1-49A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-69-9	Phenanthrene, 1-methyl-	10.831	90	116
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	91	190
2381-21-7	Pyrene, 1-methyl-	12.183	91	264
483-65-8	Retene	12.221	89	158
112-95-8	Eicosane	13.946	92	318
198-55-0	Perylene	14.954	94	1132
197-61-5	Rubicene-	15.174	91	2432

Job number: 19/9004
Sample number: 282
Sample identity: GTCS 1-40A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
475-20-7	Longifolene	8.455	95	561
832-69-9	Phenanthrene, 1-methyl-	10.963	91	180
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-1-(1-methylethyl)-, (4bS-trans)-	12.590	98	10624
514-62-5	Ferruginol	12.647	95	2005
3351-32-4	2-Methylchrysene	13.866	92	180
511-05-7	9(1H)-Phenanthrenone, 2,3,4,4a,10,10a-hexahydro-6-hydroxy-1,1,4a-trimethyl-7-(1-methylethyl)-, (4aS-trans)-	13.916	97	777
629-78-7	Heptadecane	14.385	92	485
198-55-0	Perylene	14.954	90	492
629-94-7	Heneicosane	15.174	92	1432

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 298 **Matrix:** Solid
Sample identity: GTCS 1-39 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
514-95-4	1,5,5-Trimethyl-6-methylene-cyclohexene	7.944	94	5220
489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,7b-octahydro-1,1,4,7-tetramethyl-, [1aR-(1a.alpha.,4.alpha.,4a.beta.,7b.alpha.)]-	8.433	99	2983
17334-55-3	1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,7,7a,7b-octahydro-1,1,7,7a-tetramethyl-, [1aR-(1a.alpha.,7.alpha.,7a.alpha.,7b.alpha.)]-	8.578	94	9410
25246-27-9	Alloaromadendrene	8.614	95	18260
514-51-2	4,7-Methanoazulene, 1,2,3,4,5,6,7,8-octahydro-1,4,9,9-tetramethyl-, [1S-(1.alpha.,4.alpha.,7.alpha.)]-	8.909	90	7955
489-39-4	Aromandendrene	9.371	83	3643
192-97-2	Benzo[e]pyrene	14.934	95	2604

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 315 **Matrix:** Solid
Sample identity: GTCS 1-39 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
3242-08-8	Cyclohexane, 1-ethenyl-1-methyl-2-(1-methylethenyl)-4-(1-methylethylidene)-	7.935	94	620
523-47-7	Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7-dimethyl-1-(1-methylethyl)-, [1S-(1.alpha.,4a.beta.,8a.alpha.)]-	8.436	90	386
489-39-4	Aromandendrene	8.604	98	1778
25246-27-9	Alloaromadendrene	9.374	90	776
832-64-4	Phenanthrene, 4-methyl-	10.939	90	349
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.620	90	240
2381-21-7	Pyrene, 1-methyl-	12.159	89	585
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.906	91	233
192-97-2	Benzo[e]pyrene	14.928	95	1406
629-92-5	Nonadecane	15.148	93	1716

Job number: 19/9004 **Method:** SVOC
Sample number: 323 **Matrix:** Solid
Sample identity: GTCS 1-39 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
99-83-2	.alpha.-Phellandrene	5.219	93	1967
6574-99-8	3,4-Dichlorobenzonitrile	7.762	83	284
514-95-4	1,5,5-Trimethyl-6-methylene-cyclohexene	8.010	94	1663
95910-36-4	isoledene	8.275	95	712
489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,7b-octahydro-1,1,4,7-tetramethyl-, [1aR-(1a.alpha.,4.alpha.,4a.beta.,7b.alpha.)]-	8.539	93	696
17334-55-3	1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,7,7a,7b-octahydro-1,1,7,7a-tetramethyl-, [1aR-(1a.alpha.,7.alpha.,7a.alpha.,7b.alpha.)]-	8.643	97	785
489-39-4	Aromandendrene	8.677	99	6997
2531-84-2	Phenanthrene, 2-methyl-	10.880	96	1527
610-48-0	Anthracene, 1-methyl-	10.990	80	2739
84-65-1	9,10-Anthracenedione	11.133	92	845
612-94-2	Naphthalene, 2-phenyl-	11.188	87	1855
1576-67-6	Phenanthrene, 3,6-dimethyl-	11.416	86	2076
2789-88-0	di-p-Tolylacetylene	11.543	95	845
2435-53-2	Tetrachloro-o-benzoquinone	11.931	94	1396
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	96	1886
33543-31-6	Fluoranthene, 2-methyl-	12.141	96	2010
51314-72-8	2-Bromo-4,5-dimethoxycinnamic acid	12.183	90	670
2381-21-7	Pyrene, 1-methyl-	12.243	96	3210
243-17-4	11H-Benzo[b]fluorene	12.327	92	1689
3442-78-2	Pyrene, 2-methyl-	12.369	94	1688
64401-21-4	Pyrene, 1,3-dimethyl-	12.925	90	704
123-95-5	Octadecanoic acid, butyl ester	12.951	80	1508
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.052	87	1883
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	13.223	86	2257
239-01-0	11H-Benzo[a]carbazole	13.296	87	1968
3351-28-8	Chrysene, 1-methyl-	13.936	97	2776
1705-85-7	Chrysene, 6-methyl-	13.978	89	1191
50861-05-7	9H-Cyclopenta[a]pyrene	14.093	83	1567
192-97-2	Benzo[e]pyrene	15.033	97	8088
112-95-8	Eicosane	15.239	96	10651

Job number: 19/9004 **Method:** SVOC
Sample number: 331 **Matrix:** Solid
Sample identity: GTCS 1-39 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
80-56-8	.alpha.-Pinene	4.448	93	1009
99-83-2	.alpha.-Phellandrene	5.171	87	980
99-87-6	p-Cymene	5.318	95	1642
5989-27-5	D-Limonene	5.423	92	1603
514-95-4	1,5,5-Trimethyl-6-methylene-cyclohexene	7.965	93	580
489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,7b-octahydro-1,1,4,7-tetramethyl-, [1aR-(1a.alpha.,4.alpha.,4a.beta.,7b.alpha.)]-	8.455	99	927
17334-55-3	1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,7,7a,7b-octahydro-1,1,7,7a-tetramethyl-, [1aR-(1a.alpha.,7.alpha.,7a.alpha.,7b.alpha.)]-	8.599	91	1613
60909-28-6	10s,11s-Himachala-3(12),4-diene	8.635	97	3879
489-39-4	Aromandendrene	8.751	96	709
25246-27-9	Alloaromadendrene	8.794	92	296
514-51-2	4,7-Methanoazulene, 1,2,3,4,5,6,7,8-octahydro-1,4,9,9-tetramethyl-, [1S-(1.alpha.,4.alpha.,7.alpha.)]-	8.822	92	825
88-84-6	.beta.-Guaiene	8.878	84	134
22567-17-5	Azulene, 1,2,3,3a,4,5,6,7-octahydro-1,4-dimethyl-7-(1-methylethenyl)-, [1R-(1.alpha.,3a.beta.,4.alpha.,7.beta.)]-	9.390	99	812
75-94-5	Trichlorovinylsilane	9.696	90	116
523-47-7	Naphthalene, 1,2,4a,5,8,8a-hexahydro-4,7-dimethyl-1-(1-methylethyl)-, [1S-(1.alpha.,4a.beta.,8a.alpha.)]-	9.723	95	208
198-55-0	Perylene	14.953	95	361
544-76-3	Hexadecane	15.173	86	1613

Job number: 19/9004
Sample number: 339
Sample identity: GTCS 1-43A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
581-42-0	Naphthalene, 2,6-dimethyl-	8.344	93	561
581-40-8	Naphthalene, 2,3-dimethyl-	8.424	97	750
575-43-9	Naphthalene, 1,6-dimethyl-	8.447	90	999
829-26-5	Naphthalene, 2,3,6-trimethyl-	9.086	96	973
2131-42-2	Naphthalene, 1,4,6-trimethyl-	9.161	95	1026
2245-38-7	Naphthalene, 1,6,7-trimethyl-	9.262	91	1373
1689-64-1	9H-Fluoren-9-ol	9.560	86	1577
7320-53-8	Dibenzofuran, 4-methyl-	9.639	91	1396
33930-85-7	Benzene, (4,5,5-trimethyl-1,3-cyclopentadien-1-yl)-	9.835	90	1135
233-02-3	Naphtho[2,1-b]thiophene	10.208	94	1995
16587-52-3	Dibenzothiophene, 3-methyl-	10.780	83	1830
832-69-9	Phenanthrene, 1-methyl-	10.913	95	5459
610-48-0	Anthracene, 1-methyl-	10.990	80	8921
84-65-1	9,10-Anthracenedione	11.133	94	6326
89816-75-1	2,6-Dimethyldibenzothiophene	11.243	90	1791
2789-88-0	di-p-Tolylacetylene	11.416	93	4840
84-54-8	9,10-Anthracenedione, 2-methyl-	11.720	86	3572
77581-11-4	2,9-Dimethyl-2,3,4,5,6,7-hexahydro-1H-2-benzazonine	11.973	91	4203
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	96	6475
2435-53-2	Tetrachloro-o-benzoquinone	12.099	95	2648
33543-31-6	Fluoranthene, 2-methyl-	12.242	95	15811
2381-21-7	Pyrene, 1-methyl-	12.327	95	7242
479-79-8	11H-Benzo[a]fluoren-11-one	12.849	95	7792
64401-21-4	Pyrene, 1,3-dimethyl-	12.925	91	7437
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	13.010	94	9542
239-01-0	11H-Benzo[a]carbazole	13.579	90	9597
3351-32-4	2-Methylchrysene	13.936	96	15129
54482-31-4	D-Homoandrostane, (5.alpha.,13.alpha.)-	14.628	90	14596
192-97-2	Benzo[e]pyrene	15.033	97	30260
629-92-5	Nonadecane	15.239	94	17081

Job number: 19/9004
Sample number: 339
Sample identity: GTCS 1-43A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
72347-72-9	Propanamide, 2,2,3,3,3-pentafluoro-N-(1-hydroxy-2-phenylethyl)-, mono(2,2,3,3,3-pentafluoro-1-oxopropyl) deriv.	15.382	95	8803
3343-10-0	Benz[j]aceanthrylene, 3-methyl-	15.508	91	6337
93103-70-9	2-(Acetoxymethyl)-3-(methoxycarbonyl)biphenylene	15.669	90	7465
38119-11-8	1-Naphthalenecarboxylic acid, 2-benzoyl-	16.295	95	14484

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 355
Sample identity: GTCS 1-44A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.879	96	1095
832-64-4	Phenanthrene, 4-methyl-	10.902	95	862
832-69-9	Phenanthrene, 1-methyl-	11.012	96	1537
34373-96-1	9,10-Bis(bromomethyl)anthracene	11.188	90	1138
2789-88-0	di-p-Tolylacetylene	11.517	84	760
58718-43-7	1,6-Dimethylphenazine	11.753	89	885
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	94	1194
33543-31-6	Fluoranthene, 2-methyl-	12.242	93	3442
2381-21-7	Pyrene, 1-methyl-	12.369	95	2101
479-79-8	11H-Benzo[a]fluoren-11-one	12.841	83	1819
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	13.010	96	2821
189-55-9	Dibenzo(a,i)pyrene	13.086	95	11644
243-51-6	11H-Indeno(1,2-b)quinoline	13.296	87	2706
-	1-(2-Aminobenzylidene)-1,2,3,4-tetrahydroacridine N-oxide	13.747	95	1994
3351-32-4	2-Methylchrysene	13.936	95	5119
191-30-0	1,2,9,10-Dibenzopyrene	14.681	96	27925
192-97-2	Benzo[e]pyrene	15.033	97	16972

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 371
Sample identity: GTCS 1-45A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-69-9	Phenanthrene, 1-methyl-	10.880	96	114
2531-84-2	Phenanthrene, 2-methyl-	10.902	96	259
832-64-4	Phenanthrene, 4-methyl-	10.990	87	190
84-65-1	9,10-Anthracenedione	11.133	90	118
612-94-2	Naphthalene, 2-phenyl-	11.177	81	179
2789-88-0	di-p-Tolylacetylene	11.534	81	137
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	92	207
243-17-4	11H-Benzo[b]fluorene	12.141	91	337
33543-31-6	Fluoranthene, 2-methyl-	12.243	95	645
2381-21-7	Pyrene, 1-methyl-	12.479	89	317
479-79-8	11H-Benzo[a]fluoren-11-one	12.841	97	302
227-86-1	Anthra(1,2-b)thiophene	13.223	86	542
239-01-0	11H-Benzo[a]carbazole	13.579	83	224
3351-28-8	Chrysene, 1-methyl-	13.936	97	635
112-84-5	13-Docosenamide, (Z)-	14.618	83	1273
192-97-2	Benzo[e]pyrene	15.032	96	2136

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 387
Sample identity: GTCS 1-47A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
91-57-6	Naphthalene, 2-methyl-	7.709	94	167
939-27-5	Naphthalene, 2-ethyl-	8.263	89	137
575-43-9	Naphthalene, 1,6-dimethyl-	8.344	94	158
575-37-1	Naphthalene, 1,7-dimethyl-	8.424	97	205
582-16-1	Naphthalene, 2,7-dimethyl-	8.447	95	165
829-26-5	Naphthalene, 2,3,6-trimethyl-	9.189	93	135
2245-38-7	Naphthalene, 1,6,7-trimethyl-	9.264	86	166
7320-53-8	Dibenzofuran, 4-methyl-	9.628	83	143
1430-97-3	9H-Fluorene, 2-methyl-	9.988	90	203
486-25-9	9H-Fluoren-9-one	10.087	86	213
234-41-3	Naphtho[1,2-b]thiophene	10.208	95	306
2531-84-2	Phenanthrene, 2-methyl-	10.880	98	634
832-69-9	Phenanthrene, 1-methyl-	10.957	95	229
84-65-1	9,10-Anthracenedione	11.133	91	313
52251-71-5	Anthracene, 2-ethyl-	11.298	86	177
1576-67-6	Phenanthrene, 3,6-dimethyl-	11.416	91	379
2789-88-0	di-p-Tolylacetylene	11.492	91	812
3674-66-6	Phenanthrene, 2,5-dimethyl-	11.518	90	289
1210-12-4	9-Anthracenecarbonitrile	11.973	80	251
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	92	386
33543-31-6	Fluoranthene, 2-methyl-	12.141	96	510
238-84-6	11H-Benzo[a]fluorene	12.243	94	1115
2381-21-7	Pyrene, 1-methyl-	12.369	96	523
2435-53-2	Tetrachloro-o-benzoquinone	12.445	91	203
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-1-(1-methylethyl)-, (4bS-trans)-	12.664	94	215
64401-21-4	Pyrene, 1,3-dimethyl-	12.799	86	367
479-79-8	11H-Benzo[a]fluoren-11-one	12.841	96	328
227-86-1	Anthra(1,2-b)thiophene	13.223	86	512
239-01-0	11H-Benzo[a]carbazole	13.579	84	200
3351-32-4	2-Methylchrysene	13.936	97	930

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 387
Sample identity: GTCS 1-47A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
3697-24-3	Chrysene, 5-methyl-	13.968	95	514
646-31-1	Tetracosane	14.450	97	1055
192-97-2	Benzo[e]pyrene	15.032	98	3091

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 403
Sample identity: GTCS 1-48A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
613-12-7	Anthracene, 2-methyl-	10.880	92	1128
2531-84-2	Phenanthrene, 2-methyl-	10.902	96	1094
832-69-9	Phenanthrene, 1-methyl-	10.957	95	573
610-48-0	Anthracene, 1-methyl-	10.990	80	2064
77581-11-4	2,9-Dimethyl-2,3,4,5,6,7-hexahydro-1H-2-benzazonine	11.981	90	1046
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	83	860
2381-21-7	Pyrene, 1-methyl-	12.242	90	4236
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-1-(1-methylethyl)-, (4bS-trans)-	12.664	95	2278
605-67-4	Benzo[h]quinoline, 2,4-dimethyl-	12.715	80	1220
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	13.010	92	2276
3111-37-3	3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	13.296	89	2959
1705-85-7	Chrysene, 6-methyl-	13.936	95	5382
192-97-2	Benzo[e]pyrene	15.033	96	8828

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 419
Sample identity: GTCS 1-49A
Sample depth: 0.10-0.15
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2245-38-7	Naphthalene, 1,6,7-trimethyl-	9.264	94	136
486-25-9	9H-Fluoren-9-one	10.087	87	292
613-12-7	Anthracene, 2-methyl-	10.957	89	282
832-69-9	Phenanthrene, 1-methyl-	10.990	90	223
2531-84-2	Phenanthrene, 2-methyl-	11.012	97	351
5737-13-3	Cyclopenta(def)phenanthrenone	11.492	86	330
2435-53-2	Tetrachloro-o-benzoquinone	11.931	91	305
2381-21-7	Pyrene, 1-methyl-	12.141	94	344
243-17-4	11H-Benzo[b]fluorene	12.243	95	594
243-46-9	Benzo[b]naphtho[2,3-d]thiophene	13.010	91	476
479-79-8	11H-Benzo[a]fluoren-11-one	13.103	92	451
22108-55-0	Anthra(2,3-b)thiophene	13.223	90	440
239-01-0	11H-Benzo[a]carbazole	13.579	86	199
2498-77-3	Benz[a]anthracene, 1-methyl-	13.936	90	966
192-97-2	Benzo[e]pyrene	15.077	98	2311

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 435
Sample identity: GTCS 1-17A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2381-21-7	Pyrene, 1-methyl-	12.243	92	246
514-62-5	Ferruginol	12.715	96	367
192-97-2	Benzo[e]pyrene	15.033	89	1150

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 451 **Matrix:** Solid
Sample identity: GTCS 1-18 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
629-78-7	Heptadecane	13.946	83	205
192-97-2	Benzo[e]pyrene	14.954	93	235

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 467 **Matrix:** Solid
Sample identity: GTCS 1-18 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
3351-28-8	Chrysene, 1-methyl-	13.866	92	134
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.954	95	559

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 475 **Matrix:** Solid
Sample identity: GTCS 1-18 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
76-22-2	Camphor	6.374	95	491

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 483 **Matrix:** Solid
Sample identity: GTCS 1-18 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
3351-28-8	Chrysene, 1-methyl-	13.856	91	170
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.953	95	774

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 491 **Matrix:** Solid
Sample identity: GTCS 1-23 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
95-13-6	Indene	5.465	80	1027
83-33-0	1H-Inden-1-one, 2,3-dihydro-	7.311	90	368
832-69-9	Phenanthrene, 1-methyl-	10.831	95	849
2531-84-2	Phenanthrene, 2-methyl-	10.850	98	1313
84-65-1	9,10-Anthracenedione	11.077	92	389
612-94-2	Naphthalene, 2-phenyl-	11.124	89	729
5737-13-3	Cyclopenta(def)phenanthrenone	11.436	93	1456
2789-88-0	di-p-Tolylacetylene	11.483	89	576
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	96	2508
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	91	1417
33543-31-6	Fluoranthene, 2-methyl-	12.183	96	4555
2381-21-7	Pyrene, 1-methyl-	12.306	96	1978
64401-21-4	Pyrene, 1,3-dimethyl-	12.845	93	1021
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	96	2312
217-59-4	Triphenylene	13.299	98	9889
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	91	3954
3351-28-8	Chrysene, 1-methyl-	13.856	97	2567
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.784	89	7888
192-97-2	Benzo[e]pyrene	14.954	97	10148
629-94-7	Heneicosane	15.174	95	6918
593-45-3	Octadecane	15.958	92	8766
191-26-4	Dibenzo[def,mno]chrysene	16.775	92	2785

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 507 **Matrix:** Solid
Sample identity: GTCS 1-23 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
132-65-0	Dibenzothiophene	10.151	94	312
832-69-9	Phenanthrene, 1-methyl-	10.850	97	600
203-64-5	4H-Cyclopenta[def]phenanthrene	10.926	87	1061
2531-84-2	Phenanthrene, 2-methyl-	10.954	98	519
84-65-1	9,10-Anthracenedione	11.077	91	289
5737-13-3	Cyclopenta(def)phenanthrenone	11.436	93	492
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	96	756
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	95	659
2381-21-7	Pyrene, 1-methyl-	12.079	95	860
33543-31-6	Fluoranthene, 2-methyl-	12.183	96	1960
243-17-4	11H-Benzo[b]fluorene	12.259	95	718
64401-21-4	Pyrene, 1,3-dimethyl-	12.722	89	668
479-79-8	11H-Benzo[a]fluoren-11-one	12.779	96	540
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	96	1024
239-01-0	11H-Benzo[a]carbazole	13.224	93	515
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	92	1582
2498-77-3	Benz[a]anthracene, 1-methyl-	13.856	96	1040
3351-28-8	Chrysene, 1-methyl-	13.896	96	685
198-55-0	Perylene	14.954	96	3387
646-31-1	Tetracosane	15.174	91	1911

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 515 **Matrix:** Solid
Sample identity: GTCS 1-23 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2245-38-7	Naphthalene, 1,6,7-trimethyl-	9.392	86	136
613-12-7	Anthracene, 2-methyl-	10.880	95	544
2531-84-2	Phenanthrene, 2-methyl-	10.902	97	499
610-48-0	Anthracene, 1-methyl-	10.957	96	296
84-65-1	9,10-Anthracenedione	11.133	87	419
34373-96-1	9,10-Bis(bromomethyl)anthracene	11.177	83	451
781-43-1	9,10-Dimethylanthracene	11.364	94	232
2789-88-0	di-p-Tolylacetylene	11.416	95	477
5737-13-3	Cyclopenta(def)phenanthrenone	11.492	83	1002
484-11-7	Neocuproine	11.754	81	739
200-23-7	Benzo[kl]xanthene	11.931	93	598
1210-12-4	9-Anthracenecarbonitrile	11.973	91	191
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.998	96	757
33543-31-6	Fluoranthene, 2-methyl-	12.141	97	858
2381-21-7	Pyrene, 1-methyl-	12.243	94	2218
243-17-4	11H-Benzo[b]fluorene	12.327	96	872
479-79-8	11H-Benzo[a]fluoren-11-one	12.841	95	1038
64401-21-4	Pyrene, 1,3-dimethyl-	12.917	83	680
227-86-1	Anthra(1,2-b)thiophene	13.010	98	923
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	13.223	95	1041
34777-33-8	Benzo(c)carbazole	13.296	92	765
6418-47-9	Heneicosane, 3-methyl-	13.558	83	643
1705-84-6	Triphenylene, 2-methyl-	13.936	95	2050
3351-28-8	Chrysene, 1-methyl-	13.968	96	1163
50861-05-7	9H-Cyclopenta[a]pyrene	14.093	93	1942
192-97-2	Benzo[e]pyrene	15.032	96	5869
112-95-8	Eicosane	15.238	95	3426
215-58-7	Benzo[b]triphenylene	16.526	93	1301

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 523 **Matrix:** Solid
Sample identity: GTCS 1-23 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.812	95	386
832-69-9	Phenanthrene, 1-methyl-	10.831	97	692
610-48-0	Anthracene, 1-methyl-	10.878	97	473
203-64-5	4H-Cyclopenta[def]phenanthrene	10.906	93	1286
84-65-1	9,10-Anthracenedione	11.058	89	298
137235-51-9	1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-diene	11.105	86	574
5737-13-3	Cyclopenta(def)phenanthrenone	11.407	83	696
2789-88-0	di-p-Tolylacetylene	11.464	89	258
77581-11-4	2,9-Dimethyl-2,3,4,5,6,7-hexahydro-1H-2-benzazonine	11.568	90	425
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.615	95	1225
2435-53-2	Tetrachloro-o-benzoquinone	11.852	90	595
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.918	90	933
33543-31-6	Fluoranthene, 2-methyl-	12.155	97	2325
243-17-4	11H-Benzo[b]fluorene	12.230	93	821
2381-21-7	Pyrene, 1-methyl-	12.277	96	678
64401-21-4	Pyrene, 1,3-dimethyl-	12.817	91	438
227-86-1	Anthra(1,2-b)thiophene	12.911	96	1213
479-79-8	11H-Benzo[a]fluoren-11-one	13.006	86	900
82979-72-4	8,9-Dihydro-7H-cyclopenta[a]pyrene	13.826	95	1728
198-55-0	Perylene	14.764	90	3330
192-97-2	Benzo[e]pyrene	14.933	98	15183

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 531
Sample identity: GTCS 1-24A
Sample depth: 0.00-0.05
Sample Type: Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-69-9	Phenanthrene, 1-methyl-	10.831	92	200
2531-84-2	Phenanthrene, 2-methyl-	10.850	97	308
203-64-5	4H-Cyclopenta[def]phenanthrene	10.926	81	558
84-65-1	9,10-Anthracenedione	11.077	86	217
5737-13-3	Cyclopenta(def)phenanthrenone	11.436	80	303
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	96	336
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	93	412
33543-31-6	Fluoranthene, 2-methyl-	12.183	93	764
243-17-4	11H-Benzo[b]fluorene	12.259	93	316
2381-21-7	Pyrene, 1-methyl-	12.306	96	396
479-79-8	11H-Benzo[a]fluoren-11-one	12.770	95	296
227-86-1	Anthra(1,2-b)thiophene	12.940	96	620
34777-33-8	Benzo(c)carbazole	13.224	86	387
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	90	998
2541-69-7	Benz[a]anthracene, 7-methyl-	13.856	95	804
3351-32-4	2-Methylchrysene	13.896	94	503
191-30-0	1,2,9,10-Dibenzopyrene	14.445	92	1190
203-11-2	Indeno[1,2,3-fg]naphthacene	14.475	92	718
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.784	96	1963
198-55-0	Perylene	14.954	95	2798

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 547
Sample identity: GTCS 1-19A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-69-9	Phenanthrene, 1-methyl-	10.831	96	440
610-48-0	Anthracene, 1-methyl-	10.897	97	413
2531-84-2	Phenanthrene, 2-methyl-	10.954	97	414
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	96	528
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	97	340
2381-21-7	Pyrene, 1-methyl-	12.079	96	401
33543-31-6	Fluoranthene, 2-methyl-	12.183	96	1013
243-17-4	11H-Benzo[b]fluorene	12.259	92	307
64401-21-4	Pyrene, 1,3-dimethyl-	12.722	91	349
479-79-8	11H-Benzo[a]fluoren-11-one	12.769	95	299
227-86-1	Anthra(1,2-b)thiophene	12.940	97	412
203-12-3	Benzo[ghi]fluoranthene	13.006	84	1395
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	13.148	89	509
239-01-0	11H-Benzo[a]carbazole	13.223	89	518
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.432	91	708
3351-32-4	2-Methylchrysene	13.896	94	358
189-55-9	Dibenzo(a,i)pyrene	14.475	92	676
198-55-0	Perylene	14.954	95	2202

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 563
Sample identity: GTCS 1-20A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.831	94	322
203-64-5	4H-Cyclopenta[def]phenanthrene	10.935	83	399
832-69-9	Phenanthrene, 1-methyl-	10.963	83	272
84-65-1	9,10-Anthracenedione	11.077	89	183
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.644	91	200
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.937	95	357
2381-21-7	Pyrene, 1-methyl-	12.089	89	313
33543-31-6	Fluoranthene, 2-methyl-	12.183	96	521
243-17-4	11H-Benzo[b]fluorene	12.259	90	203
479-79-8	11H-Benzo[a]fluoren-11-one	12.779	92	152
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.940	89	346
189-55-9	Dibenzo(a,i)pyrene	13.015	90	776
217-59-4	Triphenylene	13.299	98	1334
3351-28-8	Chrysene, 1-methyl-	13.857	94	304
192-97-2	Benzo[e]pyrene	14.954	95	1037
629-92-5	Nonadecane	15.174	93	1450

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 579
Sample identity: GTCS 1-21A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2381-21-7	Pyrene, 1-methyl-	12.183	91	228
483-65-8	Retene	12.221	99	281
3351-32-4	2-Methylchrysene	13.856	91	126
629-78-7	Heptadecane	14.385	84	594
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.954	94	637
112-95-8	Eicosane	15.173	84	1737

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 595
Sample identity: GTCS 1-22A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
192-97-2	Benzo[e]pyrene	14.953	90	318

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

Signed on behalf of Element Materials Technology:

Ryan Butterworth
Asbestos Team Leader

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-43A	0.00-0.05	188	07/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Amosite
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Potentially Respirable Fibres per gram**	66027
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					25/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					25/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-44A	0.00-0.05	204	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-45A	0.00-0.05	220	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-47A	0.00-0.05	236	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Amosite
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Potentially Respirable Fibres per gram**	0
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					25/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					25/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-48A	0.00-0.05	244	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Present
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-49A	0.00-0.05	268	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Potentially Respirable Fibres per gram**	0
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					25/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					25/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-40A	0.00-0.05	284	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-39 PRIMARY SAMPLE	0.00-0.05	300	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	ACM Debris
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	Asbestos level cannot be determined from Screen. Quantification required.
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-39 LAB DUPLICATE	0.00-0.05	317	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-39 FIELD DUPLICATE	0.00-0.05	325	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-39 FIELD DUPLICATE	0.00-0.05	325	25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-39 LAB FIELD DUPLICATE	0.00-0.05	333	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-43A	0.10-0.15	341	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos Fibres (2)**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos ACM (2)**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Type (2)**	Amosite
					07/06/2019	**Asbestos Level Screen**	Asbestos level cannot be determined from Screen. Quantification required.
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	99523
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	0.001 (mass %)
19/9004	2	GTCS 1-44A	0.10-0.15	357	07/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-45A	0.10-0.15	373	07/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-47A	0.10-0.15	389	07/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-47A	0.10-0.15	389	07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-48A	0.10-0.15	405	07/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					07/06/2019	**Synthetic/MMMF**	Present
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-49A	0.10-0.15	421	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos Fibres (2)**	Fibre Bundles
					07/06/2019	**Asbestos Fibres (3)**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos ACM (2)**	NAD
					07/06/2019	**Asbestos ACM (3)**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Type (2)**	Amosite
					07/06/2019	**Asbestos Type (3)**	Crocidolite
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	67482
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-17A	0.00-0.05	437	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-18 PRIMARY SAMPLE	0.00-0.05	453	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Present
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-18 LAB DUPLICATE	0.00-0.05	469	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles

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Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-18 LAB DUPLICATE	0.00-0.05	469	07/06/2019	**Asbestos Fibres (2)**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos ACM (2)**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Type (2)**	Amosite
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-18 FIELD DUPLICATE	0.00-0.05	477	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos Fibres (2)**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos ACM (2)**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Type (2)**	Crocidolite
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	86822
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-18 LAB FIELD DUPLICATE	0.00-0.05	485	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Present
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-23 PRIMARY SAMPLE	0.00-0.05	493	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-23 LAB DUPLICATE	0.00-0.05	509	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Present
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD

Client Name: AECOM
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Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-23 LAB DUPLICATE	0.00-0.05	509	07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-23 FIELD DUPLICATE	0.00-0.05	517	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-23 LAB FIELD DUPLICATE	0.00-0.05	525	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	Fibre Bundles
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	Chrysotile
					07/06/2019	**Asbestos Level Screen**	less than 0.1%
					25/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					25/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	2	GTCS 1-24A	0.00-0.05	533	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-19A	0.00-0.05	549	07/06/2019	**General Description (Bulk Analysis)**	soil-stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-20A	0.00-0.05	565	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-21A	0.00-0.05	581	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD

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Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	2	GTCS 1-21A	0.00-0.05	581	07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD
19/9004	2	GTCS 1-22A	0.00-0.05	597	07/06/2019	**General Description (Bulk Analysis)**	soil.stones
					07/06/2019	**Synthetic/MMMF**	Absent
					07/06/2019	**Asbestos Fibres**	NAD
					07/06/2019	**Asbestos ACM**	NAD
					07/06/2019	**Asbestos Type**	NAD
					07/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
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EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 19/9004						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 19/9004

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x2 Dilution
AB	x5 Dilution

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes

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Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods 325.2 (Chloride), 375.4 (Sulphate), 365.2 (o-Phosphate), 353.1 (TON), 354.1 (Nitrite), 350.1 (NH4+) comparable to BS ISO 15923-1, 7196A (Hex Cr)	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D and BS1377:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM119	As received solid samples are extracted with 1M NaOH by orbital shaker for Sulphide and Thiocyanate analysis.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	Yes
TM192	Isocyanates by LCMS	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes

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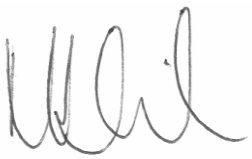
Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						Yes
Subcontracted	See attached subcontractor report for accreditation status and provider.					AR	Yes
TM15_A	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

Certificate of Analysis

Report No.:	**19-83957-1**
Issue No.:	**1**
Date of Issue	**24/06/2019**
Customer Details:	Exova Environmental UK Ltd, Unit 3, Deeside Point, Deeside Indust. Estate Zone 3, Chester, Flintshire, CH5 2UA
Customer Contact:	Bethan Perry
Customer Order No.:	19/9004 Batch 2
Customer Reference:	19/9004 B2
Quotation Reference:	190118/05
Description:	31 soil samples
Date Received:	07/06/2019
Date Started:	10/06/2019
Date Completed:	24/06/2019
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	None



Approved By: **Matthew Hickson, Laboratory Manager**

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Results Summary

Report No.: 19-83957-1

Customer Reference: 19/9004 B2

Customer Order No: 19/9004 Batch 2

Customer Sample No						19/9004 Sample 187	19/9004 Sample 203	19/9004 Sample 219	19/9004 Sample 235	19/9004 Sample 243	19/9004 Sample 267	19/9004 Sample 283	19/9004 Sample 299	19/9004 Sample 316	19/9004 Sample 324	19/9004 Sample 332	19/9004 Sample 340
Customer Sample ID						GTCS 1-43A	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-40A	GTCS 1-39A	GTCS 1-39C	GTCS 1-39D	GTCS 1-39E	GTCS 1-43A
RPS Sample No						405689	405690	405691	405692	405693	405694	405695	405696	405697	405698	405699	405700
Sample Type						**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Sample Depth (m)						0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.10-0.15m
Sampling Date						05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019	05/06/2019
Sampling Time												16:00	16:45	16:45	16:45	16:45	
Determinand	**CAS No**	**Codes**	**SOP**	**Units**	**RL**												
dry solids (at 105øC)		N	397	% w/w		88.5	86.7	90.0	82.3	76.9	90.3	83.6	86.4	85.9	85.1	84.8	88.2
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.15	< 0.15	< 0.50	< 0.15	< 0.10	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.50
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results Summary

Report No.: 19-83957-1

Customer Reference: 19/9004 B2

Customer Order No: 19/9004 Batch 2

Customer Sample No	19/9004 Sample 356	19/9004 Sample 372	19/9004 Sample 388	19/9004 Sample 404	19/9004 Sample 420	19/9004 Sample 436	19/9004 Sample 452	19/9004 Sample 468	19/9004 Sample 476	19/9004 Sample 484	19/9004 Sample 492	19/9004 Sample 508
Customer Sample ID	GTCS 1-44A	GTCS 1-45A	GTCS 1-47A	GTCS 1-48A	GTCS 1-49A	GTCS 1-17A	GTCS 1-18A	GTCS 1-18C	GTCS 1-18D	GTCS 1-18E	GTCS 1-23A	GTCS 1-23C
RPS Sample No	405701	405702	405703	405704	405705	405706	405707	405708	405709	405710	405711	405712
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Depth (m)	0.10-0.15m	0.10-0.15m	0.10-0.15m	0.10-0.15m	0.10-0.15m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m
Sampling Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019
Sampling Time						10:40	11:10	11:10	11:10	11:10	8:50	8:50

Determinand	CAS No	Codes	SOP	Units	RL											
dry solids (at 105øC)		N	397	% w/w		89.1	92.2	84.3	86.7	92.4	89.1	78.5	78.6	78.5	78.6	85.4	84.3
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.77	0.23	0.20	0.23	0.22	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results Summary

Report No.: 19-83957-1

Customer Reference: 19/9004 B2

Customer Order No: 19/9004 Batch 2

Customer Sample No						**19/9004 Sample 516**	**19/9004 Sample 524**	**19/9004 Sample 532**	**19/9004 Sample 548**	**19/9004 Sample 564**	**19/9004 Sample 580**	**19/9004 Sample 596**
Customer Sample ID						GTCS 1-23D	GTCS 1-23E	GTCS 1-24A	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A
RPS Sample No						405713	405714	405715	405716	405717	405718	405719
Sample Type						**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Sample Depth (m)						0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m	0.00-0.05m
Sampling Date						05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019
Sampling Time						8:50	8:50	9:50	14:45	15:20	12:30	13:05
Determinand	**CAS No**	**Codes**	**SOP**	**Units**	**RL**							
dry solids (at 105øC)		N	397	% w/w		84.4	85.9	87.7	91.3	81.5	89.1	93.9
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.15	< 0.20	< 0.15	< 0.50	< 0.15	< 0.15	< 0.15
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Comments

Report No.: 19-83957-1

Customer Reference: 19/9004 B2

Customer Order No: 19/9004 Batch 2

Job	Description	Job Comments
19-83957	31 soil samples	Reporting limit for Fyrol_PCF has been raised due to matrix interference.

Deviating Samples

Report No.: 19-83957-1

Customer Reference: 19/9004 B2

Customer Order No: 19/9004 Batch 2

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
405689	19/9004 Sample 187		05/06/2019	250ml amber glass jar	No	
405690	19/9004 Sample 203		05/06/2019	250ml amber glass jar	No	
405691	19/9004 Sample 219		05/06/2019	250ml amber glass jar	No	
405692	19/9004 Sample 235		05/06/2019	250ml amber glass jar	No	
405693	19/9004 Sample 243		05/06/2019	250ml amber glass jar	No	
405694	19/9004 Sample 267		05/06/2019	250ml amber glass jar	No	
405695	19/9004 Sample 283		04/06/2019	250ml amber glass jar	No	
405696	19/9004 Sample 299		04/06/2019	250ml amber glass jar	No	
405697	19/9004 Sample 316		04/06/2019	250ml amber glass jar	No	
405698	19/9004 Sample 324		04/06/2019	250ml amber glass jar	No	
405699	19/9004 Sample 332		04/06/2019	250ml amber glass jar	No	
405700	19/9004 Sample 340		05/06/2019	250ml amber glass jar	No	
405701	19/9004 Sample 356		05/06/2019	250ml amber glass jar	No	
405702	19/9004 Sample 372		05/06/2019	250ml amber glass jar	No	
405703	19/9004 Sample 388		05/06/2019	250ml amber glass jar	No	
405704	19/9004 Sample 404		05/06/2019	250ml amber glass jar	No	
405705	19/9004 Sample 420		05/06/2019	250ml amber glass jar	No	
405706	19/9004 Sample 436		05/06/2019	250ml amber glass jar	No	
405707	19/9004 Sample 452		05/06/2019	250ml amber glass jar	No	
405708	19/9004 Sample 468		05/06/2019	250ml amber glass jar	No	
405709	19/9004 Sample 476		05/06/2019	250ml amber glass jar	No	
405710	19/9004 Sample 484		05/06/2019	250ml amber glass jar	No	
405711	19/9004 Sample 492		05/06/2019	250ml amber glass jar	No	
405712	19/9004 Sample 508		05/06/2019	250ml amber glass jar	No	
405713	19/9004 Sample 516		05/06/2019	250ml amber glass jar	No	
405714	19/9004 Sample 524		05/06/2019	250ml amber glass jar	No	
405715	19/9004 Sample 532		05/06/2019	250ml amber glass jar	No	
405716	19/9004 Sample 548		05/06/2019	250ml amber glass jar	No	
405717	19/9004 Sample 564		05/06/2019	250ml amber glass jar	No	
405718	19/9004 Sample 580		05/06/2019	250ml amber glass jar	No	
405719	19/9004 Sample 596		05/06/2019	250ml amber glass jar	No	

Key Code	Description
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
F	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
N	Not Accredited Test
O	Marine Management Organisation (MMO) Validated
S	Subcontracted to approved laboratory
US	Subcontracted to approved laboratory UKAS Accredited for the test
MS	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SI	Subcontracted to internal RPS Group laboratory
USI	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
MSI	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1401
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-43A & 19/9004-184, 0.00-0.05 **Date of Analysis :** 21/06/19
Sample No: 1401 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	14.5	0.794	84	**2378-TCDD**	*	0.291	102
12378-PCDF	5.52	0.957	81	**12378-PCDD**	2.12	0.779	97
23478-PCDF	15.6	0.790	86	**123478-HxCDD**	3.82	1.137	96
123478-HxCDF	11	0.801	91	**123678-HxCDD**	13.6	1.157	92
123678-HxCDF	10.8	0.849	86	**123789-HxCDD**	6.96	1.191	
234678-HxCDF	13.1	0.779	88	**1234678-HpCDD**	232	1.289	77
123789-HxCDF	1.79	0.999	80	**OCDD**	1840	1.108	65
1234678-HpCDF	170	0.749	78				
1234789-HpCDF	8.46	1.198	60				
OCDF	167	0.607					
Total 2,3,7,8-Furans	**417**			**Total 2,3,7,8-Dioxins**	**2090**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**23.1**	**22.8**	**TEQ (WHO)- Mammals**	**19.5**	**19.2**
			TEQ (WHO)- Fish	**19.2**	**18.9**
			TEQ (WHO)- Birds	**40**	**39.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1401
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-43A & 19/9004-184, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1401 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	6.22	0.5907	90
PCB-77	218	0.6359	88
PCB-123	81.1	2.6904	92
PCB-118	3480	2.6675	87
PCB-114	29	2.8670	97
PCB-105	1570	2.6247	90
PCB-126	40	1.1414	84
PCB-167	646	3.4525	89
PCB-156	941	3.7872	94
PCB-157	417	3.8279	95
PCB-169	3.43	0.5363	105
PCB-189	207	1.2667	92

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**4.35**	**4.35**
TEQ (WHO)- Fish	**0.262**	**0.262**
TEQ (WHO)- Birds	**15.9**	**15.9**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1402
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-44A & 19/9004-200, 0.00-0.05 **Date of Analysis :** 21/06/19
Sample No: 1402 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.05	0.367	72	**2378-TCDD**	*	0.204	80
12378-PCDF	4.18	0.384	70	**12378-PCDD**	*	0.676	82
23478-PCDF	3.33	0.331	73	**123478-HxCDD**	1.08	0.676	78
123478-HxCDF	3.55	0.426	64	**123678-HxCDD**	3.07	0.692	74
123678-HxCDF	2.47	0.416	66	**123789-HxCDD**	1.66	0.712	
234678-HxCDF	3.27	0.380	67	**1234678-HpCDD**	68	1.127	63
123789-HxCDF	*	0.443	72	**OCDD**	483	1.355	56
1234678-HpCDF	25.6	0.602	57				
1234789-HpCDF	*	0.724	52				
OCDF	20.4	0.708					
Total 2,3,7,8-Furans	**65.9**			**Total 2,3,7,8-Dioxins**	**557**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.72**	**5.13**	**TEQ (WHO)- Mammals**	**4.96**	**4.03**
			TEQ (WHO)- Fish	**4.85**	**3.92**
			TEQ (WHO)- Birds	**9.29**	**8.36**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1402
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-44A & 19/9004-200, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1402 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.29	0.2974	77
PCB-77	67.4	0.3356	75
PCB-123	26	1.4844	88
PCB-118	725	1.4806	85
PCB-114	3.81	1.5903	93
PCB-105	359	1.4582	87
PCB-126	7.58	1.2634	67
PCB-167	89.7	0.8948	95
PCB-156	177	0.9628	100
PCB-157	58.5	0.9931	101
PCB-169	0.256	0.2296	83
PCB-189	19.3	0.4534	99

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.817**	**0.817**
TEQ (WHO)- Fish	**0.0531**	**0.0531**
TEQ (WHO)- Birds	**4.43**	**4.43**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1403
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-45A & 19/9004-216, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1403 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	8.78	0.486	72	**2378-TCDD**	*	0.171	81
12378-PCDF	5.13	0.520	78	**12378-PCDD**	0.761	0.453	91
23478-PCDF	7.52	0.420	83	**123478-HxCDD**	1.15	0.566	84
123478-HxCDF	9.16	0.415	78	**123678-HxCDD**	4.02	0.565	80
123678-HxCDF	5.49	0.425	78	**123789-HxCDD**	2.15	0.581	
234678-HxCDF	2.74	0.372	83	**1234678-HpCDD**	60.5	1.034	68
123789-HxCDF	*	0.465	78	**OCDD**	449	1.430	57
1234678-HpCDF	29.3	0.504	69				
1234789-HpCDF	3.36	0.645	61				
OCDF	29.4	0.749					
Total 2,3,7,8-Furans	**101**			**Total 2,3,7,8-Dioxins**	**518**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.38**	**9.16**	**TEQ (WHO)- Mammals**	**7.81**	**7.6**
			TEQ (WHO)- Fish	**8.25**	**8.03**
			TEQ (WHO)- Birds	**20.3**	**20.1**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1403
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-45A & 19/9004-216, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1403 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.936	0.2819	80
PCB-77	39.6	0.3063	77
PCB-123	28.3	1.1211	88
PCB-118	1210	1.1503	83
PCB-114	9.5	1.1747	94
PCB-105	543	1.1420	86
PCB-126	6.03	1.0647	69
PCB-167	105	0.9740	80
PCB-156	238	1.0827	84
PCB-157	72.2	1.0886	85
PCB-169	1.1	0.2597	89
PCB-189	21.1	0.5361	86

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.707**	**0.707**
TEQ (WHO)- Fish	**0.0458**	**0.0458**
TEQ (WHO)- Birds	**2.78**	**2.78**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1404
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-47A & 19/9004-232, 0.00-0.05 **Date of Analysis :** 21/06/19
Sample No: 1404 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	6.83	0.409	85	**2378-TCDD**	*	0.149	103
12378-PCDF	5.09	0.509	85	**12378-PCDD**	1.15	0.460	99
23478-PCDF	4.71	0.425	89	**123478-HxCDD**	1.41	0.598	94
123478-HxCDF	5.56	0.442	94	**123678-HxCDD**	6.51	0.603	100
123678-HxCDF	3.57	0.448	89	**123789-HxCDD**	2.3	0.621	
234678-HxCDF	4.45	0.427	92	**1234678-HpCDD**	212	1.328	79
123789-HxCDF	*	0.517	89	**OCDD**	1940	1.136	68
1234678-HpCDF	73.4	0.615	75				
1234789-HpCDF	4.25	0.790	70				
OCDF	135	0.954					
Total 2,3,7,8-Furans	**243**			**Total 2,3,7,8-Dioxins**	**2170**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**11.4**	**11.2**	**TEQ (WHO)- Mammals**	**9.51**	**9.3**
			TEQ (WHO)- Fish	**7.65**	**7.45**
			TEQ (WHO)- Birds	**16.3**	**16.1**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1404
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-47A & 19/9004-232, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1404 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.818	0.2752	95
PCB-77	41.9	0.2952	94
PCB-123	28.9	2.0310	92
PCB-118	1060	2.0561	86
PCB-114	7.21	2.1252	97
PCB-105	446	2.0232	89
PCB-126	7.85	0.9416	87
PCB-167	118	0.7287	81
PCB-156	226	0.7958	85
PCB-157	78.3	0.7896	87
PCB-169	1.03	0.2430	102
PCB-189	30.6	0.5053	88

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.88**	**0.88**
TEQ (WHO)- Fish	**0.0538**	**0.0538**
TEQ (WHO)- Birds	**3.05**	**3.05**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1405
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-48A & 19/9004-240, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1405 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.427	101	**2378-TCDD**	*	0.398	93
12378-PCDF	3.63	0.356	93	**12378-PCDD**	*	0.631	89
23478-PCDF	2.97	0.293	109	**123478-HxCDD**	0.868	0.667	99
123478-HxCDF	4.33	0.342	91	**123678-HxCDD**	8.82	0.732	89
123678-HxCDF	3.27	0.320	86	**123789-HxCDD**	4.79	0.755	
234678-HxCDF	3.46	0.312	88	**1234678-HpCDD**	278	1.017	79
123789-HxCDF	0.545	0.362	86	**OCDD**	2920	1.186	60
1234678-HpCDF	59.9	0.327	77				
1234789-HpCDF	5.49	0.397	72				
OCDF	141	0.459					
Total 2,3,7,8-Furans	**225**			**Total 2,3,7,8-Dioxins**	**3210**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**11.5**	**10.8**	**TEQ (WHO)- Mammals**	**9.04**	**7.97**
			TEQ (WHO)- Fish	**5.69**	**4.64**
			TEQ (WHO)- Birds	**7.8**	**6.35**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1405
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-48A & 19/9004-240, 0.00-0.05 **Date of Analysis :** 18/06/19
Sample No: 1405 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	223	1.4537	92
PCB-77	5240	1.4797	85
PCB-123	843	1.9520	103
PCB-118	33300	1.6948	106
PCB-114	938	1.9813	108
PCB-105	22300	1.7640	112
PCB-126	169	1.3302	120
PCB-167	823	0.9984	97
PCB-156	2000	1.1305	97
PCB-157	579	1.1200	99
PCB-169	1.52	0.4469	109
PCB-189	109	0.5494	94

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**19.3**	**19.3**
TEQ (WHO)- Fish	**1.78**	**1.78**
TEQ (WHO)- Birds	**304**	**304**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1406
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-49A & 19/9004-264, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1406 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.63	0.431	72	**2378-TCDD**	*	0.442	85
12378-PCDF	2.99	0.417	72	**12378-PCDD**	1.25	0.587	82
23478-PCDF	5.07	0.341	82	**123478-HxCDD**	1.89	0.439	83
123478-HxCDF	4.67	0.312	75	**123678-HxCDD**	6.1	0.455	77
123678-HxCDF	3.65	0.299	73	**123789-HxCDD**	2.96	0.469	
234678-HxCDF	4.33	0.275	74	**1234678-HpCDD**	86.7	0.630	62
123789-HxCDF	0.51	0.336	73	**OCDD**	624	1.268	43
1234678-HpCDF	41.2	0.264	58				
1234789-HpCDF	1.31	0.355	55				
OCDF	47.9	0.463					
Total 2,3,7,8-Furans	**115**			**Total 2,3,7,8-Dioxins**	**722**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.49**	**8.05**	**TEQ (WHO)- Mammals**	**7.57**	**7.13**
			TEQ (WHO)- Fish	**7.49**	**7.05**
			TEQ (WHO)- Birds	**13**	**12.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

Test Certificate No: 1406

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell
Sample Identifier : GTCS 1-49A & 19/9004-264, 0.00-0.05
Sample No: 1406
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 170619

Date of Receipt : 07/06/19
Date of Analysis : 18/06/19
Date of Report : 19/06/19

Test Method : 2002
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.96	0.4800	80
PCB-77	93.2	0.4548	83
PCB-123	179	19.2632	98
PCB-118	10100	18.0016	101
PCB-114	195	19.1373	109
PCB-105	4310	17.4632	110
PCB-126	16.8	0.8046	129
PCB-167	504	0.6823	98
PCB-156	1510	0.7626	99
PCB-157	340	0.7669	99
PCB-169	1.76	0.3436	95
PCB-189	63.6	0.3242	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.26**	**2.26**
TEQ (WHO)- Fish	**0.181**	**0.181**
TEQ (WHO)- Birds	**7.38**	**7.38**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1407
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 PRIMARY SAMPLE & 19/9004-296 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1407 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	6.88	0.827	80	**2378-TCDD**	*	0.646	78
12378-PCDF	5.98	0.589	71	**12378-PCDD**	2.03	0.699	83
23478-PCDF	6.84	0.432	90	**123478-HxCDD**	2.66	0.634	88
123478-HxCDF	6.53	0.339	88	**123678-HxCDD**	6.8	0.630	83
123678-HxCDF	6.21	0.329	83	**123789-HxCDD**	*	0.649	
234678-HxCDF	5.62	0.331	86	**1234678-HpCDD**	76.4	0.578	87
123789-HxCDF	*	0.362	85	**OCDD**	563	0.918	66
1234678-HpCDF	31.4	0.280	74				
1234789-HpCDF	2.18	0.341	74				
OCDF	33.8	0.543					
Total 2,3,7,8-Furans	**105**			**Total 2,3,7,8-Dioxins**	**651**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**10.6**	**9.9**	**TEQ (WHO)- Mammals**	**9.75**	**9.01**
			TEQ (WHO)- Fish	**10.5**	**9.79**
			TEQ (WHO)- Birds	**19.6**	**18.9**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1407
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 PRIMARY SAMPLE & 19/9004-296 0.00-0.05 **Date of Analysis :** 18/06/19
Sample No: 1407 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.45	0.3661	85
PCB-77	52	0.3463	83
PCB-123	14.6	0.9633	94
PCB-118	560	0.9564	89
PCB-114	7.08	0.9271	103
PCB-105	294	0.9335	97
PCB-126	13.7	1.0855	122
PCB-167	41.3	0.4944	92
PCB-156	95.8	0.5494	95
PCB-157	22.7	0.5567	96
PCB-169	2.45	0.2411	117
PCB-189	9.8	0.3943	91

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.48**	**1.48**
TEQ (WHO)- Fish	**0.0806**	**0.0806**
TEQ (WHO)- Birds	**4.36**	**4.36**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1408
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 LAB DUPLICATE & 19/9004-313 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1408 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	11.3	0.750	92	**2378-TCDD**	*	0.545	89
12378-PCDF	6.47	0.539	73	**12378-PCDD**	2.18	0.566	86
23478-PCDF	7.4	0.430	83	**123478-HxCDD**	3.25	0.493	90
123478-HxCDF	7.22	0.277	85	**123678-HxCDD**	6.05	0.482	88
123678-HxCDF	3.21	0.255	86	**123789-HxCDD**	4.84	0.497	
234678-HxCDF	5.46	0.244	84	**1234678-HpCDD**	81.5	0.538	73
123789-HxCDF	0.395	0.281	89	**OCDD**	578	0.981	51
1234678-HpCDF	31.8	0.213	73				
1234789-HpCDF	1.64	0.276	70				
OCDF	36.9	0.399					
Total 2,3,7,8-Furans	**112**			**Total 2,3,7,8-Dioxins**	**676**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**11.6**	**11.1**	**TEQ (WHO)- Mammals**	**10.7**	**10.1**
			TEQ (WHO)- Fish	**11.2**	**10.6**
			TEQ (WHO)- Birds	**24.9**	**24.4**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1408
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 LAB DUPLICATE & 19/9004-313 0.00-0.05 **Date of Analysis :** 18/06/19
Sample No: 1408 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.68	0.2542	113
PCB-77	47.8	0.2949	98
PCB-123	13.9	1.1665	98
PCB-118	519	1.1718	93
PCB-114	7.12	1.1638	104
PCB-105	274	1.1316	102
PCB-126	11.9	0.6327	115
PCB-167	40.2	0.4165	96
PCB-156	88.3	0.4839	98
PCB-157	22.4	0.4619	100
PCB-169	1.29	0.2052	95
PCB-189	8.8	0.3105	97

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.27**	**1.27**
TEQ (WHO)- Fish	**0.0712**	**0.0712**
TEQ (WHO)- Birds	**4**	**4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1409
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 FIELD DUPLICATE & 19-9004-321 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1409 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	7.37	0.676	75	**2378-TCDD**	*	0.444	91
12378-PCDF	7.17	0.476	62	**12378-PCDD**	2.33	0.610	74
23478-PCDF	8.86	0.372	73	**123478-HxCDD**	1.61	0.508	93
123478-HxCDF	7.13	0.313	89	**123678-HxCDD**	6.34	0.554	85
123678-HxCDF	6.08	0.303	85	**123789-HxCDD**	4.57	0.571	
234678-HxCDF	5.84	0.302	86	**1234678-HpCDD**	75	0.502	74
123789-HxCDF	0.909	0.340	85	**OCDD**	544	0.948	47
1234678-HpCDF	30.8	0.222	68				
1234789-HpCDF	2.69	0.273	65				
OCDF	31.1	0.495					
Total 2,3,7,8-Furans	**108**			**Total 2,3,7,8-Dioxins**	**634**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**12**	**11.6**	**TEQ (WHO)- Mammals**	**10.9**	**10.4**
			TEQ (WHO)- Fish	**11.3**	**10.9**
			TEQ (WHO)- Birds	**22.8**	**22.3**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1409
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 FIELD DUPLICATE & 19-9004-321 0.00-0.05 **Date of Analysis :** 18/06/19
Sample No: 1409 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.31	0.3789	74
PCB-77	48	0.4061	69
PCB-123	17.2	0.6635	98
PCB-118	589	0.6667	93
PCB-114	5.81	0.6617	107
PCB-105	301	0.6533	102
PCB-126	11.5	0.7208	137
PCB-167	43	0.3933	95
PCB-156	97.5	0.4561	95
PCB-157	23.5	0.4451	98
PCB-169	1.69	0.2118	100
PCB-189	9.78	0.3141	98

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.24**	**1.24**
TEQ (WHO)- Fish	**0.0695**	**0.0695**
TEQ (WHO)- Birds	**3.93**	**3.93**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1410
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 LAB FIELD DUPLICATE & 19/9004-329 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1410 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	8.6	0.682	89	**2378-TCDD**	*	0.427	101
12378-PCDF	4.6	0.409	87	**12378-PCDD**	1.63	0.510	103
23478-PCDF	8	0.327	98	**123478-HxCDD**	2.19	0.439	94
123478-HxCDF	6.2	0.211	90	**123678-HxCDD**	6.72	0.446	89
123678-HxCDF	4.78	0.191	91	**123789-HxCDD**	4.05	0.460	
234678-HxCDF	5.68	0.189	87	**1234678-HpCDD**	77.6	0.483	77
123789-HxCDF	0.684	0.224	88	**OCDD**	567	0.736	55
1234678-HpCDF	30.2	0.191	69				
1234789-HpCDF	1.82	0.240	67				
OCDF	34.2	0.386					
Total 2,3,7,8-Furans	**105**			**Total 2,3,7,8-Dioxins**	**660**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**11.1**	**10.6**	**TEQ (WHO)- Mammals**		**9.76**	**9.33**
				TEQ (WHO)- Fish		**10.1**	**9.68**
				TEQ (WHO)- Birds		**21.9**	**21.5**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1410
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-39 LAB FIELD DUPLICATE & 19/9004-329 0.00-0.05 **Date of Analysis :** 18/06/19
Sample No: 1410 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.22	0.2640	90
PCB-77	49	0.2587	90
PCB-123	14.7	0.8669	94
PCB-118	533	0.8699	89
PCB-114	7.14	0.8368	101
PCB-105	282	0.8535	97
PCB-126	11.7	0.5492	137
PCB-167	39.5	0.4266	91
PCB-156	88.7	0.4964	93
PCB-157	20.4	0.4926	94
PCB-169	2.64	0.1823	111
PCB-189	9.23	0.4123	95

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.29**	**1.29**
TEQ (WHO)- Fish	**0.0702**	**0.0702**
TEQ (WHO)- Birds	**3.99**	**3.99**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

UKAS TESTING
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Marchwood Scientific Services

371 Millbrook Rd West
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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1411
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-43A & 19/9004-337 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1411 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	29.9	1.119	71	**2378-TCDD**	2.36	0.689	83
12378-PCDF	17.4	0.713	67	**12378-PCDD**	8.54	0.878	78
23478-PCDF	29.7	0.663	69	**123478-HxCDD**	7.76	0.753	86
123478-HxCDF	23.5	0.509	73	**123678-HxCDD**	30.1	0.798	78
123678-HxCDF	16.5	0.481	70	**123789-HxCDD**	16.7	0.823	
234678-HxCDF	18.1	0.475	71	**1234678-HpCDD**	557	1.027	57
123789-HxCDF	2.49	0.544	70	**OCDD**	5300	0.991	44
1234678-HpCDF	396	0.389	52				
1234789-HpCDF	16.9	0.492	50				
OCDF	476	0.584					
Total 2,3,7,8-Furans	**1030**			**Total 2,3,7,8-Dioxins**	**5920**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**52.3**	**52.3**	**TEQ (WHO)- Mammals**	**46.3**	**46.3**
			TEQ (WHO)- Fish	**43.8**	**43.8**
			TEQ (WHO)- Birds	**85.9**	**85.9**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1411
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-43A & 19/9004-337 0.10-0.15 **Date of Analysis :** 18/06/19
Sample No: 1411 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	15.5	0.5467	76
PCB-77	477	0.4601	90
PCB-123	222	2.0924	98
PCB-118	4970	2.0133	92
PCB-114	51.2	2.2350	99
PCB-105	2640	2.1234	99
PCB-126	49.7	1.0319	108
PCB-167	1830	2.0950	90
PCB-156	1600	2.3661	91
PCB-157	1120	2.3858	91
PCB-169	11.5	0.8138	99
PCB-189	620	0.8846	93

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**5.76**	**5.76**
TEQ (WHO)- Fish	**0.37**	**0.37**
TEQ (WHO)- Birds	**31**	**31**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1412
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-44A & 19-9004-353, 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1412 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	2.55	0.323	73	**2378-TCDD**	*	0.339	78
12378-PCDF	*	0.320	61	**12378-PCDD**	0.859	0.440	71
23478-PCDF	2.91	0.233	75	**123478-HxCDD**	1.29	0.337	71
123478-HxCDF	3.22	0.187	73	**123678-HxCDD**	2.47	0.322	70
123678-HxCDF	2.54	0.183	68	**123789-HxCDD**	1.67	0.332	
234678-HxCDF	2.3	0.169	70	**1234678-HpCDD**	39.6	0.344	66
123789-HxCDF	0.314	0.190	75	**OCDD**	331	0.746	50
1234678-HpCDF	16.3	0.153	57				
1234789-HpCDF	1.04	0.188	58				
OCDF	16.2	0.311					
Total 2,3,7,8-Furans	**47.4**			**Total 2,3,7,8-Dioxins**	**377**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**4.79**	**4.44**	**TEQ (WHO)- Mammals**	**4.39**	**4.04**
			TEQ (WHO)- Fish	**4.57**	**4.21**
			TEQ (WHO)- Birds	**8.03**	**7.66**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1412
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
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ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-44A & 19-9004-353, 0.10-0.15 **Date of Analysis :** 18/06/19
Sample No: 1412 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.23	0.2377	86
PCB-77	50.1	0.2973	69
PCB-123	24.1	0.5898	91
PCB-118	516	0.5879	86
PCB-114	6.41	0.5842	99
PCB-105	267	0.5599	95
PCB-126	1.76	0.6407	81
PCB-167	74.4	0.4316	94
PCB-156	150	0.4868	94
PCB-157	49.2	0.4942	95
PCB-169	0.884	0.2056	88
PCB-189	15.6	0.3519	94

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.241**	**0.241**
TEQ (WHO)- Fish	**0.02**	**0.02**
TEQ (WHO)- Birds	**2.86**	**2.86**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1413
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-45A & 19/9004-369, 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1413 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	8.32	0.388	94	**2378-TCDD**	*	0.206	111
12378-PCDF	6.3	0.368	92	**12378-PCDD**	1.36	0.394	98
23478-PCDF	7.5	0.285	104	**123478-HxCDD**	0.726	0.319	89
123478-HxCDF	9.66	0.255	86	**123678-HxCDD**	3.82	0.338	88
123678-HxCDF	4.6	0.234	84	**123789-HxCDD**	2.06	0.348	
234678-HxCDF	4.09	0.224	83	**1234678-HpCDD**	52	0.410	74
123789-HxCDF	0.876	0.263	85	**OCDD**	443	0.963	46
1234678-HpCDF	24.9	0.181	67				
1234789-HpCDF	2.58	0.233	65				
OCDF	28	0.324					
Total 2,3,7,8-Furans	**96.9**			**Total 2,3,7,8-Dioxins**	**503**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.63**	**9.42**	**TEQ (WHO)- Mammals**	**8.35**	**8.15**
			TEQ (WHO)- Fish	**8.76**	**8.56**
			TEQ (WHO)- Birds	**20.6**	**20.4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1413
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-45A & 19/9004-369, 0.10-0.15 **Date of Analysis :** 18/06/19
Sample No: 1413 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.682	0.2670	92
PCB-77	38.6	0.2539	91
PCB-123	21.6	0.9096	78
PCB-118	989	0.8907	75
PCB-114	11.3	0.9194	83
PCB-105	452	0.8949	80
PCB-126	6.12	0.5842	120
PCB-167	87.6	0.6795	76
PCB-156	219	0.7565	79
PCB-157	65	0.7505	80
PCB-169	1.25	0.1882	125
PCB-189	17.7	0.4874	80

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.709**	**0.709**
TEQ (WHO)- Fish	**0.0442**	**0.0442**
TEQ (WHO)- Birds	**2.7**	**2.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1414
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-47A & 19/9004-385, 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1414 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	7.08	0.314	75	**2378-TCDD**	*	0.228	86
12378-PCDF	6.25	0.250	79	**12378-PCDD**	1.03	0.379	81
23478-PCDF	6.15	0.236	80	**123478-HxCDD**	1.26	0.357	94
123478-HxCDF	8.78	0.251	81	**123678-HxCDD**	5.02	0.350	90
123678-HxCDF	3.98	0.227	83	**123789-HxCDD**	0.996	0.360	
234678-HxCDF	3.53	0.233	79	**1234678-HpCDD**	162	0.673	71
123789-HxCDF	*	0.265	81	**OCDD**	1690	0.897	50
1234678-HpCDF	53.7	0.238	64				
1234789-HpCDF	4	0.342	60				
OCDF	131	0.412					
Total 2,3,7,8-Furans	**224**			**Total 2,3,7,8-Dioxins**	**1860**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**11.2**	**11**	**TEQ (WHO)- Mammals**	**9.13**	**8.87**
			TEQ (WHO)- Fish	**8.27**	**8.01**
			TEQ (WHO)- Birds	**17.9**	**17.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1414
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-47A & 19/9004-385, 0.10-0.15 **Date of Analysis :** 18/06/19
Sample No: 1414 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.24	0.2299	107
PCB-77	35.4	0.2564	102
PCB-123	21.4	0.9775	95
PCB-118	856	0.9710	91
PCB-114	6.55	0.9805	101
PCB-105	383	0.9934	97
PCB-126	6.29	0.4698	137
PCB-167	93.4	0.5931	94
PCB-156	181	0.6708	95
PCB-157	68.8	0.6556	95
PCB-169	1.4	0.1339	114
PCB-189	24.6	0.3833	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.724**	**0.724**
TEQ (WHO)- Fish	**0.0438**	**0.0438**
TEQ (WHO)- Birds	**2.6**	**2.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1415
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-48A & 19/9004-401, 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1415 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.51	0.367	66	**2378-TCDD**	*	0.236	83
12378-PCDF	4.56	0.355	56	**12378-PCDD**	0.58	0.458	69
23478-PCDF	4.59	0.288	67	**123478-HxCDD**	1.91	0.663	73
123478-HxCDF	6.72	0.323	68	**123678-HxCDD**	11	0.701	73
123678-HxCDF	3.29	0.305	66	**123789-HxCDD**	3.54	0.723	
234678-HxCDF	4.29	0.302	66	**1234678-HpCDD**	356	1.026	58
123789-HxCDF	0.901	0.347	67	**OCDD**	4280	1.050	40
1234678-HpCDF	86.1	0.316	50				
1234789-HpCDF	6.86	0.420	47				
OCDF	187	0.619					
Total 2,3,7,8-Furans	**308**			**Total 2,3,7,8-Dioxins**	**4650**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**15.5**	**15.3**	**TEQ (WHO)- Mammals**		**11.7**	**11.4**
				TEQ (WHO)- Fish		**7.87**	**7.63**
				TEQ (WHO)- Birds		**13.2**	**13**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1415
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
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ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-48A & 19/9004-401, 0.10-0.15 **Date of Analysis :** 18/06/19
Sample No: 1415 **Date of Report :** 19/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	85.6	0.6910	81
PCB-77	1870	0.6486	81
PCB-123	660	9.8998	98
PCB-118	17200	9.1350	97
PCB-114	379	10.3335	100
PCB-105	11200	9.0812	104
PCB-126	85.6	0.7905	101
PCB-167	773	0.6280	92
PCB-156	1540	0.6946	96
PCB-157	529	0.6839	97
PCB-169	1.47	0.3983	93
PCB-189	136	1.2638	94

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**9.79**	**9.79**
TEQ (WHO)- Fish	**0.82**	**0.82**
TEQ (WHO)- Birds	**112**	**112**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1416
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-49A & 19/9004-417, 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1416 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.41	0.462	66	**2378-TCDD**	*	0.428	76
12378-PCDF	3.38	0.545	54	**12378-PCDD**	1.41	0.832	55
23478-PCDF	7.1	0.415	62	**123478-HxCDD**	1.63	0.542	80
123478-HxCDF	6.58	0.400	68	**123678-HxCDD**	7.43	0.559	74
123678-HxCDF	5.43	0.370	70	**123789-HxCDD**	3.99	0.576	
234678-HxCDF	5.5	0.352	71	**1234678-HpCDD**	92.4	0.721	61
123789-HxCDF	1.02	0.430	70	**OCDD**	700	1.501	42
1234678-HpCDF	54.8	0.345	56				
1234789-HpCDF	2.19	0.461	54				
OCDF	67.7	0.677					
Total 2,3,7,8-Furans	**159**			**Total 2,3,7,8-Dioxins**	**807**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**10.8**	**10.4**	**TEQ (WHO)- Mammals**		**9.49**	**9.07**
				TEQ (WHO)- Fish		**9.35**	**8.92**
				TEQ (WHO)- Birds		**17.8**	**17.4**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1416
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-49A & 19/9004-417, 0.10-0.15 **Date of Analysis :** 19/06/19
Sample No: 1416 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.06	0.4448	75
PCB-77	70.8	0.4889	68
PCB-123	42.8	1.1760	102
PCB-118	1960	1.1854	97
PCB-114	24.7	1.1618	108
PCB-105	898	1.1042	106
PCB-126	11.4	0.8034	111
PCB-167	126	0.6382	99
PCB-156	307	0.7227	100
PCB-157	92.3	0.7378	101
PCB-169	0.557	0.3428	108
PCB-189	29.1	0.3655	95

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.27**	**1.27**
TEQ (WHO)- Fish	**0.0824**	**0.0824**
TEQ (WHO)- Birds	**5.04**	**5.04**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1417
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-17A & 19/9004-433, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1417 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.11	0.646	89	**2378-TCDD**	*	0.433	91
12378-PCDF	3.68	0.474	77	**12378-PCDD**	1.27	0.635	74
23478-PCDF	6.6	0.382	84	**123478-HxCDD**	0.898	0.461	96
123478-HxCDF	6.03	0.365	91	**123678-HxCDD**	3.68	0.494	91
123678-HxCDF	5.18	0.333	89	**123789-HxCDD**	2.69	0.509	
234678-HxCDF	5.37	0.331	91	**1234678-HpCDD**	62.9	0.681	75
123789-HxCDF	*	0.388	89	**OCDD**	474	1.359	51
1234678-HpCDF	75.4	0.321	70				
1234789-HpCDF	1.89	0.426	65				
OCDF	73.7	0.507					
Total 2,3,7,8-Furans	**181**			**Total 2,3,7,8-Dioxins**	**546**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.24**	**8.76**	**TEQ (WHO)- Mammals**	**8.1**	**7.62**
			TEQ (WHO)- Fish	**8.44**	**7.97**
			TEQ (WHO)- Birds	**14.7**	**14.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1417
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
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ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-17A & 19/9004-433, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1417 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.19	0.3580	90
PCB-77	39.2	0.3320	93
PCB-123	21.7	1.3543	98
PCB-118	633	1.3169	92
PCB-114	3.05	1.3303	105
PCB-105	295	1.3425	100
PCB-126	13.2	0.8579	156
PCB-167	65.8	0.5419	97
PCB-156	153	0.6224	98
PCB-157	34.6	0.6034	98
PCB-169	2.14	0.2676	120
PCB-189	16.4	0.3254	94

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.42**	**1.42**
TEQ (WHO)- Fish	**0.077**	**0.077**
TEQ (WHO)- Birds	**3.55**	**3.55**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1418
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 PRIMARY SAMPLE & 19/9004-449, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1418 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	26.5	1.945	72	**2378-TCDD**	*	1.426	82
12378-PCDF	18.3	1.380	64	**12378-PCDD**	9.44	1.345	73
23478-PCDF	33.4	1.124	70	**123478-HxCDD**	7.06	0.943	86
123478-HxCDF	28.1	0.599	86	**123678-HxCDD**	13.7	1.039	81
123678-HxCDF	23.2	0.589	84	**123789-HxCDD**	11.8	1.071	
234678-HxCDF	28.1	0.571	81	**1234678-HpCDD**	108	0.734	70
123789-HxCDF	1.34	0.695	81	**OCDD**	579	1.824	43
1234678-HpCDF	228	0.445	67				
1234789-HpCDF	3.48	0.636	62				
OCDF	107	0.812					
Total 2,3,7,8-Furans	**498**			**Total 2,3,7,8-Dioxins**	**729**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**41.8**	**40.4**	**TEQ (WHO)- Mammals**	**39**	**37.6**
			TEQ (WHO)- Fish	**44.2**	**42.7**
			TEQ (WHO)- Birds	**84.8**	**83.4**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1418
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 PRIMARY SAMPLE & 19/9004-449, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1418 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	11.3	0.6024	89
PCB-77	91.6	0.6777	81
PCB-123	46	1.2481	96
PCB-118	1280	1.2116	92
PCB-114	25.6	1.2578	101
PCB-105	701	1.1948	99
PCB-126	38.7	1.1856	108
PCB-167	153	0.6542	94
PCB-156	391	0.7513	96
PCB-157	89.5	0.7447	97
PCB-169	6.84	0.6655	94
PCB-189	41.8	0.6244	93

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**4.17**	**4.17**
TEQ (WHO)- Fish	**0.222**	**0.222**
TEQ (WHO)- Birds	**9.72**	**9.72**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1419
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 LAB DUPLICATE & 19/9004-465, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1419 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	22.6	1.959	77	**2378-TCDD**	*	1.505	84
12378-PCDF	15.7	1.337	73	**12378-PCDD**	2.83	1.270	79
23478-PCDF	33.8	1.107	83	**123478-HxCDD**	7.13	0.882	95
123478-HxCDF	22.4	0.534	90	**123678-HxCDD**	10.5	1.052	90
123678-HxCDF	20.4	0.513	88	**123789-HxCDD**	8.34	1.084	
234678-HxCDF	27.7	0.504	87	**1234678-HpCDD**	102	0.802	74
123789-HxCDF	1.74	0.591	86	**OCDD**	515	1.208	55
1234678-HpCDF	170	0.410	70				
1234789-HpCDF	4.99	0.532	67				
OCDF	97.2	0.540					
Total 2,3,7,8-Furans	**417**			**Total 2,3,7,8-Dioxins**	**646**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**36.1**	**34.6**	**TEQ (WHO)- Mammals**	**30**	**28.5**
			TEQ (WHO)- Fish	**36.1**	**34.6**
			TEQ (WHO)- Birds	**72.8**	**71.3**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1419
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 LAB DUPLICATE & 19/9004-465, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1419 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	10.5	0.6051	98
PCB-77	86.3	0.6298	93
PCB-123	36.8	1.0292	99
PCB-118	1010	1.0292	94
PCB-114	13.8	1.0489	106
PCB-105	556	1.0054	103
PCB-126	43	1.2320	138
PCB-167	134	0.6859	94
PCB-156	332	0.7646	95
PCB-157	73.5	0.7641	97
PCB-169	9.08	0.5771	138
PCB-189	42.5	0.9963	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**4.65**	**4.65**
TEQ (WHO)- Fish	**0.24**	**0.24**
TEQ (WHO)- Birds	**9.78**	**9.78**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1420
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 FIELD DUPLICATE & 19/9004-473, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1420 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	28.1	1.370	73	**2378-TCDD**	4.61	1.273	87
12378-PCDF	26.7	1.104	68	**12378-PCDD**	12.5	1.058	76
23478-PCDF	57.6	0.834	80	**123478-HxCDD**	12	0.766	95
123478-HxCDF	37.5	0.479	95	**123678-HxCDD**	20	0.798	91
123678-HxCDF	35	0.466	93	**123789-HxCDD**	13.9	0.823	
234678-HxCDF	56.7	0.441	92	**1234678-HpCDD**	132	0.553	72
123789-HxCDF	2.25	0.533	92	**OCDD**	524	1.039	56
1234678-HpCDF	232	0.364	71				
1234789-HpCDF	5.65	0.469	69				
OCDF	88.9	0.494					
Total 2,3,7,8-Furans	**571**			**Total 2,3,7,8-Dioxins**	**720**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**65.9**	**65.9**	**TEQ (WHO)- Mammals**		**59.7**	**59.7**
				TEQ (WHO)- Fish		**70.7**	**70.7**
				TEQ (WHO)- Birds		**123**	**123**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1420
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 FIELD DUPLICATE & 19/9004-473, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1420 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	18.3	0.6390	107
PCB-77	211	0.6271	115
PCB-123	63.6	0.7841	100
PCB-118	1880	0.7698	94
PCB-114	43.5	0.7811	105
PCB-105	1060	0.7506	103
PCB-126	63.3	0.8381	135
PCB-167	154	0.5129	97
PCB-156	398	0.5865	98
PCB-157	92.5	0.5682	99
PCB-169	18.1	0.4222	116
PCB-189	43.5	0.4809	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**7.01**	**7.01**
TEQ (WHO)- Fish	**0.366**	**0.366**
TEQ (WHO)- Birds	**18.9**	**18.9**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1421
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 LAB FIELD DUPLICATE & 19/9004-481, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1421 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	19.2	1.287	82	**2378-TCDD**	3.16	1.349	92
12378-PCDF	16.6	0.891	69	**12378-PCDD**	12.2	0.989	79
23478-PCDF	27.8	0.710	86	**123478-HxCDD**	7.8	0.708	101
123478-HxCDF	21.4	0.403	93	**123678-HxCDD**	11.6	0.773	88
123678-HxCDF	16.8	0.386	90	**123789-HxCDD**	10	0.796	
234678-HxCDF	21.4	0.369	91	**1234678-HpCDD**	86.6	0.668	74
123789-HxCDF	0.939	0.433	88	**OCDD**	489	1.390	45
1234678-HpCDF	155	0.329	67				
1234789-HpCDF	3.25	0.470	57				
OCDF	87.6	0.753					
Total 2,3,7,8-Furans	**370**			**Total 2,3,7,8-Dioxins**	**620**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**37.9**	**37.9**	**TEQ (WHO)- Mammals**		**37.7**	**37.7**
				TEQ (WHO)- Fish		**42.9**	**42.9**
				TEQ (WHO)- Birds		**73.3**	**73.3**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

UKAS TESTING
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Marchwood Scientific Services
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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1421
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-18 LAB FIELD DUPLICATE & 19/9004-481, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1421 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	9.94	0.3869	106
PCB-77	73	0.4360	99
PCB-123	29.8	0.9292	102
PCB-118	851	0.9184	97
PCB-114	12.6	0.9382	107
PCB-105	498	0.8719	104
PCB-126	37.7	0.8202	138
PCB-167	114	0.8642	93
PCB-156	280	0.9586	95
PCB-157	66.5	0.9480	97
PCB-169	7.36	0.4422	130
PCB-189	33.2	0.3543	93

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**4.05**	**4.05**
TEQ (WHO)- Fish	**0.21**	**0.21**
TEQ (WHO)- Birds	**8.51**	**8.51**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1422
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 PRIMARY SAMPLE & 19/9004-489, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1422 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	7.74	0.984	80	**2378-TCDD**	*	0.377	89
12378-PCDF	5.51	0.501	87	**12378-PCDD**	2.05	0.382	86
23478-PCDF	8.98	0.435	89	**123478-HxCDD**	2.07	0.472	85
123478-HxCDF	8.85	0.345	79	**123678-HxCDD**	3.63	0.497	82
123678-HxCDF	6.54	0.316	78	**123789-HxCDD**	2.13	0.494	
234678-HxCDF	7.47	0.330	75	**1234678-HpCDD**	53.2	0.434	59
123789-HxCDF	*	0.333	83	**OCDD**	327	0.287	67
1234678-HpCDF	50.1	0.179	73				
1234789-HpCDF	2.8	0.275	54				
OCDF	33.1	0.152					
Total 2,3,7,8-Furans	**131**			**Total 2,3,7,8-Dioxins**	**390**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**11.5**	**11.1**	**TEQ (WHO)- Mammals**	**10.3**	**9.92**
			TEQ (WHO)- Fish	**11.6**	**11.2**
			TEQ (WHO)- Birds	**23**	**22.6**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1422
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 PRIMARY SAMPLE & 19/9004-489, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1422 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 170619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.06	0.2390	88
PCB-77	33.1	0.2523	84
PCB-123	12.7	1.0128	81
PCB-118	512	1.0404	75
PCB-114	5.77	1.0455	85
PCB-105	248	1.0215	81
PCB-126	6.46	1.0906	90
PCB-167	60.3	0.6935	75
PCB-156	128	0.7703	76
PCB-157	34.7	0.7778	76
PCB-169	1.52	0.1483	99
PCB-189	19.2	0.4250	75

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.726**	**0.726**
TEQ (WHO)- Fish	**0.0418**	**0.0418**
TEQ (WHO)- Birds	**2.56**	**2.56**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1423
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 LAB DUPLICATE & 19/9004-505, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1423 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	9.95	0.665	84	**2378-TCDD**	*	0.334	97
12378-PCDF	5.79	0.687	83	**12378-PCDD**	0.918	0.741	96
23478-PCDF	4.06	0.605	85	**123478-HxCDD**	1.85	0.801	89
123478-HxCDF	6.71	0.569	83	**123678-HxCDD**	4.91	0.786	89
123678-HxCDF	7.42	0.532	88	**123789-HxCDD**	2.69	0.809	
234678-HxCDF	7.59	0.506	86	**1234678-HpCDD**	56.6	0.872	70
123789-HxCDF	0.88	0.604	87	**OCDD**	350	1.161	55
1234678-HpCDF	45	0.548	62				
1234789-HpCDF	1.67	0.741	56				
OCDF	31.8	0.803					
Total 2,3,7,8-Furans	**121**			**Total 2,3,7,8-Dioxins**	**417**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.73**	**8.39**	**TEQ (WHO)- Mammals**	**7.99**	**7.66**
			TEQ (WHO)- Fish	**7.89**	**7.56**
			TEQ (WHO)- Birds	**19.1**	**18.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1423
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 LAB DUPLICATE & 19/9004-505, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1423 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.84	0.2643	90
PCB-77	36.2	0.2909	86
PCB-123	15.4	1.2157	89
PCB-118	581	1.2157	85
PCB-114	6.39	1.2272	98
PCB-105	281	1.2380	87
PCB-126	7.59	1.1537	82
PCB-167	57.4	1.1559	84
PCB-156	133	1.2919	88
PCB-157	39.5	1.4079	87
PCB-169	1.17	0.3206	99
PCB-189	16.6	0.5493	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.832**	**0.832**
TEQ (WHO)- Fish	**0.0482**	**0.0482**
TEQ (WHO)- Birds	**2.81**	**2.81**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1424
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 FIELD DUPLICATE & 19/9004-513, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1424 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	10.4	0.625	86	**2378-TCDD**	*	0.230	97
12378-PCDF	2.02	0.738	86	**12378-PCDD**	1.84	0.684	94
23478-PCDF	7.61	0.641	89	**123478-HxCDD**	2.01	0.718	93
123478-HxCDF	5.23	0.575	89	**123678-HxCDD**	4.29	0.757	93
123678-HxCDF	7.3	0.581	86	**123789-HxCDD**	3.36	0.779	
234678-HxCDF	6.44	0.533	90	**1234678-HpCDD**	57.4	0.817	72
123789-HxCDF	*	0.608	91	**OCDD**	354	1.242	65
1234678-HpCDF	46.7	0.646	62				
1234789-HpCDF	2.6	0.672	71				
OCDF	36.8	0.836					
Total 2,3,7,8-Furans	**125**			**Total 2,3,7,8-Dioxins**	**423**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**10.5**	**10.2**	**TEQ (WHO)- Mammals**	**9.57**	**9.28**
			TEQ (WHO)- Fish	**10.1**	**9.84**
			TEQ (WHO)- Birds	**23.3**	**23**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1424
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 FIELD DUPLICATE & 19/9004-513, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1424 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.73	0.2088	91
PCB-77	34.1	0.2331	88
PCB-123	15.1	0.8496	89
PCB-118	471	0.8565	85
PCB-114	5.17	0.8680	98
PCB-105	226	0.8586	87
PCB-126	6.36	1.2126	84
PCB-167	51.4	0.6907	82
PCB-156	104	0.7726	85
PCB-157	33.2	0.7883	85
PCB-169	2.68	0.2471	102
PCB-189	14.9	0.4268	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.748**	**0.748**
TEQ (WHO)- Fish	**0.0403**	**0.0403**
TEQ (WHO)- Birds	**2.46**	**2.46**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1425
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 LAB FIELD DUPLICATE & 19/9004-521, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1425 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	9.98	0.633	88	**2378-TCDD**	*	0.225	101
12378-PCDF	7.71	0.621	88	**12378-PCDD**	2.2	0.554	100
23478-PCDF	9.49	0.532	91	**123478-HxCDD**	1.66	0.613	98
123478-HxCDF	8.58	0.532	92	**123678-HxCDD**	5.29	0.623	99
123678-HxCDF	7.66	0.504	92	**123789-HxCDD**	3.68	0.642	
234678-HxCDF	7.46	0.454	96	**1234678-HpCDD**	65.5	0.843	75
123789-HxCDF	0.877	0.600	88	**OCDD**	385	1.188	61
1234678-HpCDF	57.8	0.644	64				
1234789-HpCDF	1.3	0.750	63				
OCDF	74.4	0.675					
Total 2,3,7,8-Furans	**185**			**Total 2,3,7,8-Dioxins**	**464**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**12.7**	**12.5**	**TEQ (WHO)- Mammals**	**11.4**	**11.2**
			TEQ (WHO)- Fish	**12.1**	**11.9**
			TEQ (WHO)- Birds	**26.3**	**26.1**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1425
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-23 LAB FIELD DUPLICATE & 19/9004-521, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1425 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.941	0.2185	92
PCB-77	34.5	0.2445	91
PCB-123	14.1	0.8840	89
PCB-118	480	0.8823	84
PCB-114	5.49	0.8925	97
PCB-105	231	0.8953	87
PCB-126	11	0.8905	84
PCB-167	52.9	0.8305	83
PCB-156	111	0.9506	86
PCB-157	33.8	0.9267	87
PCB-169	2.15	0.2180	104
PCB-189	15.6	0.5026	89

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.2**	**1.2**
TEQ (WHO)- Fish	**0.0639**	**0.0639**
TEQ (WHO)- Birds	**2.97**	**2.97**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1426
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-24A & 19/9004-529, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1426 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	12.8	0.728	85	**2378-TCDD**	*	0.235	96
12378-PCDF	9.94	0.802	86	**12378-PCDD**	2.68	0.725	97
23478-PCDF	8.96	0.702	90	**123478-HxCDD**	2.71	0.853	93
123478-HxCDF	10.9	0.614	87	**123678-HxCDD**	6.17	0.855	92
123678-HxCDF	9.62	0.600	84	**123789-HxCDD**	5.17	0.881	
234678-HxCDF	9.24	0.588	84	**1234678-HpCDD**	55.8	0.708	78
123789-HxCDF	0.943	0.667	85	**OCDD**	270	1.162	65
1234678-HpCDF	54.7	0.546	72				
1234789-HpCDF	2.64	0.742	61				
OCDF	40.1	0.784					
Total 2,3,7,8-Furans	**160**			**Total 2,3,7,8-Dioxins**	**342**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**13.8**	**13.5**	**TEQ (WHO)- Mammals**		**12.9**	**12.6**
				TEQ (WHO)- Fish		**13.7**	**13.5**
				TEQ (WHO)- Birds		**30.1**	**29.9**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1426
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-24A & 19/9004-529, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1426 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.66	0.2086	91
PCB-77	33.9	0.2306	89
PCB-123	17.2	0.7636	88
PCB-118	507	0.7782	84
PCB-114	4.66	0.7605	99
PCB-105	228	0.7566	87
PCB-126	11.9	0.9606	85
PCB-167	48.1	0.7150	83
PCB-156	104	0.7819	87
PCB-157	30.1	0.7771	88
PCB-169	2.11	0.2450	98
PCB-189	14.4	0.4251	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.28**	**1.28**
TEQ (WHO)- Fish	**0.0689**	**0.0689**
TEQ (WHO)- Birds	**3.19**	**3.19**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1428
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-20A & 19/9004-561, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1428 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	6.52	0.464	87	**2378-TCDD**	*	0.218	97
12378-PCDF	4.84	0.494	87	**12378-PCDD**	1.51	0.617	98
23478-PCDF	6.15	0.428	93	**123478-HxCDD**	0.917	0.649	102
123478-HxCDF	6.81	0.429	100	**123678-HxCDD**	3.56	0.635	104
123678-HxCDF	4.38	0.444	94	**123789-HxCDD**	2	0.654	
234678-HxCDF	5.39	0.396	96	**1234678-HpCDD**	62.3	1.026	74
123789-HxCDF	*	0.505	93	**OCDD**	319	0.968	80
1234678-HpCDF	60.2	0.503	79				
1234789-HpCDF	2.48	0.842	58				
OCDF	43.2	0.581					
Total 2,3,7,8-Furans	**140**			**Total 2,3,7,8-Dioxins**	**389**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.91**	**8.64**	**TEQ (WHO)- Mammals**	**8.09**	**7.82**
			TEQ (WHO)- Fish	**8.33**	**8.06**
			TEQ (WHO)- Birds	**17.6**	**17.3**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1428
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-20A & 19/9004-561, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1428 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	4.43	0.4764	94
PCB-77	92.7	0.5212	92
PCB-123	40	1.2659	92
PCB-118	1090	1.3239	87
PCB-114	10.6	1.3078	102
PCB-105	545	1.3049	92
PCB-126	13.3	0.8642	86
PCB-167	93.1	0.5833	86
PCB-156	214	0.6716	90
PCB-157	59.2	0.6646	90
PCB-169	1.53	0.2815	94
PCB-189	18.9	0.4649	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.45**	**1.45**
TEQ (WHO)- Fish	**0.0887**	**0.0887**
TEQ (WHO)- Birds	**6.51**	**6.51**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1427
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-19A & 19/9004-545, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1427 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.7	0.534	81	**2378-TCDD**	*	0.226	95
12378-PCDF	5.06	0.539	86	**12378-PCDD**	0.643	0.619	93
23478-PCDF	6.95	0.451	91	**123478-HxCDD**	1.36	0.658	91
123478-HxCDF	6.86	0.433	92	**123678-HxCDD**	4.12	0.681	92
123678-HxCDF	5.63	0.435	89	**123789-HxCDD**	2.67	0.702	
234678-HxCDF	6.1	0.421	88	**1234678-HpCDD**	58.7	0.711	77
123789-HxCDF	0.799	0.504	87	**OCDD**	381	1.081	74
1234678-HpCDF	55	0.379	85				
1234789-HpCDF	2.6	0.531	73				
OCDF	37.4	0.510					
Total 2,3,7,8-Furans	**132**			**Total 2,3,7,8-Dioxins**	**448**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.18**	**8.95**	**TEQ (WHO)- Mammals**	**7.72**	**7.49**
			TEQ (WHO)- Fish	**8.24**	**8.01**
			TEQ (WHO)- Birds	**17**	**16.8**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1427
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-19A & 19/9004-545, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1427 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.81	0.3800	85
PCB-77	73.1	0.4331	83
PCB-123	40.2	1.7222	91
PCB-118	1040	1.7228	86
PCB-114	9.05	1.7604	99
PCB-105	431	1.7361	89
PCB-126	19.2	0.8797	81
PCB-167	122	1.0377	83
PCB-156	245	1.1081	89
PCB-157	71.4	1.1775	88
PCB-169	1.87	0.3119	92
PCB-189	28.1	0.6315	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.05**	**2.05**
TEQ (WHO)- Fish	**0.115**	**0.115**
TEQ (WHO)- Birds	**5.95**	**5.95**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA 0

Test Certificate No: 1429

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell
Sample Identifier : GTCS 1-21A & 19/9004-577, 0.00-0.05
Sample No: 1429
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 180619

Date of Receipt : 07/06/19
Date of Analysis : 19/06/19
Date of Report : 20/06/19

Test Method : 2002a
Blank : 100619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	6.49	0.454	80	**2378-TCDD**	*	0.218	85
12378-PCDF	4.43	0.493	81	**12378-PCDD**	1.07	0.536	95
23478-PCDF	7.29	0.396	90	**123478-HxCDD**	1.82	0.567	86
123478-HxCDF	6.17	0.405	84	**123678-HxCDD**	3.09	0.547	92
123678-HxCDF	4.09	0.408	82	**123789-HxCDD**	2.27	0.563	
234678-HxCDF	4.05	0.353	87	**1234678-HpCDD**	67.5	0.756	82
123789-HxCDF	0.547	0.415	88	**OCDD**	450	0.861	75
1234678-HpCDF	46	0.364	81				
1234789-HpCDF	2.17	0.485	76				
OCDF	42.3	0.499					
Total 2,3,7,8-Furans	**124**			**Total 2,3,7,8-Dioxins**	**526**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**9.12**	**8.9**	**TEQ (WHO)- Mammals**	**7.77**	**7.55**
			TEQ (WHO)- Fish	**8.53**	**8.31**
			TEQ (WHO)- Birds	**17.9**	**17.7**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1429
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-21A & 19/9004-577, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1429 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.997	0.3636	86
PCB-77	57.6	0.4088	84
PCB-123	14.9	0.7914	93
PCB-118	554	0.8076	88
PCB-114	8.14	0.8026	103
PCB-105	269	0.7857	92
PCB-126	8.08	0.9465	77
PCB-167	51.1	1.0939	86
PCB-156	101	1.2084	88
PCB-157	34.2	1.2108	91
PCB-169	0.795	0.2310	100
PCB-189	18.3	0.5965	91

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.869**	**0.869**
TEQ (WHO)- Fish	**0.052**	**0.052**
TEQ (WHO)- Birds	**3.84**	**3.84**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1430
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-22A & 19/9004-593, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1430 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.234	69	**2378-TCDD**	*	0.104	97
12378-PCDF	1.01	0.267	85	**12378-PCDD**	*	0.400	96
23478-PCDF	*	0.242	88	**123478-HxCDD**	*	0.394	89
123478-HxCDF	*	0.217	90	**123678-HxCDD**	1.96	0.416	91
123678-HxCDF	*	0.225	87	**123789-HxCDD**	0.583	0.428	
234678-HxCDF	0.997	0.202	93	**1234678-HpCDD**	50.8	0.645	91
123789-HxCDF	*	0.245	91	**OCDD**	419	0.867	80
1234678-HpCDF	18.5	0.313	81				
1234789-HpCDF	0.946	0.380	81				
OCDF	23.8	0.570					
Total 2,3,7,8-Furans	**45.2**			**Total 2,3,7,8-Dioxins**	**472**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**2.11**	**1.55**	**TEQ (WHO)- Mammals**	**1.93**	**1.22**
			TEQ (WHO)- Fish	**1.37**	**0.465**
			TEQ (WHO)- Birds	**1.63**	**0.567**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1430
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-22A & 19/9004-593, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1430 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.617	0.3148	90
PCB-77	53.2	0.3382	89
PCB-123	15.5	0.7912	89
PCB-118	520	0.7927	84
PCB-114	3.69	0.7974	98
PCB-105	241	0.7671	88
PCB-126	13	0.9054	86
PCB-167	57.7	0.9109	85
PCB-156	109	1.0009	87
PCB-157	39.4	1.0709	87
PCB-169	1.25	0.1170	99
PCB-189	12.6	0.6066	89

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.37**	**1.37**
TEQ (WHO)- Fish	**0.0756**	**0.0756**
TEQ (WHO)- Birds	**4.07**	**4.07**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1431
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCDDs and PCDFs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-40A & 19/9004-280, 0.00-0.05 **Date of Analysis :** 19/06/19
Sample No: 1431 **Date of Report :** 20/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 100619
Calibration File : 180619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	8.5	0.560	85	**2378-TCDD**	*	0.288	98
12378-PCDF	3.67	0.572	86	**12378-PCDD**	1.62	0.609	98
23478-PCDF	6.25	0.466	92	**123478-HxCDD**	2.37	0.821	94
123478-HxCDF	5.96	0.369	94	**123678-HxCDD**	6.7	0.869	97
123678-HxCDF	1.41	0.360	94	**123789-HxCDD**	4.46	0.895	
234678-HxCDF	5.48	0.350	92	**1234678-HpCDD**	134	1.074	86
123789-HxCDF	0.655	0.420	90	**OCDD**	981	1.470	78
1234678-HpCDF	38.4	0.435	84				
1234789-HpCDF	0.723	0.533	80				
OCDF	50.2	0.502					
Total 2,3,7,8-Furans	**121**			**Total 2,3,7,8-Dioxins**	**1130**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**10.7**	**10.4**	**TEQ (WHO)- Mammals**	**9.49**	**9.2**
			TEQ (WHO)- Fish	**8.92**	**8.63**
			TEQ (WHO)- Birds	**19.6**	**19.4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1431
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA
0

ANALYSIS OF PCBs

Job Reference: 19/9004 Batch 2 - Grenfell **Date of Receipt :** 07/06/19
Sample Identifier : GTCS 1-40A & 19/9004-280, 0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1431 **Date of Report :** 24/06/19
Order No: 0
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 100619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.963	0.2594	89
PCB-77	39.3	0.2963	87
PCB-123	14	0.9844	93
PCB-118	548	0.9982	87
PCB-114	5.45	1.0378	99
PCB-105	263	0.9878	90
PCB-126	9.84	0.9802	84
PCB-167	41.3	0.4777	83
PCB-156	91.9	0.5177	88
PCB-157	22.5	0.5288	88
PCB-169	2.55	0.2303	98
PCB-189	9.29	1.2074	91

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.09**	**1.09**
TEQ (WHO)- Fish	**0.0587**	**0.0587**
TEQ (WHO)- Birds	**3.09**	**3.09**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

UKAS TESTING
1668

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AECOM
9th Floor Reception
Sunley House
4 Bedford Park
Croydon
CR0 2AP

Attention :	David Dyson
Date :	17th July, 2019
Your reference :	60595731
Our reference :	Test Report 19/9004 Batch 3
Location :	Grenfell
Date samples received :	7th June, 2019
Status :	Final report
Issue :	1

Fifty two samples were received for analysis on 7th June, 2019 of which twenty eight were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	606-613	622-629	638-645	654-661	670-677	686-693	702-709	718-725	734-741	750-757	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Aluminium	13020	-	11880	-	-	12500	11350	-	11210	12190	<50	mg/kg	TM30/PM15
Arsenic #M	13.7	-	15.2	-	-	16.1	12.4	-	18.9	17.1	<0.5	mg/kg	TM30/PM15
Barium #M	183	-	177	-	-	194	158	-	172	170	<1	mg/kg	TM30/PM15
Beryllium	1.1	-	1.1	-	-	1.2	1.0	-	1.3	1.1	<0.5	mg/kg	TM30/PM15
Cadmium #M	3.6	-	0.6	-	-	0.7	0.7	-	0.8	1.4	<0.1	mg/kg	TM30/PM15
Chromium #M	153.1	-	145.3	-	-	202.6	268.8 AB	-	132.2	129.0	<0.5	mg/kg	TM30/PM15
Copper #M	81	-	59	-	-	56	50	-	54	57	<1	mg/kg	TM30/PM15
Lead #M	222	-	331	-	-	330	287	-	274	263	<5	mg/kg	TM30/PM15
Mercury #M	1.5	-	0.8	-	-	0.7	0.6	-	0.6	0.8	<0.1	mg/kg	TM30/PM15
Nickel #M	28.1	-	25.9	-	-	28.5	28.9	-	29.5	25.1	<0.7	mg/kg	TM30/PM15
Selenium #M	1	-	1	-	-	<1	1	-	1	1	<1	mg/kg	TM30/PM15
Vanadium	53	-	55	-	-	58	54	-	56	53	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	3.0	-	1.9	-	-	2.1	1.7	-	1.9	2.5	<0.1	mg/kg	TM74/PM32
Zinc #M	332	-	221	-	-	223	190	-	207	227	<5	mg/kg	TM30/PM15
Aluminium	-	10759	-	10088	12353	-	-	11780	-	-	<50	mg/kg	TM30/PM62
Arsenic	-	16.3	-	17.6	18.0	-	-	16.8	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	185	-	175	191	-	-	179	-	-	<1	mg/kg	TM30/PM62
Beryllium	-	0.9	-	1.2	1.1	-	-	1.1	-	-	<0.5	mg/kg	TM30/PM62
Cadmium	-	5.3	-	0.5	0.7	-	-	1.0	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	47.2	-	26.8	30.2	-	-	31.3	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	85	-	48	52	-	-	62	-	-	<1	mg/kg	TM30/PM62
Lead	-	193	-	334	319	-	-	484	-	-	<5	mg/kg	TM30/PM62
Mercury	-	1.5	-	0.7	0.7	-	-	0.8	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	24.7	-	20.8	24.7	-	-	23.7	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	<1	-	<1	<1	-	-	<1	-	-	<1	mg/kg	TM30/PM62
Vanadium	-	43	-	46	52	-	-	52	-	-	<1	mg/kg	TM30/PM62
Water Soluble Boron	-	1.9	-	1.3	1.8	-	-	1.8	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	329	-	204	242	-	-	244	-	-	<5	mg/kg	TM30/PM62
Aluminium	-	9700	-	8884	9573	-	-	9007	-	-	<50	mg/kg	TM30/PM42
Arsenic	-	14.1	-	17.6	16.1	-	-	14.3	-	-	<0.5	mg/kg	TM30/PM42
Barium	-	157	-	149	177	-	-	134	-	-	<1	mg/kg	TM30/PM42
Beryllium	-	0.9	-	1.1	1.0	-	-	0.9	-	-	<0.5	mg/kg	TM30/PM42
Cadmium	-	4.0	-	0.5	0.5	-	-	0.6	-	-	<0.1	mg/kg	TM30/PM42
Chromium	-	43.2	-	26.6	27.6	-	-	26.2	-	-	<0.5	mg/kg	TM30/PM42
Copper	-	80	-	46	43	-	-	46	-	-	<1	mg/kg	TM30/PM42
Lead	-	195	-	298	422	-	-	476	-	-	<5	mg/kg	TM30/PM42
Mercury	-	0.4	-	0.1	0.3	-	-	0.4	-	-	<0.1	mg/kg	TM30/PM42
Nickel	-	23.9	-	22.2	21.1	-	-	19.3	-	-	<0.7	mg/kg	TM30/PM42
Selenium	-	1	-	<1	1	-	-	1	-	-	<1	mg/kg	TM30/PM42
Vanadium	-	43	-	49	47	-	-	43	-	-	<1	mg/kg	TM30/PM42
Water Soluble Boron	-	2.1	-	1.6	2.0	-	-	1.7	-	-	<0.1	mg/kg	TM74/PM42
Zinc	-	285	-	191	182	-	-	186	-	-	<5	mg/kg	TM30/PM42

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	606-613	622-629	638-645	654-661	670-677	686-693	702-709	718-725	734-741	750-757	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
PAH MS													
Naphthalene #M	0.06	0.06	0.09	0.10	0.08	0.15	0.13	0.09	0.09	0.09	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.15	0.14	0.12	0.15	0.14	0.50	0.19	0.23	0.19	0.24	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	0.04	<0.04	0.05	<0.04	0.09	<0.04	<0.04	0.05	0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.49	0.73	0.77	0.98	0.67	2.37	0.74	1.03	1.15	1.01	<0.03	mg/kg	TM4/PM8
Anthracene #	0.15	0.20	0.17	0.26	0.18	0.71	0.20	0.28	0.33	0.28	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	1.78	2.07	2.11	2.81	2.09	8.48	2.49	3.34	3.38	3.23	<0.03	mg/kg	TM4/PM8
Pyrene #	1.53	1.71	1.85	2.44	1.84	7.57	2.21	2.93	2.81	2.83	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.15	1.13	1.02	1.44	1.09	4.14	1.38	1.76	1.61	1.72	<0.06	mg/kg	TM4/PM8
Chrysene #M	1.11	1.23	1.05	1.58	1.15	3.90	1.36	1.86	1.59	1.82	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	2.45	2.51	2.38	3.10	2.47	8.37	2.90	4.13	3.43	4.03	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.25	1.30	1.29	1.66	1.29	4.54	1.53	2.08	1.80	2.17	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.89	0.91	0.89	1.03	0.88	2.77	1.10	1.47	1.18	1.52	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.21	0.15	0.16	0.27	0.15	0.74	0.27	0.38	0.22	0.37	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.99	0.98	0.95	1.15	0.92	2.74	1.19	1.51	1.26	1.55	<0.04	mg/kg	TM4/PM8
Coronene	0.26	0.24	0.22	0.25	0.21	0.64	0.27	0.34	0.27	0.34	<0.04	mg/kg	TM4/PM8
PAH 16 Total	12.2	13.2	12.9	17.0	13.0	47.1	15.7	21.1	19.1	20.9	<0.6	mg/kg	TM4/PM8
PAH 17 Total	12.47	13.40	13.07	17.27	13.16	47.71	15.96	21.43	19.36	21.24	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.76	1.81	1.71	2.23	1.78	6.03	2.09	2.97	2.47	2.90	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.69	0.70	0.67	0.87	0.69	2.34	0.81	1.16	0.96	1.13	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	97	96	96	95	94	94	97	95	98	<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	14	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	7	<5	<5	16	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	6	7	<5	24	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	7	12	<5	<5	9	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	9	<5	<5	7	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	7	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	41	<35	<35	70	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	12.4	10.1	11.0	8.5	9.9	8.3	9.8	10.3	8.9	9.5	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	153.1	-	145.3	-	-	202.6	268.8	-	132.2	129.0	<0.5	mg/kg	NONE/NONE
Chromium III	-	47.2	-	26.8	30.2	-	-	31.3	-	-	<0.5	mg/kg	NONE/NONE
Chromium III	-	43.2	-	26.6	27.6	-	-	26.2	-	-	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	0.9	1.1	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

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Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Total Organic Carbon #	4.15	-	3.81	-	-	4.03	3.67	-	3.42	3.88	<0.02	%	TM21/PM24
Total Organic Carbon	-	2.40	-	2.63	3.64	-	-	3.68	-	-	<0.02	%	TM21/PM89
Thiocyanate	0.9	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	<0.806	4.1	8.64	<1.340	<2.860	<1.395	4.75	3.39	5.45	<0.591		ng/kg	Subcontracted
12378-PCDF*	<0.574	2.78	7.1	4.81	2.34	4.79	4.25	3.94	1.66	5.52		ng/kg	Subcontracted
23478-PCDF*	<0.641	4.08	10.4	<0.759	<0.796	<0.689	6.05	<0.451	4.84	4.68		ng/kg	Subcontracted
123478-HxCDF*	3.26	7.3	14.1	3.85	<0.720	4.14	8.12	7.4	7.22	8.09		ng/kg	Subcontracted
123678-HxCDF*	4.69	4.77	11.3	<0.774	<0.723	<0.740	5.01	4.06	4.51	4.26		ng/kg	Subcontracted
234678-HxCDF*	2.12	6.77	9.98	<0.751	<0.579	<0.590	5.1	5.04	3.78	2.57		ng/kg	Subcontracted
123789-HxCDF*	<1.024	<0.523	0.954	<0.891	<0.827	<0.719	0.712	0.648	<0.325	0.819		ng/kg	Subcontracted
1234678-HpCDF*	111	93.9	52.8	30.6	44.3	39.6	33.9	29.4	28.3	40		ng/kg	Subcontracted
1234789-HpCDF*	4.73	6.1	5.05	3.21	<1.373	<1.369	2.95	1.68	2.12	3.7		ng/kg	Subcontracted
OCDF*	134	214	44.6	31.2	29.5	26.6	39.1	36.8	40.3	63.8		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.363	<0.538	<0.729	<0.407	<0.459	<0.302	<0.316	<0.360	<0.300	<0.335		ng/kg	Subcontracted
12378-PCDD*	<0.894	2.02	0.929	<0.599	<0.639	<0.719	1.41	1.09	0.71	<0.548		ng/kg	Subcontracted
123478-HxCDD*	<1.972	3.22	1.25	<0.887	<0.888	<0.810	0.717	1.28	0.976	1.68		ng/kg	Subcontracted
123678-HxCDD*	13.8	13.9	6.06	<0.900	<0.932	2.04	2.96	3.85	2.55	3.16		ng/kg	Subcontracted
123789-HxCDD*	5.43	7.15	3.85	<0.927	<0.960	<0.849	2.8	<0.577	1.95	1.96		ng/kg	Subcontracted
1234678-HpCDD*	403	542	88.9	61.4	72.5	79.1	80.1	73.7	74.7	126		ng/kg	Subcontracted
OCDD*	3390	4500	562	439	568	480	655	557	612	1140		ng/kg	Subcontracted
TEQ(1) (NATO)*	13.2	19.6	14.4	3.78	3.92	4.08	9.14	5.59	7.54	8.43		ng/kg	Subcontracted
TEQ(2) (NATO)*	11.6	19	13.7	2.05	1.88	2.55	8.82	4.95	7.2	7.76		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	5.17	6.94	4.87	1.97	1.65	1.33	2.76	2.33	3.03	3.5		ng/kg	Subcontracted
12378-PBDF*	3.57	4.33	3.3	1.28	1.09	1.26	1.98	1.41	2.09	2.36		ng/kg	Subcontracted
23478-PBDF*	1.96	2.28	1.78	0.83	1	1.1	2.2	0.88	1.26	1.09		ng/kg	Subcontracted
123478-HxBDF*	1.55	1.19	1.55	<0.770	0.8	0.97	2.34	0.75	1.04	1.74		ng/kg	Subcontracted
123678-HxBDF*	1.73	2.04	1.41	<0.770	<0.770	<0.800	0.91	0.86	1.66	1.3		ng/kg	Subcontracted
234678-HxBDF*	<0.800	0.97	<0.800	<0.800	<0.830	<0.830	<0.790	<0.800	<0.850	<0.850		ng/kg	Subcontracted
123789-HxBDF*	<0.800	<0.800	<0.800	<0.810	<0.810	<0.800	<0.800	<0.800	<0.830	<0.840		ng/kg	Subcontracted
1234678-HpBDF*	1.03	1.55	0.98	<0.780	<0.820	<0.820	<0.820	<0.840	<0.840	<0.840		ng/kg	Subcontracted
1234789-HpBDF*	<0.770	<0.770	<0.770	<0.790	<0.800	<0.790	<0.830	<0.830	<0.830	<0.850		ng/kg	Subcontracted
OBDF*	<0.800	<0.790	<0.810	<0.810	<0.830	<0.830	<0.840	<0.850	<0.850	<0.850		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	606-613	622-629	638-645	654-661	670-677	686-693	702-709	718-725	734-741	750-757	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.790	<0.800	<0.830	<0.800	<0.830	<0.780	<0.800	<0.820	<0.840	<0.850		ng/kg	Subcontracted
12378-PBDD*	<0.800	<0.800	<0.820	<0.820	<0.820	<0.800	<0.800	<0.800	<0.800	<0.820		ng/kg	Subcontracted
123478-HxBDD*	<0.770	<0.760	<0.830	<0.800	<0.830	<0.830	<0.810	<0.840	<0.840	<0.840		ng/kg	Subcontracted
123678-HxBDD*	<0.740	<0.770	<0.840	<0.840	<0.840	<0.810	<0.810	<0.830	<0.830	<0.850		ng/kg	Subcontracted
123789-HxBDD*	<0.820	<0.800	<0.820	<0.830	<0.830	<0.830	<0.800	<0.800	<0.810	<0.810		ng/kg	Subcontracted
1234678-HpBDD*	<0.840	<0.800	<0.800	<0.800	<0.810	<0.820	<0.840	<0.850	<0.850	<0.830		ng/kg	Subcontracted
OBDD*	<0.820	<0.820	<0.800	<0.820	<0.820	<0.840	<0.850	<0.850	<0.830	<0.850		ng/kg	Subcontracted
PCB-81*	5.34	8.54	44.6	22.7	140	8.6	3.23	2.21	10.2	25.4		ng/kg	Subcontracted
PCB-77*	174	282	977	437	3290	227	69	55.7	222	594		ng/kg	Subcontracted
PCB-123*	162	120	311	211	1040	98.3	30.4	22.7	89.7	221		ng/kg	Subcontracted
PCB-118*	3920	2530	8200	5590	33100	2710	1120	863	2260	5750		ng/kg	Subcontracted
PCB-114*	30.1	35.8	140	111	787	47	15.1	10.6	45	110		ng/kg	Subcontracted
PCB-105*	2000	1390	5170	3610	21500	1630	536	405	1350	3420		ng/kg	Subcontracted
PCB-126*	17	23	46.2	20.8	120	15.4	8.59	3.29	11.4	35.2		ng/kg	Subcontracted
PCB-167*	388	339	195	136	552	105	89.7	73	101	244		ng/kg	Subcontracted
PCB-156*	803	595	496	329	1490	233	210	161	239	590		ng/kg	Subcontracted
PCB-157*	255	233	137	101	398	80.4	60.8	51	72.7	183		ng/kg	Subcontracted
PCB-169*	<0.665	0.701	2.88	<0.298	1.02	<0.352	1.3	0.8	0.306	0.518		ng/kg	Subcontracted
PCB-189*	72.5	71.8	26.3	20.7	51.5	18.9	20.9	19.1	20.2	43.1		ng/kg	Subcontracted
Isocyanic Acid-d	84	74	85	94	106	89	113	85	92	100	<0	%	TM192/PM0
Methyl Isocyanate-d	108	98	103	118	155	124	144	125	117	140	<0	%	TM192/PM0
Ethyl Isocyanate-d	105	92	98	109	158	118	152	122	115	138	<0	%	TM192/PM0
Propyl Isocyanate-d	109	90	101	111	143	118	136	115	115	125	<0	%	TM192/PM0
Phenyl Isocyanate-d	83	57	76	89	139	88	126	84	89	112	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	83	65	87	86	122	82	117	81	86	106	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	131	76	134	226++	213	114	179	96	226++	145	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	87	64	89	84	129	81	119	77	88	97	<0	%	TM192/PM0
Isophorone Diisocyanate-d	88	85	95	82	119	80	114	79	88	99	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	101	75	98	91	146	97	126	87	104	91	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.64	7.84	7.44	7.76	7.42	7.74	7.38	7.60	7.53	7.46	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	606-613	622-629	638-645	654-661	670-677	686-693	702-709	718-725	734-741	750-757	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	roots, stones	roots, stones	roots, stones	roots, stones	roots, stones	roots, stones	roots, stones, vegetation	roots, stones, vegetation	roots, stones	roots, stones		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15	<0.15	<0.15	<0.50	<0.15	<0.15	<0.15	<0.15	<0.15	<0.20		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Aluminium	10730	-	6985	10480	19810	17950	15790	-	-	15840	<50	mg/kg	TM30/PM15
Arsenic #M	23.1	-	13.9	12.7	15.4	11.4	26.2	-	-	11.1	<0.5	mg/kg	TM30/PM15
Barium #M	96	-	113	165	289	200	289	-	-	187	<1	mg/kg	TM30/PM15
Beryllium	1.0	-	0.8	0.9	1.5	1.2	1.5	-	-	1.1	<0.5	mg/kg	TM30/PM15
Cadmium #M	0.7	-	0.6	4.7	1.4	2.0	15.8	-	-	3.1	<0.1	mg/kg	TM30/PM15
Chromium #M	121.6	-	171.2	192.3	95.8	105.6	176.8	-	-	150.7	<0.5	mg/kg	TM30/PM15
Copper #M	28	-	35	41	72	56	199	-	-	77	<1	mg/kg	TM30/PM15
Lead #M	102	-	67	262	439	149	578	-	-	175	<5	mg/kg	TM30/PM15
Mercury #M	0.1	-	<0.1	0.2	0.6	0.4	0.8	-	-	0.5	<0.1	mg/kg	TM30/PM15
Nickel #M	27.9	-	20.7	19.5	32.2	36.4	46.5	-	-	26.9	<0.7	mg/kg	TM30/PM15
Selenium #M	2	-	1	1	2	1	2	-	-	1	<1	mg/kg	TM30/PM15
Vanadium	49	-	46	42	66	53	62	-	-	50	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	1.3	-	3.4	6.6	2.1	2.0	4.3	-	-	3.0	<0.1	mg/kg	TM74/PM32
Zinc #M	152	-	141	169	358	217	545	-	-	243	<5	mg/kg	TM30/PM15
Aluminium	-	15028	-	-	-	-	-	15350	14493	-	<50	mg/kg	TM30/PM62
Arsenic	-	16.5	-	-	-	-	-	35.5	9.5	-	<0.5	mg/kg	TM30/PM62
Barium	-	173	-	-	-	-	-	376	178	-	<1	mg/kg	TM30/PM62
Beryllium	-	1.8	-	-	-	-	-	1.9	1.1	-	<0.5	mg/kg	TM30/PM62
Cadmium	-	0.7	-	-	-	-	-	42.7_{AB}	1.3	-	<0.1	mg/kg	TM30/PM62
Chromium	-	33.1	-	-	-	-	-	212.1	47.2	-	<0.5	mg/kg	TM30/PM62
Copper	-	48	-	-	-	-	-	400_{AB}	53	-	<1	mg/kg	TM30/PM62
Lead	-	128	-	-	-	-	-	441	132	-	<5	mg/kg	TM30/PM62
Mercury	-	0.1	-	-	-	-	-	1.6	0.3	-	<0.1	mg/kg	TM30/PM62
Nickel	-	23.4	-	-	-	-	-	82.1	27.1	-	<0.7	mg/kg	TM30/PM62
Selenium	-	2	-	-	-	-	-	2	<1	-	<1	mg/kg	TM30/PM62
Vanadium	-	57	-	-	-	-	-	75	43	-	<1	mg/kg	TM30/PM62
Water Soluble Boron	-	6.9	-	-	-	-	-	3.1	2.2	-	<0.1	mg/kg	TM74/PM61
Zinc	-	296	-	-	-	-	-	962	191	-	<5	mg/kg	TM30/PM62
Aluminium	-	6998	-	-	-	-	-	14510	11920	-	<50	mg/kg	TM30/PM42
Arsenic	-	14.6	-	-	-	-	-	36.6	9.1	-	<0.5	mg/kg	TM30/PM42
Barium	-	102	-	-	-	-	-	339	133	-	<1	mg/kg	TM30/PM42
Beryllium	-	0.7	-	-	-	-	-	2.0	1.0	-	<0.5	mg/kg	TM30/PM42
Cadmium	-	0.6	-	-	-	-	-	46.8_{AB}	1.4	-	<0.1	mg/kg	TM30/PM42
Chromium	-	22.2	-	-	-	-	-	208.7	42.1	-	<0.5	mg/kg	TM30/PM42
Copper	-	41	-	-	-	-	-	392_{AB}	43	-	<1	mg/kg	TM30/PM42
Lead	-	128	-	-	-	-	-	448	116	-	<5	mg/kg	TM30/PM42
Mercury	-	<0.1	-	-	-	-	-	0.9	0.3	-	<0.1	mg/kg	TM30/PM42
Nickel	-	17.5	-	-	-	-	-	80.4	23.6	-	<0.7	mg/kg	TM30/PM42
Selenium	-	1	-	-	-	-	-	3	<1	-	<1	mg/kg	TM30/PM42
Vanadium	-	36	-	-	-	-	-	73	36	-	<1	mg/kg	TM30/PM42
Water Soluble Boron	-	4.4	-	-	-	-	-	3.2	1.7	-	<0.1	mg/kg	TM74/PM42
Zinc	-	189	-	-	-	-	-	951	166	-	<5	mg/kg	TM30/PM42

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
PAH MS													
Naphthalene #M	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	0.15	0.25	0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.10	0.09	0.07	0.25	0.08	0.05	0.41	0.70	0.30	0.15	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	0.23	0.15	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	0.09	0.24	0.15	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.26	0.30	0.54	1.43	0.47	0.17	1.63	3.94	2.59	0.56	<0.03	mg/kg	TM4/PM8
Anthracene #	0.10	0.09	0.18	0.57	0.14	0.06	0.69	1.43	0.96	0.24	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	1.35	1.10	1.14	3.93	1.02	0.43	5.18	11.38	5.05	1.92	<0.03	mg/kg	TM4/PM8
Pyrene #	1.19	0.99	0.97	3.17	0.90	0.39	4.32	9.64	4.16	1.66	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.74	0.71	0.59	2.52	0.50	0.28	2.36	6.06	2.37	1.15	<0.06	mg/kg	TM4/PM8
Chrysene #M	0.74	0.68	0.46	2.49	0.53	0.27	3.01	6.38	2.15	1.07	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	1.51	1.52	1.19	3.75	1.02	0.56	6.21	12.96	4.20	2.27	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.78	0.78	0.65	1.96	0.55	0.30	3.27	6.93	2.29	1.24	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.52	0.56	0.43	1.04	0.37	0.21	2.49	5.28	1.50	0.84	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.14	0.10	0.12	0.41	0.10	0.06	0.66	1.44	0.50	0.29	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.54	0.58	0.45	0.92	0.38	0.22	2.68	5.86	1.49	0.81	<0.04	mg/kg	TM4/PM8
Coronene	0.12	0.13	0.09	0.19	0.09	0.07	0.64	1.28	0.30	0.20	<0.04	mg/kg	TM4/PM8
PAH 16 Total	8.0	7.5	6.8	22.6	6.1	3.0	33.2	72.7	27.9	12.2	<0.6	mg/kg	TM4/PM8
PAH 17 Total	8.09	7.63	6.88	22.78	6.15	3.07	33.88	74.00	28.20	12.40	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.09	1.09	0.86	2.70	0.73	0.40	4.47	9.33	3.02	1.63	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.42	0.43	0.33	1.05	0.29	0.16	1.74	3.63	1.18	0.64	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	96	94	93	96	94	93	91	93	97	<0	%	TM4/PM8
VOC TICs	ND	ND	ND	See Attached	ND	ND	ND	ND	ND	ND		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	ND	ND	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	43	9	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	100	29	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	86	25	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	115	31	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	30	9	<5	<5	<5	<5	8	12	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	25	8	<5	<5	<5	<5	6	6	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	8	<5	<5	<5	<5	<5	10	23	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	407	111	<35	<35	<35	<35	<35	41	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	7.3	11.4	15.2	33.3	16.3	18.1	16.2	13.2	10.3	16.2	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	121.6	-	171.2	192.3	95.8	105.6	176.8	-	-	150.7	<0.5	mg/kg	NONE/NONE
Chromium III	-	33.1	-	-	-	-	-	212.1	47.2	-	<0.5	mg/kg	NONE/NONE
Chromium III	-	22.2	-	-	-	-	-	208.7	42.1	-	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	10.5_{AA}	<0.5	<0.5	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Total Organic Carbon #	2.31	-	3.66	8.20	5.09	4.48	4.85	-	-	3.16	<0.02	%	TM21/PM24
Total Organic Carbon	-	5.86	-	-	-	-	-	5.12	3.43	-	<0.02	%	TM21/PM89
Thiocyanate	<0.6	1.6	<0.6	1.9	0.7	0.8	0.9	<0.6	1.2	1.0	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	5.07	5.88	<0.368	1.47	3.88	3.81	15.7	27.4	<0.492	4.63		ng/kg	Subcontracted
12378-PCDF*	3.89	5.49	<0.339	1.34	1.57	1.69	6.46	19.4	1.14	3.77		ng/kg	Subcontracted
23478-PCDF*	3.56	5.7	<0.278	2.23	4.72	0.811	14	33.5	2.25	4.45		ng/kg	Subcontracted
123478-HxCDF*	7.19	8.38	<0.279	2.67	2.93	2.25	13	32.1	<0.448	5.64		ng/kg	Subcontracted
123678-HxCDF*	3.89	3.95	<0.268	2.08	1.77	2.22	<0.595	20.8	1.71	4.7		ng/kg	Subcontracted
234678-HxCDF*	4.09	1.69	1.16	2.32	<0.387	1.78	<0.560	25	2.61	5.5		ng/kg	Subcontracted
123789-HxCDF*	0.918	0.672	<0.285	<0.259	<0.403	<0.260	<603	2.01	<0.455	0.678		ng/kg	Subcontracted
1234678-HpCDF*	35.9	36.8	16.3	17.5	28.2	25	155	346	50.5	198		ng/kg	Subcontracted
1234789-HpCDF*	3.59	2.74	0.68	0.887	1.77	1.43	6.2	14.2	1.77	3.05		ng/kg	Subcontracted
OCDF*	58	58.1	33.5	17.2	32.2	31.9	222	451	84	132		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.282	<0.310	<0.263	<0.288	<0.432	<0.258	<0.618	2.3	<0.469	<0.273		ng/kg	Subcontracted
12378-PCDD*	0.63	<0.581	<0.511	0.9	<0.497	0.475	3.55	9.28	<0.591	0.526		ng/kg	Subcontracted
123478-HxCDD*	0.537	<0.712	<0.447	0.561	1.05	0.901	3.91	9.25	<0.706	0.853		ng/kg	Subcontracted
123678-HxCDD*	4.99	3.95	<0.458	0.992	3.05	3.35	12.2	29.7	2.5	5.28		ng/kg	Subcontracted
123789-HxCDD*	2.57	1.25	<0.459	0.833	1.67	1.55	7.74	14.3	3.32	3.06		ng/kg	Subcontracted
1234678-HpCDD*	116	118	55.2	30.9	54.4	66.7	224	478	166	104		ng/kg	Subcontracted
OCDD*	1110	1060	511	207	359	434	1820	4310	1370	736		ng/kg	Subcontracted
TEQ(1) (NATO)*	8.22	9.07	2.31	3.75	5.87	4	21.1	53.9	6.81	9.9		ng/kg	Subcontracted
TEQ(2) (NATO)*	7.94	8.4	1.38	3.44	5.11	3.71	20.3	53.9	5.83	9.63		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	3.06	2.84	1.29	1.08	2.26	1.89	11.14	19.67	3.65	8.77		ng/kg	Subcontracted
12378-PBDF*	1.85	2.13	0.88	<0.830	1.6	1.9	7.91	14.53	3.1	6.19		ng/kg	Subcontracted
23478-PBDF*	1.68	1.77	<0.820	<0.840	0.95	1.14	4.23	8.19	1.49	3.8		ng/kg	Subcontracted
123478-HxBDF*	2.22	1.48	<0.840	<0.840	<0.850	0.88	2.55	5.71	1.28	2.71		ng/kg	Subcontracted
123678-HxBDF*	1.19	1.87	0.97	0.85	<0.830	<0.830	2.71	4.4	1.05	2.29		ng/kg	Subcontracted
234678-HxBDF*	<0.840	0.86	0.83	<0.820	<0.850	<0.850	1.12	2.57	<0.850	1.17		ng/kg	Subcontracted
123789-HxBDF*	<0.840	<0.830	<0.830	<0.840	<0.840	<0.850	<0.850	1.15	<0.830	0.88		ng/kg	Subcontracted
1234678-HpBDF*	<0.830	<0.830	<0.840	<0.840	<0.820	<0.820	<0.820	<0.840	<0.820	<0.820		ng/kg	Subcontracted
1234789-HpBDF*	<0.840	<0.810	<0.810	<0.840	<0.820	<0.830	1.33	3.09	<0.830	<0.810		ng/kg	Subcontracted
OBDF*	<0.830	<0.820	<0.840	<0.840	<0.850	<0.840	<0.850	1.22	<0.850	<0.850		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.830	<0.820	<0.840	<0.850	<0.830	<0.830	<0.850	<0.820	<0.840	<0.820		ng/kg	Subcontracted
12378-PBDD*	<0.820	<0.820	<0.820	<0.820	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830		ng/kg	Subcontracted
123478-HxBDD*	<0.830	<0.840	<0.850	<0.840	<0.840	<0.840	<0.820	<0.820	<0.840	<0.830		ng/kg	Subcontracted
123678-HxBDD*	<0.850	<0.850	<0.850	<0.850	<0.820	<0.820	<0.820	<0.840	<0.840	<0.840		ng/kg	Subcontracted
123789-HxBDD*	<0.830	<0.840	<0.860	<0.850	<0.840	<0.810	<0.840	<0.840	<0.820	<0.810		ng/kg	Subcontracted
1234678-HpBDD*	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	0.97	1.78	<0.830	0.97		ng/kg	Subcontracted
OBDD*	<0.840	<0.810	<0.840	<0.850	<0.820	<0.850	<0.830	<0.850	<0.820	<0.860		ng/kg	Subcontracted
PCB-81*	25.3	24.2	1.65	1.09	1.35	1.82	6.48	10.2	0.833	7.84		ng/kg	Subcontracted
PCB-77*	595	579	48.4	31.4	71.3	61.9	162	256	45	259		ng/kg	Subcontracted
PCB-123*	6000	1650	103	13	35.3	32.4	78.5	138	21.7	151		ng/kg	Subcontracted
PCB-118*	154000	52400	5860	494	1070	1140	2330	2790	544	4830		ng/kg	Subcontracted
PCB-114*	4530	1210	96.1	5.02	8.65	9.47	23.4	68.4	3.81	40		ng/kg	Subcontracted
PCB-105*	103000	34900	2380	231	569	537	1170	1330	351	2330		ng/kg	Subcontracted
PCB-126*	31.3	27.6	2.05	6.88	16.6	15.4	31.7	24.7	10.1	157		ng/kg	Subcontracted
PCB-167*	2070	757	291	36.3	108	115	379	605	68.9	632		ng/kg	Subcontracted
PCB-156*	6270	2270	808	88.7	262	285	635	593	156	1170		ng/kg	Subcontracted
PCB-157*	1620	589	170	20.8	63.7	69.5	305	508	38.8	341		ng/kg	Subcontracted
PCB-169*	1.74	0.736	0.365	0.528	<0.218	0.996	<0.469	6.75	0.301	13.2		ng/kg	Subcontracted
PCB-189*	173	71.8	46.3	7.69	25	23.9	129	296	22.3	131		ng/kg	Subcontracted
Isocyanic Acid-d	91	108	105	93	89	95	93	83	114	121	<0	%	TM192/PM0
Methyl Isocyanate-d	119	138	128	107	125	123	130	94	137	130	<0	%	TM192/PM0
Ethyl Isocyanate-d	115	146	127	103	123	119	130	104	161	158	<0	%	TM192/PM0
Propyl Isocyanate-d	120	128	125	111	119	120	110	79	134	136	<0	%	TM192/PM0
Phenyl Isocyanate-d	95	130	127	92	92	103	81	48	125	132	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	90	118	120	91	83	90	97	81	125	131	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	226++	182	233	226++	226++	226++	114	81	212	243	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	86	114	119	88	85	89	89	53	113	115	<0	%	TM192/PM0
Isophorone Diisocyanate-d	89	117	110	92	76	83	108	101	124	130	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	99	126	134	102	98	103	79	61	153	165	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.08	7.49	8.09	7.51	7.45	7.29	7.84	8.05	6.99	7.21	<0.01	pH units	TM73/PM11

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Dark Brown	Dark Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	roots, stones, vegetation	roots, stones	stones, sand	stones, sand, roots, vegetation	roots, stones, vegetation	roots, stones, vegetation	roots, stones	stones, roots	stones, roots	stones, roots, vegetation		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.10	<0.20	<0.20	<0.50	<0.10	<0.15	<0.15	<0.50	<0.50	<0.20		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	0.14	0.21	0.15	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005	1014			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	SQC016-10G DIOXIN AND FURANS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V					
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	<>					
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Soil					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019					
Aluminium	13900	10660	11540	-	12640	13940	12070	-			<50	mg/kg	TM30/PM15
Arsenic #M	17.8	35.2	29.6	-	27.0	12.8	9.2	-			<0.5	mg/kg	TM30/PM15
Barium #M	321	343	357	-	395	164	88	-			<1	mg/kg	TM30/PM15
Beryllium	1.8	2.1	2.6	-	2.3	1.0	0.8	-			<0.5	mg/kg	TM30/PM15
Cadmium #M	0.7	0.7	0.9	-	0.5	1.4	0.6	-			<0.1	mg/kg	TM30/PM15
Chromium #M	87.6	115.2	114.5	-	48.3	118.5	91.6	-			<0.5	mg/kg	TM30/PM15
Copper #M	113	131	139	-	162	63	30	-			<1	mg/kg	TM30/PM15
Lead #M	500	473	442	-	587	169	100	-			<5	mg/kg	TM30/PM15
Mercury #M	0.5	0.5	0.5	-	0.8	0.3	0.2	-			<0.1	mg/kg	TM30/PM15
Nickel #M	30.0	35.9	39.6	-	33.0	28.8	17.0	-			<0.7	mg/kg	TM30/PM15
Selenium #M	1	1	1	-	1	<1	<1	-			<1	mg/kg	TM30/PM15
Vanadium	56	69	77	-	60	51	37	-			<1	mg/kg	TM30/PM15
Water Soluble Boron #M	2.9	2.9	3.0	-	2.5	2.0	0.8	-			<0.1	mg/kg	TM74/PM32
Zinc #M	286	327	339	-	354	212	104	-			<5	mg/kg	TM30/PM15
Aluminium	-	-	-	12670	-	-	-	-			<50	mg/kg	TM30/PM62
Arsenic	-	-	-	32.5	-	-	-	-			<0.5	mg/kg	TM30/PM62
Barium	-	-	-	377	-	-	-	-			<1	mg/kg	TM30/PM62
Beryllium	-	-	-	2.3	-	-	-	-			<0.5	mg/kg	TM30/PM62
Cadmium	-	-	-	1.1	-	-	-	-			<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	36.7	-	-	-	-			<0.5	mg/kg	TM30/PM62
Copper	-	-	-	154	-	-	-	-			<1	mg/kg	TM30/PM62
Lead	-	-	-	516	-	-	-	-			<5	mg/kg	TM30/PM62
Mercury	-	-	-	0.7	-	-	-	-			<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	35.0	-	-	-	-			<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	1	-	-	-	-			<1	mg/kg	TM30/PM62
Vanadium	-	-	-	64	-	-	-	-			<1	mg/kg	TM30/PM62
Water Soluble Boron	-	-	-	4.4	-	-	-	-			<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	387	-	-	-	-			<5	mg/kg	TM30/PM62
Aluminium	-	-	-	8167	-	-	-	-	-	-	<50	mg/kg	TM30/PM42
Arsenic	-	-	-	25.3	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM42
Barium	-	-	-	253	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Beryllium	-	-	-	1.8	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM42
Cadmium	-	-	-	0.5	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM42
Chromium	-	-	-	28.0	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM42
Copper	-	-	-	105	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Lead	-	-	-	359	-	-	-	-	-	-	<5	mg/kg	TM30/PM42
Mercury	-	-	-	0.7	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM42
Nickel	-	-	-	29.0	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM42
Selenium	-	-	-	1	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Vanadium	-	-	-	56	-	-	-	-	-	-	<1	mg/kg	TM30/PM42
Water Soluble Boron	-	-	-	4.2	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM42
Zinc	-	-	-	275	-	-	-	-	-	-	<5	mg/kg	TM30/PM42

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005	1014			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	SQC016-10G DIOXIN AND FURANS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V					
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	<>					
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Soil					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019					
PAH MS													
Naphthalene #M	0.05	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-			<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.27	0.11	0.11	0.12	0.08	0.12	0.04	-			<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-			<0.05	mg/kg	TM4/PM8
Fluorene #M	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	-			<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.84	0.57	0.35	0.45	0.61	0.43	0.17	-			<0.03	mg/kg	TM4/PM8
Anthracene #	0.31	0.23	0.15	0.19	0.19	0.19	0.08	-			<0.04	mg/kg	TM4/PM8
Fluoranthene #M	2.73	1.41	1.15	1.38	1.58	1.23	0.52	-			<0.03	mg/kg	TM4/PM8
Pyrene #	2.38	1.23	1.04	1.26	1.38	1.07	0.45	-			<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.46	0.81	0.68	0.78	0.75	0.69	0.29	-			<0.06	mg/kg	TM4/PM8
Chrysene #M	1.46	0.86	0.75	0.88	0.97	0.72	0.32	-			<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	3.13	1.81	1.59	1.85	1.84	1.41	0.61	-			<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.67	0.93	0.82	0.99	0.92	0.75	0.34	-			<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	1.09	0.63	0.62	0.73	0.72	0.53	0.23	-			<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.33	0.24	0.19	0.21	0.19	0.18	0.08	-			<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.12	0.69	0.67	0.75	0.78	0.53	0.23	-			<0.04	mg/kg	TM4/PM8
Coronene	0.27	0.15	0.13	0.18	0.15	0.13	0.06	-			<0.04	mg/kg	TM4/PM8
PAH 16 Total	16.9	9.6	8.1	9.6	10.0	7.9	3.4	-			<0.6	mg/kg	TM4/PM8
PAH 17 Total	17.15	9.71	8.25	9.77	10.16	7.98	3.42	-			<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	2.25	1.30	1.14	1.33	1.32	1.02	0.44	-			<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.88	0.51	0.45	0.52	0.52	0.39	0.17	-			<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	98	97	97	97	96	97	-			<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND	ND	-				None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	-				None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	-			<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5	<5	-			<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35	<35	-			<35	ug/kg	TM17/PM8
Natural Moisture Content	6.8	9.1	9.4	9.7	10.0	10.2	10.0	-			<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-			<0.3	mg/kg	TM38/PM20
Chromium III	87.6	115.2	114.5	-	48.3	118.5	91.6	-			<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	36.7	-	-	-	-			<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	28.0	-	-	-	-			<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-			<0.5	mg/kg	TM89/PM45
Total Cyanide #M	<0.5	0.8	0.8	0.9	0.8	<0.5	<0.5	-			<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005	1014			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	SQC016-10G DIOXIN AND FURANS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V					
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	<>					
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Soil					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019					
Total Organic Carbon #	6.72	5.93	5.87	-	5.16	3.79	2.99	-			<0.02	%	TM21/PM24
Total Organic Carbon	-	-	-	5.62	-	-	-	-			<0.02	%	TM21/PM89
Thiocyanate	1.1	1.7	1.9	1.6	2.0	0.7	1.7	-			<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	4.44	7.24	5.17	3.78	<0.620	<0.587	<0.339	717				ng/kg	Subcontracted
12378-PCDF*	1.25	5.44	4.28	4.04	1.29	2.65	1.37	857				ng/kg	Subcontracted
23478-PCDF*	4.59	8.17	7.62	7.28	4.7	3.91	2.93	634				ng/kg	Subcontracted
123478-HxCDF*	3.75	7.34	5.9	6.17	4.54	5.08	2.65	667				ng/kg	Subcontracted
123678-HxCDF*	5.02	6.64	4.98	5.01	4.2	4.44	0.919	460				ng/kg	Subcontracted
234678-HxCDF*	4.61	7.86	6.32	4.68	4	4.86	2.62	777				ng/kg	Subcontracted
123789-HxCDF*	<0.797	0.546	<0.520	0.354	<0.447	0.483	0.495	361				ng/kg	Subcontracted
1234678-HpCDF*	147	50.8	46.8	36.1	34	47.9	21.2	199				ng/kg	Subcontracted
1234789-HpCDF*	1.01	1.91	1.78	1.15	0.872	2.28	1.17	559				ng/kg	Subcontracted
OCDF*	145	36.2	34.6	28.1	29.1	52.9	21.7	574				ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.494	<0.551	<0.681	<0.517	<0.534	<0.340	<0.247	653				ng/kg	Subcontracted
12378-PCDD*	<0.607	3.81	<0.571	3.09	<0.546	1.29	0.686	660				ng/kg	Subcontracted
123478-HxCDD*	<0.662	2.64	2.24	2.42	1.1	1.69	0.804	803				ng/kg	Subcontracted
123678-HxCDD*	2.7	4.74	4.35	4.83	1.86	10	3.63	992				ng/kg	Subcontracted
123789-HxCDD*	1.77	3.17	3.28	3.46	1.16	4.27	2.98	1720				ng/kg	Subcontracted
1234678-HpCDD*	89.5	83.3	95.6	83.6	79.1	266	97.7	305				ng/kg	Subcontracted
OCDD*	526	600	68.1	543	545	2090	705	1170				ng/kg	Subcontracted
TEQ(1) (NATO)*	8.58	12.8	10.4	10.8	6.73	11.5	5.5	2000				ng/kg	Subcontracted
TEQ(2) (NATO)*	7.64	12.3	9.41	10.2	5.81	11.1	5.21	2000				ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	8.12	3.19	2.96	2.3	2.19	2.93	1.34	-				ng/kg	Subcontracted
12378-PBDF*	6.02	2.18	1.9	1.57	1.35	1.46	0.89	-				ng/kg	Subcontracted
23478-PBDF*	4.49	1.39	1.13	1.44	1.05	1.39	0.93	-				ng/kg	Subcontracted
123478-HxBDF*	3.16	1.05	0.92	1.16	1.33	0.89	<0.840	-				ng/kg	Subcontracted
123678-HxBDF*	3.08	1	<0.830	<0.800	0.87	1.41	<0.830	-				ng/kg	Subcontracted
234678-HxBDF*	1.02	<0.850	<0.830	<0.830	<0.830	<0.830	<0.830	-				ng/kg	Subcontracted
123789-HxBDF*	<0.830	<0.840	<0.840	<0.850	<0.840	<0.840	<0.840	-				ng/kg	Subcontracted
1234678-HpBDF*	<0.820	<0.820	<0.840	<0.840	<0.840	<0.850	<0.850	-				ng/kg	Subcontracted
1234789-HpBDF*	<0.840	<0.820	<0.820	<0.840	<0.820	<0.820	<0.850	-				ng/kg	Subcontracted
OBDF*	<0.850	<0.850	<0.820	<0.820	<0.840	<0.850	<0.850	-				ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005	1014			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	SQC016-10G DIOXIN AND FURANS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V					
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	<>					
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Soil					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019					
Dioxins (Brominated)													
2378-TBDD*	<0.850	<0.830	<0.840	<0.830	<0.830	<0.840	<0.820	-				ng/kg	Subcontracted
12378-PBDD*	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	<0.830	-				ng/kg	Subcontracted
123478-HxBDD*	<0.850	<0.840	<0.820	<0.840	<0.850	<0.840	<0.820	-				ng/kg	Subcontracted
123678-HxBDD*	<0.840	<0.840	<0.840	<0.840	<0.840	<0.840	<0.840	-				ng/kg	Subcontracted
123789-HxBDD*	<0.860	<0.830	<0.840	<0.800	<0.820	<0.810	<0.840	-				ng/kg	Subcontracted
1234678-HpBDD*	0.86	<0.850	<0.850	<0.810	<0.820	<0.820	<0.820	-				ng/kg	Subcontracted
OBDD*	<0.840	<0.820	<0.810	<0.840	<0.840	<0.850	<0.830	-				ng/kg	Subcontracted
PCB-81*	1.81	2.06	2.35	2.17	1.26	2.19	0.516	-				ng/kg	Subcontracted
PCB-77*	37.5	37.9	30.3	27.1	23.4	62.6	24.1	-				ng/kg	Subcontracted
PCB-123*	15.6	12.7	11.7	11.7	9.97	27.4	14.9	-				ng/kg	Subcontracted
PCB-118*	567	363	362	325	264	619	313	-				ng/kg	Subcontracted
PCB-114*	5.14	5.73	3.5	2.96	2.4	4.57	1.91	-				ng/kg	Subcontracted
PCB-105*	280	174	180	162	128	315	164	-				ng/kg	Subcontracted
PCB-126*	8.67	8.23	8.49	6.82	4.33	22.1	9.15	-				ng/kg	Subcontracted
PCB-167*	49.8	39.5	41.8	35.8	29.3	94.1	35.2	-				ng/kg	Subcontracted
PCB-156*	112	87.8	94	81.8	67.3	213	84.4	-				ng/kg	Subcontracted
PCB-157*	30.8	23.5	23.9	20.1	17.4	63.3	22.8	-				ng/kg	Subcontracted
PCB-169*	1.59	2.58	1.56	2.09	0.585	1.77	1.15	-				ng/kg	Subcontracted
PCB-189*	13.2	12.7	12.8	13.1	10.5	25.6	10.7	-				ng/kg	Subcontracted
Isocyanic Acid-d	95	86	85	91	100	96	128	-			<0	%	TM192/PM0
Methyl Isocyanate-d	136	119	114	135	138	122	143	-			<0	%	TM192/PM0
Ethyl Isocyanate-d	131	113	110	132	147	117	170	-			<0	%	TM192/PM0
Propyl Isocyanate-d	124	110	103	115	124	115	148	-			<0	%	TM192/PM0
Phenyl Isocyanate-d	111	80	71	101	107	93	153	-			<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	107	91	82	106	116	93	142	-			<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	132	226++	105	140	162	226++	288++	-			<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	100	89	77	99	108	90	128	-			<0	%	TM192/PM0
Isophorone Diisocyanate-d	97	94	87	102	115	92	140	-			<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	128	100	85	92	106	109	182	-			<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	-			<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	-			<250	ug/kg	TM192/PM0
pH #M	7.76	7.90	7.96	7.86	7.97	7.23	6.65	-			<0.01	pH units	TM73/PM11

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005	1014			LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	SQC016-10G DIOXIN AND FURANS					
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V					
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	<>					
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Soil					
Batch Number	3	3	3	3	3	3	3	3					
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019					
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	-				None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	-				None	PM13/PM0
Other Items	stones, roots	stones, roots	stones, roots, vegetation	stones, roots, brick fragments	stones, roots	stones, roots, vegetation	stones, roots, vegetation	-				None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-				mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-				mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	606-613	622-629	638-645	654-661	670-677	686-693	702-709	718-725	734-741	750-757	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	31	37	54	239	52	56	58	69	57	48	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	370	350	402	282	428	395	2080	322	313	945	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	532	688	<100	<100	<100	<100	<100	<100	<100	195	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	112	51	68	3554	73	182	166	133	109	93	<10	ug/kg	TM16/PM8
Dibenzofuran #M	53	26	33	1027	34	78	66	63	41	49	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	124	120	120	127	122	122	125	120	121	117	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	118	115	115	128	127	128	126	118	119	112	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	33	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	221	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	18	28	<10	<10	24	<10	86	194	75	24	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	473	844	196	<100	762	327	1013	619	418	576	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	822	2226	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	801	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	49	97	288	81	42	22	202	604	280	50	<10	ug/kg	TM16/PM8
Dibenzofuran #M	23	32	37	21	<10	<10	96	230	194	19	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	121	115	126	124	115	114	123	126	118	122	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	116	112	119	123	116	108	118	124	116	115	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005				LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A						
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019						
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam						
Batch Number	3	3	3	3	3	3	3						
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019						
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	116	<10	<10	<10				<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	46	32	35	29	40	29	26				<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	389	386	363	238	399	457	251				<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100				<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100	<100	711	<100				<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100				<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100				<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100				<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Carbazole	49	37	49	45	92	52	28				<10	ug/kg	TM16/PM8
Dibenzofuran #M	22	15	19	18	36	21	12				<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10				<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	117	124	120	109	123	122	123				<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	115	115	119	110	114	117	116				<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	606-613	622-629	638-645	654-661	670-677	686-693	702-709	718-725	734-741	750-757	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A			
Depth	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 14:15	06/06/2019 14:25	06/06/2019 09:40	06/06/2019 09:50	06/06/2019 10:45	06/06/2019 11:05	06/06/2019 11:25	06/06/2019 11:50	06/06/2019 12:25	06/06/2019 12:55			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	11	<3	4	<3	4	4	3	3	4	3	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	6	<3	4	5	5	3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	83	86	89	91	86	90	91	87	88	87	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	69	69	69	72	67	69	69	68	68	69	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	766-773	782-789	798-805	806-813	830-837	846-853	862-869	878-885	894-901	910-917	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 13:18	06/06/2019 13:45	05/06/2019 16:20	05/06/2019 16:55	05/06/2019 18:20	05/06/2019 17:30	05/06/2019 11:35	05/06/2019 11:45	06/06/2019	06/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	3	3	3	3	3	3	3	3	3	3			
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	5	9	6	9	5	7	12	16	8	6	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6	8	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	41	<30	<30	<30	<30	<30	72	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	96	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	<3	<3	<3	6	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	90	81	82	80	85	84	85	86	85	94	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	68	60	57	60	64	66	63	64	64	73	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	926-933	942-949	958-965	966-973	974-981	982-989	998-1005				LOD/LOR	Units	Method No.
Sample ID	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A						
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05						
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T						
Sample Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019						
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam						
Batch Number	3	3	3	3	3	3	3						
Date of Receipt	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019	07/06/2019						
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2				<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
Chloromethane #	4	7	8	7	9	12	10				<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2				<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1				<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	38	<30	<30	46	<30	<30	<30				<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	4	<3	<3	<3				<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2				<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3				<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5				<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6				<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4				<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27				<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7				<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	90	82	85	81	82	88	96				<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	66	58	62	56	57	65	70				<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Job number: 19/9004
Sample number: 806
Sample identity: GTCS 1-26A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: VOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
80-62-6	Methyl methacrylate	4.630	93	782

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 611
Sample identity: GTCS 1-50A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.832	95	273
33543-31-6	Fluoranthene, 2-methyl-	12.156	94	509
483-65-8	Retene	12.194	94	312
2381-21-7	Pyrene, 1-methyl-	12.393	83	201
192-97-2	Benzo[e]pyrene	14.935	95	1393

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 627
Sample identity: GTCS 1-50A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.831	90	135
192-97-2	Benzo[e]pyrene	14.933	93	1113

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 643
Sample identity: GTCS 1-51A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
33543-31-6	Fluoranthene, 2-methyl-	12.154	89	4271
192-97-2	Benzo[e]pyrene	14.933	95	23694

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 659
Sample identity: GTCS 1-51A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
95-13-6	Indene	5.439	83	1445
581-40-8	Naphthalene, 2,3-dimethyl-	8.349	97	1506
575-43-9	Naphthalene, 1,6-dimethyl-	8.373	96	1297
829-26-5	Naphthalene, 2,3,6-trimethyl-	9.007	98	1231
2245-38-7	Naphthalene, 1,6,7-trimethyl-	9.193	97	2037
612-75-9	3,3'-Dimethylbiphenyl	9.350	84	857
59247-36-8	Fluorene, 2,4a-dihydro-	9.392	90	2428
3218-36-8	[1,1'-Biphenyl]-4-carboxaldehyde	9.481	90	2731
7320-53-8	Dibenzofuran, 4-methyl-	9.563	94	2768
1730-37-6	9H-Fluorene, 1-methyl-	9.889	96	1940
1430-97-3	9H-Fluorene, 2-methyl-	9.916	95	1333
2523-37-7	9H-Fluorene, 9-methyl-	9.971	87	2473
486-25-9	9H-Fluoren-9-one	10.012	93	3761
7182-08-3	Morpholine, 4-(1-cyclohepten-1-yl)-	10.066	91	6083
233-02-3	Naphtho[2,1-b]thiophene	10.129	96	4450
832-69-9	Phenanthrene, 1-methyl-	10.802	97	15948
613-12-7	Anthracene, 2-methyl-	10.878	97	7713
203-64-5	4H-Cyclopenta[def]phenanthrene	10.906	93	18172
2531-84-2	Phenanthrene, 2-methyl-	10.935	98	7956
230-17-1	Benzo[c]cinnoline	11.058	95	5569
612-94-2	Naphthalene, 2-phenyl-	11.105	94	7408
781-43-1	9,10-Dimethylanthracene	11.417	92	7707
205-39-0	Benzo(b)naphtho(1,2-d)furan	11.843	95	4079
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.909	95	6072
2381-21-7	Pyrene, 1-methyl-	12.155	93	19565
64401-21-4	Pyrene, 1,3-dimethyl-	12.826	97	1499
80252-14-8	6H-Benz[de]anthracen-6-one	12.883	96	1490
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.911	97	7544
479-79-8	11H-Benzo[a]fluoren-11-one	13.006	97	8528
227-86-1	Anthra(1,2-b)thiophene	13.119	98	3334

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 659
Sample identity: GTCS 1-51A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
239-01-0	11H-Benzo[a]carbazole	13.195	96	4042
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.403	96	8621
2541-69-7	Benz[a]anthracene, 7-methyl-	13.836	97	9215
192-97-2	Benzo[e]pyrene	14.934	98	24414
198-55-0	Perylene	15.070	99	12492
215-58-7	Benzo[b]triphenylene	16.437	80	9355

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 675
Sample identity: GTCS 1-52A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
5385-75-1	Dibenz(a,e)aceanthrylene	12.423	98	8583
189-64-0	3,4:8,9-Dibenzopyrene	12.906	97	8787
189-55-9	Dibenzo(a,i)pyrene	14.589	96	3176
192-97-2	Benzo[e]pyrene	14.928	93	1368

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 691
Sample identity: GTCS 1-53A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.804	95	434
832-69-9	Phenanthrene, 1-methyl-	10.833	97	521
610-48-0	Anthracene, 1-methyl-	10.937	95	576
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.617	91	804
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.911	93	469
3442-78-2	Pyrene, 2-methyl-	12.043	89	353
33543-31-6	Fluoranthene, 2-methyl-	12.156	93	1173
243-17-4	11H-Benzo[b]fluorene	12.232	95	534
2381-21-7	Pyrene, 1-methyl-	12.279	97	613
479-79-8	11H-Benzo[a]fluoren-11-one	12.743	95	539
197-61-5	Rubicene-	12.885	91	722
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.913	95	727
2541-69-7	Benz[a]anthracene, 7-methyl-	13.828	95	762
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.756	95	1946
192-97-2	Benzo[e]pyrene	14.935	96	2719

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 707
Sample identity: GTCS 1-54A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.833	95	384
832-64-4	Phenanthrene, 4-methyl-	10.880	94	233
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.618	95	511
107919-92-6	Indole, 5-methyl-2-(4-pyridyl)-	11.665	80	226
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.911	89	258
2381-21-7	Pyrene, 1-methyl-	12.157	89	656
479-79-8	11H-Benzo[a]fluoren-11-one	12.753	89	259
189-55-9	Dibenzo(a,i)pyrene	12.857	90	125
227-86-1	Anthra(1,2-b)thiophene	12.904	95	531
3351-32-4	2-Methylchrysene	13.828	94	512
192-97-2	Benzo[e]pyrene	14.936	95	1974

Job number: 19/9004
Sample number: 723
Sample identity: GTCS 1-55A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.804	95	212
2531-84-2	Phenanthrene, 2-methyl-	10.832	94	278
203-64-5	4H-Cyclopenta[def]phenanthrene	10.908	90	433
33543-31-6	Fluoranthene, 2-methyl-	12.156	96	576
2381-21-7	Pyrene, 1-methyl-	12.383	91	386
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.913	90	443
3351-28-8	Chrysene, 1-methyl-	13.827	95	410
192-97-2	Benzo[e]pyrene	14.935	96	1822

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 739
Sample identity: GTCS 1-56A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.804	95	171
2531-84-2	Phenanthrene, 2-methyl-	10.832	91	230
33543-31-6	Fluoranthene, 2-methyl-	12.156	93	585
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.913	94	296
3351-28-8	Chrysene, 1-methyl-	13.828	93	403
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.756	97	819
192-97-2	Benzo[e]pyrene	14.936	96	1542

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 755
Sample identity: GTCS 1-57A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.804	95	173
613-12-7	Anthracene, 2-methyl-	10.832	92	233
33543-31-6	Fluoranthene, 2-methyl-	12.156	96	647
243-46-9	Benzo[b]naphtho[2,3-d]thiophene	12.913	83	289
3351-32-4	2-Methylchrysene	13.827	94	362
192-97-2	Benzo[e]pyrene	14.935	95	1655

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 771
Sample identity: GTCS 1-58A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
41464-43-1	1,1'-Biphenyl, 2,3,3',4'-tetrachloro-	10.973	97	156
52663-58-8	1,1'-Biphenyl, 2,3,4',6-tetrachloro-	11.256	96	177
54230-22-7	2,3,4,6-Tetrachloro-1,1'-biphenyl	11.464	98	262
41464-49-7	1,1'-Biphenyl, 2,3,3',5'-tetrachloro-	11.493	99	449
74472-33-6	2,3,3',6-Tetrachloro-1,1'-biphenyl	11.653	97	259
68194-10-5	2,3,3,',5',6-Pentachloro-1,1'-biphenyl	12.041	96	475
192-97-2	Benzo[e]pyrene	14.933	90	500

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 787
Sample identity: GTCS 1-59A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-69-9	Phenanthrene, 1-methyl-	10.802	90	120
610-48-0	Anthracene, 1-methyl-	10.935	90	169
243-17-4	11H-Benzo[b]fluorene	12.155	91	403
192-97-2	Benzo[e]pyrene	14.933	95	1048

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 803
Sample identity: GTCS 1-25A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
5737-13-3	Cyclopenta(def)phenanthrenone	11.409	91	423
2381-21-7	Pyrene, 1-methyl-	12.383	86	561
192-97-2	Benzo[e]pyrene	14.936	93	1316

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 811
Sample identity: GTCS 1-26A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
6789-88-4	Benzoic acid, hexyl ester	10.708	86	2877
4998-48-5	2-(2H-Benzotriazol-2-yl)-5-methylphenol	11.502	98	3791
629-94-7	Heneicosane	12.987	89	599
84-61-7	Dicyclohexyl phthalate	13.403	91	60077
544-76-3	Hexadecane	14.764	93	1760
112-95-8	Eicosane	15.144	89	4727

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 867
Sample identity: GTCS 1-46A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-64-4	Phenanthrene, 4-methyl-	10.802	91	282
2531-84-2	Phenanthrene, 2-methyl-	10.831	95	392
203-64-5	4H-Cyclopenta[def]phenanthrene	10.906	81	734
84-65-1	9,10-Anthracenedione	11.058	93	372
33543-31-6	Fluoranthene, 2-methyl-	12.155	95	1117
2381-21-7	Pyrene, 1-methyl-	12.278	96	480
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.911	95	690
479-79-8	11H-Benzo[a]fluoren-11-one	13.006	91	417
3351-28-8	Chrysene, 1-methyl-	13.826	90	715
192-97-2	Benzo[e]pyrene	14.933	98	3012

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 883
Sample identity: GTCS 1-46A
Sample depth: 0.10-0.15
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
575-43-9	Naphthalene, 1,6-dimethyl-	8.349	91	251
17334-55-3	1H-Cyclopropa[a]naphthalene, 1a,2,3,5,6,7,7a,7b-octahydro-1,1,7,7a-tetramethyl-, [1aR-(1a.alpha.,7.alpha.,7a.alpha.,7b.alpha.)]-	8.578	86	744
2245-38-7	Naphthalene, 1,6,7-trimethyl-	8.979	93	240
132-65-0	Dibenzothiophene	10.129	83	499
31317-07-4	1-Methyldibenzothiophene	10.623	81	1290
2531-84-2	Phenanthrene, 2-methyl-	10.802	96	1804
832-69-9	Phenanthrene, 1-methyl-	10.831	96	1253
949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	10.878	96	944
84-65-1	9,10-Anthracenedione	11.058	95	1381
1207-12-1	Dibenzothiophene, 4,6-dimethyl-	11.171	91	663
1576-67-6	Phenanthrene, 3,6-dimethyl-	11.332	90	967
77581-11-4	2,9-Dimethyl-2,3,4,5,6,7-hexahydro-1H-2-benzazonine	11.568	91	866
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.616	92	618
84-54-8	9,10-Anthracenedione, 2-methyl-	11.644	80	1430
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.843	89	1649
2435-53-2	Tetrachloro-o-benzoquinone	12.013	93	763
33543-31-6	Fluoranthene, 2-methyl-	12.155	93	4204
2381-21-7	Pyrene, 1-methyl-	12.230	96	1649
479-79-8	11H-Benzo[a]fluoren-11-one	12.750	95	1249
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.911	91	2396
34777-33-8	Benzo(c)carbazole	13.195	93	1178
3351-28-8	Chrysene, 1-methyl-	13.826	96	2844
300389-62-2	Benz[d]isoxazol-4(5H)-one, 6,7-dihydro-3-methyl-6-phenyl-, oxime	13.866	91	2064
192-97-2	Benzo[e]pyrene	14.934	98	17873
198-55-0	Perylene	15.070	96	3653
98496-82-3	Antra-9,10-quinone, 1-(3-hydrohy-3-phenyl-1-triazenyl)-	15.529	86	1182
302800-55-1	Quinoxaline, 6-(3-nitrobenzylidenamino)-	16.396	90	1199

Job number: 19/9004
Sample number: 899
Sample identity: GTCS 1-05A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
22469-52-9	1,2,4-Metheno-1H-indene, octahydro-1,7a-dimethyl-5-(1-methylethyl)-, [1S-(1.alpha.,2.alpha.,3a.beta.,4.alpha.,5.alpha.,7a.beta.,8S*)]-	8.186	95	665
832-69-9	Phenanthrene, 1-methyl-	10.802	95	1088
2531-84-2	Phenanthrene, 2-methyl-	10.831	98	615
610-48-0	Anthracene, 1-methyl-	10.878	96	506
84-65-1	9,10-Anthracenedione	11.058	84	355
612-94-2	Naphthalene, 2-phenyl-	11.105	91	660
206-44-0	Fluoranthene	11.521	96	8862
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.615	95	871
2435-53-2	Tetrachloro-o-benzoquinone	11.842	92	503
243-42-5	Benzo[b]naphtho[2,3-d]furan	11.909	96	556
243-17-4	11H-Benzo[b]fluorene	12.154	95	1617
189-55-9	Dibenzo(a,i)pyrene	12.911	94	1341
25732-74-5	Cyclopenta(cd)pyrene, 3,4-dihydro-	13.403	86	1147
3111-37-3	3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	13.479	92	528
300389-62-2	Benz[d]isoxazol-4(5H)-one, 6,7-dihydro-3-methyl-6-phenyl-, oxime	13.836	92	1037
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.764	93	1916
192-97-2	Benzo[e]pyrene	14.933	98	6551

Job number: 19/9004
Sample number: 915
Sample identity: GTCS 1-06A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
613-12-7	Anthracene, 2-methyl-	10.832	83	122
2381-21-7	Pyrene, 1-methyl-	12.156	90	300
629-78-7	Heptadecane	13.452	92	421
192-97-2	Benzo[e]pyrene	14.936	86	962

Job number: 19/9004
Sample number: 931
Sample identity: GTCS 1-07A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2531-84-2	Phenanthrene, 2-methyl-	10.835	90	153
2381-21-7	Pyrene, 1-methyl-	12.158	86	402
98496-82-3	Antra-9,10-quinone, 1-(3-hydrohy-3-phenyl-1-triazenyl)-	14.529	83	1254
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.928	94	1105

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 947 **Matrix:** Solid
Sample identity: GTCS 1-08 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2381-21-7	Pyrene, 1-methyl-	12.158	87	343
514-62-5	Ferruginol	12.622	93	523

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 963 **Matrix:** Solid
Sample identity: GTCS 1-08 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
832-69-9	Phenanthrene, 1-methyl-	10.937	90	125
192-97-2	Benzo[e]pyrene	14.935	93	881
629-78-7	Heptadecane	15.146	87	2230

Job number: 19/9004 **Method:** SVOC
Sample number: 971 **Matrix:** Solid
Sample identity: GTCS 1-08 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
3351-28-8	Chrysene, 1-methyl-	13.827	90	234
593-45-3	Octadecane	14.356	92	879
192-97-2	Benzo[e]pyrene	14.935	83	1081
629-78-7	Heptadecane	15.145	91	1829

Job number: 19/9004 **Method:** SVOC
Sample number: 979 **Matrix:** Solid
Sample identity: GTCS 1-08 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
13798-23-7	Hexathiane	8.740	97	1332
544-76-3	Hexadecane	13.460	92	723
300389-62-2	Benz[d]isoxazol-4(5H)-one, 6,7-dihydro-3-methyl-6-phenyl-, oxime	13.836	90	424
646-31-1	Tetracosane	13.916	93	926
98496-82-3	Antra-9,10-quinone, 1-(3-hydrohy-3-phenyl-1-triazenyl)-	14.534	83	1590
629-93-6	Octadecane, 1-iodo-	14.764	90	1601
192-97-2	Benzo[e]pyrene	14.933	95	1918
629-92-5	Nonadecane	15.144	92	2363
629-94-7	Heneicosane	15.928	91	4270

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 987
Sample identity: GTCS 1-09A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
112-95-8	Eicosane	13.452	83	1437
544-76-3	Hexadecane	14.356	91	1940
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.935	91	667
629-92-5	Nonadecane	15.145	89	3681

Job number: 19/9004
Sample number: 1003
Sample identity: GTCS 1-10A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
544-76-3	Hexadecane	15.144	94	3310

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

Signed on behalf of Element Materials Technology:

Ryan Butterworth
Asbestos Team Leader

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	3	GTCS 1-50A	0.00-0.05	613	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-50A	0.10-0.15	629	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	Chrysotile
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	3	GTCS 1-51A	0.00-0.05	645	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-51A	0.10-0.15	661	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	Amosite
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	3	GTCS 1-52A	0.00-0.05	677	10/06/2019	**General Description (Bulk Analysis)**	soil-stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	Amosite
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Potentially Respirable Fibres per gram**	0
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					26/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					26/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	3	GTCS 1-53A	0.00-0.05	693	10/06/2019	**General Description (Bulk Analysis)**	soil-stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-54A	0.00-0.05	709	10/06/2019	**General Description (Bulk Analysis)**	soil-stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-55A	0.00-0.05	725	10/06/2019	**General Description (Bulk Analysis)**	soil-stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	Chrysotile
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	3	GTCS 1-56A	0.00-0.05	741	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-57A	0.00-0.05	757	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	3	GTCS 1-58A	0.00-0.05	773	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-59A	0.00-0.05	789	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	ACM Debris
					10/06/2019	**Asbestos Type**	Chrysotile
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	0.083 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	0.083 (mass %)
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	0.083 (mass %)
19/9004	3	GTCS 1-25A	0.00-0.05	805	10/06/2019	**General Description (Bulk Analysis)**	soil-stones
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-26A	0.00-0.05	813	10/06/2019	**General Description (Bulk Analysis)**	soil-stones
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-27A	0.00-0.05	837	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-28A	0.00-0.05	853	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-46A	0.00-0.05	869	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	3	GTCS 1-46A	0.00-0.05	869	10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-46A	0.10-0.15	885	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Absent
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos Fibres (2)**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos ACM (2)**	NAD
					10/06/2019	**Asbestos Type**	Chrysotile
					10/06/2019	**Asbestos Type (2)**	Amosite
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	0.002 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	0.002 (mass %)
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	0.002 (mass %)
19/9004	3	GTCS 1-05A	0.00-0.05	901	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	Amosite
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	3	GTCS 1-06A	0.00-0.05	917	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stone
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	NAD
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	NAD
					10/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-07A	0.00-0.05	933	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-08 PRIMARY SAMPLE	0.00-0.05	949	11/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	3	GTCS 1-08 LAB DUPLICATE	0.00-0.05	965	11/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-08 FIELD DUPLICATE	0.00-0.05	973	10/06/2019	**General Description (Bulk Analysis)**	Soil/Stones
					10/06/2019	**Synthetic/MMMF**	Present
					10/06/2019	**Asbestos Fibres**	Fibre Bundles
					10/06/2019	**Asbestos ACM**	NAD
					10/06/2019	**Asbestos Type**	Chrysotile
					10/06/2019	**Asbestos Level Screen**	less than 0.1%
					26/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					26/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	3	GTCS 1-08 LAB FIELD DUPLICATE	0.00-0.05	981	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-09A	0.00-0.05	989	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	3	GTCS 1-10A	0.00-0.05	1005	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 19/9004						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 19/9004

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x2 Dilution
AB	x5 Dilution

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods 325.2 (Chloride), 375.4 (Sulphate), 365.2 (o-Phosphate), 353.1 (TON), 354.1 (Nitrite), 350.1 (NH4+) comparable to BS ISO 15923-1, 7196A (Hex Cr)	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D and BS1377:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

EMT Job No: 19/9004

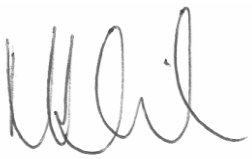
Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM119	As received solid samples are extracted with 1M NaOH by orbital shaker for Sulphide and Thiocyanate analysis.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	Yes
TM192	Isocyanates by LCMS	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						Yes
Subcontracted	See attached subcontractor report for accreditation status and provider.					AR	Yes
TM15_A	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

Certificate of Analysis

Report No.:	**19-84033-1**
Issue No.:	**1**
Date of Issue	**24/06/2019**
Customer Details:	Exova Environmental UK Ltd, Unit 3, Deeside Point, Deeside Indust. Estate Zone 3, Chester, Flintshire, CH5 2UA
Customer Contact:	Bethan Perry
Customer Order No.:	E208N19001041
Customer Reference:	19/9004 B3
Quotation Reference:	190118/05
Description:	27 soil samples
Date Received:	11/06/2019
Date Started:	12/06/2019
Date Completed:	24/06/2019
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	None



Approved By: **Matthew Hickson, Laboratory Manager**

RPS Environmental Management Limited trading as RPS Mountainheath. Registered in England No. 01756175.
13 St Martins Way, Bedford, Bedfordshire, MK42 0LF. T +44 1462 480 400
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Results Summary

Report No.: 19-84033-1

Customer Reference: 19/9004 B3

Customer Order No: E208N19001041

Customer Sample No	19/9004/612	19/9004/628	19/9004/644	19/9004/660	19/9004/676	19/9004/692	19/9004/708	19/9004/724	19/9004/740	19/9004/756	19/9004/772	19/9004/788	19/9004/804
Customer Sample ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS 1-25A
RPS Sample No	405908	405909	405910	405911	405912	405913	405914	405915	405916	405917	405918	405919	405920
Sample Type	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Sample Depth (m)	0.00-0.05	0.10-0.15	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05
Sampling Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	05/06/2019
Sampling Time	14:15	14:25	9:40	9:50	10:45	11:05	11:25	11:50	12:25	12:55	13:18	13:45	16:20

Determinand	CAS No	Codes	SOP	Units	RL												
dry solids (at 105øC)		N	397	% w/w		80.2	90.9	91.9	94.4	91.5	93.1	92.1	91.4	92.2	92.1	94.0	91.4	86.8
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.15	< 0.15	< 0.15	< 0.50	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.20	< 0.10	< 0.20	< 0.20
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results Summary

Report No.: 19-84033-1

Customer Reference: 19/9004 B3

Customer Order No: E208N19001041

Customer Sample No	19/9004/812	19/9004/836	19/9004/852	19/9004/868	19/9004/884	19/9004/900	19/9004/916	19/9004/932	19/9004/948	19/9004/964	19/9004/972	19/9004/980	19/9004/988
Customer Sample ID	GTCS 1-26A	GTCS 1-27A	GTCS 1-28A	GTCS 1-46A	GTCS 1-46A	GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08A	GTCS 1-08C	GTCS 1-08D	GTCS 1-08E	GTCS 1-09A
RPS Sample No	405921	405922	405923	405924	405925	405926	405927	405928	405929	405930	405931	405932	405933
Sample Type	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Sample Depth (m)	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.10-0.15	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05
Sampling Date	05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019
Sampling Time	16:55	18:20	17:30	11:35	11:45								

Determinand	CAS No	Codes	SOP	Units	RL												
dry solids (at 105øC)		N	397	% w/w		73.6	85.8	87.1	88.8	86.4	92.4	86.8	94.5	93.3	90.5	92.8	90.8	90.2
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.50	< 0.10	< 0.15	< 0.15	< 0.50	< 0.50	< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	0.14	0.21	0.15	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results Summary

Report No.: 19-84033-1

Customer Reference: 19/9004 B3

Customer Order No: E208N19001041

Customer Sample No	**19/9004/1004**
Customer Sample ID	GTCS 1-10A
RPS Sample No	405934
Sample Type	**SOIL**
Sample Depth (m)	0.00-0.05
Sampling Date	06/06/2019
Sampling Time	

Determinand	CAS No	Codes	SOP	Units	RL	
dry solids (at 105øC)		N	397	% w/w		89.0
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.50
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50

Comments

Report No.: 19-84033-1

Customer Reference: 19/9004 B3

Customer Order No: E208N19001041

Job	Description	Job Comments
19-84033	27 soil samples	Reporting limit for Fyrol_PCF has been raised due to matrix interference.

Deviating Samples

Report No.: 19-84033-1

Customer Reference: 19/9004 B3

Customer Order No: E208N19001041

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
405908	19/9004/612		06/06/2019	250ml amber glass jar	No	
405909	19/9004/628		06/06/2019	250ml amber glass jar	No	
405910	19/9004/644		06/06/2019	250ml amber glass jar	No	
405911	19/9004/660		06/06/2019	250ml amber glass jar	No	
405912	19/9004/676		06/06/2019	250ml amber glass jar	No	
405913	19/9004/692		06/06/2019	250ml amber glass jar	No	
405914	19/9004/708		06/06/2019	250ml amber glass jar	No	
405915	19/9004/724		06/06/2019	250ml amber glass jar	No	
405916	19/9004/740		06/06/2019	250ml amber glass jar	No	
405917	19/9004/756		06/06/2019	250ml amber glass jar	No	
405918	19/9004/772		06/06/2019	250ml amber glass jar	No	
405919	19/9004/788		06/06/2019	250ml amber glass jar	No	
405920	19/9004/804		05/06/2019	250ml amber glass jar	No	
405921	19/9004/812		05/06/2019	250ml amber glass jar	No	
405922	19/9004/836		05/06/2019	250ml amber glass jar	No	
405923	19/9004/852		05/06/2019	250ml amber glass jar	No	
405924	19/9004/868		05/06/2019	250ml amber glass jar	No	
405925	19/9004/884		05/06/2019	250ml amber glass jar	No	
405926	19/9004/900		06/06/2019	250ml amber glass jar	No	
405927	19/9004/916		06/06/2019	250ml amber glass jar	No	
405928	19/9004/932		06/06/2019	250ml amber glass jar	No	
405929	19/9004/948		06/06/2019	250ml amber glass jar	No	
405930	19/9004/964		06/06/2019	250ml amber glass jar	No	
405931	19/9004/972		06/06/2019	250ml amber glass jar	No	
405932	19/9004/980		06/06/2019	250ml amber glass jar	No	
405933	19/9004/988		06/06/2019	250ml amber glass jar	No	
405934	19/9004/1004		06/06/2019	250ml amber glass jar	No	

Key Code	Description
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
F	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
N	Not Accredited Test
O	Marine Management Organisation (MMO) Validated
S	Subcontracted to approved laboratory
US	Subcontracted to approved laboratory UKAS Accredited for the test
MS	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SI	Subcontracted to internal RPS Group laboratory
USI	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
MSI	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1555
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-50A & 19/9004 -609, 0.00-0.05
Sample No: 1555
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.806	66	**2378-TCDD**	*	0.363	88
12378-PCDF	*	0.574	96	**12378-PCDD**	*	0.894	114
23478-PCDF	*	0.641	81	**123478-HxCDD**	*	1.972	102
123478-HxCDF	3.26	0.950	83	**123678-HxCDD**	13.8	2.430	95
123678-HxCDF	4.69	0.747	96	**123789-HxCDD**	5.43	2.502	
234678-HxCDF	2.12	0.886	82	**1234678-HpCDD**	403	6.035	71
123789-HxCDF	*	1.024	83	**OCDD**	3390	3.237	93
1234678-HpCDF	111	2.337	78				
1234789-HpCDF	4.73	3.382	63				
OCDF	134	2.420					
Total 2,3,7,8-Furans	**260**			**Total 2,3,7,8-Dioxins**	**3810**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**13.2**	**11.6**	**TEQ (WHO)- Mammals**	**11**	**9.17**
			TEQ (WHO)- Fish	**5.84**	**3.11**
			TEQ (WHO)- Birds	**6.56**	**3.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

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Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1555
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-50A & 19/9004 -609, 0.00-0.05
Sample No: 1555
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	5.34	0.824	123
PCB-77	174	0.927	111
PCB-123	162	3.616	94
PCB-118	3920	3.586	89
PCB-114	30.1	3.862	101
PCB-105	2000	3.551	95
PCB-126	17	2.076	53
PCB-167	388	1.312	88
PCB-156	803	1.491	93
PCB-157	255	1.526	93
PCB-169	*	0.665	77
PCB-189	72.5	0.898	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.97**	**1.95**
TEQ (WHO)- Fish	**0.143**	**0.143**
TEQ (WHO)- Birds	**11.3**	**11.3**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1556
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-50A & 19/9004 - 625, 0.10-0.15
Sample No: 1556
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 10719

Date of Receipt : 11/06/19
Date of Analysis : 03/07/19
Date of Report : 03/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	4.1	0.907	83	**2378-TCDD**	*	0.538	81
12378-PCDF	2.78	0.692	73	**12378-PCDD**	2.02	0.756	77
23478-PCDF	4.08	0.575	80	**123478-HxCDD**	3.22	1.110	79
123478-HxCDF	7.3	0.496	82	**123678-HxCDD**	13.9	1.133	78
123678-HxCDF	4.77	0.456	83	**123789-HxCDD**	7.15	1.151	
234678-HxCDF	6.77	0.425	86	**1234678-HpCDD**	542	0.734	73
123789-HxCDF	*	0.523	86	**OCDD**	4500	1.800	58
1234678-HpCDF	93.9	0.354	87				
1234789-HpCDF	6.1	0.490	84				
OCDF	214	0.916					
Total 2,3,7,8-Furans	**343**			**Total 2,3,7,8-Dioxins**	**5070**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**19.6**	**19**	**TEQ (WHO)- Mammals**	**16.5**	**15.9**
			TEQ (WHO)- Fish	**10.7**	**10.1**
			TEQ (WHO)- Birds	**16**	**15.4**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

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Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1556
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-50A & 19/9004 - 625, 0.10-0.15
Sample No: 1556
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	8.54	0.583	92
PCB-77	282	0.595	92
PCB-123	120	1.356	99
PCB-118	2530	1.393	93
PCB-114	35.8	1.387	108
PCB-105	1390	1.340	97
PCB-126	23	1.066	58
PCB-167	339	1.176	95
PCB-156	595	1.275	99
PCB-157	233	1.352	99
PCB-169	0.701	0.443	62
PCB-189	71.8	0.857	98

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.51**	**2.51**
TEQ (WHO)- Fish	**0.174**	**0.174**
TEQ (WHO)- Birds	**17.5**	**17.5**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1557
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-51A & 19/9004 - 641, 0.00-0.05
Sample No: 1557
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 10719

Date of Receipt : 11/06/19
Date of Analysis : 03/07/19
Date of Report : 03/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	8.64	1.076	101	**2378-TCDD**	*	0.729	94
12378-PCDF	7.1	0.680	97	**12378-PCDD**	0.929	0.795	86
23478-PCDF	10.4	0.669	89	**123478-HxCDD**	1.25	0.837	96
123478-HxCDF	14.1	0.733	94	**123678-HxCDD**	6.06	0.850	96
123678-HxCDF	11.3	0.723	92	**123789-HxCDD**	3.85	0.864	
234678-HxCDF	9.98	0.618	101	**1234678-HpCDD**	88.9	0.819	95
123789-HxCDF	0.954	0.782	104	**OCDD**	562	1.791	71
1234678-HpCDF	52.8	0.545	107				
1234789-HpCDF	5.05	0.737	107				
OCDF	44.6	0.977					
Total 2,3,7,8-Furans	**165**			**Total 2,3,7,8-Dioxins**	**663**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**14.4**	**13.7**	**TEQ (WHO)- Mammals**	**12.3**	**11.5**
			TEQ (WHO)- Fish	**12.7**	**12**
			TEQ (WHO)- Birds	**26.3**	**25.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1557
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-51A & 19/9004 - 641, 0.00-0.05
Sample No: 1557
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	44.6	0.847	99
PCB-77	977	0.873	97
PCB-123	311	2.723	98
PCB-118	8200	2.645	95
PCB-114	140	2.828	105
PCB-105	5170	2.629	100
PCB-126	46.2	1.091	79
PCB-167	195	1.295	94
PCB-156	496	1.506	98
PCB-157	137	1.514	99
PCB-169	2.88	0.394	86
PCB-189	26.3	0.501	95

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**5.26**	**5.26**
TEQ (WHO)- Fish	**0.424**	**0.424**
TEQ (WHO)- Birds	**58.6**	**58.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1558
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-51A & 19/9004 -657, 0.10-0.15
Sample No: 1558
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	1.340	68	**2378-TCDD**	*	0.407	91
12378-PCDF	4.81	0.951	92	**12378-PCDD**	*	0.599	114
23478-PCDF	*	0.759	103	**123478-HxCDD**	*	0.887	86
123478-HxCDF	3.85	0.734	84	**123678-HxCDD**	*	0.900	83
123678-HxCDF	*	0.774	80	**123789-HxCDD**	*	0.927	
234678-HxCDF	*	0.751	76	**1234678-HpCDD**	61.4	2.080	59
123789-HxCDF	*	0.891	76	**OCDD**	439	3.892	66
1234678-HpCDF	30.6	1.036	57				
1234789-HpCDF	3.21	1.240	56				
OCDF	31.2	1.165					
Total 2,3,7,8-Furans	**73.7**			**Total 2,3,7,8-Dioxins**	**501**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**3.78**	**2.05**	**TEQ (WHO)- Mammals**	**3.5**	**1.62**
			TEQ (WHO)- Fish	**3.23**	**1.07**
			TEQ (WHO)- Birds	**4.81**	**1.31**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1558
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-51A & 19/9004 -657, 0.10-0.15
Sample No: 1558
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	22.7	1.314	89
PCB-77	437	1.573	84
PCB-123	211	2.653	98
PCB-118	5590	2.651	92
PCB-114	111	2.810	104
PCB-105	3610	2.541	97
PCB-126	20.8	2.713	72
PCB-167	136	1.150	92
PCB-156	329	1.271	97
PCB-157	101	1.307	98
PCB-169	*	0.298	76
PCB-189	20.7	0.660	96

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.44**	**2.43**
TEQ (WHO)- Fish	**0.209**	**0.209**
TEQ (WHO)- Birds	**26.7**	**26.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1559
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-52A & 19-9004 - 673, 0.00-0.05
Sample No: 1559
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	2.860	53	**2378-TCDD**	*	0.459	77
12378-PCDF	2.34	0.798	85	**12378-PCDD**	*	0.639	123
23478-PCDF	*	0.796	77	**123478-HxCDD**	*	0.888	97
123478-HxCDF	*	0.720	76	**123678-HxCDD**	*	0.932	89
123678-HxCDF	*	0.723	76	**123789-HxCDD**	*	0.960	
234678-HxCDF	*	0.579	85	**1234678-HpCDD**	72.5	2.848	64
123789-HxCDF	*	0.827	77	**OCDD**	568	2.453	109
1234678-HpCDF	44.3	1.044	70				
1234789-HpCDF	*	1.373	64				
OCDF	29.5	1.023					
Total 2,3,7,8-Furans	**76.1**			**Total 2,3,7,8-Dioxins**	**641**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**3.92**	**1.88**	**TEQ (WHO)- Mammals**	**3.62**	**1.42**
			TEQ (WHO)- Fish	**3.09**	**0.692**
			TEQ (WHO)- Birds	**6.01**	**0.809**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1559
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-52A & 19-9004 - 673, 0.00-0.05
Sample No: 1559
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	140	2.161	87
PCB-77	3290	3.284	62
PCB-123	1040	5.967	91
PCB-118	33100	5.822	90
PCB-114	787	6.486	96
PCB-105	21500	5.726	92
PCB-126	120	2.886	52
PCB-167	552	1.245	93
PCB-156	1490	1.363	99
PCB-157	398	1.372	99
PCB-169	1.02	0.430	63
PCB-189	51.5	0.645	92

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**14.2**	**14.2**
TEQ (WHO)- Fish	**1.29**	**1.29**
TEQ (WHO)- Birds	**193**	**193**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1560
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-53A & 19/9004 - 689, 0.00-0.05
Sample No: 1560
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	1.395	63	**2378-TCDD**	*	0.302	94
12378-PCDF	4.79	0.925	92	**12378-PCDD**	*	0.719	116
23478-PCDF	*	0.689	110	**123478-HxCDD**	*	0.810	85
123478-HxCDF	4.14	0.734	67	**123678-HxCDD**	2.04	0.825	82
123678-HxCDF	*	0.740	62	**123789-HxCDD**	*	0.849	
234678-HxCDF	*	0.590	78	**1234678-HpCDD**	79.1	2.908	58
123789-HxCDF	*	0.719	73	**OCDD**	480	2.637	68
1234678-HpCDF	39.6	1.035	60				
1234789-HpCDF	*	1.369	54				
OCDF	26.6	1.115					
Total 2,3,7,8-Furans	**75.1**			**Total 2,3,7,8-Dioxins**	**561**		

	TEQ[1]	**TEQ[2]**		**TEQ[1]**	**TEQ[2]**
TEQ (Nato)	**4.08**	**2.55**	**TEQ (WHO)- Mammals**	**3.85**	**2.1**
			TEQ (WHO)- Fish	**3.27**	**1.2**
			TEQ (WHO)- Birds	**4.89**	**1.44**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ[2]	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1560
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-53A & 19/9004 - 689, 0.00-0.05
Sample No: 1560
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	8.6	1.168	73
PCB-77	227	1.383	67
PCB-123	98.3	1.799	87
PCB-118	2710	1.822	80
PCB-114	47	1.876	92
PCB-105	1630	1.794	86
PCB-126	15.4	2.656	54
PCB-167	105	0.772	88
PCB-156	233	0.872	92
PCB-157	80.4	0.911	90
PCB-169	*	0.352	59
PCB-189	18.9	0.620	89

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.72**	**1.71**
TEQ (WHO)- Fish	**0.128**	**0.128**
TEQ (WHO)- Birds	**14**	**14**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1561
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-54A & 19/9004 - 705, 0.00-0.05
Sample No: 1561
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	4.75	0.533	77	**2378-TCDD**	*	0.316	82
12378-PCDF	4.25	0.379	84	**12378-PCDD**	1.41	0.317	104
23478-PCDF	6.05	0.304	93	**123478-HxCDD**	0.717	0.488	86
123478-HxCDF	8.12	0.347	84	**123678-HxCDD**	2.96	0.481	88
123678-HxCDF	5.01	0.303	87	**123789-HxCDD**	2.8	0.464	
234678-HxCDF	5.1	0.316	88	**1234678-HpCDD**	80.1	0.378	76
123789-HxCDF	0.712	0.322	90	**OCDD**	655	0.608	80
1234678-HpCDF	33.9	0.163	85				
1234789-HpCDF	2.95	0.186	84				
OCDF	39.1	0.131					
Total 2,3,7,8-Furans	**110**			**Total 2,3,7,8-Dioxins**	**743**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.14**	**8.82**	**TEQ (WHO)- Mammals**	**8.07**	**7.75**
			TEQ (WHO)- Fish	**8.03**	**7.71**
			TEQ (WHO)- Birds	**15.7**	**15.4**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1561
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-54A & 19/9004 - 705, 0.00-0.05
Sample No: 1561
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 25/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.23	0.410	85
PCB-77	69	0.359	94
PCB-123	30.4	1.202	77
PCB-118	1120	1.186	72
PCB-114	15.1	1.207	81
PCB-105	536	1.172	73
PCB-126	8.59	0.830	85
PCB-167	89.7	0.664	82
PCB-156	210	0.743	83
PCB-157	60.8	0.780	81
PCB-169	1.3	0.153	114
PCB-189	20.9	0.930	83

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.969**	**0.969**
TEQ (WHO)- Fish	**0.0619**	**0.0619**
TEQ (WHO)- Birds	**4.73**	**4.73**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1562
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-55A & 19/9004 - 721, 0.00-0.05
Sample No: 1562
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.39	0.604	81	**2378-TCDD**	*	0.360	83
12378-PCDF	3.94	0.458	81	**12378-PCDD**	1.09	0.675	76
23478-PCDF	*	0.451	70	**123478-HxCDD**	1.28	0.536	91
123478-HxCDF	7.4	0.503	68	**123678-HxCDD**	3.85	0.598	90
123678-HxCDF	4.06	0.485	71	**123789-HxCDD**	*	0.577	
234678-HxCDF	5.04	0.427	77	**1234678-HpCDD**	73.7	1.127	72
123789-HxCDF	0.648	0.442	86	**OCDD**	557	1.796	46
1234678-HpCDF	29.4	0.501	72				
1234789-HpCDF	1.68	0.600	69				
OCDF	36.8	0.914					
Total 2,3,7,8-Furans	**92.4**			**Total 2,3,7,8-Dioxins**	**637**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.59**	**4.95**	**TEQ (WHO)- Mammals**	**5.55**	**5**
			TEQ (WHO)- Fish	**4.88**	**4.29**
			TEQ (WHO)- Birds	**8**	**7.13**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value	TEQ^2	Concentration of Non Detected Congeners at Zero
TEF	Toxic Equivalent Factor		
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1562
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-55A & 19/9004 - 721, 0.00-0.05
Sample No: 1562
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 25/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.21	0.573	86
PCB-77	55.7	0.564	82
PCB-123	22.7	2.001	75
PCB-118	863	1.983	70
PCB-114	10.6	1.970	80
PCB-105	405	1.969	72
PCB-126	3.29	1.285	83
PCB-167	73	0.794	83
PCB-156	161	0.963	82
PCB-157	51	0.933	81
PCB-169	0.8	0.261	86
PCB-189	19.1	0.830	84

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.408**	**0.408**
TEQ (WHO)- Fish	**0.0312**	**0.0312**
TEQ (WHO)- Birds	**3.41**	**3.41**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1563
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-56A & 19/9004 - 737, 0.00-0.05
Sample No: 1563
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.45	0.561	64	**2378-TCDD**	*	0.300	71
12378-PCDF	1.66	0.453	67	**12378-PCDD**	0.71	0.396	70
23478-PCDF	4.84	0.387	68	**123478-HxCDD**	0.976	0.487	70
123478-HxCDF	7.22	0.367	69	**123678-HxCDD**	2.55	0.443	76
123678-HxCDF	4.51	0.366	65	**123789-HxCDD**	1.95	0.427	
234678-HxCDF	3.78	0.340	73	**1234678-HpCDD**	74.7	0.390	60
123789-HxCDF	*	0.325	79	**OCDD**	612	0.675	57
1234678-HpCDF	28.3	0.139	70				
1234789-HpCDF	2.12	0.178	67				
OCDF	40.3	0.158					
Total 2,3,7,8-Furans	**98.2**			**Total 2,3,7,8-Dioxins**	**693**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**7.54**	**7.2**	**TEQ (WHO)- Mammals**	**6.43**	**6.1**
			TEQ (WHO)- Fish	**6.34**	**6.01**
			TEQ (WHO)- Birds	**13.8**	**13.4**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1563
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-56A & 19/9004 - 737, 0.00-0.05
Sample No: 1563
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 25/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	10.2	0.634	70
PCB-77	222	0.690	61
PCB-123	89.7	0.746	69
PCB-118	2260	0.713	66
PCB-114	45	0.726	74
PCB-105	1350	0.713	66
PCB-126	11.4	1.048	83
PCB-167	101	0.419	69
PCB-156	239	0.490	69
PCB-157	72.7	0.516	68
PCB-169	0.306	0.221	76
PCB-189	20.2	0.409	69

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.3**	**1.3**
TEQ (WHO)- Fish	**0.105**	**0.105**
TEQ (WHO)- Birds	**13.5**	**13.5**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1564
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-57A & 19/9004 - 753, 0.00-0.05
Sample No: 1564
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.591	62	**2378-TCDD**	*	0.335	76
12378-PCDF	5.52	0.427	73	**12378-PCDD**	*	0.548	81
23478-PCDF	4.68	0.402	71	**123478-HxCDD**	1.68	0.739	77
123478-HxCDF	8.09	0.563	77	**123678-HxCDD**	3.16	0.697	84
123678-HxCDF	4.26	0.556	82	**123789-HxCDD**	1.96	0.673	
234678-HxCDF	2.57	0.576	74	**1234678-HpCDD**	126	1.474	68
123789-HxCDF	0.819	0.654	71	**OCDD**	1140	1.844	44
1234678-HpCDF	40	0.602	71				
1234789-HpCDF	3.7	0.701	70				
OCDF	63.8	0.957					
Total 2,3,7,8-Furans	**133**			**Total 2,3,7,8-Dioxins**	**1270**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.43**	**7.76**	**TEQ (WHO)- Mammals**	**6.82**	**5.88**
			TEQ (WHO)- Fish	**6.67**	**5.76**
			TEQ (WHO)- Birds	**9.27**	**7.8**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1564
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-57A & 19/9004 - 753, 0.00-0.05
Sample No: 1564
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 25/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	25.4	1.214	71
PCB-77	594	1.379	61
PCB-123	221	0.783	78
PCB-118	5750	0.746	74
PCB-114	110	0.785	82
PCB-105	3420	0.741	76
PCB-126	35.2	1.388	72
PCB-167	244	2.198	75
PCB-156	590	2.642	74
PCB-157	183	2.675	74
PCB-169	0.518	0.362	97
PCB-189	43.1	0.376	76

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**3.92**	**3.92**
TEQ (WHO)- Fish	**0.301**	**0.301**
TEQ (WHO)- Birds	**36.2**	**36.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1565
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-58A & 19/9004 - 769, 0.00-0.05
Sample No: 1565
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.07	0.585	65	**2378-TCDD**	*	0.282	81
12378-PCDF	3.89	0.523	59	**12378-PCDD**	0.63	0.364	69
23478-PCDF	3.56	0.422	66	**123478-HxCDD**	0.537	0.517	94
123478-HxCDF	7.19	0.365	86	**123678-HxCDD**	4.99	0.564	84
123678-HxCDF	3.89	0.355	80	**123789-HxCDD**	2.57	0.544	
234678-HxCDF	4.09	0.350	84	**1234678-HpCDD**	116	0.456	86
123789-HxCDF	0.918	0.353	88	**OCDD**	1110	0.560	72
1234678-HpCDF	35.9	0.154	85				
1234789-HpCDF	3.59	0.178	85				
OCDF	58	0.275					
Total 2,3,7,8-Furans	**126**			**Total 2,3,7,8-Dioxins**	**1240**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.22**	**7.94**	**TEQ (WHO)- Mammals**	**6.93**	**6.65**
			TEQ (WHO)- Fish	**5.72**	**5.44**
			TEQ (WHO)- Birds	**12.5**	**12.2**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1565
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-58A & 19/9004 - 769, 0.00-0.05
Sample No: 1565
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	25.3	0.858	69
PCB-77	595	0.817	72
PCB-123	6000	3.519	81
PCB-118	154000	17.247	80
PCB-114	4530	3.652	82
PCB-105	103000	19.480	84
PCB-126	31.3	1.459	84
PCB-167	2070	0.977	77
PCB-156	6270	1.090	77
PCB-157	1620	1.165	75
PCB-169	1.74	0.376	83
PCB-189	173	4.622	76

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**11.6**	**11.6**
TEQ (WHO)- Fish	**1.62**	**1.62**
TEQ (WHO)- Birds	**48.6**	**48.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1566
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-59A & 19/9004 - 785, 0.00-0.05
Sample No: 1566
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.88	0.601	64	**2378-TCDD**	*	0.310	81
12378-PCDF	5.49	0.543	62	**12378-PCDD**	*	0.581	62
23478-PCDF	5.7	0.436	67	**123478-HxCDD**	*	0.712	90
123478-HxCDF	8.38	0.533	76	**123678-HxCDD**	3.95	0.679	91
123678-HxCDF	3.95	0.574	68	**123789-HxCDD**	1.25	0.655	
234678-HxCDF	1.69	0.457	85	**1234678-HpCDD**	118	1.343	78
123789-HxCDF	0.672	0.537	83	**OCDD**	1060	1.538	52
1234678-HpCDF	36.8	0.439	78				
1234789-HpCDF	2.74	0.535	74				
OCDF	58.1	1.012					
Total 2,3,7,8-Furans	**129**			**Total 2,3,7,8-Dioxins**	**1180**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.07**	**8.4**	**TEQ (WHO)- Mammals**	**7.33**	**6.36**
			TEQ (WHO)- Fish	**6.81**	**5.57**
			TEQ (WHO)- Birds	**15.3**	**14.4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1566
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-59A & 19/9004 - 785, 0.00-0.05
Sample No: 1566
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	24.2	1.216	77
PCB-77	579	1.105	77
PCB-123	1650	1.522	75
PCB-118	52400	50.927	73
PCB-114	1210	1.542	77
PCB-105	34900	55.203	83
PCB-126	27.6	1.299	78
PCB-167	757	0.647	70
PCB-156	2270	0.733	71
PCB-157	589	0.752	69
PCB-169	0.736	0.461	79
PCB-189	71.8	0.318	71

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**5.66**	**5.66**
TEQ (WHO)- Fish	**0.677**	**0.677**
TEQ (WHO)- Birds	**38.6**	**38.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1567
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-25A & 19/9004 - 801, 0.00-0.05
Sample No: 1567
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.368	61	**2378-TCDD**	*	0.263	72
12378-PCDF	*	0.339	63	**12378-PCDD**	*	0.511	76
23478-PCDF	*	0.278	69	**123478-HxCDD**	*	0.447	83
123478-HxCDF	*	0.279	72	**123678-HxCDD**	*	0.458	83
123678-HxCDF	*	0.268	74	**123789-HxCDD**	*	0.459	
234678-HxCDF	1.16	0.252	78	**1234678-HpCDD**	55.2	0.966	60
123789-HxCDF	*	0.285	74	**OCDD**	511	1.813	47
1234678-HpCDF	16.3	0.365	63				
1234789-HpCDF	0.68	0.473	54				
OCDF	33.5	0.709					
Total 2,3,7,8-Furans	**51.7**			**Total 2,3,7,8-Dioxins**	**566**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**2.31**	**1.38**	**TEQ (WHO)- Mammals**	**2.13**	**1**
			TEQ (WHO)- Fish	**1.66**	**0.396**
			TEQ (WHO)- Birds	**2.01**	**0.396**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1567
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-25A & 19/9004 - 801, 0.00-0.05
Sample No: 1567
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.65	0.629	75
PCB-77	48.4	0.644	70
PCB-123	103	0.976	80
PCB-118	5860	0.896	77
PCB-114	96.1	0.986	83
PCB-105	2380	0.919	78
PCB-126	2.05	1.311	70
PCB-167	291	0.697	76
PCB-156	808	0.788	78
PCB-157	170	0.810	76
PCB-169	0.365	0.315	83
PCB-189	46.3	0.364	78

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.514**	**0.514**
TEQ (WHO)- Fish	**0.0647**	**0.0647**
TEQ (WHO)- Birds	**3.2**	**3.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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371 Millbrook Rd West
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1568
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-26A & 19/9004 - 809, 0.00-0.05
Sample No: 1568
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	1.47	0.407	77	**2378-TCDD**	*	0.288	91
12378-PCDF	1.34	0.288	79	**12378-PCDD**	0.9	0.340	92
23478-PCDF	2.23	0.257	80	**123478-HxCDD**	0.561	0.416	98
123478-HxCDF	2.67	0.262	84	**123678-HxCDD**	0.992	0.458	83
123678-HxCDF	2.08	0.251	83	**123789-HxCDD**	0.833	0.458	
234678-HxCDF	2.32	0.252	87	**1234678-HpCDD**	30.9	0.303	78
123789-HxCDF	*	0.259	88	**OCDD**	207	0.502	76
1234678-HpCDF	17.5	0.146	74				
1234789-HpCDF	0.887	0.158	75				
OCDF	17.2	0.238					
Total 2,3,7,8-Furans	**47.6**			**Total 2,3,7,8-Dioxins**	**241**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**3.75**	**3.44**	**TEQ (WHO)- Mammals**	**3.57**	**3.26**
			TEQ (WHO)- Fish	**3.71**	**3.4**
			TEQ (WHO)- Birds	**6.11**	**5.79**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1568
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-26A & 19/9004 - 809, 0.00-0.05
Sample No: 1568
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.09	0.269	104
PCB-77	31.4	0.292	96
PCB-123	13	0.587	79
PCB-118	494	0.578	75
PCB-114	5.02	0.578	84
PCB-105	231	0.583	75
PCB-126	6.88	0.821	84
PCB-167	36.3	0.253	75
PCB-156	88.7	0.291	75
PCB-157	20.8	0.304	73
PCB-169	0.528	0.100	99
PCB-189	7.69	0.204	77

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.734**	**0.734**
TEQ (WHO)- Fish	**0.0426**	**0.0426**
TEQ (WHO)- Birds	**2.41**	**2.41**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1569
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-27A & 19/9004 - 833, 0.00-0.05
Sample No: 1569
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.88	0.818	66	**2378-TCDD**	*	0.432	84
12378-PCDF	1.57	0.469	69	**12378-PCDD**	*	0.497	78
23478-PCDF	4.72	0.423	67	**123478-HxCDD**	1.05	0.566	75
123478-HxCDF	2.93	0.405	68	**123678-HxCDD**	3.05	0.563	74
123678-HxCDF	1.77	0.390	68	**123789-HxCDD**	1.67	0.564	
234678-HxCDF	*	0.387	71	**1234678-HpCDD**	54.4	1.008	57
123789-HxCDF	*	0.403	70	**OCDD**	359	2.083	45
1234678-HpCDF	28.2	0.474	59				
1234789-HpCDF	1.77	0.588	56				
OCDF	32.2	1.034					
Total 2,3,7,8-Furans	**77.1**			**Total 2,3,7,8-Dioxins**	**419**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.87**	**5.11**	**TEQ (WHO)- Mammals**	**4.87**	**3.86**
			TEQ (WHO)- Fish	**5.08**	**4.07**
			TEQ (WHO)- Birds	**10.9**	**9.87**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1569
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-27A & 19/9004 - 833, 0.00-0.05
Sample No: 1569
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.35	0.430	81
PCB-77	71.3	0.440	76
PCB-123	35.3	0.837	72
PCB-118	1070	0.812	68
PCB-114	8.65	0.807	77
PCB-105	569	0.810	69
PCB-126	16.6	1.273	66
PCB-167	108	2.165	73
PCB-156	262	2.516	75
PCB-157	63.7	2.478	74
PCB-169	*	0.218	77
PCB-189	25	0.192	77

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.74**	**1.73**
TEQ (WHO)- Fish	**0.102**	**0.102**
TEQ (WHO)- Birds	**5.46**	**5.46**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1570
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-28A & 19/9004 - 849, 0.00-0.05
Sample No: 1570
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.81	0.486	76	**2378-TCDD**	*	0.258	97
12378-PCDF	1.69	0.352	68	**12378-PCDD**	0.475	0.300	83
23478-PCDF	0.811	0.315	70	**123478-HxCDD**	0.901	0.407	91
123478-HxCDF	2.25	0.274	81	**123678-HxCDD**	3.35	0.396	85
123678-HxCDF	2.22	0.258	80	**123789-HxCDD**	1.55	0.396	
234678-HxCDF	1.78	0.260	82	**1234678-HpCDD**	66.7	0.330	73
123789-HxCDF	*	0.260	84	**OCDD**	434	0.482	75
1234678-HpCDF	25	0.170	70				
1234789-HpCDF	1.43	0.184	74				
OCDF	31.9	0.174					
Total 2,3,7,8-Furans	**70.9**			**Total 2,3,7,8-Dioxins**	**507**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**4**	**3.71**	**TEQ (WHO)- Mammals**	**3.71**	**3.43**
			TEQ (WHO)- Fish	**2.94**	**2.66**
			TEQ (WHO)- Birds	**6.78**	**6.5**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1570
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-28A & 19/9004 - 849, 0.00-0.05
Sample No: 1570
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.82	0.353	75
PCB-77	61.9	0.303	83
PCB-123	32.4	0.718	77
PCB-118	1140	0.691	73
PCB-114	9.47	0.692	83
PCB-105	537	0.691	73
PCB-126	15.4	0.866	80
PCB-167	115	0.370	73
PCB-156	285	0.443	74
PCB-157	69.5	0.442	73
PCB-169	0.996	0.191	82
PCB-189	23.9	0.248	78

	TEQ1	**TEQ2**
TEQ (WHO)- Mammals	**1.64**	**1.64**
TEQ (WHO)- Fish	**0.0952**	**0.0952**
TEQ (WHO)- Birds	**4.92**	**4.92**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1571
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-46A & 19/9004 - 865, 0.00-0.05
Sample No: 1571
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	15.7	0.914	70	**2378-TCDD**	*	0.618	85
12378-PCDF	6.46	0.700	69	**12378-PCDD**	3.55	0.819	71
23478-PCDF	14	0.713	60	**123478-HxCDD**	3.91	0.984	93
123478-HxCDF	13	0.614	84	**123678-HxCDD**	12.2	1.005	89
123678-HxCDF	*	0.595	85	**123789-HxCDD**	7.74	1.005	
234678-HxCDF	*	0.560	89	**1234678-HpCDD**	224	1.341	71
123789-HxCDF	*	0.603	88	**OCDD**	1820	1.358	55
1234678-HpCDF	155	0.663	71				
1234789-HpCDF	6.2	0.778	68				
OCDF	222	0.898					
Total 2,3,7,8-Furans	**433**			**Total 2,3,7,8-Dioxins**	**2070**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**21.1**	**20.3**	**TEQ (WHO)- Mammals**	**18.5**	**17.7**
			TEQ (WHO)- Fish	**18**	**17.2**
			TEQ (WHO)- Birds	**39.1**	**38.3**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value	TEQ^2	Concentration of Non Detected Congeners at Zero
TEF	Toxic Equivalent Factor		
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1571
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-46A & 19/9004 - 865, 0.00-0.05
Sample No: 1571
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	6.48	0.687	92
PCB-77	162	0.674	90
PCB-123	78.5	3.339	86
PCB-118	2330	3.247	81
PCB-114	23.4	3.372	90
PCB-105	1170	3.304	82
PCB-126	31.7	1.005	91
PCB-167	379	0.717	78
PCB-156	635	0.829	79
PCB-157	305	0.833	78
PCB-169	*	0.469	97
PCB-189	129	0.514	81

	TEQ1	**TEQ2**
TEQ (WHO)- Mammals	**3.36**	**3.34**
TEQ (WHO)- Fish	**0.203**	**0.203**
TEQ (WHO)- Birds	**12.2**	**12.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1572
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-46A & 19/9004 - 881, 0.10-0.15
Sample No: 1572
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	27.4	1.683	67	**2378-TCDD**	2.3	0.854	83
12378-PCDF	19.4	1.060	63	**12378-PCDD**	9.28	0.883	75
23478-PCDF	33.5	0.922	64	**123478-HxCDD**	9.25	1.112	96
123478-HxCDF	32.1	0.693	93	**123678-HxCDD**	29.7	1.076	95
123678-HxCDF	20.8	0.647	94	**123789-HxCDD**	14.3	1.076	
234678-HxCDF	25	0.637	96	**1234678-HpCDD**	478	0.895	90
123789-HxCDF	2.01	0.660	95	**OCDD**	4310	0.930	89
1234678-HpCDF	346	0.379	84				
1234789-HpCDF	14.2	0.410	86				
OCDF	451	0.354					
Total 2,3,7,8-Furans	**971**			**Total 2,3,7,8-Dioxins**	**4850**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**53.9**	**53.9**	**TEQ (WHO)- Mammals**		**48.1**	**48.1**
				TEQ (WHO)- Fish		**48.3**	**48.3**
				TEQ (WHO)- Birds		**89.2**	**89.2**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1572
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-46A & 19/9004 - 881, 0.10-0.15
Sample No: 1572
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 10719

Date of Receipt : 11/06/19
Date of Analysis : 02/07/19
Date of Report : 03/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	10.2	0.663	84
PCB-77	256	0.675	81
PCB-123	138	1.603	82
PCB-118	2790	1.731	72
PCB-114	68.4	1.838	79
PCB-105	1330	2.012	76
PCB-126	24.7	0.984	100
PCB-167	605	2.246	98
PCB-156	593	1.895	98
PCB-157	508	1.835	97
PCB-169	6.75	0.519	101
PCB-189	296	0.821	87

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.89**	**2.89**
TEQ (WHO)- Fish	**0.186**	**0.186**
TEQ (WHO)- Birds	**16.6**	**16.6**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1573
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-05A & 19/9004 - 897, 0.00-0.05
Sample No: 1573
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.492	56	**2378-TCDD**	*	0.469	78
12378-PCDF	1.14	0.475	53	**12378-PCDD**	*	0.591	69
23478-PCDF	2.25	0.368	56	**123478-HxCDD**	*	0.706	77
123478-HxCDF	*	0.448	66	**123678-HxCDD**	2.5	0.690	77
123678-HxCDF	1.71	0.447	70	**123789-HxCDD**	3.32	0.691	
234678-HxCDF	2.61	0.401	72	**1234678-HpCDD**	166	1.030	56
123789-HxCDF	*	0.455	70	**OCDD**	1370	2.345	45
1234678-HpCDF	50.5	0.494	55				
1234789-HpCDF	1.77	0.580	53				
OCDF	84	0.756					
Total 2,3,7,8-Furans	**144**			**Total 2,3,7,8-Dioxins**	**1540**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**6.81**	**5.83**	**TEQ (WHO)- Mammals**	**5.61**	**4.34**
			TEQ (WHO)- Fish	**4.04**	**2.51**
			TEQ (WHO)- Birds	**5.67**	**3.99**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1573
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-05A & 19/9004 - 897, 0.00-0.05
Sample No: 1573
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.833	0.313	103
PCB-77	45	0.289	103
PCB-123	21.7	0.864	86
PCB-118	544	0.828	81
PCB-114	3.81	0.874	89
PCB-105	351	0.840	83
PCB-126	10.1	1.253	87
PCB-167	68.9	0.874	78
PCB-156	156	0.994	79
PCB-157	38.8	1.016	78
PCB-169	0.301	0.168	101
PCB-189	22.3	0.377	80

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.06**	**1.06**
TEQ (WHO)- Fish	**0.0614**	**0.0614**
TEQ (WHO)- Birds	**3.4**	**3.4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1574
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-06A & 19/9004 - 913, 0.00-0.05
Sample No: 1574
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	4.63	0.586	69	**2378-TCDD**	*	0.273	85
12378-PCDF	3.77	0.419	78	**12378-PCDD**	0.526	0.288	90
23478-PCDF	4.45	0.395	76	**123478-HxCDD**	0.853	0.454	91
123478-HxCDF	5.64	0.304	79	**123678-HxCDD**	5.28	0.501	81
123678-HxCDF	4.7	0.281	79	**123789-HxCDD**	3.06	0.501	
234678-HxCDF	5.5	0.277	81	**1234678-HpCDD**	104	0.320	75
123789-HxCDF	0.678	0.281	84	**OCDD**	736	0.482	78
1234678-HpCDF	198	0.248	68				
1234789-HpCDF	3.05	0.276	69				
OCDF	132	0.233					
Total 2,3,7,8-Furans	**363**			**Total 2,3,7,8-Dioxins**	**849**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**9.9**	**9.63**	**TEQ (WHO)- Mammals**	**8.59**	**8.32**
			TEQ (WHO)- Fish	**7.81**	**7.54**
			TEQ (WHO)- Birds	**14.5**	**14.2**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1574
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-06A & 19/9004 - 913, 0.00-0.05
Sample No: 1574
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 25/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	7.84	0.458	81
PCB-77	259	0.403	86
PCB-123	151	1.282	86
PCB-118	4830	1.253	82
PCB-114	40	1.313	91
PCB-105	2330	1.247	84
PCB-126	157	0.875	118
PCB-167	632	0.528	89
PCB-156	1170	0.609	90
PCB-157	341	0.618	87
PCB-169	13.2	0.221	121
PCB-189	131	0.384	87

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**16.4**	**16.4**
TEQ (WHO)- Fish	**0.865**	**0.865**
TEQ (WHO)- Birds	**29.9**	**29.9**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1575
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-07A & 19/9004 - 929, 0.00-0.05
Sample No: 1575
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	4.44	0.736	64	**2378-TCDD**	*	0.494	88
12378-PCDF	1.25	0.548	67	**12378-PCDD**	*	0.607	68
23478-PCDF	4.59	0.480	66	**123478-HxCDD**	*	0.662	87
123478-HxCDF	3.75	0.737	84	**123678-HxCDD**	2.7	0.674	88
123678-HxCDF	5.02	0.752	80	**123789-HxCDD**	1.77	0.675	
234678-HxCDF	4.61	0.680	88	**1234678-HpCDD**	89.5	1.061	73
123789-HxCDF	*	0.797	85	**OCDD**	526	1.896	54
1234678-HpCDF	147	0.470	68				
1234789-HpCDF	1.01	0.536	66				
OCDF	145	1.030					
Total 2,3,7,8-Furans	**317**			**Total 2,3,7,8-Dioxins**	**620**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.58**	**7.64**	**TEQ (WHO)- Mammals**	**7.47**	**6.22**
			TEQ (WHO)- Fish	**7.12**	**5.6**
			TEQ (WHO)- Birds	**13.6**	**12.3**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1575
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-07A & 19/9004 - 929, 0.00-0.05
Sample No: 1575
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.81	0.370	103
PCB-77	37.5	0.359	105
PCB-123	15.6	0.442	83
PCB-118	567	0.438	78
PCB-114	5.14	0.433	89
PCB-105	280	0.439	78
PCB-126	8.67	1.261	101
PCB-167	49.8	0.377	80
PCB-156	112	0.447	80
PCB-157	30.8	0.451	79
PCB-169	1.59	0.237	111
PCB-189	13.2	0.263	80

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.951**	**0.951**
TEQ (WHO)- Fish	**0.0535**	**0.0535**
TEQ (WHO)- Birds	**2.97**	**2.97**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1576
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-08 PRIMARY SAMPLE & 19/9004 - 945, 0.00-0.05 **Date of Analysis :** 23/06/19
Sample No: 1576 **Date of Report :** 25/06/19
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 170619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	7.24	1.092	62	**2378-TCDD**	*	0.551	78
12378-PCDF	5.44	0.568	65	**12378-PCDD**	3.81	0.490	64
23478-PCDF	8.17	0.477	67	**123478-HxCDD**	2.64	0.463	80
123478-HxCDF	7.34	0.288	67	**123678-HxCDD**	4.74	0.482	77
123678-HxCDF	6.64	0.274	67	**123789-HxCDD**	3.17	0.482	
234678-HxCDF	7.86	0.264	72	**1234678-HpCDD**	83.3	0.391	69
123789-HxCDF	0.546	0.246	78	**OCDD**	600	0.588	63
1234678-HpCDF	50.8	0.177	63				
1234789-HpCDF	1.91	0.198	64				
OCDF	36.2	0.207					
Total 2,3,7,8-Furans	**132**			**Total 2,3,7,8-Dioxins**	**698**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**12.8**	**12.3**	**TEQ (WHO)- Mammals**	**12.5**	**12**
			TEQ (WHO)- Fish	**13.4**	**12.8**
			TEQ (WHO)- Birds	**23.7**	**23.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1576
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-08 PRIMARY SAMPLE & 19/9004 - 945, 0.00-0.05 **Date of Analysis :** 25/06/19
Sample No: 1576 **Date of Report :** 01/07/19
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 170619
Calibration File : 250619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.06	0.258	107
PCB-77	37.9	0.296	84
PCB-123	12.7	0.638	81
PCB-118	363	0.627	75
PCB-114	5.73	0.625	87
PCB-105	174	0.608	78
PCB-126	8.23	0.772	75
PCB-167	39.5	0.381	80
PCB-156	87.8	0.443	80
PCB-157	23.5	0.463	78
PCB-169	2.58	0.215	87
PCB-189	12.7	0.361	78

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.927**	**0.927**
TEQ (WHO)- Fish	**0.0497**	**0.0497**
TEQ (WHO)- Birds	**2.96**	**2.96**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1577
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-08 LAB DUPLICATE & 19/9004 - 961, 0.00-0.05
Sample No: 1577
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	5.17	0.721	63	**2378-TCDD**	*	0.681	78
12378-PCDF	4.28	0.528	67	**12378-PCDD**	*	0.571	75
23478-PCDF	7.62	0.426	69	**123478-HxCDD**	2.24	0.546	81
123478-HxCDF	5.9	0.492	69	**123678-HxCDD**	4.35	0.548	80
123678-HxCDF	4.98	0.489	72	**123789-HxCDD**	3.28	0.548	
234678-HxCDF	6.32	0.482	73	**1234678-HpCDD**	95.6	0.746	58
123789-HxCDF	*	0.520	72	**OCDD**	681	1.211	51
1234678-HpCDF	46.8	0.384	56				
1234789-HpCDF	1.78	0.435	52				
OCDF	34.6	0.640					
Total 2,3,7,8-Furans	**117**			**Total 2,3,7,8-Dioxins**	**786**		

	TEQ[1]	**TEQ[2]**		**TEQ[1]**	**TEQ[2]**
TEQ (Nato)	**10.4**	**9.41**	**TEQ (WHO)- Mammals**	**8.6**	**7.3**
			TEQ (WHO)- Fish	**9.16**	**7.86**
			TEQ (WHO)- Birds	**17.4**	**16.1**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ[2]	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1577
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-08 LAB DUPLICATE & 19/9004 - 961, 0.00-0.05 **Date of Analysis :** 26/06/19
Sample No: 1577 **Date of Report :** 01/07/19
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 170619
Calibration File : 250619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.35	0.311	104
PCB-77	30.3	0.309	100
PCB-123	11.7	0.452	85
PCB-118	362	0.436	80
PCB-114	3.5	0.447	90
PCB-105	180	0.446	80
PCB-126	8.49	0.846	91
PCB-167	41.8	0.317	79
PCB-156	94	0.373	79
PCB-157	23.9	0.370	79
PCB-169	1.56	0.224	102
PCB-189	12.8	0.344	81

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.922**	**0.922**
TEQ (WHO)- Fish	**0.0504**	**0.0504**
TEQ (WHO)- Birds	**2.63**	**2.63**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1578
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-08 FIELD DUPLICATE & 19/9004 - 969, 0.00-0.05 **Date of Analysis :** 23/06/19
Sample No: 1578 **Date of Report :** 25/06/19
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 170619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	3.78	0.755	71	**2378-TCDD**	*	0.517	85
12378-PCDF	4.04	0.492	70	**12378-PCDD**	3.09	0.560	82
23478-PCDF	7.28	0.447	71	**123478-HxCDD**	2.42	0.565	87
123478-HxCDF	6.17	0.314	76	**123678-HxCDD**	4.83	0.557	86
123678-HxCDF	5.01	0.301	74	**123789-HxCDD**	3.46	0.557	
234678-HxCDF	4.68	0.282	79	**1234678-HpCDD**	83.6	0.304	71
123789-HxCDF	0.354	0.282	82	**OCDD**	543	0.656	73
1234678-HpCDF	36.1	0.162	66				
1234789-HpCDF	1.15	0.179	66				
OCDF	28.1	0.209					
Total 2,3,7,8-Furans	**96.7**			**Total 2,3,7,8-Dioxins**	**640**		

	TEQ[1]	**TEQ[2]**		**TEQ[1]**	**TEQ[2]**
TEQ (Nato)	**10.8**	**10.2**	**TEQ (WHO)- Mammals**	**10.4**	**9.84**
			TEQ (WHO)- Fish	**11.1**	**10.5**
			TEQ (WHO)- Birds	**17.7**	**17.2**

*	Isomer Not detected	**TEQ[1]**	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	**TEQ[2]**	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

UKAS TESTING
1668

MSS
Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1578
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-08 FIELD DUPLICATE & 19/9004 - 969, 0.00-0.05
Sample No: 1578
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 26/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.17	0.239	90
PCB-77	27.1	0.241	84
PCB-123	11.7	1.453	102
PCB-118	325	1.443	99
PCB-114	2.96	1.417	111
PCB-105	162	1.383	99
PCB-126	6.82	0.884	82
PCB-167	35.8	1.104	95
PCB-156	81.8	1.256	96
PCB-157	20.1	1.276	93
PCB-169	2.09	0.214	108
PCB-189	13.1	0.519	100

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.768**	**0.768**
TEQ (WHO)- Fish	**0.0413**	**0.0413**
TEQ (WHO)- Birds	**2.29**	**2.29**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Marchwood Scientific Services
371 Millbrook Rd West
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SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1579
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-08 LAB FIELD DUPLICATE & 19/9004 - 977, 0.00-0.05 **Date of Analysis :** 23/06/19
Sample No: 1579 **Date of Report :** 25/06/19
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 170619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.620	67	**2378-TCDD**	*	0.534	82
12378-PCDF	1.29	0.449	73	**12378-PCDD**	*	0.546	87
23478-PCDF	4.7	0.377	77	**123478-HxCDD**	1.1	0.554	82
123478-HxCDF	4.54	0.436	71	**123678-HxCDD**	1.86	0.596	83
123678-HxCDF	4.2	0.431	73	**123789-HxCDD**	1.16	0.596	
234678-HxCDF	4	0.399	75	**1234678-HpCDD**	79.1	0.707	63
123789-HxCDF	*	0.447	74	**OCDD**	545	1.467	55
1234678-HpCDF	34	0.430	58				
1234789-HpCDF	0.872	0.490	57				
OCDF	29.1	0.650					
Total 2,3,7,8-Furans	**82.8**			**Total 2,3,7,8-Dioxins**	**628**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**6.73**	**5.81**	**TEQ (WHO)- Mammals**	**5.63**	**4.45**
			TEQ (WHO)- Fish	**5.91**	**4.75**
			TEQ (WHO)- Birds	**8.52**	**6.78**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value	TEQ^2	Concentration of Non Detected Congeners at Zero
TEF	Toxic Equivalent Factor		
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1579
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-08 LAB FIELD DUPLICATE & 19/9004 - 977, 0.00-0.05 **Date of Analysis :** 26/06/19
Sample No: 1579 **Date of Report :** 01/07/19
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 170619
Calibration File : 250619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.26	0.296	96
PCB-77	23.4	0.283	95
PCB-123	9.97	0.625	100
PCB-118	264	0.614	95
PCB-114	2.4	0.611	108
PCB-105	128	0.625	95
PCB-126	4.33	1.161	78
PCB-167	29.3	0.542	99
PCB-156	67.3	0.611	100
PCB-157	17.4	0.619	97
PCB-169	0.585	0.139	102
PCB-189	10.5	0.396	102

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.469**	**0.469**
TEQ (WHO)- Fish	**0.0273**	**0.0273**
TEQ (WHO)- Birds	**1.75**	**1.75**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1580
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-09A & 19/9004 - 985, 0.00-0.05
Sample No: 1580
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.587	61	**2378-TCDD**	*	0.340	81
12378-PCDF	2.65	0.408	62	**12378-PCDD**	1.29	0.486	64
23478-PCDF	3.91	0.378	63	**123478-HxCDD**	1.69	0.644	84
123478-HxCDF	5.08	0.353	75	**123678-HxCDD**	10	0.628	81
123678-HxCDF	4.44	0.375	69	**123789-HxCDD**	4.27	0.628	
234678-HxCDF	4.86	0.349	78	**1234678-HpCDD**	266	0.525	70
123789-HxCDF	0.483	0.335	83	**OCDD**	2090	0.679	73
1234678-HpCDF	47.9	0.195	69				
1234789-HpCDF	2.28	0.227	69				
OCDF	52.9	0.251					
Total 2,3,7,8-Furans	**125**			**Total 2,3,7,8-Dioxins**	**2380**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**11.5**	**11.1**	**TEQ (WHO)- Mammals**	**9.83**	**9.43**
			TEQ (WHO)- Fish	**7.2**	**6.83**
			TEQ (WHO)- Birds	**9.48**	**8.55**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1580
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-09A & 19/9004 - 985, 0.00-0.05
Sample No: 1580
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 27/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.19	0.342	93
PCB-77	62.6	0.349	89
PCB-123	27.4	0.592	102
PCB-118	619	0.569	97
PCB-114	4.57	0.561	111
PCB-105	315	0.561	99
PCB-126	22.1	0.840	89
PCB-167	94.1	0.657	97
PCB-156	213	0.755	97
PCB-157	63.3	0.781	92
PCB-169	1.77	0.244	81
PCB-189	25.6	0.320	99

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.31**	**2.31**
TEQ (WHO)- Fish	**0.125**	**0.125**
TEQ (WHO)- Birds	**5.63**	**5.63**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1581
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-10A & 19/9004 - 1001, 0.00-0.05
Sample No: 1581
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.339	68	**2378-TCDD**	*	0.247	82
12378-PCDF	1.37	0.287	64	**12378-PCDD**	0.686	0.386	69
23478-PCDF	2.93	0.249	63	**123478-HxCDD**	0.804	0.446	89
123478-HxCDF	2.65	0.287	73	**123678-HxCDD**	3.63	0.451	85
123678-HxCDF	0.919	0.268	74	**123789-HxCDD**	2.98	0.451	
234678-HxCDF	2.62	0.259	78	**1234678-HpCDD**	97.7	0.517	66
123789-HxCDF	0.495	0.259	82	**OCDD**	705	0.623	53
1234678-HpCDF	21.2	0.238	62				
1234789-HpCDF	1.17	0.279	59				
OCDF	21.7	0.391					
Total 2,3,7,8-Furans	**55.1**			**Total 2,3,7,8-Dioxins**	**811**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.5**	**5.21**	**TEQ (WHO)- Mammals**	**4.72**	**4.43**
			TEQ (WHO)- Fish	**4.01**	**3.75**
			TEQ (WHO)- Birds	**5.78**	**5.19**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1581
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-10A & 19/9004 - 1001, 0.00-0.05
Sample No: 1581
Order No: E208N19001042
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 250619

Date of Receipt : 11/06/19
Date of Analysis : 27/06/19
Date of Report : 01/07/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.516	0.215	91
PCB-77	24.1	0.226	85
PCB-123	14.9	0.736	98
PCB-118	313	0.743	93
PCB-114	1.91	0.705	109
PCB-105	164	0.738	94
PCB-126	9.15	0.634	81
PCB-167	35.2	0.685	87
PCB-156	84.4	0.772	87
PCB-157	22.8	0.778	82
PCB-169	1.15	0.138	105
PCB-189	10.7	0.466	88

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.972**	**0.972**
TEQ (WHO)- Fish	**0.0517**	**0.0517**
TEQ (WHO)- Birds	**2.2**	**2.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Element Materials Technology
Unit 3 Deeside Point
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CH5 2UA

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W: www.element.com

AECOM
9th Floor Reception
Sunley House
4 Bedford Park
Croydon
CR0 2AP

Attention :	David Dyson
Date :	17th July, 2019
Your reference :	60595731
Our reference :	Test Report 19/9004 Batch 4
Location :	Grenfell
Date samples received :	8th June, 2019
Status :	Final report
Issue :	1

Twenty seven samples were received for analysis on 8th June, 2019 of which sixteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
Aluminium	-	-	-	-	-	8683	10180	10300	-	11880	<50	mg/kg	TM30/PM15
Arsenic #M	-	-	-	-	-	9.6	11.1	9.6	-	10.7	<0.5	mg/kg	TM30/PM15
Barium #M	-	-	-	-	-	124	153	134	-	134	<1	mg/kg	TM30/PM15
Beryllium	-	-	-	-	-	0.8	0.8	0.8	-	1.0	<0.5	mg/kg	TM30/PM15
Cadmium #M	-	-	-	-	-	0.6	0.9	0.6	-	0.6	<0.1	mg/kg	TM30/PM15
Chromium #M	-	-	-	-	-	132.8	84.5	74.0	-	78.1	<0.5	mg/kg	TM30/PM15
Copper #M	-	-	-	-	-	39	62	48	-	50	<1	mg/kg	TM30/PM15
Lead #M	-	-	-	-	-	197	131	141	-	147	<5	mg/kg	TM30/PM15
Mercury #M	-	-	-	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	mg/kg	TM30/PM15
Nickel #M	-	-	-	-	-	21.8	23.4	17.2	-	20.3	<0.7	mg/kg	TM30/PM15
Selenium #M	-	-	-	-	-	1	1	<1	-	1	<1	mg/kg	TM30/PM15
Vanadium	-	-	-	-	-	40	47	45	-	52	<1	mg/kg	TM30/PM15
Water Soluble Boron #M	-	-	-	-	-	2.5	3.7	3.7	-	3.2	<0.1	mg/kg	TM74/PM32
Zinc #M	-	-	-	-	-	391	189	190	-	188	<5	mg/kg	TM30/PM15
Aluminium	4386	12066	14825	13421	12027	-	-	-	9318	-	<50	mg/kg	TM30/PM62
Arsenic	8.9	92.9	32.7	25.8	26.7	-	-	-	13.4	-	<0.5	mg/kg	TM30/PM62
Barium	52	327	607	345	375	-	-	-	117	-	<1	mg/kg	TM30/PM62
Beryllium	<0.5	2.2	2.0	1.6	1.3	-	-	-	0.8	-	<0.5	mg/kg	TM30/PM62
Cadmium	0.3	1.6	1.4	1.4	1.9	-	-	-	0.6	-	<0.1	mg/kg	TM30/PM62
Chromium	24.9	67.0	57.0	46.6	32.9	-	-	-	30.1	-	<0.5	mg/kg	TM30/PM62
Copper	63	232	261	218	161	-	-	-	45	-	<1	mg/kg	TM30/PM62
Lead	42	552	1111	860	617	-	-	-	149	-	<5	mg/kg	TM30/PM62
Mercury	<0.1	0.2	0.5	0.3	0.2	-	-	-	<0.1	-	<0.1	mg/kg	TM30/PM62
Nickel	16.3	82.8	44.8	40.6	31.3	-	-	-	16.3	-	<0.7	mg/kg	TM30/PM62
Selenium	<1	4	2	2	2	-	-	-	1	-	<1	mg/kg	TM30/PM62
Vanadium	37	62	82	73	60	-	-	-	45	-	<1	mg/kg	TM30/PM62
Water Soluble Boron	2.8	2.8	3.1	4.0	3.2	-	-	-	5.3	-	<0.1	mg/kg	TM74/PM61
Zinc	103	803	967	804	851	-	-	-	177	-	<5	mg/kg	TM30/PM62
Aluminium	3993	12550	12110	12710	12040	-	-	-	9669	-	<50	mg/kg	TM30/PM42
Arsenic	9.4	32.3	27.8	35.2	32.2	-	-	-	11.1	-	<0.5	mg/kg	TM30/PM42
Barium	48	475	509	535	575	-	-	-	153	-	<1	mg/kg	TM30/PM42
Beryllium	0.5	1.8	1.7	1.9	1.8	-	-	-	0.8	-	<0.5	mg/kg	TM30/PM42
Cadmium	0.2	1.8	1.4	2.1	1.6	-	-	-	0.6	-	<0.1	mg/kg	TM30/PM42
Chromium	24.4	55.9	46.2	59.0	52.8	-	-	-	28.7	-	<0.5	mg/kg	TM30/PM42
Copper	48	644$_{AA}$	245	299$_{AA}$	287$_{AA}$	-	-	-	55	-	<1	mg/kg	TM30/PM42
Lead	36	980	956	1083	1597	-	-	-	153	-	<5	mg/kg	TM30/PM42
Mercury	<0.1	0.2	0.3	0.2	0.3	-	-	-	0.2	-	<0.1	mg/kg	TM30/PM42
Nickel	16.0	50.9	41.2	52.8	48.2	-	-	-	18.5	-	<0.7	mg/kg	TM30/PM42
Selenium	<1	2	2	2	2	-	-	-	1	-	<1	mg/kg	TM30/PM42
Vanadium	39	77	73	80	77	-	-	-	45	-	<1	mg/kg	TM30/PM42
Water Soluble Boron	2.4	4.1	4.5	4.3	4.2	-	-	-	4.0	-	<0.1	mg/kg	TM74/PM42
Zinc	85	1021	891	1505	1046	-	-	-	198	-	<5	mg/kg	TM30/PM42

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
PAH MS													
Naphthalene #M	<0.04	0.12	0.09	0.10	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	0.19	0.19	0.17	0.19	0.12	0.07	0.07	0.06	0.07	<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	0.16	0.12	0.14	0.19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	0.13	0.09	0.10	0.15	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.05	2.58	2.08	2.19	2.79	0.22	0.33	0.29	0.38	0.30	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	0.47	0.43	0.42	0.64	0.07	0.12	0.11	0.13	0.11	<0.04	mg/kg	TM4/PM8
Fluoranthene #M	0.14	5.64	5.02	4.89	5.85	0.87	0.96	1.05	1.03	0.94	<0.03	mg/kg	TM4/PM8
Pyrene #	0.11	5.17	4.41	4.41	5.21	0.79	0.84	0.93	0.91	0.84	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.15	3.36	2.99	2.71	4.32	1.16	0.76	0.81	0.74	0.72	<0.06	mg/kg	TM4/PM8
Chrysene #M	0.09	2.55	2.25	2.49	2.66	0.79	0.49	0.59	0.57	0.64	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	0.26	5.73	5.08	5.13	6.29	2.02	1.29	1.45	1.32	1.33	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.13	2.87	2.64	2.81	3.18	0.93	0.63	0.72	0.72	0.72	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.10	1.94	1.73	1.83	2.07	0.78	0.49	0.53	0.49	0.51	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	0.39	0.45	0.42	0.60	0.16	0.12	0.10	0.13	0.09	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.11	2.09	1.69	1.80	2.12	0.78	0.53	0.60	0.56	0.55	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	0.47	0.43	0.42	0.49	0.16	0.12	0.14	0.12	0.12	<0.04	mg/kg	TM4/PM8
PAH 16 Total	1.1	33.4	29.3	29.6	36.4	8.7	6.6	7.3	7.0	6.8	<0.6	mg/kg	TM4/PM8
PAH 17 Total	1.14	33.86	29.69	30.03	36.87	8.85	6.75	7.39	7.16	6.94	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.19	4.13	3.66	3.69	4.53	1.45	0.93	1.04	0.95	0.96	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.07	1.60	1.42	1.44	1.76	0.57	0.36	0.41	0.37	0.37	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	101	101	100	99	98	92	104	97	99	96	<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	See Attached		None	TM15/PM10
SVOC TICs	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached		None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	ug/kg	TM17/PM8
Natural Moisture Content	27.7	17.6	16.0	16.4	17.8	22.2	22.1	20.8	15.8	13.6	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	-	-	-	-	132.8	84.5	74.0	-	78.1	<0.5	mg/kg	NONE/NONE
Chromium III	24.9	67.0	57.0	46.6	32.9	-	-	-	30.1	-	<0.5	mg/kg	NONE/NONE
Chromium III	24.4	55.9	46.2	59.0	52.8	-	-	-	28.7	-	<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Cyanide #M	<0.5	2.1	2.2	2.6	2.4	1.0	0.7	<0.5	<0.5	0.6	<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
Total Organic Carbon #	-	-	-	-	-	6.59	7.82	8.35	-	9.17	<0.02	%	TM21/PM24
Total Organic Carbon	5.84	6.15	9.07	8.09	7.83	-	-	-	8.21	-	<0.02	%	TM21/PM89
Thiocyanate	2.9	<0.6	<0.6	<0.6	<0.6	1.0	1.7	1.8	1.7	1.7	<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	<0.196	13	21	19.5	24.5	<0.664	<0.539	<0.734	<0.601	<0.543		ng/kg	Subcontracted
12378-PCDF*	<0.132	9.81	11.6	12.3	12.5	<0.362	3.04	<0.445	<0.314	<0.315		ng/kg	Subcontracted
23478-PCDF*	<0.111	11.7	20.5	15.4	16.6	0.725	3.26	<0.372	1.77	2.58		ng/kg	Subcontracted
123478-HxCDF*	0.998	14.1	14.4	10.5	17.9	1.91	3.23	1.88	<0.247	1.32		ng/kg	Subcontracted
123678-HxCDF*	1.01	13.2	19.9	18	19.2	<0.335	2.85	<0.315	<0.251	2.01		ng/kg	Subcontracted
234678-HxCDF*	1.26	18.2	24.3	19.5	20.4	0.85	4.16	3.62	<0.218	<0.221		ng/kg	Subcontracted
123789-HxCDF*	<0.144	2.02	1.55	<1.201	1.55	<0.368	<0.368	<0.346	<0.275	<0.265		ng/kg	Subcontracted
1234678-HpCDF*	18	275	535	384	441	42.2	38.3	28.1	21.8	18.9		ng/kg	Subcontracted
1234789-HpCDF*	0.744	34	33.5	24.1	26.3	3.16	1.94	1.31	0.803	<0.517		ng/kg	Subcontracted
OCDF*	31.1	1040	2680	1470	1750	74.6	59.1	50.9	35.4	34.5		ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.132	<0.846	<0.437	0.81	1.68	<0.289	<0.213	<0.234	<0.186	<0.214		ng/kg	Subcontracted
12378-PCDD*	<0.113	16.2	10.5	8.97	9.92	7.21	0.96	<0.624	<0.458	<0.521		ng/kg	Subcontracted
123478-HxCDD*	0.593	25.2	18.5	13.4	16.5	18.6	1.49	1.19	0.918	1.21		ng/kg	Subcontracted
123678-HxCDD*	1.84	43	55.9	39.9	41.1	33.5	6.11	4.55	2.63	3.34		ng/kg	Subcontracted
123789-HxCDD*	0.994	40.3	35	25.7	31.3	36.4	4.33	3.16	<0.541	1.64		ng/kg	Subcontracted
1234678-HpCDD*	91.9	1040	2190	1230	1440	1350	191	170	128	121		ng/kg	Subcontracted
OCDD*	774	8750	25900	12900	14900	10200	1440	1230	964	844		ng/kg	Subcontracted
TEQ(1) (NATO)*	2.87	55.5	91.7	59.1	68.5	37.8	8.59	5.61	4.39	5.12		ng/kg	Subcontracted
TEQ(2) (NATO)*	2.58	54.6	91.3	59	68.5	37.4	8.28	4.71	3.75	4.52		ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	1.29	16.89	23.55	12.66	11.09	2.91	1.76	1.3	0.89	<0.790		ng/kg	Subcontracted
12378-PBDF*	0.92	12.29	18.91	10.91	8.89	1.06	1.28	1.01	1.31	1.07		ng/kg	Subcontracted
23478-PBDF*	<0.770	5.91	8.45	5.87	6.23	0.77	1.25	1.65	1.09	0.92		ng/kg	Subcontracted
123478-HxBDF*	0.71	6.88	7.9	3.87	5.52	0.69	0.8	0.91	<0.790	<0.790		ng/kg	Subcontracted
123678-HxBDF*	<0.800	5.4	4.13	4.21	3.16	1.04	1.33	0.88	<0.800	<0.800		ng/kg	Subcontracted
234678-HxBDF*	<0.840	3.15	9.22	7.32	5.92	<0.810	<0.800	<0.780	<0.760	<0.760		ng/kg	Subcontracted
123789-HxBDF*	<0.800	1.88	3.56	2.55	1.85	<0.800	<0.840	<0.800	<0.800	<0.800		ng/kg	Subcontracted
1234678-HpBDF*	<0.800	5.03	12.11	8.35	14.77	<0.800	<0.800	<0.800	1.11	1.34		ng/kg	Subcontracted
1234789-HpBDF*	0.82	1.22	4.9	2.7	6.32	<0.840	<0.780	<0.790	<0.790	<0.780		ng/kg	Subcontracted
OBDF*	<0.840	0.9	3.34	4.08	5.9	<0.820	<0.850	<0.810	<0.840	<0.830		ng/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
Dioxins (Brominated)													
2378-TBDD*	<0.760	<0.780	<0.760	<0.780	<0.760	<0.770	<0.800	<0.770	<0.800	<0.800		ng/kg	Subcontracted
12378-PBDD*	<0.810	<0.810	<0.800	<0.740	<0.790	<0.800	<0.780	<0.800	<0.800	<0.800		ng/kg	Subcontracted
123478-HxBDD*	<0.790	<0.800	<0.800	<0.800	<0.770	<0.800	<0.800	<0.810	<0.780	<0.770		ng/kg	Subcontracted
123678-HxBDD*	<0.700	<0.780	<0.760	<0.700	<0.800	<0.760	<0.780	<0.780	<0.780	<0.780		ng/kg	Subcontracted
123789-HxBDD*	<0.750	<0.790	<0.790	<0.770	<0.790	<0.780	<0.750	<0.770	<0.790	<0.770		ng/kg	Subcontracted
1234678-HpBDD*	<0.740	2.56	1.88	1.11	2.68	<0.800	<0.830	<0.820	<0.820	<0.820		ng/kg	Subcontracted
OBDD*	<0.780	<0.780	<0.830	<0.810	<0.810	<0.820	<0.810	<0.800	<0.800	<0.810		ng/kg	Subcontracted
PCB-81*	0.687	3.54	4.66	5.14	7.05	5.23	3.46	1.48	0.94	1.32		ng/kg	Subcontracted
PCB-77*	12.4	81.3	106	115	173	134	69.3	65.6	57.8	48.9		ng/kg	Subcontracted
PCB-123*	7.06	24.4	43.3	46.1	34.3	37.3	27.5	31.2	21.7	26.3		ng/kg	Subcontracted
PCB-118*	249	753	1040	1120	1140	1580	1200	1060	920	796		ng/kg	Subcontracted
PCB-114*	3.45	7.28	8.41	16.2	18	17.4	12.4	10.5	10.7	13.2		ng/kg	Subcontracted
PCB-105*	117	355	525	535	573	743	587	538	445	388		ng/kg	Subcontracted
PCB-126*	<0.476	17.4	22.1	28.8	27.1	11.7	14.9	11.8	4.88	7.06		ng/kg	Subcontracted
PCB-167*	20.7	114	132	199	151	99.5	98.3	84.4	75.8	64		ng/kg	Subcontracted
PCB-156*	55.9	210	248	265	280	262	231	215	183	157		ng/kg	Subcontracted
PCB-157*	10.6	60.3	89.3	102	94.3	60.2	51.1	49.7	38.8	34.6		ng/kg	Subcontracted
PCB-169*	0.158	2.41	5.93	6.39	6.3	<0.353	0.258	<0.204	0.545	0.46		ng/kg	Subcontracted
PCB-189*	5.64	56.1	61.1	57.9	65.7	23	28.8	22.3	19.2	16.9		ng/kg	Subcontracted
Isocyanic Acid-d	71	66	66	79	76	90	85	84	57	44	<0	%	TM192/PM0
Methyl Isocyanate-d	98	82	81	102	97	117	109	110	67	54	<0	%	TM192/PM0
Ethyl Isocyanate-d	96	82	81	99	96	117	108	112	58	50	<0	%	TM192/PM0
Propyl Isocyanate-d	103	83	82	100	93	119	108	111	82	64	<0	%	TM192/PM0
Phenyl Isocyanate-d	91	55	55	69	57	99	72	76	41	30	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	78	65	66	79	75	96	82	84	46	44	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	139++	57	53	102	91	226++	115	226++	35	31	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	76	56	52	74	69	100	81	85	41	35	<0	%	TM192/PM0
Isophorone Diisocyanate-d	81	75	74	81	87	92	89	90	50	53	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	85	59	51	81	84	112	95	98	48	39	<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
pH #M	7.53	7.75	7.77	7.83	7.78	7.65	7.47	7.45	7.54	7.25	<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam		None	PM13/PM0
Sample Colour	Dark Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, vegetation	stones, vegetation	stones, vegetation, debris	stones, vegetation, brick, scrap metal	stones, vegetation, debris	stones, wood	stones, wood, vegetation	stones, chalk, wood, vegetation	stones.wood	stones, wood vegetation, debris		None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.50	<0.20	<0.20		mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		mg/kg	Subcontracted

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
Aluminium	7777	8281	5892	18930	11650	11400					<50	mg/kg	TM30/PM15
Arsenic #M	10.6	12.4	5.2	17.7	9.0	14.8					<0.5	mg/kg	TM30/PM15
Barium #M	89	140	196	244	135	225					<1	mg/kg	TM30/PM15
Beryllium	0.7	0.8	0.7	1.5	0.9	1.3					<0.5	mg/kg	TM30/PM15
Cadmium #M	0.4	0.4	0.3	2.7	0.7	1.1					<0.1	mg/kg	TM30/PM15
Chromium #M	102.5	94.0	94.0	89.2	145.2	117.6					<0.5	mg/kg	TM30/PM15
Copper #M	24	34	25	95	33	54					<1	mg/kg	TM30/PM15
Lead #M	101	182	63	301	141	280					<5	mg/kg	TM30/PM15
Mercury #M	0.2	0.4	<0.1	1.4	0.3	0.4					<0.1	mg/kg	TM30/PM15
Nickel #M	14.7	17.8	13.4	30.5	21.0	25.9					<0.7	mg/kg	TM30/PM15
Selenium #M	<1	<1	1	1	1	<1					<1	mg/kg	TM30/PM15
Vanadium	36	43	30	64	49	55					<1	mg/kg	TM30/PM15
Water Soluble Boron #M	0.9	1.2	0.9	1.7	1.3	1.8					<0.1	mg/kg	TM74/PM32
Zinc #M	104	130	90	360	151	303					<5	mg/kg	TM30/PM15
Aluminium	-	-	-	-	-	-					<50	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Beryllium	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-					<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-					<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Vanadium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Water Soluble Boron	-	-	-	-	-	-					<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-					<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
PAH MS													
Naphthalene #M	<0.04	<0.04	<0.04	<0.04	<0.04	0.05					<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.07	0.07	<0.03	0.12	0.06	0.20					<0.03	mg/kg	TM4/PM8
Acenaphthene #M	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Fluorene #M	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Phenanthrene #M	0.34	0.36	0.05	0.56	0.39	0.74					<0.03	mg/kg	TM4/PM8
Anthracene #	0.12	0.11	<0.04	0.18	0.13	0.21					<0.04	mg/kg	TM4/PM8
Fluoranthene #M	1.20	1.25	0.19	1.41	1.29	2.56					<0.03	mg/kg	TM4/PM8
Pyrene #	1.04	1.12	0.18	1.09	1.10	2.25					<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.85	0.65	0.19	0.77	0.89	1.71					<0.06	mg/kg	TM4/PM8
Chrysene #M	0.62	0.68	0.13	0.76	0.62	1.33					<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #M	1.51	1.61	0.38	1.76	1.62	3.16					<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.76	0.87	0.19	0.96	0.77	1.65					<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #M	0.53	0.57	0.15	0.74	0.65	1.09					<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.10	0.17	<0.04	0.15	0.18	0.29					<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.54	0.64	0.16	0.79	0.75	1.22					<0.04	mg/kg	TM4/PM8
Coronene	0.12	0.15	<0.04	0.18	0.17	0.27					<0.04	mg/kg	TM4/PM8
PAH 16 Total	7.7	8.1	1.6	9.3	8.5	16.5					<0.6	mg/kg	TM4/PM8
PAH 17 Total	7.80	8.25	1.62	9.47	8.62	16.73					<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.09	1.16	0.27	1.27	1.17	2.28					<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.42	0.45	0.11	0.49	0.45	0.88					<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	103	97	99	96	97	100					<0	%	TM4/PM8
VOC TICs	ND	ND	ND	ND	ND	ND						None	TM15/PM10
SVOC TICs	ND	See Attached	ND	See Attached	See Attached	See Attached						None	TM16/PM8
7,12-Dimethyl benzo(a)anthracene	<100	<100	<100	<100	<100	<100					<100	ug/kg	TM16/PM8
PCB 28 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35	<35	<35	<35	<35					<35	ug/kg	TM17/PM8
Natural Moisture Content	9.9	6.8	5.8	8.2	18.3	7.1					<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	102.5	94.0	94.0	89.2	145.2	117.6					<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-					<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Cyanide #M	<0.5	<0.5	0.5	2.2	<0.5	<0.5					<0.5	mg/kg	TM89/PM45

Please see attached notes for all abbreviations and acronyms

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
Total Organic Carbon #	2.75	2.84	3.00	4.83	2.38	4.12					<0.02	%	TM21/PM24
Total Organic Carbon	-	-	-	-	-	-					<0.02	%	TM21/PM89
Thiocyanate	0.8	0.6	1.3	0.9	<0.6	0.9					<0.6	mg/kg	TM107/PM119
Furans (Chlorinated)													
2378-TCDF*	<0.469	<0.436	<0.982	<0.939	<0.976	<0.757						ng/kg	Subcontracted
12378-PCDF*	<0.267	<0.284	<0.437	4.91	1.47	<0.815						ng/kg	Subcontracted
23478-PCDF*	<0.229	<0.249	<0.339	<0.573	<0.566	<0.538						ng/kg	Subcontracted
123478-HxCDF*	<0.200	<0.373	<0.378	<0.784	<0.358	<0.859						ng/kg	Subcontracted
123678-HxCDF*	<0.196	<0.420	<0.413	4.77	<0.415	<0.807						ng/kg	Subcontracted
234678-HxCDF*	<0.180	<0.404	<0.459	6.12	<0.373	<0.835						ng/kg	Subcontracted
123789-HxCDF*	<0.220	<0.496	<0.595	<0.852	<0.551	<1.003						ng/kg	Subcontracted
1234678-HpCDF*	17	26.4	131	82.8	26.9	139						ng/kg	Subcontracted
1234789-HpCDF*	<0.423	0.912	<3.012	4.72	2.09	<2.553						ng/kg	Subcontracted
OCDF*	31.7	19.6	71.6	91	42.6	88.5						ng/kg	Subcontracted
Dioxins (Chlorinated)													
2378-TCDD*	<0.182	<0.164	<0.311	<0.324	<0.398	<0.223						ng/kg	Subcontracted
12378-PCDD*	<0.507	<0.392	<0.636	0.766	<0.781	<0.593						ng/kg	Subcontracted
123478-HxCDD*	<0.360	<0.725	<0.660	<1.146	2.63	<0.904						ng/kg	Subcontracted
123678-HxCDD*	1.28	<0.793	1.61	4.84	3.53	<0.849						ng/kg	Subcontracted
123789-HxCDD*	0.595	<0.817	<0.716	<1.280	<1.204	<0.874						ng/kg	Subcontracted
1234678-HpCDD*	48.8	42.7	66.9	226	145	114						ng/kg	Subcontracted
OCDD*	388	340	492	1670	1180	796						ng/kg	Subcontracted
TEQ(1) (NATO)*	1.99	2	3.98	8.21	5.11	4.96						ng/kg	Subcontracted
TEQ(2) (NATO)*	1.26	1.06	2.71	7.1	3.65	3.41						ng/kg	Subcontracted
Furans (Brominated)													
2378-TBDF*	<0.820	<0.800	3.91	3.78	1.1	3.97						ng/kg	Subcontracted
12378-PBDF*	1.22	0.97	2.66	2.57	0.85	2.14						ng/kg	Subcontracted
23478-PBDF*	0.85	1.26	1.68	1.29	1.16	2.3						ng/kg	Subcontracted
123478-HxBDF*	<0.790	<0.790	1.29	1.85	0.8	1.46						ng/kg	Subcontracted
123678-HxBDF*	<0.800	<0.800	0.89	0.75	<0.770	2.07						ng/kg	Subcontracted
234678-HxBDF*	<0.800	<0.800	<0.800	<0.820	<0.800	<0.800						ng/kg	Subcontracted
123789-HxBDF*	<0.780	<0.790	<0.790	<0.830	<0.810	<0.800						ng/kg	Subcontracted
1234678-HpBDF*	1.03	1.31	1.5	1.8	<0.800	1.11						ng/kg	Subcontracted
1234789-HpBDF*	<0.790	<0.780	<0.780	<0.820	<0.820	<0.790						ng/kg	Subcontracted
OBDF*	<0.830	<0.840	<0.800	<0.800	<0.830	<0.830						ng/kg	Subcontracted

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
Dioxins (Brominated)													
2378-TBDD*	<0.800	<0.780	<0.790	<0.780	<0.790	<0.800						ng/kg	Subcontracted
12378-PBDD*	<0.830	<0.830	<0.800	<0.800	<0.800	<0.800						ng/kg	Subcontracted
123478-HxBDD*	<0.790	<0.770	<0.810	<0.800	<0.800	<0.800						ng/kg	Subcontracted
123678-HxBDD*	<0.780	<0.780	<0.800	<0.800	<0.810	<0.810						ng/kg	Subcontracted
123789-HxBDD*	<0.800	<0.800	<0.780	<0.770	<0.770	<0.790						ng/kg	Subcontracted
1234678-HpBDD*	<0.820	<0.810	<0.810	<0.810	<0.820	<0.820						ng/kg	Subcontracted
OBDD*	<0.800	<0.800	<0.800	<0.820	<0.820	<0.830						ng/kg	Subcontracted
PCB-81*	<0.230	0.385	<0.168	2.9	1.57	2.23						ng/kg	Subcontracted
PCB-77*	19.6	26.9	12.2	91.3	57	59.9						ng/kg	Subcontracted
PCB-123*	4.45	4.35	5.02	42.1	28.1	48.9						ng/kg	Subcontracted
PCB-118*	264	226	253	1700	929	1110						ng/kg	Subcontracted
PCB-114*	5.49	1.89	2.57	12.6	10.1	13.4						ng/kg	Subcontracted
PCB-105*	118	109	111	886	525	583						ng/kg	Subcontracted
PCB-126*	1.75	3.34	<2.912	4.06	13.8	2.47						ng/kg	Subcontracted
PCB-167*	27.1	23.8	29.2	247	97.2	157						ng/kg	Subcontracted
PCB-156*	59.1	48.6	58.8	486	242	299						ng/kg	Subcontracted
PCB-157*	16.2	16.1	12.8	161	61.4	91.5						ng/kg	Subcontracted
PCB-169*	0.376	0.561	<0.187	0.768	<0.378	1.62						ng/kg	Subcontracted
PCB-189*	7	6.62	7.22	63.8	27.3	46						ng/kg	Subcontracted
Isocyanic Acid-d	84	93	59	74	74	66					<0	%	TM192/PM0
Methyl Isocyanate-d	95	115	69	92	81	74					<0	%	TM192/PM0
Ethyl Isocyanate-d	93	111	64	86	78	66					<0	%	TM192/PM0
Propyl Isocyanate-d	106	114	79	103	99	86					<0	%	TM192/PM0
Phenyl Isocyanate-d	100	89	74	76	77	48					<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	90	90	62	75	70	55					<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	139++	226++	51	86	82	48					<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	84	85	57	72	72	49					<0	%	TM192/PM0
Isophorone Diisocyanate-d	92	92	57	74	70	60					<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	92	98	74	85	85	60					<0	%	TM192/PM0
Isocyanic Acid	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
Methyl Isocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
Ethyl Isocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
Propyl Isocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
Phenyl Isocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	<500	<500	<500	<500	<500	<500					<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	<250	<250	<250	<250	<250	<250					<250	ug/kg	TM192/PM0
pH #M	7.49	7.62	7.50	7.63	7.59	7.37					<0.01	pH units	TM73/PM11

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay						None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown						None	PM13/PM0
Other Items	stones, vegetation	stones, vegetation, chalk	stones, vegetation, debris	stones, vegetation	stones, vegetation	stones, vegetation						None	PM13/PM0
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						mg/kg	Subcontracted
4,4'-dibromobiphenyl (PBB 15)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						mg/kg	Subcontracted
2,2',5-tribromobiphenyl (PBB 18)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						mg/kg	Subcontracted
2,2'-dibromobiphenyl (PBB 4)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						mg/kg	Subcontracted
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						mg/kg	Subcontracted
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',4-tribromodiphenyl ether (BDE-17)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,4,4'-tribromodiphenyl ether (BDE-28)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
hexabromocyclododecane (1,2,5,6,9,10-)*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
tetrabromobisphenol A*	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						mg/kg	Subcontracted
triphenylphosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted
tris(1-chloro-2-propyl)phosphate TCPP*	<0.15	<0.15	<0.50	<0.50	<0.20	<0.15						mg/kg	Subcontracted
tris(2-ethylhexyl) phosphate*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10						mg/kg	Subcontracted

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	<10	87	82	92	101	<10	21	50	27	50	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	32607	609	805	639	838	210	408	939	418	583	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	174	212	191	231	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	<10	233	245	257	346	61	67	518	243	1164	<10	ug/kg	TM16/PM8
Dibenzofuran #M	<10	72	60	70	112	12	16	170	98	233	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	120	123	122	123	120	125	121	129	129	122	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	120	123	122	121	128	122	125	124	130	128	<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

SVOC Report : **Solid**

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
SVOC MS													
Phenols													
2-Chlorophenol #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Phenol #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2-Methylnaphthalene #M	<10	21	<10	32	17	<10					<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	<100	120	<100	594	1106	459					<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100					<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	131	<100	<100					<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100					<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100					<100	ug/kg	TM16/PM8
Dimethyl phthalate #M	<100	<100	<100	<100	<100	<100					<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Carbazole	35	69	23	49	76	80					<10	ug/kg	TM16/PM8
Dibenzofuran #M	<10	17	<10	24	19	22					<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Hexachlorobutadiene #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Isophorone #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Nitrobenzene #M	<10	<10	<10	<10	<10	<10					<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	121	125	123	124	123	120					<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	129	124	124	124	129	130					<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	1015-1022	1031-1038	1047-1054	1055-1062	1063-1070	1071-1078	1095-1102	1111-1118	1119-1126	1127-1134	LOD/LOR	Units	Method No.
Sample ID	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE			
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	06/06/2019 15:30	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 14:35	06/06/2019 17:00	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27	06/06/2019 17:27			
Sample Type	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam	Clayey Loam			
Batch Number	4	4	4	4	4	4	4	4	4	4			
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019			
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Chloromethane #	8	7	9	10	12	17	20	21	14	14	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	<30	37	<30	<30	<30	<30	<30	<30	<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	87	81	70	75	81	79	60	59	66	54	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	70	63	62	64	68	67	58	59	63	55	<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

VOC Report : **Solid**

EMT Sample No.	1135-1142	1151-1158	1167-1174	1183-1190	1199-1206	1215-1222					LOD/LOR	Units	Method No.
Sample ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A							
Depth	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/06/2019 09:00	07/06/2019 09:40	07/06/2019 10:45	07/06/2019 10:50	07/06/2019 09:10	07/06/2019 09:45							
Sample Type	Clayey Loam	Clayey Loam	Loam	Clayey Loam	Clay	Clay							
Batch Number	4	4	4	4	4	4							
Date of Receipt	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019	08/06/2019							
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2					<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #M	<6	<6	<6	<6	<6	<6					<6	ug/kg	TM15/PM10
Chloromethane #	5	5	7	12	5	11					<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2					<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1					<1	ug/kg	TM15/PM10
Chloroethane #M	<6	<6	<6	<6	<6	<6					<6	ug/kg	TM15/PM10
Trichlorofluoromethane #M	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #M	<6	<6	<6	<6	<6	<6					<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<30	<30	41	<30	<30	<30					<30	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
1,1-Dichloroethane #M	<6	<6	<6	<6	<6	<6					<6	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #M	<7	<7	<7	<7	<7	<7					<7	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Bromochloromethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Chloroform #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
1,1,1-Trichloroethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
Carbon tetrachloride #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,2-Dichloroethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
Benzene #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
Trichloroethene (TCE) #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
1,2-Dichloropropane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Dibromomethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Bromodichloromethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Toluene #M	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
1,3-Dichloropropane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Dibromochloromethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
Chlorobenzene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #M	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
Ethylbenzene #M	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
m/p-Xylene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
o-Xylene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15_A/PM10
Bromoform	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #M	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2					<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3					<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5					<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6					<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
4-Isopropyltoluene #	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
n-Butylbenzene #	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #M	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane #	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene #	<7	<7	<7	<7	<7	<7					<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4					<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27					<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene #	<7	<7	<7	<7	<7	<7					<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	86	88	85	66	74	87					<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	77	75	76	61	71	73					<0	%	TM15/PM10

Please see attached notes for all abbreviations and acronyms

Job number: 19/9004 **Method:** VOC
Sample number: 1127 **Matrix:** Solid
Sample identity: GTCS 1-12 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
80-56-8	.alpha.-Pinene	6.354	96	268

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 1020
Sample identity: GTCS 1-29A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
91-10-1	Phenol, 2,6-dimethoxy-	7.756	92	2254
458-36-6	2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	9.867	91	3917

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1036 **Matrix:** Solid
Sample identity: GTCS 1-30 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
31317-07-4	1-Methyldibenzothiophene	10.623	86	689
832-64-4	Phenanthrene, 4-methyl-	10.802	91	830
2531-84-2	Phenanthrene, 2-methyl-	10.831	97	469
610-48-0	Anthracene, 1-methyl-	10.878	92	322
84-65-1	9,10-Anthracenedione	11.058	92	467
612-94-2	Naphthalene, 2-phenyl-	11.105	81	236
33543-31-6	Fluoranthene, 2-methyl-	12.155	95	1068
479-79-8	11H-Benzo[a]fluoren-11-one	12.750	95	338
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.911	86	730
2541-69-7	Benz[a]anthracene, 7-methyl-	13.826	87	890
192-97-2	Benzo[e]pyrene	14.934	96	2766

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1052 **Matrix:** Solid
Sample identity: GTCS 1-30 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
70-55-3	Benzenesulfonamide, 4-methyl-	9.468	90	474
234-41-3	Naphtho[1,2-b]thiophene	10.129	86	305
31317-07-4	1-Methyldibenzothiophene	10.623	96	760
949-41-7	1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	10.802	92	608
832-69-9	Phenanthrene, 1-methyl-	10.831	96	687
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.616	91	938
33543-31-6	Fluoranthene, 2-methyl-	12.155	96	1203
2381-21-7	Pyrene, 1-methyl-	12.382	92	564
479-79-8	11H-Benzo[a]fluoren-11-one	12.750	95	430
205-43-6	Benzo[b]naphtho[1,2-d]thiophene	12.911	90	624
544-76-3	Hexadecane	13.450	92	514
3697-24-3	Chrysene, 5-methyl-	13.826	89	770
192-97-2	Benzo[e]pyrene	14.934	96	2927

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1060 **Matrix:** Solid
Sample identity: GTCS 1-30 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
31317-07-4	1-Methyldibenzothiophene	10.625	89	896
2531-84-2	Phenanthrene, 2-methyl-	10.804	96	618
832-64-4	Phenanthrene, 4-methyl-	10.833	96	686
610-48-0	Anthracene, 1-methyl-	10.880	94	271
84-65-1	9,10-Anthracenedione	11.060	90	352
2381-21-7	Pyrene, 1-methyl-	12.156	95	1193
479-79-8	11H-Benzo[a]fluoren-11-one	12.752	95	837
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.913	86	1008
629-78-7	Heptadecane	13.452	95	1277
3351-28-8	Chrysene, 1-methyl-	13.828	95	812
629-94-7	Heneicosane	14.357	94	1909
192-97-2	Benzo[e]pyrene	14.935	95	2611

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1068 **Matrix:** Solid
Sample identity: GTCS 1-30 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
132-65-0	Dibenzothiophene	10.129	92	517
31317-07-4	1-Methyldibenzothiophene	10.623	96	825
2531-84-2	Phenanthrene, 2-methyl-	10.802	96	988
832-69-9	Phenanthrene, 1-methyl-	10.831	96	512
613-12-7	Anthracene, 2-methyl-	10.878	95	376
84-65-1	9,10-Anthracenedione	11.058	91	536
2435-53-2	Tetrachloro-o-benzoquinone	11.909	91	643
243-42-5	Benzo[b]naphtho[2,3-d]furan	12.013	87	345
33543-31-6	Fluoranthene, 2-methyl-	12.155	95	1275
2381-21-7	Pyrene, 1-methyl-	12.278	98	667
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.911	91	971
479-79-8	11H-Benzo[a]fluoren-11-one	13.006	84	642
3111-37-3	3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	13.479	94	449
3351-32-4	2-Methylchrysene	13.836	95	752
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.764	94	1463
192-97-2	Benzo[e]pyrene	14.934	98	2795

Job number: 19/9004
Sample number: 1076
Sample identity: GTCS 1-11A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
80-07-9	Benzene, 1,1'-sulfonylbis[4-chloro-	12.098	91	266

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1100 **Matrix:** Solid
Sample identity: GTCS 1-12 PRIMARY SAMPLE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
629-78-7	Heptadecane	14.355	89	1514
192-97-2	Benzo[e]pyrene	14.934	93	882

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1116 **Matrix:** Solid
Sample identity: GTCS 1-12 LAB DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
73060-34-1	2-Chloro-2-methyl-1-oxa-2-sila-1,2-dihydronaphthalene	9.854	80	123
553-21-9	Germacra-1(10),4,11(13)-trien-12-oic acid, 6.alpha.-hydroxy-, .gamma.-lactone, (E,E)-	11.251	86	496
33543-31-6	Fluoranthene, 2-methyl-	12.159	97	782
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-1-(1-methylethyl)-, (4bS-trans)-	12.565	95	1163
24035-37-8	13-Isopropylpodocarpen-12-ol-20-al	12.622	92	532
1705-85-7	Chrysene, 6-methyl-	13.830	92	836
629-94-7	Heneicosane	14.359	94	1411
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.928	95	1334

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1124 **Matrix:** Solid
Sample identity: GTCS 1-12 FIELD DUPLICATE
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
553-21-9	Germacra-1(10),4,11(13)-trien-12-oic acid, 6.alpha.-hydroxy-, .gamma.-lactone, (E,E)-	11.249	90	622
511-15-9	2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-1-(1-methylethyl)-, (4bS-trans)-	12.563	90	1743
514-62-5	Ferruginol	12.620	97	624
593-45-3	Octadecane	13.453	86	1290
629-94-7	Heneicosane	14.357	95	1142
192-97-2	Benzo[e]pyrene	14.936	83	1029
629-92-5	Nonadecane	15.146	92	1386

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004 **Method:** SVOC
Sample number: 1132 **Matrix:** Solid
Sample identity: GTCS 1-12 LAB FIELD DUPLIC
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
147-82-0	Benzenamine, 2,4,6-tribromo-	9.522	86	696
486-25-9	9H-Fluoren-9-one	10.011	84	307
132-65-0	Dibenzothiophene	10.129	95	435
832-64-4	Phenanthrene, 4-methyl-	10.802	96	818
832-69-9	Phenanthrene, 1-methyl-	10.935	95	650
553-21-9	Germacra-1(10),4,11(13)-trien-12-oic acid, 6.alpha.-hydroxy-, .gamma.-lactone, (E,E)-	11.247	89	401
116196-83-9	4,4'-Bis(tetrahydrothiopyran)	11.616	95	470
33543-31-6	Fluoranthene, 2-methyl-	12.155	95	1038
2381-21-7	Pyrene, 1-methyl-	12.278	90	941
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	12.911	91	593
479-79-8	11H-Benzo[a]fluoren-11-one	12.996	95	1293
3111-37-3	3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	13.469	93	1052
3351-28-8	Chrysene, 1-methyl-	13.826	94	746
629-78-7	Heptadecane	14.355	93	1856
192-97-2	Benzo[e]pyrene	14.934	98	3341

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 1156
Sample identity: GTCS 1-14A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
629-94-7	Heneicosane	14.355	92	954
192-97-2	Benzo[e]pyrene	14.933	93	848

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 1188
Sample identity: GTCS 1-31A
Sample depth: 0.00-0.05
Sample Type: Clayey Loam
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
126848-01-9	3,5,6-Trimethyl-p-quinone, 2-(2,5-dioxotetrahydrofuran-3-yl)thio-	14.933	92	701

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 1204
Sample identity: GTCS 1-15A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2381-21-7	Pyrene, 1-methyl-	12.156	90	293

All solid results are expressed on a dry weight basis unless stated otherwise.

Job number: 19/9004
Sample number: 1220
Sample identity: GTCS 1-16A
Sample depth: 0.00-0.05
Sample Type: Clay
Units: ug/kg

Method: SVOC
Matrix: Solid

Note: Only samples with TICs (if requested) are reported. If TICs were requested but no compounds found they are not reported.

CAS No.	Tentative Compound Identification	Retention Time (minutes)	% Match	Concentration
2381-21-7	Pyrene, 1-methyl-	12.158	96	502
192-97-2	Benzo[e]pyrene	14.938	83	1177
629-92-5	Nonadecane	15.148	92	1856

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

Signed on behalf of Element Materials Technology:

Ryan Butterworth
Asbestos Team Leader

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	4	GTCS 1-29A	0.00-0.05	1022	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	Fibre Bundles
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	Chrysotile
					11/06/2019	**Asbestos Level Screen**	less than 0.1%
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	4	GTCS 1-30 PRIMARY SAMPLE	0.00-0.05	1038	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	Fibre Bundles
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	Chrysotile
					11/06/2019	**Asbestos Level Screen**	less than 0.1%
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	4	GTCS 1-30 LAB DUPLICATE	0.00-0.05	1054	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	Fibre Bundles
					11/06/2019	**Asbestos Fibres (2)**	Fibre Bundles
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos ACM (2)**	NAD
					11/06/2019	**Asbestos Type**	Chrysotile
					11/06/2019	**Asbestos Type (2)**	Amosite
					11/06/2019	**Asbestos Level Screen**	less than 0.1%
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	0.001 (mass %)
					27/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	0.001 (mass %)

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	4	GTCS 1-30 LAB DUPLICATE	0.00-0.05	1054	27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	0.001 (mass %)
19/9004	4	GTCS 1-30 FIELD DUPLICATE	0.00-0.05	1062	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	Fibre Bundles
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	Chrysotile
					11/06/2019	**Asbestos Level Screen**	less than 0.1%
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	4	GTCS 1-30 LAB FIELD DUPLICATE	0.00-0.05	1070	11/06/2019	**General Description (Bulk Analysis)**	soil/stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	Fibre Bundles
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	Chrysotile
					11/06/2019	**Asbestos Level Screen**	less than 0.1%
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	4	GTCS 1-11A	0.00-0.05	1078	11/06/2019	**General Description (Bulk Analysis)**	soil/stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-12 PRIMARY SAMPLE	0.00-0.05	1102	11/06/2019	**General Description (Bulk Analysis)**	soil/stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-12 LAB DUPLICATE	0.00-0.05	1118	11/06/2019	**General Description (Bulk Analysis)**	soil/stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-12 FIELD DUPLICATE	0.00-0.05	1126	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	Fibre Bundles

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	4	GTCS 1-12 FIELD DUPLICATE	0.00-0.05	1126	11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	Chrysotile
					11/06/2019	**Asbestos Level Screen**	less than 0.1%
					27/06/2019	**Potentially Respirable Fibres per gram**	0
					27/06/2019	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					27/06/2019	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					27/06/2019	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					27/06/2019	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)
19/9004	4	GTCS 1-12 LAB FIELD DUPLICATE	0.00-0.05	1134	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-13A	0.00-0.05	1142	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-14A	0.00-0.05	1158	11/06/2019	**General Description (Bulk Analysis)**	soil-stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-32A	0.00-0.05	1174	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-31A	0.00-0.05	1190	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD
19/9004	4	GTCS 1-15A	0.00-0.05	1206	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Present
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
19/9004	4	GTCS 1-16A	0.00-0.05	1222	11/06/2019	**General Description (Bulk Analysis)**	soil.stones
					11/06/2019	**Synthetic/MMMF**	Absent
					11/06/2019	**Asbestos Fibres**	NAD
					11/06/2019	**Asbestos ACM**	NAD
					11/06/2019	**Asbestos Type**	NAD
					11/06/2019	**Asbestos Level Screen**	NAD

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 19/9004						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 19/9004

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x5 Dilution

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465 and BS1377.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM4	Modified USEPA 8270 method for the solvent extraction and determination of 16 PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM15	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes	Yes	AR	Yes

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes	Yes	AD	Yes
TM30	Determination of Trace Metal elements by ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry). Modified US EPA Method 200.7, 6010B and BS EN ISO 11885 2009	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods 325.2 (Chloride), 375.4 (Sulphate), 365.2 (o-Phosphate), 353.1 (TON), 354.1 (Nitrite), 350.1 (NH4+) comparable to BS ISO 15923-1, 7196A (Hex Cr)	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	
TM65	Asbestos Bulk Identification method based on HSG 248.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 and 9045D and BS1377:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes	Yes	AR	No

EMT Job No: 19/9004

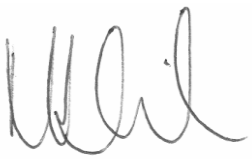
Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes	Yes	AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.			AR	Yes
TM89	Modified USEPA method OIA-1667. Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide and Thiocyanate analysis.	Yes	Yes	AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM119	As received solid samples are extracted with 1M NaOH by orbital shaker for Sulphide and Thiocyanate analysis.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.			AR	Yes
TM131	Quantification of Asbestos Fibres and ACM, based on HSG248 and SCA method.	PM42	Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	Yes
TM192	Isocyanates by LCMS	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						Yes
Subcontracted	See attached subcontractor report for accreditation status and provider.					AR	Yes
TM15_A	Modified USEPA 8260. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

Certificate of Analysis

Report No.:	**19-84036-1**
Issue No.:	**1**
Date of Issue	**24/06/2019**
Customer Details:	Exova Environmental UK Ltd, Unit 3, Deeside Point, Deeside Indust. Estate Zone 3, Chester, Flintshire, CH5 2UA
Customer Contact:	Bethan Perry
Customer Order No.:	E208N19001045
Customer Reference:	19/9004 B4
Quotation Reference:	190118/05
Description:	16 soil samples
Date Received:	11/06/2019
Date Started:	12/06/2019
Date Completed:	24/06/2019
Test Methods:	Details available on request (refer to SOP code against relevant result/s)
Notes:	None



Approved By: **Matthew Hickson, Laboratory Manager**

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Results Summary

Report No.: 19-84036-1

Customer Reference: 19/9004 B4

Customer Order No: E208N19001045

Customer Sample No						**19/9004/1021**	**19/9004/1037**	**19/9004/1053**	**19/9004/1061**	**19/9004/1069**	**19/9004/1077**	**19/9004/1101**	**19/9004/1117**	**19/9004/1125**	**19/9004/1133**	**19/9004/1141**	**19/9004/1157**
Customer Sample ID						GTCS 1-29A	GTCS 1-30A	GTCS 1-30C	GTCS 1-30D	GTCS 1-30E	GTCS 1-11A	GTCS 1-12A	GTCS 1-12C	GTCS 1-12D	GTCS 1-12E	GTCS 1-13A	GTCS 1-14A
RPS Sample No						405940	405941	405942	405943	405944	405945	405946	405947	405948	405949	405950	405951
Sample Type						**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Sample Depth (m)						0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05
Sampling Date						06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	07/06/2019	07/06/2019
Sampling Time						15:30	14:35	14:35	14:35	14:35	17:00	17:27	17:27	17:27	17:27	9:00	9:40
Determinand	**CAS No**	**Codes**	**SOP**	**Units**	**RL**												
dry solids (at 105øC)		N	397	% w/w		76.1	85.5	88.8	86.1	84.8	74.0	84.5	84.0	84.6	84.3	91.8	93.7
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.10	< 0.20	< 0.50	< 0.20	< 0.20	< 0.15	< 0.15
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results Summary

Report No.: 19-84036-1

Customer Reference: 19/9004 B4

Customer Order No: E208N19001045

Customer Sample No	**19/9004/1173**	**19/9004/1189**	**19/9004/1205**	**19/9004/1221**
Customer Sample ID	GTCS 1-32A	GTCS 1-31A	GTCS 1-15A	GTCS 1-16A
RPS Sample No	405952	405953	405954	405955
Sample Type	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Sample Depth (m)	0.00-0.05	0.00-0.05	0.00-0.05	0.00-0.05
Sampling Date	07/06/2019	06/06/2019	07/06/2019	07/06/2019
Sampling Time	10:45	10:50	9:10	9:45

Determinand	CAS No	Codes	SOP	Units	RL				
dry solids (at 105øC)		N	397	% w/w		95.7	90.0	83.3	93.4
2,2',4,4',6-pentabromodiphenyl ether (BDE-100)	189084-64-8	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5'-hexabromodiphenyl ether (BDE-138)	182677-30-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4-tribromodiphenyl ether (BDE-17)		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183		N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,4,4'-tribromodiphenyl ether (BDE-28)	41318-75-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	189084-61-5	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',3,4,4'-pentabromodiphenyl ether (BDE-85)	182346-21-0	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
tris(1-chloro-2-propyl)phosphate TCPP	13674-84-5	N	in house	mg/kg DW	0.1	< 0.50	< 0.50	< 0.20	< 0.15
hexabromocyclododecane (1,2,5,6,9,10-)	3194-55-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
hexabromobiphenyl (2,2',4,4',5,5'-) (PBB 153)	59080-40-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50
4,4'-dibromobiphenyl (PBB 15)	92-86-4	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50
2,2',5-tribromobiphenyl (PBB 18)	59080-34-1	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50
2,2'-dibromobiphenyl (PBB 4)	13099-09-9	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50
tetrabromobiphenyl (3,3',5,5'-) (PBB 80)	16400-50-3	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50
tris(2-ethylhexyl) phosphate	78-42-2	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
triphenylphosphate	115-86-6	N	in house	mg/kg DW	0.1	< 0.10	< 0.10	< 0.10	< 0.10
tetrabromobisphenol A	79-94-7	N	in house	mg/kg DW	0.5	< 0.50	< 0.50	< 0.50	< 0.50

Comments

Report No.: 19-84036-1

Customer Reference: 19/9004 B4

Customer Order No: E208N19001045

Job	Description	Job Comments
19-84036	16 soil samples	Reporting limit for Fyrol_PCF has been raised due to matrix interference.

Deviating Samples

Report No.: 19-84036-1

Customer Reference: 19/9004 B4

Customer Order No: E208N19001045

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).
RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.
Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.
Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.
Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submisson may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
405940	19/9004/1021		06/06/2019	250ml amber glass jar	No	
405941	19/9004/1037		06/06/2019	250ml amber glass jar	No	
405942	19/9004/1053		06/06/2019	250ml amber glass jar	No	
405943	19/9004/1061		06/06/2019	250ml amber glass jar	No	
405944	19/9004/1069		06/06/2019	250ml amber glass jar	No	
405945	19/9004/1077		06/06/2019	250ml amber glass jar	No	
405946	19/9004/1101		06/06/2019	250ml amber glass jar	No	
405947	19/9004/1117		06/06/2019	250ml amber glass jar	No	
405948	19/9004/1125		06/06/2019	250ml amber glass jar	No	
405949	19/9004/1133		06/06/2019	250ml amber glass jar	No	
405950	19/9004/1141		07/06/2019	250ml amber glass jar	No	
405951	19/9004/1157		07/06/2019	250ml amber glass jar	No	
405952	19/9004/1173		07/06/2019	250ml amber glass jar	No	
405953	19/9004/1189		06/06/2019	250ml amber glass jar	No	
405954	19/9004/1205		07/06/2019	250ml amber glass jar	No	
405955	19/9004/1221		07/06/2019	250ml amber glass jar	No	

Key Code	Description
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
F	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
N	Not Accredited Test
O	Marine Management Organisation (MMO) Validated
S	Subcontracted to approved laboratory
US	Subcontracted to approved laboratory UKAS Accredited for the test
MS	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SI	Subcontracted to internal RPS Group laboratory
USI	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
MSI	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
DW (in units)	Results are expressed on a dry weight basis

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other

Marchwood Scientific Services
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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1537
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference: GTCS 1-29A & 19/9004 - 1018, 0.00-0.05 **Date of Receipt :** 11/06/19
Sample Identifier : E208N19001046 **Date of Analysis :** 22/06/19
Sample No: 1537 **Date of Report :** 25/06/19
Order No: Soil
Sample Type: Ash
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 170619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.196	90	**2378-TCDD**	*	0.132	103
12378-PCDF	*	0.132	105	**12378-PCDD**	*	0.113	112
23478-PCDF	*	0.111	108	**123478-HxCDD**	0.593	0.251	92
123478-HxCDF	0.998	0.160	86	**123678-HxCDD**	1.84	0.244	94
123678-HxCDF	1.01	0.143	86	**123789-HxCDD**	0.994	0.243	
234678-HxCDF	1.26	0.136	90	**1234678-HpCDD**	91.9	0.270	77
123789-HxCDF	*	0.144	93	**OCDD**	774	0.199	98
1234678-HpCDF	18	0.083	88				
1234789-HpCDF	0.744	0.124	71				
OCDF	31.1	0.124					
Total 2,3,7,8-Furans	**53.1**			**Total 2,3,7,8-Dioxins**	**870**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**2.87**	**2.58**	**TEQ (WHO)- Mammals**		**2.33**	**2.02**
				TEQ (WHO)- Fish		**1.34**	**1.01**
				TEQ (WHO)- Birds		**1.41**	**0.834**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

UKAS TESTING
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Marchwood Scientific Services

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1537
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference: GTCS 1-29A & 19/9004 - 1018, 0.00-0.05 **Date of Receipt :** 11/06/19
Sample Identifier : E208N19001046 **Date of Analysis :** 23/06/19
Sample No: 1537 **Date of Report :** 25/06/19
Order No: Soil
Sample Type: Ash
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 170619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.687	0.142	105
PCB-77	12.4	0.158	94
PCB-123	7.06	0.665	100
PCB-118	249	0.697	95
PCB-114	3.45	0.702	109
PCB-105	117	0.664	98
PCB-126	*	0.476	94
PCB-167	20.7	0.604	95
PCB-156	55.9	0.669	98
PCB-157	10.6	0.694	99
PCB-169	0.158	0.064	107
PCB-189	5.64	0.535	103

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.0679**	**0.0203**
TEQ (WHO)- Fish	**0.0063**	**0.0039**
TEQ (WHO)- Birds	**0.76**	**0.712**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

UKAS TESTING
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Marchwood Scientific Services

371 Millbrook Rd West
Southampton
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1538
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-30 PRIMARY SAMPLE & 19/9004 - 1034, 0.00-0.05
Sample No: 1538
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	13	0.942	96	**2378-TCDD**	*	0.846	100
12378-PCDF	9.81	0.822	96	**12378-PCDD**	16.2	1.163	96
23478-PCDF	11.7	0.697	101	**123478-HxCDD**	25.2	1.825	87
123478-HxCDF	14.1	0.935	89	**123678-HxCDD**	43	1.746	95
123678-HxCDF	13.2	0.869	92	**123789-HxCDD**	40.3	1.736	
234678-HxCDF	18.2	0.807	95	**1234678-HpCDD**	1040	1.548	86
123789-HxCDF	2.02	0.958	91	**OCDD**	8750	1.664	61
1234678-HpCDF	275	1.104	82				
1234789-HpCDF	34	1.353	81				
OCDF	1040	0.812					
Total 2,3,7,8-Furans	**1430**			**Total 2,3,7,8-Dioxins**	**9910**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**55.5**	**54.6**	**TEQ (WHO)- Mammals**	**54.2**	**53.3**
			TEQ (WHO)- Fish	**47.4**	**46.5**
			TEQ (WHO)- Birds	**58.3**	**57.4**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1538
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-30 PRIMARY SAMPLE & 19/9004 - 1034, 0.00-0.05
Sample No: 1538
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.54	0.484	102
PCB-77	81.3	0.527	98
PCB-123	24.4	1.896	96
PCB-118	753	1.924	90
PCB-114	7.28	1.929	104
PCB-105	355	1.868	95
PCB-126	17.4	0.775	100
PCB-167	114	2.118	88
PCB-156	210	2.388	92
PCB-157	60.3	2.399	94
PCB-169	2.41	0.342	94
PCB-189	56.1	0.783	95

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.86**	**1.86**
TEQ (WHO)- Fish	**0.105**	**0.105**
TEQ (WHO)- Birds	**6.23**	**6.23**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1539
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-30 LAB DUPLICATE & 19/9004 - 1050, 0.00-0.05
Sample No: 1539
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	21	1.209	77	**2378-TCDD**	*	0.437	90
12378-PCDF	11.6	1.155	77	**12378-PCDD**	10.5	1.184	86
23478-PCDF	20.5	0.961	82	**123478-HxCDD**	18.5	2.327	85
123478-HxCDF	14.4	1.315	82	**123678-HxCDD**	55.9	2.369	86
123678-HxCDF	19.9	1.258	81	**123789-HxCDD**	35	2.439	
234678-HxCDF	24.3	1.153	86	**1234678-HpCDD**	2190	3.983	82
123789-HxCDF	1.55	1.387	84	**OCDD**	25900	2.772	70
1234678-HpCDF	535	1.580	86				
1234789-HpCDF	33.5	2.211	78				
OCDF	2680	1.180					
Total 2,3,7,8-Furans	**3360**			**Total 2,3,7,8-Dioxins**	**28200**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**91.7**	**91.3**	**TEQ (WHO)- Mammals**	**72.6**	**72.2**
			TEQ (WHO)- Fish	**49.7**	**49.3**
			TEQ (WHO)- Birds	**75.4**	**74.9**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
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SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1539
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-30 LAB DUPLICATE & 19/9004 - 1050, 0.00-0.05
Sample No: 1539
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	4.66	0.513	80
PCB-77	106	0.552	80
PCB-123	43.3	1.281	89
PCB-118	1040	1.294	85
PCB-114	8.41	1.306	97
PCB-105	525	1.255	90
PCB-126	22.1	1.738	72
PCB-167	132	1.048	83
PCB-156	248	1.164	87
PCB-157	89.3	1.238	88
PCB-169	5.93	0.431	86
PCB-189	61.1	0.671	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.47**	**2.47**
TEQ (WHO)- Fish	**0.135**	**0.135**
TEQ (WHO)- Birds	**8.11**	**8.11**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1540
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-30 FIELD DUPLICATE & 19/9004 - 1058, 0.00-0.05
Sample No: 1540
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	19.5	1.240	82	**2378-TCDD**	0.81	0.450	93
12378-PCDF	12.3	1.062	82	**12378-PCDD**	8.97	1.314	89
23478-PCDF	15.4	0.920	85	**123478-HxCDD**	13.4	2.441	87
123478-HxCDF	10.5	1.172	85	**123678-HxCDD**	39.9	2.552	88
123678-HxCDF	18	1.107	88	**123789-HxCDD**	25.7	2.627	
234678-HxCDF	19.5	1.071	88	**1234678-HpCDD**	1230	3.663	81
123789-HxCDF	*	1.201	92	**OCDD**	12900	3.460	76
1234678-HpCDF	384	1.279	76				
1234789-HpCDF	24.1	1.455	78				
OCDF	1470	1.357					
Total 2,3,7,8-Furans	**1970**			**Total 2,3,7,8-Dioxins**	**14200**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**59.1**	**59**	**TEQ (WHO)- Mammals**	**50.2**	**50.1**
			TEQ (WHO)- Fish	**38.1**	**37.9**
			TEQ (WHO)- Birds	**61.2**	**61.1**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1540
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-30 FIELD DUPLICATE & 19/9004 - 1058, 0.00-0.05
Sample No: 1540
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	5.14	0.601	84
PCB-77	115	0.653	84
PCB-123	46.1	1.505	92
PCB-118	1120	1.486	86
PCB-114	16.2	1.520	101
PCB-105	535	1.464	92
PCB-126	28.8	2.159	77
PCB-167	199	1.098	87
PCB-156	265	1.198	92
PCB-157	102	1.198	92
PCB-169	6.39	0.491	94
PCB-189	57.9	0.783	92

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**3.16**	**3.16**
TEQ (WHO)- Fish	**0.17**	**0.17**
TEQ (WHO)- Birds	**9.26**	**9.26**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1541
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-30 LAB FIELD DUPLICATE & 19-9004 - 1066, 0.00-0.05
Sample No: 1541
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	24.5	1.452	73	**2378-TCDD**	1.68	0.464	86
12378-PCDF	12.5	1.221	75	**12378-PCDD**	9.92	1.294	82
23478-PCDF	16.6	1.025	79	**123478-HxCDD**	16.5	2.116	88
123478-HxCDF	17.9	1.273	83	**123678-HxCDD**	41.1	2.162	87
123678-HxCDF	19.2	1.201	81	**123789-HxCDD**	31.3	2.226	
234678-HxCDF	20.4	1.090	85	**1234678-HpCDD**	1440	2.624	86
123789-HxCDF	1.55	1.336	85	**OCDD**	14900	2.647	73
1234678-HpCDF	441	1.256	85				
1234789-HpCDF	26.3	1.530	84				
OCDF	1750	1.144					
Total 2,3,7,8-Furans	**2330**			**Total 2,3,7,8-Dioxins**	**16400**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**68.5**	**68.5**	**TEQ (WHO)- Mammals**	**58.3**	**58.3**
			TEQ (WHO)- Fish	**44.4**	**44.4**
			TEQ (WHO)- Birds	**72**	**72**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1541
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-30 LAB FIELD DUPLICATE & 19-9004 - 1066, 0.00-0.05 **Date of Analysis :** 23/06/19
Sample No: 1541 **Date of Report :** 25/06/19
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT **Test Method :** 2002
GC Column : DB5 **Blank :** 170619
Calibration File : 210619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	7.05	0.846	81
PCB-77	173	0.945	78
PCB-123	34.3	1.322	89
PCB-118	1140	1.410	83
PCB-114	18	1.410	95
PCB-105	573	1.347	89
PCB-126	27.1	1.792	73
PCB-167	151	3.318	83
PCB-156	280	3.740	87
PCB-157	94.3	3.698	88
PCB-169	6.3	0.439	84
PCB-189	65.7	0.803	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**2.99**	**2.99**
TEQ (WHO)- Fish	**0.168**	**0.168**
TEQ (WHO)- Birds	**12.2**	**12.2**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1542
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-11A & 19/9004 - 1074 0.00-0.05
Sample No: 1542
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.664	67	**2378-TCDD**	*	0.289	85
12378-PCDF	*	0.362	71	**12378-PCDD**	7.21	1.223	78
23478-PCDF	0.725	0.298	75	**123478-HxCDD**	18.6	2.578	78
123478-HxCDF	1.91	0.333	77	**123678-HxCDD**	33.5	2.520	78
123678-HxCDF	*	0.335	77	**123789-HxCDD**	36.4	2.594	
234678-HxCDF	0.85	0.307	79	**1234678-HpCDD**	1350	2.571	75
123789-HxCDF	*	0.368	78	**OCDD**	10200	1.479	67
1234678-HpCDF	42.2	0.625	74				
1234789-HpCDF	3.16	0.722	75				
OCDF	74.6	0.739					
Total 2,3,7,8-Furans	**123**			**Total 2,3,7,8-Dioxins**	**11700**		
		TEQ[1]	**TEQ[2]**			**TEQ[1]**	**TEQ[2]**
TEQ (Nato)		**37.8**	**37.4**	**TEQ (WHO)- Mammals**		**34.1**	**33.6**
				TEQ (WHO)- Fish		**21.1**	**20.7**
				TEQ (WHO)- Birds		**17**	**16**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1542
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-11A & 19/9004 - 1074 0.00-0.05
Sample No: 1542
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	5.23	0.651	77
PCB-77	134	0.712	76
PCB-123	37.3	1.172	103
PCB-118	1580	1.173	97
PCB-114	17.4	1.229	111
PCB-105	743	1.161	101
PCB-126	11.7	1.617	71
PCB-167	99.5	0.811	102
PCB-156	262	0.890	107
PCB-157	60.2	0.910	108
PCB-169	*	0.353	76
PCB-189	23	0.530	109

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.28**	**1.27**
TEQ (WHO)- Fish	**0.0886**	**0.0886**
TEQ (WHO)- Birds	**8.51**	**8.51**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1543
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-12 PRIMARY SAMPLE & 19/9004 - 1098, 0.00-0.05
Sample No: 1543
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.539	87	**2378-TCDD**	*	0.213	98
12378-PCDF	3.04	0.342	86	**12378-PCDD**	0.96	0.473	96
23478-PCDF	3.26	0.273	92	**123478-HxCDD**	1.49	0.687	93
123478-HxCDF	3.23	0.331	90	**123678-HxCDD**	6.11	0.686	91
123678-HxCDF	2.85	0.329	91	**123789-HxCDD**	4.33	0.706	
234678-HxCDF	4.16	0.295	94	**1234678-HpCDD**	191	1.064	88
123789-HxCDF	*	0.368	92	**OCDD**	1440	1.197	75
1234678-HpCDF	38.3	0.397	91				
1234789-HpCDF	1.94	0.491	85				
OCDF	59.1	0.634					
Total 2,3,7,8-Furans	**116**			**Total 2,3,7,8-Dioxins**	**1640**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.59**	**8.28**	**TEQ (WHO)- Mammals**	**7.31**	**7**
			TEQ (WHO)- Fish	**5.64**	**5.36**
			TEQ (WHO)- Birds	**7.65**	**6.86**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1543
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-12 PRIMARY SAMPLE & 19/9004 - 1098, 0.00-0.05
Sample No: 1543
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	3.46	0.374	87
PCB-77	69.3	0.409	88
PCB-123	27.5	1.079	93
PCB-118	1200	1.081	89
PCB-114	12.4	1.093	101
PCB-105	587	1.066	94
PCB-126	14.9	1.282	81
PCB-167	98.3	0.660	87
PCB-156	231	0.720	92
PCB-157	51.1	0.729	94
PCB-169	0.258	0.200	94
PCB-189	28.8	0.812	95

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.57**	**1.57**
TEQ (WHO)- Fish	**0.0943**	**0.0943**
TEQ (WHO)- Birds	**5.4**	**5.4**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

1668

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1544
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-12 LAB DUPLICATE & 19/9004 - 1114, 0.00-0.05
Sample No: 1544
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.734	83	**2378-TCDD**	*	0.234	100
12378-PCDF	*	0.445	81	**12378-PCDD**	*	0.624	96
23478-PCDF	*	0.372	89	**123478-HxCDD**	1.19	0.785	87
123478-HxCDF	1.88	0.311	95	**123678-HxCDD**	4.55	0.795	92
123678-HxCDF	*	0.315	92	**123789-HxCDD**	3.16	0.818	
234678-HxCDF	3.62	0.288	96	**1234678-HpCDD**	170	1.342	93
123789-HxCDF	*	0.346	93	**OCDD**	1230	1.625	80
1234678-HpCDF	28.1	0.638	84				
1234789-HpCDF	1.31	0.774	80				
OCDF	50.9	0.840					
Total 2,3,7,8-Furans	**85.8**			**Total 2,3,7,8-Dioxins**	**1410**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**5.61**	**4.71**	**TEQ (WHO)- Mammals**	**4.94**	**3.81**
			TEQ (WHO)- Fish	**2.98**	**1.81**
			TEQ (WHO)- Birds	**3.64**	**1.56**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ[2]	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services
371 Millbrook Rd West
Southampton
SO15 0HW
Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1544
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-12 LAB DUPLICATE & 19/9004 - 1114, 0.00-0.05
Sample No: 1544
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.48	0.349	90
PCB-77	65.6	0.403	87
PCB-123	31.2	0.741	91
PCB-118	1060	0.764	86
PCB-114	10.5	0.776	99
PCB-105	538	0.723	91
PCB-126	11.8	1.740	85
PCB-167	84.4	0.787	84
PCB-156	215	0.877	87
PCB-157	49.7	0.874	86
PCB-169	*	0.204	92
PCB-189	22.3	0.415	90

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.25**	**1.25**
TEQ (WHO)- Fish	**0.0763**	**0.0763**
TEQ (WHO)- Birds	**4.7**	**4.7**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Marchwood Scientific Services

371 Millbrook Rd West
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1545
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-12 FIELD DUPLICATE & 19/9004 - 1122, 0.00-0.05
Sample No: 1545
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.601	72	**2378-TCDD**	*	0.186	104
12378-PCDF	*	0.314	90	**12378-PCDD**	*	0.458	101
23478-PCDF	1.77	0.267	93	**123478-HxCDD**	0.918	0.511	95
123478-HxCDF	*	0.247	91	**123678-HxCDD**	2.63	0.526	96
123678-HxCDF	*	0.251	89	**123789-HxCDD**	*	0.541	
234678-HxCDF	*	0.218	95	**1234678-HpCDD**	128	1.083	91
123789-HxCDF	*	0.275	90	**OCDD**	964	1.778	78
1234678-HpCDF	21.8	0.449	93				
1234789-HpCDF	0.803	0.531	90				
OCDF	35.4	0.615					
Total 2,3,7,8-Furans	**59.7**			**Total 2,3,7,8-Dioxins**	**1100**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**4.39**	**3.75**	**TEQ (WHO)- Mammals**	**3.56**	**2.69**
			TEQ (WHO)- Fish	**2.62**	**1.82**
			TEQ (WHO)- Birds	**3.73**	**2.3**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1545
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-12 FIELD DUPLICATE & 19/9004 - 1122, 0.00-0.05
Sample No: 1545
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.94	0.324	87
PCB-77	57.8	0.357	84
PCB-123	21.7	1.364	90
PCB-118	920	1.326	86
PCB-114	10.7	1.408	98
PCB-105	445	1.352	89
PCB-126	4.88	1.392	78
PCB-167	75.8	0.535	87
PCB-156	183	0.598	89
PCB-157	38.8	0.605	91
PCB-169	0.545	0.167	91
PCB-189	19.2	0.555	91

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.562**	**0.562**
TEQ (WHO)- Fish	**0.0393**	**0.0393**
TEQ (WHO)- Birds	**3.55**	**3.55**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1546
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference: **Date of Receipt :** 11/06/19
Sample Identifier : GTCS 1-12 LAB FIELD DUPLICATE & 19/9004 - 1130,0.00-0.05 **Date of Analysis :** 22/06/19
Sample No: 1546 **Date of Report :** 25/06/19
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS **Test Method :** 2002a
GC Column : DB5 **Blank :** 170619
Calibration File : 140619 **Sample size:** 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.543	83	**2378-TCDD**	*	0.214	99
12378-PCDF	*	0.315	83	**12378-PCDD**	*	0.521	92
23478-PCDF	2.58	0.269	88	**123478-HxCDD**	1.21	0.468	93
123478-HxCDF	1.32	0.250	88	**123678-HxCDD**	3.34	0.469	86
123678-HxCDF	2.01	0.243	89	**123789-HxCDD**	1.64	0.483	
234678-HxCDF	*	0.221	92	**1234678-HpCDD**	121	1.243	82
123789-HxCDF	*	0.265	93	**OCDD**	844	1.565	69
1234678-HpCDF	18.9	0.427	84				
1234789-HpCDF	*	0.517	84				
OCDF	34.5	0.842					
Total 2,3,7,8-Furans	**59.3**			**Total 2,3,7,8-Dioxins**	**972**		

	TEQ[1]	TEQ[2]		TEQ[1]	TEQ[2]
TEQ (Nato)	**5.12**	**4.52**	**TEQ (WHO)- Mammals**	**4.24**	**3.39**
			TEQ (WHO)- Fish	**3.51**	**2.67**
			TEQ (WHO)- Birds	**4.93**	**3.56**

*	Isomer Not detected	TEQ[1]	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ[2]	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit **Signature :** Karl Pettit
Position : Technical Manager

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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1546
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-12 LAB FIELD DUPLICATE & 19/9004 - 1130,0.00-0.05
Sample No: 1546
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.32	0.293	87
PCB-77	48.9	0.321	87
PCB-123	26.3	0.997	90
PCB-118	796	1.007	86
PCB-114	13.2	1.034	97
PCB-105	388	0.978	89
PCB-126	7.06	1.405	80
PCB-167	64	1.185	86
PCB-156	157	1.302	88
PCB-157	34.6	1.346	90
PCB-169	0.46	0.212	86
PCB-189	16.9	0.587	89

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.77**	**0.77**
TEQ (WHO)- Fish	**0.0484**	**0.0484**
TEQ (WHO)- Birds	**3.35**	**3.35**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1547
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-13A & 19/9004 - 1138, 0.00-0.05
Sample No: 1547
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.469	80	**2378-TCDD**	*	0.182	101
12378-PCDF	*	0.267	87	**12378-PCDD**	*	0.507	93
23478-PCDF	*	0.229	91	**123478-HxCDD**	*	0.360	100
123478-HxCDF	*	0.200	97	**123678-HxCDD**	1.28	0.378	102
123678-HxCDF	*	0.196	96	**123789-HxCDD**	0.595	0.389	
234678-HxCDF	*	0.180	100	**1234678-HpCDD**	48.8	0.921	94
123789-HxCDF	*	0.220	95	**OCDD**	388	0.971	76
1234678-HpCDF	17	0.390	86				
1234789-HpCDF	*	0.423	90				
OCDF	31.7	0.714					
Total 2,3,7,8-Furans	**48.7**			**Total 2,3,7,8-Dioxins**	**439**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**1.99**	**1.26**	**TEQ (WHO)- Mammals**	**1.9**	**0.971**
			TEQ (WHO)- Fish	**1.38**	**0.279**
			TEQ (WHO)- Birds	**1.85**	**0.333**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1548
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-14A & 19/9004 - 1154 0.00-0.05
Sample No: 1548
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.436	86	**2378-TCDD**	*	0.164	104
12378-PCDF	*	0.284	84	**12378-PCDD**	*	0.392	95
23478-PCDF	*	0.249	88	**123478-HxCDD**	*	0.725	89
123478-HxCDF	*	0.373	83	**123678-HxCDD**	*	0.793	78
123678-HxCDF	*	0.420	75	**123789-HxCDD**	*	0.817	
234678-HxCDF	*	0.404	71	**1234678-HpCDD**	42.7	2.099	61
123789-HxCDF	*	0.496	70	**OCDD**	340	1.989	78
1234678-HpCDF	26.4	0.874	56				
1234789-HpCDF	0.912	0.888	68				
OCDF	19.6	1.013					
Total 2,3,7,8-Furans	**46.9**			**Total 2,3,7,8-Dioxins**	**383**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**2**	**1.06**	**TEQ (WHO)- Mammals**	**1.89**	**0.808**
			TEQ (WHO)- Fish	**1.62**	**0.352**
			TEQ (WHO)- Birds	**1.92**	**0.352**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1548
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-14A & 19/9004 - 1154 0.00-0.05
Sample No: 1548
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	0.385	0.217	87
PCB-77	26.9	0.233	85
PCB-123	4.35	0.678	85
PCB-118	226	0.693	80
PCB-114	1.89	0.691	93
PCB-105	109	0.691	84
PCB-126	3.34	1.105	79
PCB-167	23.8	0.608	90
PCB-156	48.6	0.670	93
PCB-157	16.1	0.688	94
PCB-169	0.561	0.130	94
PCB-189	6.62	0.667	92

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.367**	**0.367**
TEQ (WHO)- Fish	**0.0218**	**0.0218**
TEQ (WHO)- Birds	**1.74**	**1.74**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1549
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-32A & 19/9004 - 1170, 0.00-0.05
Sample No: 1549
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.982	56	**2378-TCDD**	*	0.311	100
12378-PCDF	*	0.437	106	**12378-PCDD**	*	0.636	110
23478-PCDF	*	0.339	124	**123478-HxCDD**	*	0.660	93
123478-HxCDF	*	0.378	90	**123678-HxCDD**	1.61	0.695	90
123678-HxCDF	*	0.413	82	**123789-HxCDD**	*	0.716	
234678-HxCDF	*	0.459	70	**1234678-HpCDD**	66.9	3.105	48
123789-HxCDF	*	0.595	61	**OCDD**	492	3.869	67
1234678-HpCDF	131	2.255	52				
1234789-HpCDF	*	3.012	49				
OCDF	71.6	1.687					
Total 2,3,7,8-Furans	**203**			**Total 2,3,7,8-Dioxins**	**560**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**3.98**	**2.71**	**TEQ (WHO)- Mammals**	**3.82**	**2.31**
			TEQ (WHO)- Fish	**3.19**	**1.45**
			TEQ (WHO)- Birds	**4.08**	**1.45**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1549
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-32A & 19/9004 - 1170, 0.00-0.05
Sample No: 1549
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	*	0.168	93
PCB-77	12.2	0.242	73
PCB-123	5.02	0.779	113
PCB-118	253	0.838	104
PCB-114	2.57	0.818	125
PCB-105	111	0.813	109
PCB-126	*	2.912	62
PCB-167	29.2	0.757	103
PCB-156	58.8	0.824	109
PCB-157	12.8	0.858	109
PCB-169	*	0.187	63
PCB-189	7.22	0.339	116

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.312**	**0.0156**
TEQ (WHO)- Fish	**0.0183**	**0.0036**
TEQ (WHO)- Birds	**0.941**	**0.633**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1550
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-31A & 19/9004 - 1186, 0.00-0.05
Sample No: 1550
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.939	63	**2378-TCDD**	*	0.324	88
12378-PCDF	4.91	0.686	102	**12378-PCDD**	0.766	0.554	111
23478-PCDF	*	0.573	111	**123478-HxCDD**	*	1.146	90
123478-HxCDF	*	0.784	77	**123678-HxCDD**	4.84	1.243	86
123678-HxCDF	4.77	0.778	72	**123789-HxCDD**	*	1.280	
234678-HxCDF	6.12	0.832	68	**1234678-HpCDD**	226	5.040	66
123789-HxCDF	*	0.852	77	**OCDD**	1670	4.216	83
1234678-HpCDF	82.8	1.988	65				
1234789-HpCDF	4.75	2.357	67				
OCDF	91	1.788					
Total 2,3,7,8-Furans	**194**			**Total 2,3,7,8-Dioxins**	**1900**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**8.21**	**7.1**	**TEQ (WHO)- Mammals**	**7.15**	**6.15**
			TEQ (WHO)- Fish	**4.83**	**3.43**
			TEQ (WHO)- Birds	**5.86**	**3.67**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1550
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-31A & 19/9004 - 1186, 0.00-0.05
Sample No: 1550
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.9	0.439	105
PCB-77	91.3	0.492	104
PCB-123	42.1	1.896	91
PCB-118	1700	2.002	84
PCB-114	12.6	1.977	98
PCB-105	886	1.872	89
PCB-126	4.06	2.398	68
PCB-167	247	1.907	79
PCB-156	486	2.110	83
PCB-157	161	2.130	84
PCB-169	0.768	0.388	79
PCB-189	63.8	0.828	84

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.547**	**0.547**
TEQ (WHO)- Fish	**0.0489**	**0.0489**
TEQ (WHO)- Birds	**5.44**	**5.44**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

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Southampton
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Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1551
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-15A & 19/9004 - 1202, 0.00-0.05
Sample No: 1551
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.976	59	**2378-TCDD**	*	0.398	83
12378-PCDF	1.47	0.628	114	**12378-PCDD**	*	0.781	114
23478-PCDF	*	0.566	106	**123478-HxCDD**	2.63	1.044	116
123478-HxCDF	*	0.358	104	**123678-HxCDD**	3.53	1.170	111
123678-HxCDF	*	0.415	88	**123789-HxCDD**	*	1.204	
234678-HxCDF	*	0.373	93	**1234678-HpCDD**	145	3.889	65
123789-HxCDF	*	0.551	78	**OCDD**	1180	3.381	69
1234678-HpCDF	26.9	1.185	57				
1234789-HpCDF	2.09	1.268	62				
OCDF	42.6	1.288					
Total 2,3,7,8-Furans	**73.1**			**Total 2,3,7,8-Dioxins**	**1330**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**5.11**	**3.65**	**TEQ (WHO)- Mammals**	**4.5**	**2.76**
			TEQ (WHO)- Fish	**3.67**	**1.98**
			TEQ (WHO)- Birds	**3.88**	**0.87**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1551
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-15A & 19/9004 - 1202, 0.00-0.05
Sample No: 1551
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	1.57	0.559	106
PCB-77	57	0.634	96
PCB-123	28.1	0.955	88
PCB-118	929	0.967	83
PCB-114	10.1	0.941	98
PCB-105	525	0.937	85
PCB-126	13.8	2.909	74
PCB-167	97.2	1.522	82
PCB-156	242	1.651	86
PCB-157	61.4	1.761	85
PCB-169	*	0.378	80
PCB-189	27.3	0.859	88

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**1.45**	**1.44**
TEQ (WHO)- Fish	**0.085**	**0.085**
TEQ (WHO)- Birds	**4.48**	**4.48**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1552
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCDDs and PCDFs

Job Reference:
Sample Identifier : GTCS 1-16A & 19/9004 - 1218, 0.00-0.05
Sample No: 1552
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Thermo DFS
GC Column : DB5
Calibration File : 140619

Date of Receipt : 11/06/19
Date of Analysis : 22/06/19
Date of Report : 25/06/19

Test Method : 2002a
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %	Congener	Conc	DL	Rec %
2378-TCDF	*	0.757	53	**2378-TCDD**	*	0.223	79
12378-PCDF	*	0.815	53	**12378-PCDD**	*	0.593	105
23478-PCDF	*	0.538	73	**123478-HxCDD**	*	0.904	89
123478-HxCDF	*	0.859	78	**123678-HxCDD**	*	0.849	90
123678-HxCDF	*	0.807	78	**123789-HxCDD**	*	0.874	
234678-HxCDF	*	0.835	74	**1234678-HpCDD**	114	3.130	63
123789-HxCDF	*	1.003	72	**OCDD**	796	3.116	91
1234678-HpCDF	139	2.255	57				
1234789-HpCDF	*	2.553	57				
OCDF	88.5	2.000					
Total 2,3,7,8-Furans	**227**			**Total 2,3,7,8-Dioxins**	**910**		

	TEQ^1	TEQ^2		TEQ^1	TEQ^2
TEQ (Nato)	**4.96**	**3.41**	**TEQ (WHO)- Mammals**	**4.51**	**2.79**
			TEQ (WHO)- Fish	**3.6**	**1.59**
			TEQ (WHO)- Birds	**4.3**	**1.59**

*	Isomer Not detected
TEQ	Toxic Equivalent Value
TEF	Toxic Equivalent Factor
Conc	Concentration
DL	Detection Value
REC	Recovery

TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ^2	Concentration of Non Detected Congeners at Zero

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

MSS
Marchwood Scientific Services

371 Millbrook Rd West
Southampton
SO15 0HW

Tel: 02380 786979

UKAS accredited testing laboratory No. 1668

Name of Client : Exova Environmental UK Ltd Jones **Test Certificate No:** 1552
Address : Unit 3 Deeside Point, Zone 3, Deeside Industrial Park, Deeside, CH5 2UA

ANALYSIS OF PCBs

Job Reference:
Sample Identifier : GTCS 1-16A & 19/9004 - 1218, 0.00-0.05
Sample No: 1552
Order No: E208N19001046
Sample Type: Soil
Sample Condition : conforming
Instrument : Micromass Ultima NT
GC Column : DB5
Calibration File : 210619

Date of Receipt : 11/06/19
Date of Analysis : 23/06/19
Date of Report : 25/06/19

Test Method : 2002
Blank : 170619
Sample size: 1

expressed as ng /kg

Congener	Conc	DL	Rec %
PCB-81	2.23	0.405	89
PCB-77	59.9	0.477	80
PCB-123	48.9	1.019	92
PCB-118	1110	1.035	85
PCB-114	13.4	1.018	102
PCB-105	583	0.996	89
PCB-126	2.47	2.241	74
PCB-167	157	0.898	86
PCB-156	299	0.986	92
PCB-157	91.5	0.995	92
PCB-169	1.62	0.466	63
PCB-189	46	1.243	92

	TEQ1	TEQ2
TEQ (WHO)- Mammals	**0.373**	**0.373**
TEQ (WHO)- Fish	**0.0313**	**0.0313**
TEQ (WHO)- Birds	**3.58**	**3.58**

*	Isomer Not detected	TEQ^1	Concentration of Non Detected Congeners at Detection Limit
TEQ	Toxic Equivalent Value		
TEF	Toxic Equivalent Factor	TEQ^2	Concentration of Non Detected Congeners at Zero
Conc	Concentration		
DL	Detection Value		
REC	Recovery		

Reported by : K Pettit
Position : Technical Manager

Signature : Karl Pettit

UKAS TESTING
1668

Element Materials Technology
Unit 3 Deeside Point
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AECOM
9th Floor Reception
Sunley House
4 Bedford Park
Croydon
CR0 2AP

Attention :	David Dyson
Date :	17th July, 2019
Your reference :	60595731
Our reference :	Test Report 19/9004 Batch 5
Location :	Grenfell
Date samples received :	5th July, 2019
Status :	Final report
Issue :	1

Ten samples were received for analysis on 5th July, 2019 of which ten were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Compiled By:

Simon Gomery BSc
Project Manager

Element Materials Technology

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson
EMT Job No: 19/9004

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	LOD/LOR	Units	Method No.
Sample ID	Isocyanates Underivatised AQC 1	Isocyanates Underivatised AQC 2	Isocyanates Underivatised AQC 3	Isocyanates Underivatised AQC 4	Isocyanates Underivatised AQC 5	Isocyanates Process Blank 1	Isocyanates Process Blank 2	Isocyanates Process Blank 3	Isocyanates Process Blank 4	Isocyanates Process Blank 5			
Depth													
COC No / misc													
Containers	J	J	J	J	J	J	J	J	J	J			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	5	5	5	5	5	5	5	5	5	5			
Date of Receipt	05/07/2019	05/07/2019	05/07/2019	05/07/2019	05/07/2019	05/07/2019	05/07/2019	05/07/2019	05/07/2019	05/07/2019			
Isocyanic Acid-d	-	-	-	-	-	80	85	77	72	88	<0	%	TM192/PM0
Methyl Isocyanate-d	-	-	-	-	-	115	122	101	88	130	<0	%	TM192/PM0
Ethyl Isocyanate-d	-	-	-	-	-	104	118	94	89	117	<0	%	TM192/PM0
Propyl Isocyanate-d	-	-	-	-	-	114	127	109	108	125	<0	%	TM192/PM0
Phenyl Isocyanate-d	-	-	-	-	-	123	122	113	92	124	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	-	-	-	-	-	90	82	80	70	94	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	-	-	-	-	-	195++	226++	139++	99	119++	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	-	-	-	-	-	124	92	93	69	108	<0	%	TM192/PM0
Isophorone Diisocyanate-d	-	-	-	-	-	109	87	88	67	93	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	-	-	-	-	-	150	110	118	119	108	<0	%	TM192/PM0
Isocyanic Acid	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Methyl Isocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Ethyl Isocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Propyl Isocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Phenyl Isocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Hexamethylene Diisocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isophorone Diisocyanate	-	-	-	-	-	<500	<500	<500	<500	<500	<500	ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	-	-	-	-	-	<250	<250	<250	<250	<250	<250	ug/kg	TM192/PM0
Isocyanic Acid-d	83	82	75	82	86	-	-	-	-	-	<0	%	TM192/PM0
Methyl Isocyanate-d	91	94	81	76	90	-	-	-	-	-	<0	%	TM192/PM0
Ethyl Isocyanate-d	91	95	80	76	94	-	-	-	-	-	<0	%	TM192/PM0
Propyl Isocyanate-d	94	99	88	78	96	-	-	-	-	-	<0	%	TM192/PM0
Phenyl Isocyanate-d	99	98	95	66	97	-	-	-	-	-	<0	%	TM192/PM0
Hexamethylene Diisocyanate-d	93	90	80	62	90	-	-	-	-	-	<0	%	TM192/PM0
2,4-Toluene Diisocyanate-d	84	80	139++	43	76	-	-	-	-	-	<0	%	TM192/PM0
2,6-Toluene Diisocyanate-d	103	98	82	63	98	-	-	-	-	-	<0	%	TM192/PM0
Isophorone Diisocyanate-d	104	94	90	70	91	-	-	-	-	-	<0	%	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)-d	108	105	87	68	77	-	-	-	-	-	<0	%	TM192/PM0
Methyl Isocyanate	302.14	300.25	315.71	216.82	293.82	-	-	-	-	-		ug/kg	TM192/PM0
Ethyl Isocyanate	161.00	161.80	166.11	113.78	174.81	-	-	-	-	-		ug/kg	TM192/PM0
Propyl Isocyanate	154.41	167.92	181.59	107.79	165.88	-	-	-	-	-		ug/kg	TM192/PM0
Phenyl Isocyanate	203.66	215.90	225.70	119.45	214.83	-	-	-	-	-		ug/kg	TM192/PM0
Hexamethylene Diisocyanate	172.20	181.28	189.98	87.07	171.64	-	-	-	-	-		ug/kg	TM192/PM0
2,4-Toluene Diisocyanate	156.83	185.51	162.73	80.30	182.66	-	-	-	-	-		ug/kg	TM192/PM0
2,6-Toluene Diisocyanate	147.17	170.51	153.68	79.29	158.38	-	-	-	-	-		ug/kg	TM192/PM0
Isophorone Diisocyanate	387.36	426.36	449.86	238.08	428.43	-	-	-	-	-		ug/kg	TM192/PM0
4,4-Methylene-bis(phenyl-isocyanate)	144.88	196.82	184.19	77.70	108.69	-	-	-	-	-		ug/kg	TM192/PM0

Client Name: AECOM
Reference: 60595731
Location: Grenfell
Contact: David Dyson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 19/9004						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 19/9004

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
++	Result outside calibration range, results should be considered as indicative only and are not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 19/9004

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM192	Isocyanates by LCMS	PM0	No preparation is required.			AR	No

Appendix TN15-E – Analytical Data Tables

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-05	GTCS 1-06	GTCS 1-07	GTCS 1-08				GTCS 1-09	GTCS 1-10	GTCS 1-11	GTCS 1-12			
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019				06/06/2019	06/06/2019	06/06/2019	06/06/2019			
				Sample Type	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Field_D		
				Sample Area	Lancaster West Walkways	Lancaster West Walkways	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Verity Close	Verity Close	Morland House	Morland House	Morland House	Morland House	Morland House
				Field ID	GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Metals																		
Aluminium	mg/kg	50	77,000[#1]		11,920 - 14,493	15,840	13,900	10,660	8,167 - 12,670	11,540	12,640	13,940	12,070	8,683	10,180	9,318 - 9,669	10,300	11,880
Arsenic	mg/kg	0.5	37[#2]		9.1 - 9.5	11.1	17.8	35.2	25.3 - 32.5	29.6	27	12.8	9.2	9.6	11.1	11.1 - 13.4	9.6	10.7
Barium	mg/kg	1	460[#7]		133 - 178	187	321	343	253 - 377	357	395	164	88	124	153	117 - 153	134	134
Beryllium	mg/kg	0.5	1.7[#2]		1 - 1.1	1.1	1.8	2.1	1.8 - 2.3	2.6	2.3	1	0.8	0.8	0.8	0.8	0.8	1
Boron	mg/kg	0.1	290[#2]		1.7 - 2.2	3	2.9	2.9	4.2 - 4.4	3	2.5	2	0.8	2.5	3.7	4 - 5.3	3.7	3.2
Cadmium	mg/kg	0.1	22[#6]		1.3 - 1.4	3.1	0.7	0.7	0.5 - 1.1	0.9	0.5	1.4	0.6	0.6	0.9	0.6	0.6	0.6
Chromium (Trivalent)	mg/kg	0.5	910[#2]		42.1 - 47.2	150.7	87.6	115.2	28 - 36.7	114.5	48.3	118.5	91.6	132.8	84.5	28.7 - 30.1	74	78.1
Chromium (hexavalent)	mg/kg	0.3	21[#6]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.5	Use either CrIII or CrVI[#2]		42.1 - 47.2	150.7	87.6	115.2	28 - 36.7	114.5	48.3	118.5	91.6	132.8	84.5	28.7 - 30.1	74	78.1
Copper	mg/kg	1	2,400[#2]		43 - 53	77	113	131	105 - 154	139	162	63	30	39	62	45 - 55	48	50
Lead	mg/kg	5	200[#6]		116 - 132	175	500	473	359 - 516	442	587	169	100	197	131	149 - 153	141	147
Mercury	mg/kg	0.1	40[#2]		0.3	0.5	0.5	0.5	0.7	0.5	0.8	0.3	0.2	<0.1	<0.1	<0.1 - 0.2	<0.1	<0.1
Nickel	mg/kg	0.7	130[#2]		23.6 - 27.1	26.9	30	35.9	29 - 35	39.6	33	28.8	17	21.8	23.4	16.3 - 18.5	17.2	20.3
Selenium	mg/kg	1	250[#2]		<1	1	1	1	1	1	1	<1	<1	1	1	1	<1	1
Vanadium	mg/kg	1	410[#2]		36 - 43	50	56	69	56 - 64	77	60	51	37	40	47	45	45	52
Zinc	mg/kg	5	3,700[#2]		166 - 191	243	286	327	275 - 387	339	354	212	104	391	189	177 - 198	190	188
VOCs																		
1,1,1,2-tetrachloroethane	ug/kg	5	2,800[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-trichloroethane	ug/kg	5	18,000[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-tetrachloroethane	ug/kg	3	3,400[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1,2-trichloroethane	ug/kg	4	1,200[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,1-dichloroethane	ug/kg	6	1,200[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloroethene	ug/kg	6	3,900[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-trichlorobenzene	ug/kg	7	3,600[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2,3-trichloropropane	ug/kg	4	5.1[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2,4-trimethylbenzene	ug/kg	6	850[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,2-dibromo-3-chloropropane	ug/kg	4	5.3[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2-dibromoethane	ug/kg	3	36[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-dichloroethane	ug/kg	5	11[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dichloropropane	ug/kg	4	42[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3,5-trimethylbenzene	ug/kg	3	270,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,3-dichloropropane	ug/kg	4	1,600,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,2-dichloropropane	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Benzene	ug/kg	5	870[#6]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromobenzene	ug/kg	2	2,000[#3]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/kg	4	150,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromodichloromethane	ug/kg	4	290[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoform	ug/kg	4	5,900[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromomethane	ug/kg	1	6,800[#1]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Methyl butanal	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	ug/kg	4	56[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorodibromomethane	ug/kg	5	8,300[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/kg	6	11,000[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
Chloroform	ug/kg	5	1,700[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/kg	3	9.8[#3]		8	6	4	7	7	8	9	12	10	17	20	14	21	14
cis-1,2-dichloroethene	ug/kg	7	190[#3]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
cis-1,3-dichloropropene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromomethane	ug/kg	4	24,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dichlorodifluoromethane	ug/kg	2	87,000[#1]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dichloromethane	ug/kg	30	980[#3]		<30	<30	38	<30	46	<30	<30	<30	<30	<30	<30	<30	<30	<30
Ethylbenzene	ug/kg	3	110,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Eucalyptol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	ug/kg	3	27,000[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Methyl Methacrylate	ug/kg	100	4,400,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	ug/kg	6	84,000[#1]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
n-butylbenzene	ug/kg	4	3,900,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
n-propylbenzene	ug/kg	4	82,000[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
sec-butylbenzene	ug/kg	4	7,800,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/kg	3	19,000[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-butylbenzene	ug/kg	5	7,800,000[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/kg	3	390[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Toluene	ug/kg	3	290,000[#2]		<3	<3	<3	4	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-dichloroethene	ug/kg	3	340[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,3-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichloroethene	ug/kg	5	34[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/kg	3	23,000,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Undecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (m & p)	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Xylene (o)	ug/kg	4	140,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Vinyl chloride	ug/kg	2	0.87[#2]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
VOC TICs	None				0	0	0	0	0	0	0	0	0	0	0	0	0	-
Trihalomethanes	ug/kg				<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-05	GTCS 1-06	GTCS 1-07	GTCS 1-08				GTCS 1-09	GTCS 1-10	GTCS 1-11	GTCS 1-12			
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019				06/06/2019	06/06/2019	06/06/2019	06/06/2019			
				Sample Type	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Field_D		
				Sample Area	Lancaster West Walkways	Lancaster West Walkways	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Verity Close	Verity Close	Morland House	Morland House	Morland House	Morland House	Morland House
				Field ID	GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
SVOCs																		
Dibenzo[a,e]pyrene	ug/kg	100	42[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	ug/kg	10	240,000[#1]		75	24	46	32	29	35	40	29	26	<10	21	27	50	50
4-bromophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chlorophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Azobenzene	ug/kg	10	5,600[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethoxy) methane	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethyl)ether	ug/kg	10	230[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbazole	ug/kg	10			280	50	49	37	45	49	92	52	28	61	67	243	518	1,164
Dibenzofuran	ug/kg	10	73,000[#1]		194	19	22	15	18	19	36	21	12	12	16	98	170	233
Hexachlorobutadiene	ug/kg	4	700[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorocyclopentadiene	ug/kg	10	1,800[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	ug/kg	10	480[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Anilines																		
2-nitroaniline	ug/kg	10	630,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
3-nitroaniline	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloroaniline	ug/kg	10	2,700[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-nitroaniline	ug/kg	10	27,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Amino Aliphatics																		
N-nitrosodi-n-propylamine	ug/kg	10	78[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Explosives																		
2,4-Dinitrotoluene	ug/kg	10	3,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-dinitrotoluene	ug/kg	10	1,700[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	ug/kg	10	5,100[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phenolics																		
2,4-dimethylphenol	ug/kg	10	43,000[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene	ug/kg	10	9,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloro-3-methylphenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Phenol	ug/kg	10	200,000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Phenols																		
2,4,5-trichlorophenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,6-trichlorophenol	ug/kg	10	49,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-dichlorophenol	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chlorophenol	ug/kg	10	390,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	ug/kg	10	520[#2]		<10	<10	<10	<10	116	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Benzenes																		
1,2,4-trichlorobenzene	ug/kg	7	6,400[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2-dichlorobenzene	ug/kg	4	55,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3-dichlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,4-dichlorobenzene	ug/kg	4	150,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorobenzene	ug/kg	10	3,300[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phthalates																		
Bis(2-ethylhexyl) phthalate	ug/kg	100	610,000[#3]		418	576	389	386	238	363	399	457	251	210	408	418	939	583
Butyl benzyl phthalate	ug/kg	100	3,300,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Diethylphthalate	ug/kg	100	260,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Dimethyl phthalate	ug/kg	100	16,400[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Di-n-butyl phthalate	ug/kg	100	31,000[#3]		<100	<100	<100	<100	<100	<100	<100	711	<100	<100	<100	<100	<100	<100
Di-n-octyl phthalate	ug/kg	100	2,800,000[#3]		801	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SVOC - Solvents																		
Isophorone	ug/kg	10	570,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC TIC																		
SVOC TICs	None				-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Phellandrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Pinene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	268
.beta.-Guaiene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
[1,1-Biphenyl]-4-carboxaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1(2Aminobenzylidene)1234-tetrahydroacridine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,4-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,5-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,4,6-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-d	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,9,10-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,5,5-Trimethyl-6-methylene-cyclohexene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,6-Dimethylphenazine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-5,7,9(10),11,13-pentaene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-8,11,13-triene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
10s,11s-Himachala-3(12),4-diene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]fluoren-11-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	1,293
11H-Benzo[a]fluoren-11-one, 10-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]fluorene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo(b)fluorene	ug/kg	100			1,617	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Indeno[1,2-b]quinoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Docosenamide, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Isopropylpodocarpen-12-ol-20-al	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	532	-
1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H-Inden-1-one, 2,3-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Methyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Naphthalenecarboxylic acid, 2-benzoyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(2H-Benzotriazol-2-yl)-5-methylphenol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(Acetoxymethyl)-3-(methoxycarbonyl)biphen	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-05	GTCS 1-06	GTCS 1-07	GTCS 1-08				GTCS 1-09	GTCS 1-10	GTCS 1-11	GTCS 1-12			
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019				06/06/2019	06/06/2019	06/06/2019	06/06/2019			
				Sample Type	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Field_D		
				Sample Area	Lancaster West Walkways	Lancaster West Walkways	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Verity Close	Verity Close	Morland House	Morland House	Morland House	Morland House	Morland House
				Field ID	GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
2,3,3,,5,6-Pentachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,3,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Cycloheptatrien-1-one, 2-phenyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-Dimethyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,9-Dimethyl-2,3,4,5,6,7hexahydro-1H-2-benz	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Bromo-4,5-dimethoxycinnamic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2Chloro2methyl1oxa2sila-1,2-dihydronaphtha	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	123	-
2-Methylchrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3-Dimethylbiphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4:8,9-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4-Dichlorobenzonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,5-Dimethoxy-4-hydroxycinnamaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	ug/kg	100			528	-	-	-	-	-	-	-	-	-	-	-	-	1,052
4,4-Bis(tetrahydrothiopyran)	ug/kg	100			871	-	-	-	-	-	-	-	-	-	-	-	-	470
4H-Cyclopenta[def]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
6H-Benz[de]anthracen-6-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
7H-Benz(de)anthracen-7-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
8,9-Dihydro-7H-cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Anthracenedione	ug/kg	100	14,000[#1]		355	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Anthracenedione, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Bis(bromomethyl)anthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Dimethylanthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9-Anthracenecarbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-ol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	307
9H-Fluorene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 9-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alloaromadendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthra(1,2-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthra(2,3-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 1-methyl-	ug/kg	100			506	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 2-methyl-	ug/kg	100			-	122	-	-	-	-	-	-	-	-	-	-	-	-
Aromandendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(A)anthracene-7,12-dione	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene-7-carbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 12-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 7-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[j]aceanthrylene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenamine, 2,4,6-tribromo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	696
Benzene, (4,5,5-trimethyl-1,3-cyclopentadien-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Sulfonylbis (4-chlorobenzene)	ug/kg	100	51,000[#1]		-	-	-	-	-	-	-	-	-	266	-	-	-	-
Benzenesulfonamide, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(c)carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,1-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	593
Benzo[b]naphtho[2,3-d]furan	ug/kg	100			556	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,3-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]cinnoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(e)pyrene	ug/kg	100			6,551	962	-	-	1,081	881	1,918	-	-	-	882	1,029	-	3,341
Benzo[ghi]fluoranthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[h]quinoline, 2,4-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[kl]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzoic acid, hexyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl	ug/kg	100	160,000[#2]		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylated Hydroxytoluene	ug/kg	100	150,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camphor (TIC)	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 1-methyl-	ug/kg	100			-	-	-	-	234	-	-	-	-	-	-	-	-	746
Chrysene, 5-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 6-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	836	-
Cyclopenta(cd)pyrene, 3,4-dihydro-	ug/kg	100			1,147	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclopenta(def)phenanthrenone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dehydroabietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Homoandrostane, (5.alpha.,13.alpha.)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,e)aceanthrylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,i)pyrene	ug/kg	100			1,341	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo[def,mno]chrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene	ug/kg	100	780,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	435
Dibenzothiophene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 4,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dicyclohexyl phthalate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenyl sulfide	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
di-p-Tolylacetylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Limonene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eicosane	ug/kg	100			-	-	-	-	-	-	1,437	-	-	-	-	-	-	-
Ferruginol	ug/kg	100			-	-	-	523	-	-	-	-	-	-	-	624	-	-
Fluoranthene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	782	1,038
Fluorene, 2,4a-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane	ug/kg	100			-	-	-	-	-	-	4,270	-	-	-	-	1,142	1,411	-
Heneicosane, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptadecane	ug/kg	100			-	421	-	-	1,829	2,230	-	-	-	-	1,514	-	-	1,856
Hexadecane	ug/kg	100			-	-	-	-	-	-	723	1,940	3,310	-	-	-	-	-
Hexathiane	ug/kg	100			-	-	-	-	-	-	1,332	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-05	GTCS 1-06	GTCS 1-07	GTCS 1-08				GTCS 1-09	GTCS 1-10	GTCS 1-11	GTCS 1-12			
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019				06/06/2019	06/06/2019	06/06/2019	06/06/2019			
				Sample Type	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Field_D		
				Sample Area	Lancaster West Walkways	Lancaster West Walkways	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Verity Close	Verity Close	Morland House	Morland House	Morland House	Morland House	Morland House
				Field ID	GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Indene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno[1,2,3-fg]naphthacene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indole, 5-methyl-2-(4-pyridyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isocil	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
isoledene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Longifolene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl dehydroabietate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morpholine, 4-(1-cyclohepten-1-yl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,5-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6,7-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-phenyl-	ug/kg	100			660	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[1,2-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1,8,7-klmn]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Decanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neocuproine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonadecane	ug/kg	100			-	-	-	-	-	-	2,363	3,681	-	-	-	1,386	-	-
n-Pentafluorosulfanyl-S,S-diphenoxysufilimine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecane	ug/kg	100			-	-	-	-	879	-	-	-	-	-	-	1,290	-	-
Octadecane, 1-iodo-	ug/kg	100			-	-	-	-	-	-	1,601	-	-	-	-	-	-	-
Octadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic acid, butyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Cymene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Perylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 1-methyl-	ug/kg	100			1,088	-	-	-	-	125	-	-	-	-	-	-	-	650
Phenanthrene, 2,5-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 2-methyl-	ug/kg	100			615	-	153	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 3,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	818
Phenol, 2,6-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2-methoxy-4-(1-propenyl)-, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1-methyl-	ug/kg	100			-	300	402	343	-	-	-	-	-	-	-	-	-	941
Pyrene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quinoxaline, 6-(3-nitrobenzylidenamino)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubicene-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloro-o-benzoquinone	ug/kg	100			503	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetracosane	ug/kg	100			-	-	-	-	-	-	926	-	-	-	-	-	-	-
Tetradecanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Bis(methyldichlorosilyl)ethylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorovinylsilane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-01	ug/kg	100			665	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-02	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-03	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-04	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-05	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	1,743	1,163	-
GT-SVOC-TIC-06	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-07	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-08	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-09	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-10	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-11	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-12	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	622	496	401
GT-SVOC-TIC-13	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-14	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-15	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-16	ug/kg	100			1,916	-	1,105	-	-	-	-	667	-	-	-	-	1,334	-
GT-SVOC-TIC-17	ug/kg	100			-	-	1,254	-	-	-	1,590	-	-	-	-	-	-	-
GT-SVOC-TIC-18	ug/kg	100			1,037	-	-	-	-	-	424	-	-	-	-	-	-	-
Benzo(b)naphtho(1,2-d)furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-

		Method Detection Limit	Generic Screening Criteria (GSC)																
Location					GTCS 1-05	GTCS 1-06	GTCS 1-07	GTCS 1-08				GTCS 1-09	GTCS 1-10	GTCS 1-11	GTCS 1-12			
Date					06/06/2019	06/06/2019	06/06/2019	06/06/2019				06/06/2019	06/06/2019	06/06/2019	06/06/2019			
Sample Type					Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Field_D		
Sample Area					Lancaster West Walkways	Lancaster West Walkways	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Verity Close	Verity Close	Morland House	Morland House	Morland House	Morland House	Morland House
Field ID					GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE
Sample_Depth_Range					0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
PAH																		
Acenaphthene	mg/kg	0.01	510[#2]		0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.01	420[#2]		0.3	0.15	0.27	0.11	0.12	0.11	0.08	0.12	0.04	0.12	0.07	0.06	0.07	0.07
Anthracene	mg/kg	0.01	5,400[#2]		0.96	0.24	0.31	0.23	0.19	0.15	0.19	0.19	0.08	0.07	0.12	0.13	0.11	0.11
Benz(a)anthracene	mg/kg	0.01	11[#2]		2.37	1.15	1.46	0.81	0.78	0.68	0.75	0.69	0.29	1.16	0.76	0.74	0.81	0.72
Benzo(a) pyrene	mg/kg	0.01	2.7[#2]		2.29	1.24	1.67	0.93	0.99	0.82	0.92	0.75	0.34	0.93	0.63	0.72	0.72	0.72
Benzo(b)fluoranthene	mg/kg	0.01	3.3[#2]		3.02	1.63	2.25	1.3	1.33	1.14	1.32	1.02	0.44	1.45	0.93	0.95	1.04	0.96
Benzo(b)&(k)fluoranthene	mg/kg	0.01			4.2	2.27	3.13	1.81	1.85	1.59	1.84	1.41	0.61	2.02	1.29	1.32	1.45	1.33
Benzo(g,h,i)perylene	mg/kg	0.01	340[#2]		1.49	0.81	1.12	0.69	0.75	0.67	0.78	0.53	0.23	0.78	0.53	0.56	0.6	0.55
Benzo(k)fluoranthene	mg/kg	0.01	93[#2]		1.18	0.64	0.88	0.51	0.52	0.45	0.52	0.39	0.17	0.57	0.36	0.37	0.41	0.37
Chrysene	mg/kg	0.01	22[#2]		2.15	1.07	1.46	0.86	0.88	0.75	0.97	0.72	0.32	0.79	0.49	0.57	0.59	0.64
Coronene	mg/kg	0.04			0.3	0.2	0.27	0.15	0.18	0.13	0.15	0.13	0.06	0.16	0.12	0.12	0.14	0.12
Dibenz(a,h)anthracene	mg/kg	0.01	0.28[#2]		0.5	0.29	0.33	0.24	0.21	0.19	0.19	0.18	0.08	0.16	0.12	0.13	0.1	0.09
Fluoranthene	mg/kg	0.01	560[#2]		5.05 - 8.862	1.92	2.73	1.41	1.38	1.15	1.58	1.23	0.52	0.87	0.96	1.03	1.05	0.94
Fluorene	mg/kg	0.01	400[#2]		0.15	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Indeno(1,2,3-c,d)pyrene	mg/kg	0.01	36[#2]		1.5	0.84	1.09	0.63	0.73	0.62	0.72	0.53	0.23	0.78	0.49	0.49	0.53	0.51
Naphthalene	mg/kg	0.01	5.6[#2]		<0.027 - 0.04	<0.027	<0.027 - 0.05	<0.027 - 0.04	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027
Phenanthrene	mg/kg	0.01	220[#2]		2.59	0.56	0.84	0.57	0.45	0.35	0.61	0.43	0.17	0.22	0.33	0.38	0.29	0.3
Pyrene	mg/kg	0.01	1,200[#2]		4.16	1.66	2.38	1.23	1.26	1.04	1.38	1.07	0.45	0.79	0.84	0.91	0.93	0.84
PAH 16 Total	mg/kg	0.6			27.9	12.2	16.9	9.6	9.6	8.1	10	7.9	3.4	8.7	6.6	7	7.3	6.8
PAH 17 Total	mg/kg	0.64			28.2	12.4	17.15	9.71	9.77	8.25	10.16	7.98	3.42	8.85	6.75	7.16	7.39	6.94
PCB (Dutch 7) congeners																		
PCB 28	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 52	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 101	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 118	ug/kg	5	120[#1]		<5 - 0.544	<5 - 4.83	<5 - 0.567	<5 - 0.363	<5 - 0.325	<5 - 0.362	<5 - 0.264	<5 - 0.619	<5 - 0.313	<5 - 1.58	<5 - 1.2	<5 - 0.92	<5 - 1.06	<5 - 0.796
PCB 138	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 153	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 180	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total PCB 7 Congeners	ug/kg	35	200[#5]		<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
PCB (WHO12) 12 congeners																		
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	ug/kg	Various	38[#1]		0.045	0.259	0.0375	0.0379	0.0271	0.0303	0.0234	0.0626	0.0241	0.134	0.0693	0.0578	0.0656	0.0489
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	ug/kg	Various	12[#1]		0.000833	0.00784	0.00181	0.00206	0.00217	0.00235	0.00126	0.00219	0.000516	0.00523	0.00346	0.00094	0.00148	0.00132
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	ug/kg	Various	120[#1]		0.351	2.33	0.28	0.174	0.162	0.18	0.128	0.315	0.164	0.743	0.587	0.445	0.538	0.388
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	ug/kg	Various	120[#1]		0.00381	0.04	0.00514	0.00573	0.00296	0.0035	0.0024	0.00457	0.00191	0.0174	0.0124	0.0107	0.0105	0.0132
Pentachlorobiphenyl, 2,3',4,4',5- (PCB-118)	ug/kg	Various	120[#1]		0.544	4.83	0.567	0.325	0.362	0.264	0.619	0.313	1.58	1.2	0.92	1.06	0.796	
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	ug/kg	Various	120[#1]		0.0217	0.151	0.0156	0.0127	0.0117	0.0117	0.00997	0.0274	0.0149	0.0373	0.0275	0.0217	0.0312	0.0263
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	ug/kg	Various	0.036[#1]		0.0101	0.157	0.00867	0.00823	0.00682	0.00849	0.00433	0.0221	0.00915	0.0117	0.0149	0.00488	0.0118	0.00706
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	ug/kg	Various	120[#1]		0.156	1.17	0.112	0.0878	0.0818	0.094	0.0673	0.213	0.0844	0.262	0.231	0.183	0.215	0.157
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	ug/kg	Various	120[#1]		0.0388	0.341	0.0308	0.0235	0.0201	0.0239	0.0174	0.0633	0.0228	0.0602	0.0511	0.0388	0.0497	0.0346
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	ug/kg	Various	120[#1]		0.0689	0.632	0.0498	0.0395	0.0358	0.0418	0.0293	0.0941	0.0352	0.0995	0.0983	0.0758	0.0844	0.064
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	ug/kg	Various	0.12[#1]		0.000301	0.0132	0.00159	0.00258	0.00209	0.00156	0.000585	0.00177	0.00115	<0.000353	0.000258	0.000545	<0.000204	0.00046
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189	ug/kg	Various	130[#1]		0.0223	0.131	0.0132	0.0127	0.0131	0.0128	0.0105	0.0256	0.0107	0.023	0.0288	0.0192	0.0223	0.0169
Chlorinated Dioxins and Furans																		
2378-TCDF	ng/kg	Various			<0.492	4.63	4.44	7.24	3.78	5.17	<0.62	<0.587	<0.339	<0.664	<0.539	<0.601	<0.734	<0.543
12378-PeCDD	ng/kg	Various			<0.591	0.526	<0.607	3.81	3.09	<0.571	<0.546	1.29	0.686	7.21	0.96	<0.458	<0.624	<0.521
123478-HxCDD	ng/kg	Various			<0.706	0.853	<0.662	2.64	2.42	2.24	1.1	1.69	0.804	18.6	1.49	0.918	1.19	1.21
123678-HxCDD	ng/kg	Various			2.5	5.28	2.7	4.74	4.83	4.35	1.86	10	3.63	33.5	6.11	2.63	4.55	3.34
123789 HxCDD	ng/kg	Various			3.32	3.06	1.77	3.17	3.46	3.28	1.16	4.27	2.98	36.4	4.33	<0.541	3.16	1.64
1234678-HpCDD	ng/kg	Various			166	104	89.5	83.3	83.6	95.6	79.1	266	97.7	1,350	191	128	170	121
OCDD	ng/kg	Various			1,370	736	526	600	543	68.1	545	2,090	705	10,200	1,440	964	1,230	844
OCDF	ng/kg	Various			84	132	145	36.2	28.1	34.6	29.1	52.9	21.7	74.6	59.1	35.4	50.9	34.5
2378-TCDD	ng/kg	Various			<0.469	<0.273	<0.494	<0.551	<0.517	<0.681	<0.534	<0.34	<0.247	<0.289	<0.213	<0.186	<0.234	<0.214
12378-PeCDF	ng/kg	Various			1.14	3.77	1.25	5.44	4.04	4.28	1.29	2.65	1.37	<0.362	3.04	<0.314	<0.445	<0.315
23478-PeCDF	ng/kg	Various			2.25	4.45	4.59	8.17	7.28	7.62	4.7	3.91	2.93	0.725	3.26	1.77	<0.372	2.58
123478-HxCDF	ng/kg	Various			<0.448	5.64	3.75	7.34	6.17	5.9	4.54	5.08	2.65	1.91	3.23	<0.247	1.88	1.32
123678-HxCDF	ng/kg	Various			1.71	4.7	5.02	6.64	5.01	4.98	4.2	4.44	0.919	<0.335	2.85	<0.251	<0.315	2.01
234678-HxCDF	ng/kg	Various			2.61	5.5	4.61	7.86	4.68	6.32	4	4.86	2.62	0.85	4.16	<0.218	3.62	<0.221
123789-HxCDF	ng/kg	Various			<0.455	0.678	<0.797	0.546	0.354	<0.52	<0.447	0.483	0.495	<0.368	<0.368	<0.275	<0.346	<0.265
1234678-HpCDF	ng/kg	Various			50.5	198	147	50.8	36.1	46.8	34	47.9	21.2	42.2	38.3	21.8	28.1	18.9
1234789-HpCDF	ng/kg	Various			1.77	3.05	1.01	1.91	1.15	1.78	0.872	2.28	1.17	3.16	1.94	0.803	1.31	<0.517
Brominated Dioxins and Furans																		
2378-TBDD	ng/kg	Various			<0.84	<0.82	<0.85	<0.83	<0.83	<0.84	<0.83	<0.84	<0.82	<0.77	<0.8	<0.8	<0.77	<0.8
12378-PBDD	ng/kg	Various			<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.83	<0.8	<0.78	<0.8	<0.8	<0.8
123478-HxBDD	ng/kg	Various			<0.84	<0.83	<0.85	<0.84	<0.84	<0.82	<0.85	<0.84	<0.82	<0.8	<0.8	<0.78	<0.81	<0.77
123678-HxBDD	ng/kg	Various			<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.76	<0.78	<0.78	<0.78	<0.78
123789-HxBDD	ng/kg	Various			<0.82	<0.81	<0.86	<0.83	<0.8	<0.84	<0.82	<0.81	<0.84	<0.78	<0.75	<0.79	<0.77	<0.77
1234678-HpBDD	ng/kg	Various			<0.83	0.97	0.86	<0.85	<0.81	<0.85	<0.82	<0.82	<0.82	<0.8	<0.83	<0.82	<0.82	<0.82
OBDD	ng/kg	Various			<0.82	<0.86	<0.84	<0.82	<0.84	<0.81	<0.84	<0.85	<0.83	<0.82	<0.81	<0.8	<0.8	<0.81
2378-TBDF	ng/kg	Various			3.65	8.77	8.12	3.19	2.3	2.96	2.19	2.93	1.34	2.91	1.76	0.89	1.3	<0.79
12378-PBDF	ng/kg	Various			3.1	6.19	6.02	2.18	1.57	1.9	1.35	1.46	0.89	1.06	1.28	1.31	1.01	1.07
23478-PBDF	ng/kg	Various			1.49	3.8	4.49	1.39	1.44	1.13	1.05	1.39	0.93	0.77	1.25	1.09	1.65	0.92
123478-HxBDF	ng/kg	Various			1.28	2.71	3.16	1.05	1.16	0.92	1.33	0.89	<0.84	0.69	0.8	<0.79	0.91	<0.79
123678-HxBDF	ng/kg	Various			1.05	2.29	3.08	1	<0.8	<0.83	0.87	1.41	<0.83	1.04	1.33	<0.8	0.88	<0.8
23678-HxBDF	ng/kg	Various			<0.85	1.17	1.02	<0.85	<0.83	<0.83	<0.83	<0.83	<0.83	<0.81	<0.8	<0.76	<0.78	<0.76
123789-HxBDF	ng/kg	Various			<0.83	0.88	<0.83	<0.84	<0.85	<0.84	<0.84	<0.84	<0.84	<0.8	<0.84	<0.8	<0.8	<0.8
1234678-HpBDF	ng/kg	Various			<0.82	<0.82	<0.82	<0.82	<0.84	<0.84	<0.84	<0.85	<0.85	<0.8	<0.8	1.11	<0.8	1.34
1234789-HpBDF	ng/kg	Various			<0.83	<0.81	<0.84	<0.82	<0.84	<0.82	<0.82	<0.82	<0.85	<0.84	<0.78	<0.79	<0.79	<0.78
OBDF	ng/kg	Various			<0.85	<0.85	<0.85	<0.85	<0.82	<0.82	<0.84	<0.85	<0.85	<0.82	<0.85	<0.84	<0.81	<0.83
Organophosphorous flame retardants																		
Triphenylphosphate	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tris(1-chloro-2-propyl)phosphate	mg/kg	Various	630[#1]		<0.5	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.2	<0.2	<0.5	<0.2
Tris(2-ethylhexyl) phosphate	mg/kg	0.1	170[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-05	GTCS 1-06	GTCS 1-07	GTCS 1-08				GTCS 1-09	GTCS 1-10	GTCS 1-11	GTCS 1-12			
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019				06/06/2019	06/06/2019	06/06/2019	06/06/2019			
				Sample Type	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Field_D		
				Sample Area	Lancaster West Walkways	Lancaster West Walkways	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Treadgold House	Verity Close	Verity Close	Morland House	Morland House	Morland House	Morland House	Morland House
				Field ID	GTCS 1-05A	GTCS 1-06A	GTCS 1-07A	GTCS 1-08 PRIMARY SAMPLE	GTCS 1-08 FIELD DUPLICATE	GTCS 1-08 LAB DUPLICATE	GTCS 1-08 LAB FIELD DUPLICATE	GTCS 1-09A	GTCS 1-10A	GTCS 1-11A	GTCS 1-12 PRIMARY SAMPLE	GTCS 1-12 FIELD DUPLICATE	GTCS 1-12 LAB DUPLICATE	GTCS 1-12 LAB FIELD DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Brominated flame retardents (PBDEs)																		
2,2',4-tribromodiphenyl ether (BDE-17)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,4'-tribromodiphenyl ether (BDE-28)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',3,4,4'-pentabromodiphenyl ether (BDE-8	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5-pentabromodiphenyl ether (BDE-9	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',6-pentabromodiphenyl ether (BDE-1	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',3,4,4',5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5,5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1	13[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5,6'-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2,3,4,4,5,6-heptabromodiphenyl ether (BDE	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Polybrominated biphenyls (PBBs)																		
2,2-dibromobiphenyl (PBB 4)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4,4-dibromobiphenyl (PBB 15)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2,5-tribromobiphenyl (PBB 18)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tetrabromobiphenyl (3,3,5,5-) (PBB 80)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromobiphenyl (PBB 153)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrabromobisphenol A																		
tetrabromobisphenol A	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromocyclododecane (HBCDD)																		
Hexabromocyclododecane (HBCDD)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isocyanates																		
Isocyanic Acid	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Methyl Isocyanate	ug/kg	250	4,600[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Ethyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Propyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Phenyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Hexamethylene diisocyanate	ug/kg	250	3,100[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,4-Toluene diisocyanate	ug/kg	250	6,400[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,6-Toluene diisocyanate	ug/kg	250	5,300[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Isophorone Diisocyanate	ug/kg	500			<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
4,4-Methylene-bis(phenyl-isocyanate)	ug/kg	250	850,000,000[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Cyanides																		
Cyanide (Free)	mg/kg	0.5	20[#5]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
Cyanide Total	mg/kg	0.5	78[#1]		<0.5	<0.5	<0.5	0.8	0.9	0.8	0.8	<0.5	<0.5	1	0.7	<0.5	<0.5	0.6
Thiocyanate	mg/kg	0.6	20[#5]		1.2	1	1.1	1.7	1.6	1.9	2	0.7	1.7	1	1.7	1.7	1.8	1.7
Asbestos																		
General Description (Bulk Analysis)	None				Soil/Stone	Soil/Stone	soil.stones	Soil/Stones	Soil/Stones	Soil/Stones	soil.stones	soil.stones	soil.stones	soil/stones	soil/stones	soil-stones	soil/stones	soil/stones
Asbestos Fibres	None				Fibre Bundles	NAD	NAD	NAD	Fibre Bundles	NAD	NAD	NAD	NAD	NAD	NAD	Fibre Bundles	NAD	NAD
Asbestos ACM	None				NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
Asbestos Type	None				Amosite	NAD	NAD	NAD	Chrysotile	NAD	NAD	NAD	NAD	NAD	NAD	Chrysotile	NAD	NAD
Asbestos Level Screen					less than 0.1%	NAD	NAD	NAD	less than 0.1%	NAD	NAD	NAD	NAD	NAD	NAD	less than 0.1%	NAD	NAD
Potentially Respirable Fibres per gram	f/g	0			0	-	-	-	0	-	-	-	-	-	-	0	-	-
SVF / MMMF																		
Synthetic/MMMF	None				Present	Present	Present	Absent	Present	Absent	Present	Absent	Absent	Present	Present	Present	Present	Present
Asbestos Quantification																		
Asbestos Gravimetric & PCOM Total	mass %	0.001			<0.001	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-
Asbestos PCOM Quantification (Fibres)	mass %	0.001			<0.001	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-
Total ACM Gravimetric Quantification (% Asb)	mass %	0.001			<0.001	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-
Total Detailed Gravimetric Quantification (% A	mass %	0.001			<0.001	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-
Asbestos Quantification - Total - %	mass %	0.001			<0.001	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-
Total Organic Carbon																		
TOC	percent	0.02			3.43	3.16	6.72	5.93	5.62	5.87	5.16	3.79	2.99	6.59	7.82	8.21	8.35	9.17
Inorganics																		
pH (Lab)	pH units	0.01			6.99	7.21	7.76	7.9	7.86	7.96	7.97	7.23	6.65	7.65	7.47	7.54	7.45	7.25
Other																		
Natural Moisture Content	percent	0.1			10.3	16.2	6.8	9.1	9.7	9.4	10	10.2	10	22.2	22.1	15.8	20.8	13.6
ESdat Calculated																		
Cresols Total	ug/kg	20	180[#3]		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo(a)pyrene (surrogate marker for PAH m	mg/kg	0.01	5.0[#6]		2.29	1.24	1.67	0.93	0.99	0.82	0.92	0.75	0.34	0.93	0.63	0.72	0.72	0.72
Xylene Total	ug/kg	8	130,000[#2]		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Trichlorobenzene (total)	ug/kg	14	2200[#5]		<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14
AECOM Calculated																		
Sum of PCDD/F +PCB12	ng/kg	Various	8700[#4]		2972	11309	2097	1619	1445	1083	1288	3967	1563	14761	4101	2952	3603	2601
PCDD/F+PBDD/F+PCB12 Hazard Index	-	-	1		0.07	0.32	0.1	0.14				0.13	0.06	0.34	0.09			
WHO2005 TEQ (PCDD/F + PBDD/F + PCB)	ng/kg	Various			6.539	27.646	10.245	13.925	11.438	8.816	5.71	12.723	5.845	35.585	9.383	3.719	5.899	4.48

Comments
#1 USEPA RSL (May 2019)
#2 LQM/CIEH S4ULs 2015
#3 EIC/AGS/CL:AIRE 2010
#4 EA SGV 2009
#5 Dutch IV 2013
#6 Defra C4SL 2014
#7 AECOM (modified EIC GAC to include plant uptake route)
GSC based on residential (with private gardens) land use scenario
2.5% soil organic matter content selected for GSC #2 and #3
(blank): No assessment criteria available
- : Not analysed
Field_D: Field Duplicate
NAD: No Asbestos Detected

		Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-13	GTCS 1-14	GTCS 1-15	GTCS 1-16	GTCS 1-17	GTCS 1-18				GTCS 1-19	GTCS 1-20	GTCS 1-21	GTCS 1-22	GTCS 1-23				GTCS 1-24	GTCS 1-25	GTCS 1-26	GTCS 1-27
				Date	07/06/2019	07/06/2019	07/06/2019	07/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal
				Sample Area	Allom House and Barlow House	Allom House and Barlow House	Camelford Walk	Camelford Walk	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Henry Dickens Estate	Henry Dickens Estate	Avondale Park	Avondale Park	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Bramley House	Bramley House	Whitstable House
				Field ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-15A	GTCS 1-16A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A
	Units			Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Metals																									
Aluminium	mg/kg	50	77,000[#1]		7,777	8,281	11,650	11,400	9,583	15,320 - 18,258	17,423 - 18,250	16,350 - 19,022	16,400 - 19,023	8,970	10,260	10,030	11,170	12,090	9,670 - 12,510	11,560	11,124 - 11,210	13,720	6,985	10,480	19,810
Arsenic	mg/kg	0.5	37[#2]		10.6	12.4	9	14.8	27	38.5 - 47.4	50.7 - 58.6	39.7 - 55.4	46.6 - 61.5	16.7	19.2	13.9	15.4	18.4	17.2 - 20.2	19.1	16.3 - 19.3	23.1	13.9	12.7	15.4
Barium	mg/kg	1	460[#7]		89	140	135	225	272	815 - 991	866 - 945	885 - 948	883 - 944	171	249	186	138	540	486 - 613	564	517 - 560	269	113	165	289
Beryllium	mg/kg	0.5	1.7[#2]		0.7	0.8	0.9	1.3	2.1	3.5 - 4	3.9 - 4.1	3.6 - 4.1	3.7 - 4	1.1	1.4	1.1	1	1.3	1.1 - 1.3	1.3	1.2	1.6	0.8	0.9	1.5
Boron	mg/kg	0.1	290[#2]		0.9	1.2	1.3	1.8	1.8	3.7 - 4.3	3.5 - 3.8	3.3 - 4.3	3.5 - 3.7	2	3.5	4.5	3.8	6.4	4.2 - 7.4	6.1	4.9 - 6.5	2.7	3.4	6.6	2.1
Cadmium	mg/kg	0.1	22[#2]		0.4	0.4	0.7	1.1	0.9	1.6 - 2	1.9 - 7	1.8 - 2.1	1.9 - 2.1	1.1	0.8	1.1	0.9	0.9	0.6 - 0.8	0.8	0.6 - 0.8	1	0.6	4.7	1.4
Chromium (Trivalent)	mg/kg	0.5	910[#2]		102.5	94	145.2	117.6	80.9	52.6 - 59.9	57.4 - 57.8	57.1 - 59.6	54.1 - 63.4	69.3	117.8	66.9	72	71.5	28.3 - 30.6	71.1	30.1 - 31	68.2	171.2	192.3	95.8
Chromium (hexavalent)	mg/kg	0.3	21[#6]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.5	Use either CrIII or CrVI[#2]		102.5	94	145.2	117.6	80.9	52.6 - 59.9	57.4 - 57.8	57.1 - 59.6	54.1 - 63.4	69.3	117.8	66.9	72	71.5	28.3 - 30.6	71.1	30.1 - 31	68.2	171.2	192.3	95.8
Copper	mg/kg	1	2,400[#2]		24	34	33	54	183	518 - 658	470 - 501	484 - 527	504 - 539	68	90	81	58	93	79 - 86	88	79 - 92	76	35	41	72
Lead	mg/kg	5	200[#6]		101	182	141	280	492	1,231 - 1,785	1,459 - 1,780	1,455 - 1,528	1,472 - 1,519	290	434	1,200	168	2,099	2,092 - 2,621	2,151	2,371 - 2,539	659	67	262	439
Mercury	mg/kg	0.1	40[#2]		0.2	0.4	0.3	0.4	0.4	2.4 - 4.1	3.1 - 3.5	2.4 - 4.2	2.6 - 3.3	0.8	0.6	0.9	0.3	0.8	0.5 - 0.9	1.8	0.4 - 0.8	1.8	<0.1	0.2	0.6
Nickel	mg/kg	0.7	130[#2]		14.7	17.8	21	25.9	38.4	51.9 - 62.6	62.1 - 73.1	56.8 - 61.6	55.4 - 85.3	25.6	28.3	23.3	22.4	24.9	21.1 - 23.9	24.9	21.9 - 23.1	27.4	20.7	19.5	32.2
Selenium	mg/kg	1	250[#2]		<1	<1	1	<1	2	2	2	2	2	1	2	<1	1	1	<1	1	<1 - 1	2	1	1	2
Vanadium	mg/kg	1	410[#2]		36	43	49	55	66	79 - 95	90 - 92	85 - 90	79 - 92	53	58	44	44	53	51 - 59	53	53 - 59	62	46	42	66
Zinc	mg/kg	5	3,700[#2]		104	130	151	303	339	971 - 1,092	1,058 - 5,153	989 - 1,070	1,000 - 1,184	229	292	299	243	499	369 - 451	444	382 - 444	285	141	169	358
VOCs																									
1,1,1,2-tetrachloroethane	ug/kg	5	2,800[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-trichloroethane	ug/kg	5	18,000[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-tetrachloroethane	ug/kg	3	3,400[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1,2-trichloroethane	ug/kg	4	1,200[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,1-dichloroethane	ug/kg	6	1,200[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloroethene	ug/kg	6	3,900[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-trichlorobenzene	ug/kg	7	3,600[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2,3-trichloropropane	ug/kg	4	5.1[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2,4-trimethylbenzene	ug/kg	6	850[#2]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,2-dibromo-3-chloropropane	ug/kg	4	5.3[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2-dibromoethane	ug/kg	3	36[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-dichloroethane	ug/kg	5	11[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dichloropropane	ug/kg	4	42[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3,5-trimethylbenzene	ug/kg	3	270,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,3-dichloropropane	ug/kg	4	1,600,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,2-dichloropropane	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Benzene	ug/kg	5	870[#6]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	96	<5
Bromobenzene	ug/kg	2	2,000[#3]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/kg	4	150,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromodichloromethane	ug/kg	4	290[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoform	ug/kg	4	5,900[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromomethane	ug/kg	1	6,800[#3]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Methyl butanal	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	ug/kg	4	56[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorodibromomethane	ug/kg	5	8,300[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/kg	6	11,000[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
Chloroform	ug/kg	5	1,700[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/kg	3	9.8[#3]		5	5	5	11	9	26	11	14	19	12	21	7	8	16	11	18	34	7	6	9	5
cis-1,2-dichloroethene	ug/kg	7	190[#3]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
cis-1,3-dichloropropene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromomethane	ug/kg	4	24,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dichlorodifluoromethane	ug/kg	2	87,000[#1]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dichloromethane	ug/kg	30	980[#3]		<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Ethylbenzene	ug/kg	3	110,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	3	<3	3	3	<3	<3	<3	<3
Eucalyptol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	ug/kg	3	27,000[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Methyl Methacrylate	ug/kg	100	4,400,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	782	-
MTBE	ug/kg	6	84,000[#1]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
n-butylbenzene	ug/kg	4	3,900,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
n-propylbenzene	ug/kg	4	82,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
sec-butylbenzene	ug/kg	4	7,800,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/kg	3	19,000[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-butylbenzene	ug/kg	5	7,800,000[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/kg	3	390[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Toluene	ug/kg	3	290,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-dichloroethene	ug/kg	3	340[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,3-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichloroethene	ug/kg	5	34[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/kg	3	23,000,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Undecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	386	-	-	-
Xylene (m & p)	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Xylene (o)	ug/kg	4	140,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Vinyl chloride	ug/kg	2	0.87[#2]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
VOC TICs	None				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-	0
Trihalomethanes	ug/kg				<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-13	GTCS 1-14	GTCS 1-15	GTCS 1-16	GTCS 1-17	GTCS 1-18				GTCS 1-19	GTCS 1-20	GTCS 1-21	GTCS 1-22	GTCS 1-23				GTCS 1-24	GTCS 1-25	GTCS 1-26	GTCS 1-27
				Date	07/06/2019	07/06/2019	07/06/2019	07/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal
				Sample Area	Allom House and Barlow House	Allom House and Barlow House	Camelford Walk	Camelford Walk	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Henry Dickens Estate	Henry Dickens Estate	Avondale Park	Avondale Park	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Bramley House	Bramley House	Whitstable House
				Field ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-15A	GTCS 1-16A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
SVOCs																									
Dibenzo[a,e]pyrene	ug/kg	100	42[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	ug/kg	10	240,000[#1]		<10	21	17	<10	22	74	72	75	195	87	98	43	21	162	126	141	116	131	<10	<10	24
4-bromophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chlorophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Azobenzene	ug/kg	10	5,600[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethoxy) methane	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethyl)ether	ug/kg	10	230[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbazole	ug/kg	10			35	69	76	80	25	53	58	53	54	250	296	61	39	329	226	451	291	238	288	81	42
Dibenzofuran	ug/kg	10	73,000[#1]		<10	17	19	22	21	38	36	36	60	89	142	28	15	139	136	164	132	107	37	21	<10
Hexachlorobutadiene	ug/kg	4	700[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorocyclopentadiene	ug/kg	10	1,800[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	ug/kg	10	480[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Anilines																									
2-nitroaniline	ug/kg	10	630,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
3-nitroaniline	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloroaniline	ug/kg	10	2,700[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-nitroaniline	ug/kg	10	27,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Amino Aliphatics																									
N-nitrosodi-n-propylamine	ug/kg	10	78[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Explosives																									
2,4-Dinitrotoluene	ug/kg	10	3,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-dinitrotoluene	ug/kg	10	1,700[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	ug/kg	10	5,100[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phenolics																									
2,4-dimethylphenol	ug/kg	10	43,000[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	33	<10	<10
2-chloronaphthalene	ug/kg	10	9,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloro-3-methylphenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	221	<10
4-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Phenol	ug/kg	10	200,000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Phenols																									
2,4,5-trichlorophenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,6-trichlorophenol	ug/kg	10	49,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-dichlorophenol	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chlorophenol	ug/kg	10	390,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	ug/kg	10	520[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Benzenes																									
1,2,4-trichlorobenzene	ug/kg	7	6,400[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2-dichlorobenzene	ug/kg	4	55,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3-dichlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,4-dichlorobenzene	ug/kg	4	150,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorobenzene	ug/kg	10	3,300[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	83	<10	<10	<10
SVOC - Phthalates																									
Bis(2-ethylhexyl) phthalate	ug/kg	100	610,000[#3]		<100	120	1,106	459	587	567	634	639	731	418	287	571	1,546	399	307	394	337	384	196	<100	762
Butyl benzyl phthalate	ug/kg	100	3,300,000[#3]		<100	<100	<100	<100	135	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Diethylphthalate	ug/kg	100	260,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Dimethyl phthalate	ug/kg	100	16,400[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Di-n-butyl phthalate	ug/kg	100	31,000[#3]		<100	<100	<100	<100	<100	<100	453	177	119	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Di-n-octyl phthalate	ug/kg	100	2,800,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SVOC - Solvents																									
Isophorone	ug/kg	10	570,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC TIC																									
SVOC TICs	None				0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
.alpha.-Phellandrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Pinene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.beta.-Guaiene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[1,1-Biphenyl]-4-carboxaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1(2Aminobenzylidene)1234-tetrahydroacridine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,4-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,5-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,4,6-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-d	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	574	-	-	-	-
1,2,9,10-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,190	-	-	-
1,5,5-Trimethyl-6-methylene-cyclohexene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,6-Dimethylphenazine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-5,7,9(10),11,13-pentaene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-8,11,13-triene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10s,11s-Himachala-3(12),4-diene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	518	-	-	-	-	-	515	-	-	-	-	-
11H-Benzo[a]fluoren-11-one	ug/kg	100			-	-	-	-	-	-	-	-	-	299	152	-	-	-	1,038	540	900	296	-	-	-
11H-Benzo[a]fluoren-11-one, 10-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]fluorene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo(b)fluorene	ug/kg	100			-	-	-	-	-	-	-	-	-	307	203	-	-	-	872	718	821	316	-	-	-
11H-Indeno(1,2-b)quinoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Docosenamide, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Isopropylpodocarpen-12-ol-20-al	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H-Inden-1-one, 2,3-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	368	-	-	-	-	-	-	-
1-Methyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Naphthalenecarboxylic acid, 2-benzoyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(2H-Benzotriazol-2-yl)-5-methylphenol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,791	-
2-(Acetoxymethyl)-3-(methoxycarbonyl)biphen	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-13	GTCS 1-14	GTCS 1-15	GTCS 1-16	GTCS 1-17	GTCS 1-18				GTCS 1-19	GTCS 1-20	GTCS 1-21	GTCS 1-22	GTCS 1-23				GTCS 1-24	GTCS 1-25	GTCS 1-26	GTCS 1-27
				Date	07/06/2019	07/06/2019	07/06/2019	07/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal
				Sample Area	Allom House and Barlow House	Allom House and Barlow House	Camelford Walk	Camelford Walk	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Henry Dickens Estate	Henry Dickens Estate	Avondale Park	Avondale Park	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Bramley House	Bramley House	Whitstable House
				Field ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-15A	GTCS 1-16A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
2,3,3,.5,6-Pentachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,3,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Cycloheptatrien-1-one, 2-phenyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-Dimethyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,9-Dimethyl-2,3,4,5,6,7hexahydro-1H-2-benz	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	425	-	-	-	-	-
2-Bromo-4,5-dimethoxycinnamic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2Chloro2methyl1oxa2sila-1,2-dihydronaphtha	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylchrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	358	-	126	-	-	-	-	-	503	-	-	-
2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3-Dimethylbiphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4:8,9-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4-Dichlorobenzonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,5-Dimethoxy-4-hydroxycinnamaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4-Bis(tetrahydrothiopyran)	ug/kg	100			-	-	-	-	-	-	-	-	-	528	200	-	-	2,508	-	756	1,225	336	-	-	-
4H-Cyclopenta[def]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	399	-	-	-	-	1,061	1,286	558	-	-	-
6H-Benz[de]anthracen-6-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7H-Benz(de)anthracen-7-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8,9-Dihydro-7H-cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,728	-	-	-	-
9,10-Anthracenedione	ug/kg	100	14,000[#1]		-	-	-	-	-	-	-	-	-	-	183	-	-	389	419	289	298	217	-	-	-
9,10-Anthracenedione, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Bis(bromomethyl)anthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	451	-	-	-	-	-	-
9,10-Dimethylanthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	232	-	-	-	-	-	-
9-Anthracenecarbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	191	-	-	-	-	-	-
9H-Cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,942	-	-	-	-	-	-
9H-Fluoren-9-ol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 9-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alloaromadendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthra(1,2-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	412	-	-	-	-	923	-	1,213	620	-	-	-
Anthra(2,3-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	413	-	-	-	-	296	-	473	-	-	-	-
Anthracene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	544	-	-	-	-	-	-
Aromandendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(A)anthracene-7,12-dione	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene-7-carbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 12-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,040	-	-	-	-	-
Benz[a]anthracene, 7-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	804	-	-	-
Benz[j]aceanthrylene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenamine, 2,4,6-tribromo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene, (4,5,5-trimethyl-1,3-cyclopentadien-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Sulfonylbis (4-chlorobenzene)	ug/kg	100	51,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenesulfonamide, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(c)carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	765	-	-	387	-	-	-
Benzo[b]naphtho[1,2-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,1-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	509	346	-	-	2,312	1,041	1,024	-	-	-	-	-
Benzo[b]naphtho[2,3-d]furan	ug/kg	100			-	-	-	-	-	-	-	-	-	340	357	-	-	1,417	757	659	933	412	-	-	-
Benzo[b]naphtho[2,3-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,301	-	-	-	-	-	-
Benzo[c]cinnoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(e)pyrene	ug/kg	100			-	848	-	1,177	1,150	235	-	-	-	-	1,037	-	318	10,148	5,869	-	15,183	-	1,316	-	-
Benzo[ghi]fluoranthene	ug/kg	100			-	-	-	-	-	-	-	-	-	1,395	-	-	-	-	-	-	-	-	-	-	-
Benzo[h]quinoline, 2,4-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[kl]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	598	-	-	-	-	-	-
Benzoic acid, hexyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,877	-
1,1-Biphenyl	ug/kg	100	160,000[#3]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylated Hydroxytoluene	ug/kg	100	150,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camphor (TIC)	ug/kg	100			-	-	-	-	-	-	491	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	134	170	-	304	-	-	2,567	1,163	685	-	-	-	-	-
Chrysene, 5-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 6-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclopenta(cd)pyrene, 3,4-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	708	-	-	-	3,954	-	1,582	-	998	-	-	-
Cyclopenta(def)phenanthrenone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	1,456	1,002	492	696	303	423	-	-
Dehydroabietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Homoandrostane, (5.alpha.,13.alpha.)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,e)aceanthrylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,i)pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	676	776	-	-	-	-	-	-	-	-	-	-
Dibenzo[def,mno]chrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	2,785	-	-	-	-	-	-	-
Dibenzofuran, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene	ug/kg	100	780,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	312	-	-	-	-	-
Dibenzothiophene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 4,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dicyclohexyl phthalate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60,077	-
Diphenyl sulfide	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
di-p-Tolylacetylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	576	477	-	258	-	-	-	-
D-Limonene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eicosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	1,737	-	-	3,426	-	-	-	-	4,727	-
Ferruginol	ug/kg	100			-	-	-	-	367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	1,013	521	-	-	4,555	858	1,960	2,325	764	-	-	-
Fluorene, 2,4a-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane	ug/kg	100			-	954	-	-	-	-	-	-	-	-	-	-	-	6,918	-	-	-	-	-	599	-
Heneicosane, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	643	-	-	-	-	-	-
Heptadecane	ug/kg	100			-	-	-	-	-	205	-	-	-	-	-	594	-	-	-	-	-	-	-	-	-
Hexadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,760	-
Hexathiane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-13	GTCS 1-14	GTCS 1-15	GTCS 1-16	GTCS 1-17	GTCS 1-18				GTCS 1-19	GTCS 1-20	GTCS 1-21	GTCS 1-22	GTCS 1-23				GTCS 1-24	GTCS 1-25	GTCS 1-26	GTCS 1-27
				Date	07/06/2019	07/06/2019	07/06/2019	07/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal
				Sample Area	Allom House and Barlow House	Allom House and Barlow House	Camelford Walk	Camelford Walk	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Henry Dickens Estate	Henry Dickens Estate	Avondale Park	Avondale Park	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Bramley House	Bramley House	Whitstable House
				Field ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-15A	GTCS 1-16A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Indene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	1,027	-	-	-	-	-	-	-
Indeno[1,2,3-fg]naphthacene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	718	-	-	-
Indole, 5-methyl-2-(4-pyridyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isocil	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
isoledene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Longifolene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl dehydroabietate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morpholine, 4-(1-cyclohepten-1-yl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,5-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6,7-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	136	-	-	-	-	-	-
Naphthalene, 1,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-phenyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	729	-	-	-	-	-	-	-
Naphtho[1,2-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1,8,7-klmn]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Decanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neocuproine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	739	-	-	-	-	-	-
Hexadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonadecane	ug/kg	100			-	-	-	1,856	-	-	-	-	-	-	1,450	-	-	-	-	-	-	-	-	-	-
n-Pentafluorosulfanyl-S,S-diphenoxysulfilimine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	8,766	-	-	-	-	-	-	-
Octadecane, 1-iodo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic acid, butyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Cymene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Perylene	ug/kg	100			-	-	-	-	-	-	-	-	-	2,202	-	-	-	-	-	3,387	3,330	2,798	-	-	-
Phenanthrene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	440	272	-	-	849	-	600	692	200	-	-	-
Phenanthrene, 2,5-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	414	322	-	-	1,313	499	519	386	308	-	-	-
Phenanthrene, 3,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2-methoxy-4-(1-propenyl)-, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	349	-	-	-	1,021	680	668	438	-	-	-	-
Pyrene, 1-methyl-	ug/kg	100			-	-	293	502	246	-	-	-	-	401	313	228	-	1,978	2,218	860	678	396	561	-	-
Pyrene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Quinoxaline, 6-(3-nitrobenzylidenamino)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	281	-	-	-	-	-	-	-	-	-
Rubicene-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloro-o-benzoquinone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	595	-	-	-	-
Tetracosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,911	-	-	-	-	-
Tetradecanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Bis(methyldichlorosilyl)ethylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorovinylsilane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	1,334	-	-	9,889	-	-	-	-	-	-	-
Triphenylene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,050	-	-	-	-	-	-
GT-SVOC-TIC-01	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-02	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-03	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-04	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-05	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-06	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-07	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-08	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-09	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-10	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-11	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-12	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-13	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-14	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-15	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-16	ug/kg	100			-	-	-	-	-	-	-	559	774	-	-	637	-	7,888	-	-	-	1,963	-	-	-
GT-SVOC-TIC-17	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-18	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)naphtho(1,2-d)furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)		Location	GTCS 1-13	GTCS 1-14	GTCS 1-15	GTCS 1-16	GTCS 1-17	GTCS 1-18				GTCS 1-19	GTCS 1-20	GTCS 1-21	GTCS 1-22	GTCS 1-23				GTCS 1-24	GTCS 1-25	GTCS 1-26	GTCS 1-27
					Date	07/06/2019	07/06/2019	07/06/2019	07/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal
					Sample Area	Allom House and Barlow House	Allom House and Barlow House	Camelford Walk	Camelford Walk	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Henry Dickens Estate	Henry Dickens Estate	Avondale Park	Avondale Park	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Bramley House	Bramley House	Whitstable House
					Field ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-15A	GTCS 1-16A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A
					Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
PAH																										
Acenaphthene	mg/kg	0.01	510[#2]			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.13	<0.05	<0.05	0.16	0.12	0.19	0.15	0.16	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.01	420[#2]			0.07	0.07	0.06	0.2	0.13	0.24	0.23	0.27	0.21	1.4	0.27	0.17	0.1	1.69	1.74	1.76	1.54	1.04	0.07	0.25	0.08
Anthracene	mg/kg	0.01	5,400[#2]			0.12	0.11	0.13	0.21	0.12	0.31	0.26	0.39	0.24	1.12	0.5	0.19	0.22	1.74	1.72	1.77	1.72	1.24	0.18	0.57	0.14
Benz(a)anthracene	mg/kg	0.01	11[#2]			0.85	0.65	0.89	1.71	0.33	1.2	0.79	1.07	0.79	4.03	1.71	0.72	0.81	5.55	6.03	5.92	5.66	4.4	0.59	2.52	0.5
Benzo(a) pyrene	mg/kg	0.01	2.7[#2]			0.76	0.87	0.77	1.65	0.49	1.48	1.06	1.35	1.09	4.52	2.04	0.9	0.95	7.43	7.82	7.68	7.05	5.75	0.65	1.96	0.55
Benzo(b)fluoranthene	mg/kg	0.01	3.3[#2]			1.09	1.16	1.17	2.28	0.63	2.25	1.63	1.98	1.61	5.93	2.6	1.21	1.26	9.25	10.06	9.91	9.05	7.17	0.86	2.7	0.73
Benzo(b)&(k)fluoranthene	mg/kg	0.01				1.51	1.61	1.62	3.16	0.88	3.12	2.26	2.75	2.24	8.23	3.61	1.68	1.75	12.85	13.97	13.77	12.57	9.96	1.19	3.75	1.02
Benzo(g,h,i)perylene	mg/kg	0.01	340[#2]			0.54	0.64	0.75	1.22	0.46	1.47	1.14	1.36	1.12	3.26	1.4	0.68	0.67	5.46	5.95	6.15	5.13	4.34	0.45	0.92	0.38
Benzo(k)fluoranthene	mg/kg	0.01	93[#2]			0.42	0.45	0.45	0.88	0.25	0.87	0.63	0.77	0.63	2.3	1.01	0.47	0.49	3.6	3.91	3.86	3.52	2.79	0.33	1.05	0.29
Chrysene	mg/kg	0.01	22[#2]			0.62	0.68	0.62	1.33	0.36	1.36	0.91	1.18	0.93	3.75	1.82	0.8	0.89	5.77	6.19	6.12	6.08	4.53	0.46	2.49	0.53
Coronene	mg/kg	0.04				0.12	0.15	0.17	0.27	0.1	0.33	0.24	0.33	0.27	0.76	0.25	0.18	0.12	1.23	1.43	1.13	0.91	1.04	0.09	0.19	0.09
Dibenz(a,h)anthracene	mg/kg	0.01	0.28[#2]			0.1	0.17	0.18	0.29	0.1	0.33	0.19	0.25	0.24	0.67	0.32	0.18	0.16	1.01	1.49	1.25	1.31	1.06	0.12	0.41	0.1
Fluoranthene	mg/kg	0.01	560[#2]			1.2	1.25	1.29	2.56	0.46	1.72	1.2	1.69	1.19	7.09	3.68	1.37	1.71	9.69	10.1	10.15	9.67	8.11	1.14	3.93	1.02
Fluorene	mg/kg	0.01	400[#2]			<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	0.1	0.11	<0.04	<0.04	0.2	0.19	0.21	0.19	0.16	<0.04	0.07	<0.04
Indeno(1,2,3-c,d)pyrene	mg/kg	0.01	36[#2]			0.53	0.57	0.65	1.09	0.42	1.32	1.01	1.22	1.01	3.2	1.35	0.67	0.62	5.22	5.84	5.84	5.06	4.2	0.43	1.04	0.37
Naphthalene	mg/kg	0.01	5.6[#2]			<0.027	<0.027	<0.027	<0.027 - 0.05	<0.027	<0.027 - 0.07	<0.027 - 0.07	<0.027 - 0.11	<0.027 - 0.07	<0.027 - 0.15	<0.027 - 0.08	<0.027 - 0.05	<0.027	<0.027 - 0.29	<0.027 - 0.39	<0.027 - 0.38	<0.027 - 0.32	<0.027 - 0.28	<0.027	<0.027 - 0.08	<0.027
Phenanthrene	mg/kg	0.01	220[#2]			0.34	0.36	0.39	0.74	0.16	0.68	0.43	0.77	0.43	1.65	1.65	0.46	0.82	2.85	3	3.07	3.15	2.56	0.54	1.43	0.47
Pyrene	mg/kg	0.01	1,200[#2]			1.04	1.12	1.1	2.25	0.43	1.72	1.22	1.63	1.21	6.2	3.13	1.19	1.47	8.8	9.11	9.15	8.9	7.19	0.97	3.17	0.9
PAH 16 Total	mg/kg	0.6				7.7	8.1	8.5	16.5	4.3	15	10.8	14.1	10.8	45.4	21.8	9.1	10.2	68.7	73.7	73.4	68.5	55	6.8	22.6	6.1
PAH 17 Total	mg/kg	0.64				7.8	8.25	8.62	16.73	4.44	15.35	11.01	14.43	11.04	46.2	22.05	9.24	10.29	69.94	75.09	74.54	69.41	56.02	6.88	22.78	6.15
PCB (Dutch 7) congeners																										
PCB 28	ug/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 52	ug/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 101	ug/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 118	ug/kg	5	120[#1]			<5 - 0.264	<5 - 0.226	<5 - 0.929	<5 - 1.11	<5 - 0.633	<5 - 1.28	<5 - 1.88	<5 - 1.01	<5 - 0.851	<5 - 1.04	<5 - 1.09	<5 - 0.554	<5 - 0.52	<5 - 0.512	<5 - 0.471	<5 - 0.581	<5 - 0.48	<5 - 0.507	<5 - 5.86	<5 - 0.494	<5 - 1.07
PCB 138	ug/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 153	ug/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
PCB 180	ug/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total PCB 7 Congeners	ug/kg	35	200[#5]			<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
PCB (WHO12) 12 congeners																										
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	ug/kg	Various	38[#1]			0.0196	0.0269	0.057	0.0599	0.0392	0.0916	0.211	0.0863	0.073	0.0731	0.0927	0.0576	0.0532	0.0331	0.0341	0.0362	0.0345	0.0339	0.0484	0.0314	0.0713
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	ug/kg	Various	12[#1]			<0.00023	0.000385	0.00157	0.00223	0.00219	0.0113	0.0183	0.0105	0.00994	0.00281	0.00443	0.000997	0.000617	0.00206	0.00073	0.00184	0.000941	0.00266	0.00165	0.00109	0.00135
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	ug/kg	Various	120[#1]			0.118	0.109	0.525	0.583	0.295	0.701	1.06	0.556	0.498	0.431	0.545	0.269	0.241	0.248	0.226	0.281	0.231	0.228	2.38	0.231	0.569
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	ug/kg	Various	120[#1]			0.00549	0.00189	0.0101	0.0134	0.00305	0.0256	0.0435	0.0138	0.0126	0.00905	0.0106	0.00814	0.00369	0.00577	0.00517	0.00639	0.00549	0.00466	0.0961	0.00502	0.00865
Pentachlorobiphenyl, 2,3,4,4',5- (PCB-118)	ug/kg	Various	120[#1]			0.264	0.226	0.929	1.11	0.633	1.28	1.88	1.01	0.851	1.04	1.09	0.554	0.52	0.512	0.471	0.581	0.48	0.507	5.86	0.494	1.07
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	ug/kg	Various	120[#1]			0.00445	0.00435	0.0281	0.0489	0.0217	0.046	0.0636	0.0368	0.0298	0.0402	0.04	0.0149	0.0155	0.0127	0.0151	0.0154	0.0141	0.0172	0.103	0.013	0.0353
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	ug/kg	Various	0.036[#1]			0.00175	0.00334	0.0138	0.00247	0.0132	0.0387	0.0633	0.043	0.0377	0.0192	0.0133	0.00808	0.013	0.00646	0.00636	0.00759	0.011	0.0119	0.00205	0.00688	0.0166
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	ug/kg	Various	120[#1]			0.0591	0.0486	0.242	0.299	0.153	0.391	0.398	0.332	0.28	0.245	0.214	0.101	0.109	0.128	0.104	0.133	0.111	0.104	0.808	0.0887	0.262
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	ug/kg	Various	120[#1]			0.0162	0.0161	0.0614	0.0915	0.0346	0.0895	0.0925	0.0735	0.0665	0.0714	0.0592	0.0342	0.0394	0.0347	0.0332	0.0395	0.0338	0.0301	0.17	0.0208	0.0637
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	ug/kg	Various	120[#1]			0.0271	0.0238	0.0972	0.157	0.0658	0.153	0.154	0.134	0.114	0.122	0.0931	0.0511	0.0577	0.0603	0.0514	0.0574	0.0529	0.0481	0.291	0.0363	0.108
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	ug/kg	Various	0.12[#1]			0.000376	0.000561	<0.000378	0.00162	0.00214	0.00684	0.0181	0.00908	0.00736	0.00187	0.00153	0.000795	0.00125	0.00152	0.00268	0.00117	0.00215	0.00211	0.000365	0.000528	<0.000218
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189	ug/kg	Various	130[#1]			0.007	0.00662	0.0273	0.046	0.0164	0.0418	0.0435	0.0425	0.0332	0.0281	0.0189	0.0183	0.0126	0.0192	0.0149	0.0166	0.0156	0.0144	0.0463	0.00769	0.025
Chlorinated Dioxins and Furans																										
2378-TCDF	ng/kg	Various				<0.469	<0.436	<0.976	<0.757	3.11	26.5	28.1	22.6	19.2	5.7	6.52	6.49	<0.234	7.74	10.4	9.95	9.98	12.8	<0.368	1.47	3.88
12378-PeCDD	ng/kg	Various				<0.507	<0.392	<0.781	<0.593	1.27	9.44	12.5	2.83	12.2	0.643	1.51	1.07	<0.4	2.05	1.84	0.918	2.2	2.68	<0.511	0.9	<0.497
123478-HxCDD	ng/kg	Various				<0.36	<0.725	2.63	<0.904	0.898	7.06	12	7.13	7.8	1.36	0.917	1.82	<0.394	2.07	2.01	1.85	1.66	2.71	<0.447	0.561	1.05
123678-HxCDD	ng/kg	Various				1.28	<0.793	3.53	<0.849	3.68	13.7	20	10.5	11.6	4.12	3.56	3.09	1.96	3.63	4.29	4.91	5.29	6.17	<0.458	0.992	3.05
123789 HxCDD	ng/kg	Various				0.595	<0.817	<1.204	<0.874	2.69	11.8	13.9	8.34	10	2.67	2	2.27	0.583	2.13	3.36	2.69	3.68	5.17	<0.459	0.833	1.67
1234678-HpCDD	ng/kg	Various				48.8	42.7	145	114	62.9	108	132	102	86.6	58.7	62.3	67.5	50.8	53.2	57.4	56.6	65.5	55.8	55.2	30.9	54.4
OCDD	ng/kg	Various				388	340	1,180	796	474	579	524	515	489	381	319	450	419	327	354	350	385	270	511	207	359
OCDF	ng/kg	Various				31.7	19.6	42.6	88.5	73.7	107	88.9	97.2	87.6	37.4	43.2	42.3	23.8	33.1	36.8	31.8	74.4	40.1	33.5	17.2	32.2
2378-TCDD	ng/kg	Various				<0.182	<0.164	<0.398	<0.223	<0.433	<1.426	4.61	<1.505	3.16	<0.226	<0.218	<0.218	<0.104	<0.377	<0.23	<0.334	<0.225	<0.235	<0.263	<0.288	<0.432
12378-PeCDF	ng/kg	Various				<0.267	<0.284	1.47	<0.815	3.68	18.3	26.7	15.7	16.6	5.06	4.84	4.43	1.01	5.51	2.02	5.79	7.71	9.94	<0.339	1.34	1.57
23478-PeCDF	ng/kg	Various				<0.229	<0.249	<0.566	<0.538	6.6	33.4	57.6	33.8	27.8	6.95	6.15	7.29	<0.242	8.98	7.61	4.06	9.49	8.96	<0.278	2.23	4.72
123478-HxCDF	ng/kg	Various				<0.2	<0.373	<0.358	<0.859	6.03	28.1	37.5	22.4	21.4	6.86	6.81	6.17	<0.217	8.85	5.23	6.71	8.58	10.9	<0.279	2.67	2.93
123678-HxCDF	ng/kg	Various				<0.196	<0.42	<0.415	<0.807	5.18	23.2	35	20.4	16.8	5.63	4.38	4.09	<0.225	6.54	7.3	7.42	7.66	9.62	<0.268	2.08	1.77
234678-HxCDF	ng/kg	Various				<0.18	<0.404	<0.373	<0.835	5.37	28.1	56.7	27.7	21.4	6.1	5.39	4.05	0.997	7.47	6.44	7.59	7.46	9.24	1.16	2.32	<0.387
123789-HxCDF	ng/kg	Various				<0.22	<0.496	<0.551	<1.003	<0.388	1.34	2.25	1.74	0.939	0.799	<0.505	0.547	<0.245	<0.333	<0.608	0.88	0.877	0.943	<0.285	<0.259	<0.403
1234678-HpCDF	ng/kg	Various				17	26.4	26.9	139	75.4	228	232	170	155	55	60.2	46	18.5	50.1	46.7	45	57.8	54.7	16.3	17.5	28.2
1234789-HpCDF	ng/kg	Various				<0.423	0.912	2.09	<2.553	1.89	3.48	5.65	4.99	3.25	2.6	2.48	2.17	0.946	2.8	2.6	1.67	1.3	2.64	0.68	0.887	1.77
Brominated Dioxins and Furans																										
2378-TBDD	ng/kg	Various				<0.8	<0.78	<0.79	<0.8	<0.75	<0.77	<0.77	<0.79	<0.76	<0.8	<0.78	<0.8	<0.8	<0.78	<0.77	<0.79	<0.79	<0.8	<0.84	<0.85	<0.83
12378-PBDD	ng/kg	Various				<0.83	<0.83	<0.8	<0.8	<0.8	<0.81	<0.8	<0.8	<0.82	<0.78	<0.8	<0.78	<0.79	<0.81	<0.8	<0.84	<0.8	<0.81	<0.82	<0.82	<0.83
123478-HxBDD	ng/kg	Various				<0.79	<0.77	<0.8	<0.8	<0.75	<0.76	<0.71	<0.75	<0.76	<0.76	<0.75	<0.77	<0.77	<0.79	<0.77	<0.79	<0.79	<0.77	<0.85	<0.84	<0.84
123678-HxBDD	ng/kg	Various				<0.78	<0.78	<0.81	<0.81	<0.72	<0.75	<0.73	<0.72	<0.73	<0.8	<0.78	<0.78	<0.8	<0.76	<0.74	<0.77	<0.78	<0.79	<0.85	<0.85	<0.82
123789-HxBDD	ng/kg	Various				<0.8	<0.8	<0.77	<0.79	<0.71	<0.7	<0.69	<0.68	<0.66	<0.77	<0.77	<0.71	<0.74	<0.69	<0.8	<0.75	<0.73	<0.73	<0.86	<0.85	<0.84
1234678-HpBDD	ng/kg	Various				<0.82	<0.81	<0.82	<0.82	<0.78	<0.8	1.22	0.86	0.99	<0.84	<0.83	<0.8	<0.8	<0.8	<0.83	<0.8	<0.8	<0.78	<0.83	<0.83	<0.83
OBDD	ng/kg	Various				<0.8	<0.8	<0.82	<0.83	<0.78	<0.82	<0.78	<0.8	<0.8	<0.82	<0.8	<0.82	<0.8	<0.82	<0.8	<0.84	<0.82	<0.82	<0.84	<0.85	<0.82
2378-TBDF	ng/kg	Various				<0.82	<0.8	1.1	3.97	2.31	7.34	6.99	6.34	4.8	2.65	1.97	2.87	0.98	1.98	1.7	1.55	1.58	3.08	1.29	1.08	2.26
12378-PBDF	ng/kg	Various				1.22	0.97	0.85	2.14	1.16	6.23	6.14	5.87	4.87	1.7	1.41	1.75	1.14	1.54	1.28	1.17	1.25	1.66	0.88	<0.83	1.6
23478-PBDF	ng/kg	Various				0.85	1.26	1.16	2.3	0.68	3.3	2.24	2.51	2.59	0.98	0.77	0.89	<0.8	0.83	0.88	0.76	0.76	1.19	<0.82	<0.84	0.95
123478-HxBDF	ng/kg	Various				<0.79	<0.79	0.8	1.46	1.5	2.72	3.06	3.5	3.81	2	2.3	2.1	0.79	0.62	1.6	1.38	1.75	1.9	<0.84	<0.84	<0.85
123678-HxBDF	ng/kg	Various				<0.8	<0.8	<0.77	2.07	1.01	2.11	2.29	2.79	2	2.53	2.21	1.85	<0.8	0.79	2.19	1.72	2.6	2.27	0.97	0.85	<0.83
234678-HxBDF	ng/kg	Various				<0.8	<0.8	<0.8	<0.8	<0.8	1.05	1.82	1.31	2.13	<0.81	<0.77	<0.75	<0.77	<0.78	<0.8	<0.8	<0.83	<0.88	0.83	<0.82	<0.85
123789-HxBDF	ng/kg	Various				<0.78	<0.79	<0.81	<0.8	<0.78	1.44	1.48	0.99	1.19	<0.79	<0.8	<0.81	<0.8	<0.82	<0.8	<0.84	<0.82	<0.82	<0.83	<0.84	<0.84
1234678-HpBDF	ng/kg	Various				1.03	1.31	<0.8	1.11	<0.76	<0.76	<0.79	<0.77	<0.77	<0.84	<0.78	<0.77	<0.79	<0.74	<0.79	<0.77	<0.77	<0.79	<0.84	<0.84	<0.82
1234789-HpBDF	ng/kg	Various				<0.79	<0.78	<0.82	<0.79	<0.82	<0.8	<0.81	<0.8	<0.81	<0.8	<0.81	<0.79	<0.74	<0.8	<0.82	<0.8	<0.8	<0.83	<0.81	<0.84	<0.82
OBDF	ng/kg	Various				<0.83	<0.84	<0.83	<0.83	<0.84	<0.82	<0.78	<0.8	<0.82	<0.82	<0.84	<0.85	<0.83	<0.84	<0.81	<0.79	<0.84	<0.85	<0.84	<0.84	<0.85
Organophosphorous flame retardants																										
Triphenylphosphate	mg/kg	0.1				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tris(1-chloro-2-propyl)phosphate	mg/kg	Various	630[#1]			<0.15	<0.15	<0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.5	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.2	<0.15	<0.2	<0.5	<0.1
Tris(2-ethylhexyl) phosphate	mg/kg	0.1	170[#1]			<0.1	<0.1	<0.1	<0.1	0.77	0.23	0.23	0.2	0.22	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.14	0.21

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-13	GTCS 1-14	GTCS 1-15	GTCS 1-16	GTCS 1-17	GTCS 1-18				GTCS 1-19	GTCS 1-20	GTCS 1-21	GTCS 1-22	GTCS 1-23				GTCS 1-24	GTCS 1-25	GTCS 1-26	GTCS 1-27
				Date	07/06/2019	07/06/2019	07/06/2019	07/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019	05/06/2019				05/06/2019	05/06/2019	05/06/2019	05/06/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal
				Sample Area	Allom House and Barlow House	Allom House and Barlow House	Camelford Walk	Camelford Walk	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Portland Road Community Kitchen Garden	Henry Dickens Estate	Henry Dickens Estate	Avondale Park	Avondale Park	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Avondale Park Gardens	Bramley House	Bramley House	Whitstable House
				Field ID	GTCS 1-13A	GTCS 1-14A	GTCS 1-15A	GTCS 1-16A	GTCS 1-17A	GTCS 1-18 PRIMARY SAMPLE	GTCS 1-18 FIELD DUPLICATE	GTCS 1-18 LAB DUPLICATE	GTCS 1-18 LAB FIELD DUPLICATE	GTCS 1-19A	GTCS 1-20A	GTCS 1-21A	GTCS 1-22A	GTCS 1-23 PRIMARY SAMPLE	GTCS 1-23 FIELD DUPLICATE	GTCS 1-23 LAB DUPLICATE	GTCS 1-23 LAB FIELD DUPLICATE	GTCS 1-24A	GTCS 1-25A	GTCS 1-26A	GTCS 1-27A
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Brominated flame retardents (PBDEs)																									
2,2",4-tribromodiphenyl ether (BDE-17)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,4"-tribromodiphenyl ether (BDE-28)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",4,4"-tetrabromodiphenyl ether (BDE-47)	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,3",4,4"-tetrabromodiphenyl ether (BDE-66)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",3,4,4"-pentabromodiphenyl ether (BDE-8	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",4,4",5-pentabromodiphenyl ether (BDE-9	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",4,4",6-pentabromodiphenyl ether (BDE-1	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",3,4,4",5"-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",4,4",5,5"-hexabromodiphenyl ether(BDE-	mg/kg	0.1	13[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2",4,4",5,6"-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2,3,4,4,5,6-heptabromodiphenyl ether (BDE	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Polybrominated biphenyls (PBBs)																									
2,2-dibromobiphenyl (PBB 4)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4,4-dibromobiphenyl (PBB 15)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2,5-tribromobiphenyl (PBB 18)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tetrabromobiphenyl (3,3,5,5-) (PBB 80)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromobiphenyl (PBB 153)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrabromobisphenol A																									
tetrabromobisphenol A	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromocyclododecane (HBCDD)																									
Hexabromocyclododecane (HBCDD)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isocyanates																									
Isocyanic Acid	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Methyl Isocyanate	ug/kg	250	4,600[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Ethyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Propyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Phenyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Hexamethylene diisocyanate	ug/kg	250	3,100[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,4-Toluene diisocyanate	ug/kg	250	6,400[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,6-Toluene diisocyanate	ug/kg	250	5,300[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Isophorone Diisocyanate	ug/kg	500			<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
4,4-Methylene-bis(phenyl-isocyanate)	ug/kg	250	850,000,000[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	373	<250	<250	<250	<250
Cyanides																									
Cyanide (Free)	mg/kg	0.5	20[#5]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cyanide Total	mg/kg	0.5	78[#1]		<0.5	<0.5	<0.5	<0.5	1	1.6	1.5	1.8	1.8	<0.5	<0.5	0.7	0.7	0.8	<0.5	0.7	0.6	0.6	<0.5	<0.5	<0.5
Thiocyanate	mg/kg	0.6	20[#5]		0.8	0.6	<0.6	0.9	1.6	1.4	1.2	1.5	1.3	1.6	0.8	0.8	1.3	1.7	1.4	1.5	1.5	1.8	<0.6	1.9	0.7
Asbestos																									
General Description (Bulk Analysis)	None				soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones
Asbestos Fibres	None				NAD	NAD	NAD	NAD	NAD	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	NAD	NAD	NAD	NAD	NAD	Fibre Bundles	NAD	Fibre Bundles	NAD	NAD	NAD	NAD
Asbestos ACM	None				NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
Asbestos Type	None				NAD	NAD	NAD	NAD	NAD	Chrysotile	Chrysotile	Chrysotile	Chrysotile	NAD	NAD	NAD	NAD	NAD	Chrysotile	NAD	Chrysotile	NAD	NAD	NAD	NAD
Asbestos Level Screen					NAD	NAD	NAD	NAD	NAD	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	NAD	NAD	NAD	NAD	NAD	less than 0.1%	NAD	less than 0.1%	NAD	NAD	NAD	NAD
Potentially Respirable Fibres per gram	f/g	0			-	-	-	-	-	0	86,822	0	0	-	-	-	-	-	0	-	0	-	-	-	-
SVF / MMMF																									
Synthetic/MMMF	None				Present	Present	Present	Absent	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent
Asbestos Quantification																									
Asbestos Gravimetric & PCOM Total	mass %	0.001			-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
Asbestos PCOM Quantification (Fibres)	mass %	0.001			-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
Total ACM Gravimetric Quantification (% Asb	mass %	0.001			-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
Total Detailed Gravimetric Quantification (% A	mass %	0.001			-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
Asbestos Quantification - Total - %	mass %	0.001			-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
Total Organic Carbon																									
TOC	percent	0.02			2.75	2.84	2.38	4.12	4.93	8.83	8.57	9.42	9.51	5.57	4.88	4.09	5.75	6.14	7.08	5.81	5.75	5.84	3.66	8.2	5.09
Inorganics																									
pH (Lab)	pH units	0.01			7.49	7.62	7.59	7.37	7.74	7.73	7.73	7.77	7.82	7.13	8.06	7.73	7.42	7.6	7.57	7.59	7.59	7.27	8.09	7.51	7.45
Other																									
Natural Moisture Content	percent	0.1			9.9	6.8	18.3	7.1	15.5	23.7	21.5	22.8	18.3	13.2	21.4	13.8	9.5	15	11.1	12.5	12.6	15.2	15.2	33.3	16.3
ESdat Calculated																									
Cresols Total	ug/kg	20	180[#3]		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	221	<20
Benzo(a)pyrene (surrogate marker for PAH m	mg/kg	0.01	5.0[#6]		0.76	0.87	0.77	1.65	0.49	1.48	1.06	1.35	1.09	4.52	2.04	0.9	0.95	7.43	7.82	7.68	7.05	5.75	0.65	1.96	0.55
Xylene Total	ug/kg	8	130,000[#2]		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Trichlorobenzene (total)	ug/kg	14	2200[#5]		<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14
AECOM Calculated																									
Sum of PCDD/F +PCB12	ng/kg	Various	8700[#4]		1028	917	3417	3586	2022	4136	5367	3442	3033	2684	2731	1787	1601	1601	1531	1731	1659	1526	10444	1240	2746
PCDD/F+PBDD/F+PCB12 Hazard Index	-	-	1		0.01	0.02	0.05	0.04	0.1	0.45				0.11	0.1	0.1	0.03	0.11				0.15	0.02	0.04	0.07
WHO2005 TEQ (PCDD/F + PBDD/F + PCB)	ng/kg	Various			1.476	1.595	4.773	4.682	9.768	44.401	69.059	35.555	44.116	10.598	10.186	9.417	2.803	11.281	10.869	9.217	13.235	15.063	1.849	4.189	6.149

Comments
#1 USEPA RSL (May 2019)
#2 LQM/CIEH S4ULs 2015
#3 EIC/AGS/CL:AIRE 2010
#4 EA SGV 2009
#5 Dutch IV 2013
#6 Defra C4SL 2014
#7 AECOM (modified EIC GAC to include plant uptake route)
GSC based on residential (with private gardens) land use scenario
2.5% soil organic matter content selected for GSC #2 and #3
(blank): No assessment criteria available
- : Not analysed
Field_D: Field Duplicate
NAD: No Asbestos Detected

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-28	GTCS 1-29	GTCS 1-30				GTCS 1-31	GTCS 1-32	GTCS 1-33	GTCS 1-34	GTCS 1-35	GTCS 1-36				GTCS 1-37	GTCS 1-38	GTCS 1-39		
				Date	05/06/2019	06/06/2019	06/06/2019				07/06/2019	07/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019				04/06/2019	04/06/2019	04/06/2019		
				Sample Type	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Field_D	
				Sample Area	Whitstable House	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	Markland House	Markland House	Darfield Way	Darfield Way	Robinson House	Robinson House	Robinson House	Robinson House	Robinson House	Kensington Memorial Park	Kensington Memorial Park	West London Bowling Club	West London Bowling Club	West London Bowling Club
				Field ID	GTCS 1-28A	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-31A	GTCS 1-32A	GTCS 1-33A	GTCS 1-34A	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-37A	GTCS 1-38A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 FIELD DUPLICATE	GTCS 1-39 LAB DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Metals																								
Aluminium	mg/kg	50	77,000[#1]		17,950	3,993 - 4,386	12,066 - 12,550	12,710 - 13,421	12,110 - 14,825	12,027 - 12,040	18,930	5,892	17,230	10,400	9,603	9,831 - 13,789	10,450 - 13,120	9,865 - 12,830	14,330	7,627	25,210	13,595 - 13,720	13,090 - 17,285	19,970
Arsenic	mg/kg	0.5	37[#2]		11.4	8.9 - 9.4	32.3 - 92.9	25.8 - 35.2	27.8 - 32.7	26.7 - 32.2	17.7	5.2	12	15.8	17.2	15 - 16.1	15.1 - 18	14.2 - 18.4	14.6	11.7	16.1	27.4 - 30.3	28.2 - 30.7	32.6
Barium	mg/kg	1	460[#7]		200	48 - 52	327 - 475	345 - 535	509 - 607	375 - 575	244	196	111	139	186	175 - 235	175 - 230	187 - 209	222	143	168	200 - 252	201 - 220	361
Beryllium	mg/kg	0.5	1.7[#2]		1.2	<0.5 - 0.5	1.8 - 2.2	1.6 - 1.9	1.7 - 2	1.3 - 1.8	1.5	0.7	1.1	0.9	1.3	1.1 - 1.4	1.1 - 1.3	1.1 - 1.3	1.4	0.8	1.8	1.5 - 1.8	1.6 - 2.1	2.7
Boron	mg/kg	0.1	290[#2]		2	2.4 - 2.8	2.8 - 4.1	4 - 4.3	3.1 - 4.5	3.2 - 4.2	1.7	0.9	2.7	3.9	2.5	2.2 - 2.6	2.3 - 2.5	2.3 - 2.6	2.7	9.8	3.7	3.7 - 4.6	3.8 - 4.1	4.3
Cadmium	mg/kg	0.1	22[#2]		2	0.2 - 0.3	1.6 - 1.8	1.4 - 2.1	1.4	1.6 - 1.9	2.7	0.3	0.8	0.9	0.7	0.6 - 0.7	0.6 - 0.8	0.6 - 0.8	0.7	0.7	0.5	0.6 - 0.7	0.6 - 0.7	0.9
Chromium (Trivalent)	mg/kg	0.5	910[#2]		105.6	24.4 - 24.9	55.9 - 67	46.6 - 59	46.2 - 57	32.9 - 52.8	89.2	94	83	99	97.8	28.8 - 34	29.2 - 33.5	30.5 - 35.4	101.4	95.4	88.8	29.1 - 34.4	32.5 - 35.8	68.9
Chromium (hexavalent)	mg/kg	0.3	21[#6]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	53	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.5	Use either CrIII or CrVI[#2]		105.6	24.4 - 24.9	55.9 - 67	46.6 - 59	46.2 - 57	32.9 - 52.8	89.2	94	83	99	97.8	28.8 - 34	29.2 - 33.5	30.5 - 35.4	101.4	95.4	88.8	29.1 - 34.4	32.5 - 35.8	68.9
Copper	mg/kg	1	2,400[#2]		56	48 - 63	232 - 644	218 - 299	245 - 261	161 - 287	95	25	50	61	90	83 - 110	85 - 98	87 - 95	92	54	54	58 - 66	58 - 71	71
Lead	mg/kg	5	200[#6]		149	36 - 42	552 - 980	860 - 1,083	956 - 1,111	617 - 1,597	301	63	96	172	312	296 - 341	294 - 327	321 - 385	275	178	214	342 - 398	373 - 392	431
Mercury	mg/kg	0.1	40[#2]		0.4	<0.1	0.2	0.2 - 0.3	0.3 - 0.5	0.2 - 0.3	1.4	<0.1	0.1	0.2	0.7	<0.1 - 0.3	0.1 - 0.4	<0.1 - 0.4	0.5	0.3	0.5	1.9 - 2.7	2.3 - 3.2	3
Nickel	mg/kg	0.7	130[#2]		36.4	16 - 16.3	50.9 - 82.8	40.6 - 52.8	41.2 - 44.8	31.3 - 48.2	30.5	13.4	24.4	21	26.1	22.7 - 26.4	22.6 - 28	23.4 - 24.7	26.4	18.7	30.8	23.1 - 26.3	23.5 - 27.8	34.6
Selenium	mg/kg	1	250[#2]		1	<3	2 - 4	2	2	2	1	1	2	2	2	<1 - 1	<1	<1	<1	<1	2	1	1	2
Vanadium	mg/kg	1	410[#2]		53	37 - 39	62 - 77	73 - 80	73 - 82	60 - 77	64	30	55	38	56	41 - 53	44 - 52	42 - 49	53	35	95	57 - 61	60 - 66	82
Zinc	mg/kg	5	3,700[#2]		217	85 - 103	803 - 1,021	804 - 1,505	891 - 967	851 - 1,046	360	90	166	246	243	271 - 337	269 - 312	270 - 325	298	199	160	246 - 285	258 - 290	308
VOCs																								
1,1,1,2-tetrachloroethane	ug/kg	5	2,800[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-trichloroethane	ug/kg	5	18,000[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-tetrachloroethane	ug/kg	3	3,400[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1,2-trichloroethane	ug/kg	4	1,200[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,1-dichloroethane	ug/kg	6	1,200[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloroethene	ug/kg	6	3,900[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-trichlorobenzene	ug/kg	7	3,600[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2,3-trichloropropane	ug/kg	4	5.1[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2,4-trimethylbenzene	ug/kg	6	850[#2]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,2-dibromo-3-chloropropane	ug/kg	4	5.3[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2-dibromoethane	ug/kg	3	36[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-dichloroethane	ug/kg	5	11[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dichloropropane	ug/kg	4	42[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3,5-trimethylbenzene	ug/kg	3	270,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,3-dichloropropane	ug/kg	4	1,600,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,2-dichloropropane	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Benzene	ug/kg	5	870[#6]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromobenzene	ug/kg	2	2,000[#3]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/kg	4	150,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromodichloromethane	ug/kg	4	290[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoform	ug/kg	4	5,900[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromomethane	ug/kg	1	6,800[#1]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Methyl butanal	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152
Carbon tetrachloride	ug/kg	4	56[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorodibromomethane	ug/kg	5	8,300[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/kg	6	11,000[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	7	<6	<6	<6	<6	<6	<6	<6	<6
Chloroform	ug/kg	5	1,700[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/kg	3	9.8[#3]		7	8	7	10	9	12	12	7	5	7	6	19	6	6	4	50	36	12	10	13
cis-1,2-dichloroethene	ug/kg	7	190[#3]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
cis-1,3-dichloropropene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromomethane	ug/kg	4	24,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dichlorodifluoromethane	ug/kg	2	87,000[#1]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dichloromethane	ug/kg	30	980[#3]		<30	<30	<30	37	<30	<30	<30	41	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Ethylbenzene	ug/kg	3	110,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Eucalyptol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	317	447	2,367
Isopropylbenzene	ug/kg	3	27,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Methyl Methacrylate	ug/kg	100	4,400,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	ug/kg	6	84,000[#1]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
n-butylbenzene	ug/kg	4	3,900,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
n-propylbenzene	ug/kg	4	82,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
sec-butylbenzene	ug/kg	4	7,800,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/kg	3	19,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-butylbenzene	ug/kg	5	7,800,000[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/kg	3	390[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Toluene	ug/kg	3	290,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-dichloroethene	ug/kg	3	340[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,3-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichloroethene	ug/kg	5	34[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/kg	3	23,000,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Undecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (m & p)	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Xylene (o)	ug/kg	4	140,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Vinyl chloride	ug/kg	2	0.87[#2]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
VOC TICs	None				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
Trihalomethanes	ug/kg				<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18

				Location	GTCS 1-28	GTCS 1-29	GTCS 1-30				GTCS 1-31	GTCS 1-32	GTCS 1-33	GTCS 1-34	GTCS 1-35	GTCS 1-36				GTCS 1-37	GTCS 1-38	GTCS 1-39							
				Date	05/06/2019	06/06/2019	06/06/2019				07/06/2019	07/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019				04/06/2019	04/06/2019	04/06/2019							
				Sample Type	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal			Field_D				
				Sample Area	Whitstable House	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	Markland House	Markland House	Darfield Way	Darfield Way	Robinson House	Robinson House	Robinson House	Robinson House	Robinson House	Kensington Memorial Park	Kensington Memorial Park	West London Bowling Club	West London Bowling Club	West London Bowling Club				
				Field ID	GTCS 1-28A	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-31A	GTCS 1-32A	GTCS 1-33A	GTCS 1-34A	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-37A	GTCS 1-38A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 FIELD DUPLICATE	GTCS 1-39 LAB DUPLICATE				
	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05				
SVOCs																														
Dibenzo[a,e]pyrene	ug/kg	100	42[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2-methylnaphthalene	ug/kg	10	240,000[#1]		<10	<10	87	92	82	101	32	<10	15	28	47	121	61	146	108	24	32	49	90	61				
4-bromophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
4-chlorophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Azobenzene	ug/kg	10	5,600[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Bis(2-chloroethoxy) methane	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Bis(2-chloroethyl)ether	ug/kg	10	230[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Carbazole	ug/kg	10			22	<10	233	257	245	346	49	23	<10	131	57	112	82	797	381	116	203	93	93	103				
Dibenzofuran	ug/kg	10	73,000[#1]		<10	<10	72	70	60	112	24	<10	<10	52	25	56	30	122	90	19	38	37	51	47				
Hexachlorobutadiene	ug/kg	4	700[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				
Hexachlorocyclopentadiene	ug/kg	10	1,800[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Hexachloroethane	ug/kg	10	480[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC - Anilines																														
2-nitroaniline	ug/kg	10	630,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
3-nitroaniline	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
4-chloroaniline	ug/kg	10	2,700[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
4-nitroaniline	ug/kg	10	27,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC - Amino Aliphatics																														
N-nitrosodi-n-propylamine	ug/kg	10	78[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC - Explosives																														
2,4-Dinitrotoluene	ug/kg	10	3,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
2,6-dinitrotoluene	ug/kg	10	1,700[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Nitrobenzene	ug/kg	10	5,100[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC - Phenolics																														
2,4-dimethylphenol	ug/kg	10	43,000[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	18	25	<10	<10	<10	<10				
2-chloronaphthalene	ug/kg	10	9,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
2-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
2-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
4-chloro-3-methylphenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
4-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	136	<10	<10	<10	<10				
4-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Phenol	ug/kg	10	200,000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	598	<10	<10	<10	<10				
SVOC - Halogenated Phenols																														
2,4,5-trichlorophenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
2,4,6-trichlorophenol	ug/kg	10	49,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
2,4-dichlorophenol	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
2-chlorophenol	ug/kg	10	390,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
Pentachlorophenol	ug/kg	10	520[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC - Halogenated Benzenes																														
1,2,4-trichlorobenzene	ug/kg	7	6,400[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7				
1,2-dichlorobenzene	ug/kg	4	55,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				
1,3-dichlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				
1,4-dichlorobenzene	ug/kg	4	150,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4				
Hexachlorobenzene	ug/kg	10	3,300[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC - Phthalates																														
Bis(2-ethylhexyl) phthalate	ug/kg	100	610,000[#3]		327	32,607	609	639	805	838	594	<100	340	610	626	613	1,121	812	766	527	155	<100	141	<100				
Butyl benzyl phthalate	ug/kg	100	3,300,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100				
Diethylphthalate	ug/kg	100	260,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100				
Dimethyl phthalate	ug/kg	100	16,400[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100				
Di-n-butyl phthalate	ug/kg	100	31,000[#3]		<100	<100	174	191	212	231	131	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100				
Di-n-octyl phthalate	ug/kg	100	2,800,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100				
SVOC - Solvents																														
Isophorone	ug/kg	10	570,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10				
SVOC TIC																														
SVOC TICs	None				0	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-				
.alpha.-Phellandrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,967	-				
.alpha.-Pinene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
.beta.-Guaiene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
[1,1-Biphenyl]-4-carboxaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1(2Aminobenzylidene)1234-tetrahydroacridine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1,1-Biphenyl, 2,3,3,4-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1,1-Biphenyl, 2,3,3,5-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1,1-Biphenyl, 2,3,4,6-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-d	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1,2,9,10-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1,5,5-Trimethyl-6-methylene-cyclohexene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,220	1,663	-				
1,6-Dimethylphenazine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
10,18-Bisnorabieta-5,7,9(10),11,13-pentaene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
10,18-Bisnorabieta-8,11,13-triene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
10s,11s-Himachala-3(12),4-diene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11H-Benzo[a]carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,968	-				
11H-Benzo[a]fluoren-11-one	ug/kg	100			-	-	338	837	430	642	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11H-Benzo[a]fluoren-11-one, 10-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11H-Benzo[a]fluorene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11H-Benzo[b]fluorene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,689	-				
11H-Indeno[1,2-b]quinoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
13-Docosenamide, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
13-Isopropylpodocarpen-12-ol-20-al	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	ug/kg	100			-	-	-	-	608	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1H-Inden-1-one, 2,3-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1-Methyldibenzothiophene	ug/kg	100			-	-	689	896	760	825	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
1-Naphthalenecarboxylic acid, 2-benzoyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2-(2H-Benzotriazol-2-yl)-5-methylphenol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
2-(Acetoxymethyl)-3-(methoxycarbonyl)biphen	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

				Location	GTCS 1-28	GTCS 1-29	GTCS 1-30				GTCS 1-31	GTCS 1-32	GTCS 1-33	GTCS 1-34	GTCS 1-35	GTCS 1-36				GTCS 1-37	GTCS 1-38	GTCS 1-39		
				Date	05/06/2019	06/06/2019	06/06/2019				07/06/2019	07/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019				04/06/2019	04/06/2019	04/06/2019		
				Sample Type	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Field_D	
				Sample Area	Whitstable House	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	Markland House	Markland House	Darfield Way	Darfield Way	Robinson House	Robinson House	Robinson House	Robinson House	Robinson House	Kensington Memorial Park	Kensington Memorial Park	West London Bowling Club	West London Bowling Club	West London Bowling Club
		Method Detection Limit	Generic Screening Criteria (GSC)	Field ID	GTCS 1-28A	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-31A	GTCS 1-32A	GTCS 1-33A	GTCS 1-34A	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-37A	GTCS 1-38A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 FIELD DUPLICATE	GTCS 1-39 LAB DUPLICATE
	Units			Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
2,3,3,,5,6-Pentachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,3,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Cycloheptatrien-1-one, 2-phenyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-Dimethyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,9-Dimethyl-2,3,4,5,6,7hexahydro-1H-2-benz	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Bromo-4,5-dimethoxycinnamic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	670	-
2Chloro2methyl1oxa2sila-1,2-dihydronaphtha	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylchrysene	ug/kg	100			-	-	-	-	-	752	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	ug/kg	100			-	3,917	-	-	-	-	-	-	-	-	-	-	-	-	-	784	-	-	-	-
3,3-Dimethylbiphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4:8,9-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4-Dichlorobenzonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	284	-	-
3,5-Dimethoxy-4-hydroxycinnamaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	-	-	-	-
3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	ug/kg	100			-	-	-	-	-	449	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4-Bis(tetrahydrothiopyran)	ug/kg	100			-	-	-	-	938	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240
4H-Cyclopenta[def]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6H-Benz[de]anthracen-6-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7H-Benz(de)anthracen-7-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8,9-Dihydro-7H-cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Anthracenedione	ug/kg	100	14,000[#1]		-	-	467	352	-	536	-	-	-	-	-	-	-	-	-	-	-	-	845	-
9,10-Anthracenedione, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Bis(bromomethyl)anthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Dimethylanthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9-Anthracenecarbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,567	-
9H-Fluoren-9-ol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 9-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alloaromadendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18,260	-	776
Anthra(1,2-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	415	445	-	-	-	-	-	-
Anthra(2,3-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 1-methyl-	ug/kg	100			-	-	322	271	-	-	-	-	-	-	-	-	-	-	-	-	-	2,739	-	-
Anthracene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 2-methyl-	ug/kg	100			-	-	-	-	-	376	-	-	-	-	-	-	-	-	169	-	-	-	-	-
Aromandendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,643	6,997	1,778
Benz(A)anthracene-7,12-dione	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene-7-carbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 12-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 7-methyl-	ug/kg	100			-	-	890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[j]aceanthrylene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	424	-	-	-	-
Benzenamine, 2,4,6-tribromo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene, (4,5,5-trimethyl-1,3-cyclopentadien-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Sulfonylbis (4-chlorobenzene)	ug/kg	100	51,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenesulfonamide, 4-methyl-	ug/kg	100			-	-	-	-	474	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(c)carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]thiophene	ug/kg	100			-	-	-	-	624	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,1-d]thiophene	ug/kg	100			-	-	730	1,008	-	971	-	-	-	395	-	-	-	-	-	-	-	2,257	233	-
Benzo[b]naphtho[2,3-d]furan	ug/kg	100			-	-	-	-	-	345	-	-	-	-	-	-	-	-	165	-	-	1,886	-	-
Benzo[b]naphtho[2,3-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]cinnoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(e)pyrene	ug/kg	100			-	-	2,766	2,611	2,927	2,795	-	-	-	815	-	574	594	1,062	2,669	-	664	2,604	8,088	1,406
Benzo[ghi]fluoranthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[h]quinoline, 2,4-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[kl]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzoic acid, hexyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl	ug/kg	100	160,000[#3]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylated Hydroxytoluene	ug/kg	100	150,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camphor (TIC)	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 1-methyl-	ug/kg	100			-	-	-	812	-	-	-	-	-	-	-	-	-	307	337	-	-	2,776	-	-
Chrysene, 5-methyl-	ug/kg	100			-	-	-	-	770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 6-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,191	-	-
Cyclopenta(cd)pyrene, 3,4-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,883	-	-
Cyclopenta(def)phenanthrenone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dehydroabietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Homoandrostane, (5.alpha.,13.alpha.)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,e)aceanthrylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,i)pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo[def,mno]chrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene	ug/kg	100	780,000[#1]		-	-	-	-	-	517	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 4,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dicyclohexyl phthalate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenyl sulfide	ug/kg	100			-	-	-	-	-	-	-	-	-	-	361	-	433	374	392	372	-	-	-	-
di-p-Tolylacetylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	845	-
D-Limonene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eicosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,651	-
Ferruginol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene, 2-methyl-	ug/kg	100			-	-	1,068	-	1,203	1,275	-	-	-	-	-	-	-	533	707	-	-	-	2,010	-
Fluorene, 2,4a-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane	ug/kg	100			-	-	-	1,909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptadecane	ug/kg	100			-	-	-	1,277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexadecane	ug/kg	100			-	-	-	-	514	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexathiane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-28	GTCS 1-29	GTCS 1-30				GTCS 1-31	GTCS 1-32	GTCS 1-33	GTCS 1-34	GTCS 1-35	GTCS 1-36				GTCS 1-37	GTCS 1-38	GTCS 1-39		
				Date	05/06/2019	06/06/2019	06/06/2019				07/06/2019	07/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019				04/06/2019	04/06/2019	04/06/2019		
				Sample Type	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Field_D	
				Sample Area	Whitstable House	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	Markland House	Markland House	Darfield Way	Darfield Way	Robinson House	Robinson House	Robinson House	Robinson House	Robinson House	Kensington Memorial Park	Kensington Memorial Park	West London Bowling Club	West London Bowling Club	West London Bowling Club
				Field ID	GTCS 1-28A	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-31A	GTCS 1-32A	GTCS 1-33A	GTCS 1-34A	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-37A	GTCS 1-38A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 FIELD DUPLICATE	GTCS 1-39 LAB DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Indene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno[1,2,3-fg]naphthacene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indole, 5-methyl-2-(4-pyridyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isocil	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	281	-	-	-	-	-	-
isoledene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	712	-
Longifolene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl dehydroabietate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morpholine, 4-(1-cyclohepten-1-yl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,5-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6,7-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-phenyl-	ug/kg	100			-	-	236	-	-	-	-	-	-	-	-	-	-	135	-	-	-	-	1,855	-
Naphtho[1,2-b]thiophene	ug/kg	100			-	-	-	-	305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1,8,7-klmn]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Decanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neocuproine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,716
n-Pentafluorosulfanyl-S,S-diphenoxysufilimine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecane, 1-iodo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic acid, butyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,508	-
p-Cymene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	26	45	226
Perylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 1-methyl-	ug/kg	100			-	-	-	-	687	512	-	-	-	-	-	-	-	332	248	-	-	-	-	-
Phenanthrene, 2,5-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 2-methyl-	ug/kg	100			-	-	469	618	-	988	-	-	-	-	-	-	-	217	264	-	252	-	1,527	-
Phenanthrene, 3,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,076	-
Phenanthrene, 4-methyl-	ug/kg	100			-	-	830	686	-	-	-	-	-	224	-	-	-	-	-	-	-	-	-	349
Phenol, 2,6-dimethoxy-	ug/kg	100			-	2,254	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2-methoxy-4-(1-propenyl)-, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	704	-
Pyrene, 1-methyl-	ug/kg	100			-	-	-	1,193	564	667	-	-	-	-	-	280	-	302	-	-	-	-	3,210	585
Pyrene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	244	-	-	-	1,688	-
Quinoxaline, 6-(3-nitrobenzylidenamino)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubicene-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloro-o-benzoquinone	ug/kg	100			-	-	-	-	-	643	-	-	-	-	-	-	-	-	-	-	-	-	1,396	-
Tetracosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetradecanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Bis(methyldichlorosilyl)ethylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorovinylsilane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-01	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-02	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-03	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,983	696	-
GT-SVOC-TIC-04	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,410	785	-
GT-SVOC-TIC-05	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-06	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,955	-	-
GT-SVOC-TIC-07	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-08	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-09	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-10	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-11	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	620
GT-SVOC-TIC-12	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-13	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	386
GT-SVOC-TIC-14	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-15	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-16	ug/kg	100			-	-	-	-	-	1,463	701	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-17	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	894	-	-	-	-
GT-SVOC-TIC-18	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)naphtho(1,2-d)furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

		Method Detection Limit	Generic Screening Criteria (GSC)																									
Location					GTCS 1-28	GTCS 1-29	GTCS 1-30				GTCS 1-31	GTCS 1-32	GTCS 1-33	GTCS 1-34	GTCS 1-35	GTCS 1-36				GTCS 1-37	GTCS 1-38	GTCS 1-39					
Date					05/06/2019	06/06/2019	06/06/2019				07/06/2019	07/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019				04/06/2019	04/06/2019	04/06/2019					
Sample Type					Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal			Field_D		
Sample Area					Whitstable House	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	Markland House	Markland House	Darfield Way	Darfield Way	Robinson House	Robinson House	Robinson House	Robinson House	Robinson House	Kensington Memorial Park	Kensington Memorial Park	West London Bowling Club	West London Bowling Club	West London Bowling Club			
Field ID					GTCS 1-28A	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-31A	GTCS 1-32A	GTCS 1-33A	GTCS 1-34A	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-37A	GTCS 1-38A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 FIELD DUPLICATE	GTCS 1-39 LAB DUPLICATE			
Sample_Depth_Range					0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05			
PAH																												
Acenaphthene	mg/kg	0.01	510[#2]		<0.05	<0.05	0.16	0.14	0.12	0.19	<0.05	<0.05	<0.05	<0.05	0.23	0.07	0.07	0.11	0.12	<0.05	<0.05	<0.05	<0.05	<0.05			
Acenaphthylene	mg/kg	0.01	420[#2]		0.05	<0.03	0.19	0.17	0.19	0.19	0.12	<0.03	0.04	0.08	0.57	0.38	0.18	0.2	0.32	0.25	0.17	0.37	0.38	0.42			
Anthracene	mg/kg	0.01	5,400[#2]		0.06	<0.04	0.47	0.42	0.43	0.64	0.18	<0.04	<0.04	0.09	2.33	0.57	0.32	0.45	0.51	0.37	0.29	0.36	0.37	0.41			
Benz(a)anthracene	mg/kg	0.01	11[#2]		0.28	0.15	3.36	2.71	2.99	4.32	0.77	0.19	0.22	0.38	4.32	2	1.14	1.18	1.73	1.03	1.04	1.34	1.44	1.63			
Benzo(a) pyrene	mg/kg	0.01	2.7[#2]		0.3	0.13	2.87	2.81	2.64	3.18	0.96	0.19	0.21	0.38	3.97	2.81	1.47	1.43	2.22	1.22	1.1	1.66	1.71	1.76			
Benzo(b)fluoranthene	mg/kg	0.01	3.3[#2]		0.4	0.19	4.13	3.69	3.66	4.53	1.27	0.27	0.3	0.55	5.09	3.58	1.94	1.88	2.94	1.77	1.47	2.22	2.32	2.35			
Benzo(b)&(k)fluoranthene	mg/kg	0.01			0.56	0.26	5.73	5.13	5.08	6.29	1.76	0.38	0.41	0.76	7.07	4.97	2.69	2.61	4.08	2.46	2.04	3.08	3.22	3.26			
Benzo(g,h,i)perylene	mg/kg	0.01	340[#2]		0.22	0.11	2.09	1.8	1.69	2.12	0.79	0.16	0.2	0.36	2.48	2.07	1.22	1.09	1.98	0.96	0.7	1.17	1.22	1.23			
Benzo(k)fluoranthene	mg/kg	0.01	93[#2]		0.16	0.07	1.6	1.44	1.42	1.76	0.49	0.11	0.11	0.21	1.98	1.39	0.75	0.73	1.14	0.69	0.57	0.86	0.9	0.91			
Chrysene	mg/kg	0.01	22[#2]		0.27	0.09	2.55	2.49	2.25	2.66	0.76	0.13	0.21	0.37	4.01	2.12	1.25	1.26	1.85	1.18	1.13	1.61	1.6	1.71			
Coronene	mg/kg	0.04			0.07	<0.04	0.47	0.42	0.43	0.49	0.18	<0.04	0.07	0.11	0.38	0.46	0.21	0.23	0.42	0.22	0.16	0.28	0.28	0.29			
Dibenz(a,h)anthracene	mg/kg	0.01	0.28[#2]		0.06	<0.04	0.39	0.42	0.45	0.6	0.15	<0.04	<0.04	0.07	0.71	0.41	0.22	0.18	0.47	0.2	0.16	0.21	0.37	0.28			
Fluoranthene	mg/kg	0.01	560[#2]		0.43	0.14	5.64	4.89	5.02	5.85	1.41	0.19	0.34	0.59	10.09	3.72	2.08	2.34	2.76	2.09	2.32	2.68	2.81	2.87			
Fluorene	mg/kg	0.01	400[#2]		<0.04	<0.04	0.13	0.1	0.09	0.15	<0.04	<0.04	<0.04	<0.04	0.27	0.08	0.06	0.1	0.1	0.08	0.07	0.05	0.06	0.06			
Indeno(1,2,3-c,d)pyrene	mg/kg	0.01	36[#2]		0.21	0.1	1.94	1.83	1.73	2.07	0.74	0.15	0.17	0.32	2.48	2.08	1.14	1.03	1.75	0.91	0.7	1.13	1.22	1.27			
Naphthalene	mg/kg	0.01	5.6[#2]		<0.027	<0.027	<0.027 - 0.12	<0.027 - 0.1	<0.027 - 0.09	<0.027 - 0.12	<0.027	<0.027	<0.027	<0.027 - 0.13	<0.027 - 0.16	<0.027 - 0.15	<0.027 - 0.1	<0.027 - 0.11	<0.027 - 0.14	<0.027	<0.027	<0.027 - 0.08	<0.027 - 0.09	<0.027 - 0.09			
Phenanthrene	mg/kg	0.01	220[#2]		0.17	0.05	2.58	2.19	2.08	2.79	0.56	0.05	0.13	0.25	6.24	1.22	0.88	1.24	1.08	0.83	1.04	0.85	0.92	0.86			
Pyrene	mg/kg	0.01	1,200[#2]		0.39	0.11	5.17	4.41	4.41	5.21	1.09	0.18	0.31	0.5	7.95	3.4	1.9	2.05	2.58	1.76	1.86	2.39	2.52	2.63			
PAH 16 Total	mg/kg	0.6			3	1.1	33.4	29.6	29.3	36.4	9.3	1.6	2.2	4.3	52.9	26.1	14.7	15.4	21.7	13.3	12.6	17	17.9	18.5			
PAH 17 Total	mg/kg	0.64			3.07	1.14	33.86	30.03	29.69	36.87	9.47	1.62	2.31	4.39	53.26	26.51	14.93	15.61	22.11	13.56	12.78	17.26	18.21	18.77			
PCB (Dutch 7) congeners																												
PCB 28	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
PCB 52	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
PCB 101	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
PCB 118	ug/kg	5	120[#1]		<5 - 1.14	<5 - 0.249	<5 - 0.753	<5 - 1.12	<5 - 1.04	<5 - 1.14	<5 - 1.7	<5 - 0.253	<5 - 1.34	<5 - 2.78	<5 - 1.22	<5 - 0.747	<5 - 0.767	<5 - 0.708	<5 - 0.728	<5 - 0.534	<5 - 0.432	<5 - 0.56	<5 - 0.589	<5 - 0.519			
PCB 138	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
PCB 153	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
PCB 180	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
Total PCB 7 Congeners	ug/kg	35	200[#5]		<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35			
PCB (WHO12) 12 congeners																												
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	ug/kg	Various	38[#1]		0.0619	0.0124	0.0813	0.115	0.106	0.173	0.0913	0.0122	0.0629	0.136	0.0332	0.052	0.0665	0.0552	0.0478	0.0414	0.0362	0.052	0.048	0.0478			
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	ug/kg	Various	12[#1]		0.00182	0.000687	0.00354	0.00514	0.00466	0.00705	0.0029	<0.000168	<0.000305	0.00172	0.00125	0.00153	<0.000271	0.0019	0.00107	0.00133	0.000823	0.00345	0.00331	0.00368			
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	ug/kg	Various	120[#1]		0.537	0.117	0.355	0.535	0.525	0.573	0.886	0.111	0.634	1.34	0.523	0.356	0.368	0.35	0.35	0.258	0.197	0.294	0.301	0.274			
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	ug/kg	Various	120[#1]		0.00947	0.00345	0.00728	0.0162	0.00841	0.018	0.0126	0.00257	0.0199	0.0241	0.011	0.00677	0.00859	0.00844	0.00879	0.00875	0.0044	0.00708	0.00581	0.00712			
Pentachlorobiphenyl, 2,3,4,4',5- (PCB-118)	ug/kg	Various	120[#1]		1.14	0.249	0.753	1.12	1.04	1.14	1.7	0.253	1.34	2.78	1.22	0.747	0.767	0.708	0.728	0.534	0.432	0.56	0.589	0.519			
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	ug/kg	Various	120[#1]		0.0324	0.00706	0.0244	0.0461	0.0433	0.0343	0.0421	0.00502	0.036	0.0676	0.0251	0.0174	0.0179	0.0129	0.0209	0.0181	0.00976	0.0146	0.0172	0.0139			
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	ug/kg	Various	0.036[#1]		0.0154	<0.000476	0.0174	0.0288	0.0221	0.0271	0.00406	<0.002912	0.012	0.0302	0.0069	0.00842	<0.000529	0.0087	0.0104	0.00589	0.0091	0.0137	0.0115	0.0119			
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	ug/kg	Various	120[#1]		0.285	0.0559	0.21	0.265	0.248	0.28	0.486	0.0588	0.32	0.703	0.194	0.163	0.163	0.155	0.157	0.0967	0.0744	0.0958	0.0975	0.0883			
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	ug/kg	Various	120[#1]		0.0695	0.0106	0.0603	0.102	0.0893	0.0943	0.161	0.0128	0.081	0.175	0.0448	0.0426	0.0462	0.0406	0.0409	0.0255	0.017	0.0227	0.0235	0.0224			
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	ug/kg	Various	120[#1]		0.115	0.0207	0.114	0.199	0.132	0.151	0.247	0.0292	0.133	0.283	0.0723	0.0719	0.0772	0.0707	0.0704	0.0449	0.0315	0.0413	0.043	0.0402			
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	ug/kg	Various	0.12[#1]		0.000996	0.000158	0.00241	0.00639	0.00593	0.0063	0.000768	<0.000187	0.000913	0.00168	0.00154	0.00152	<0.000245	<0.000127	0.00192	0.000305	0.000701	0.00245	0.00169	0.00129			
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189	ug/kg	Various	130[#1]		0.0239	0.00564	0.0561	0.0579	0.0611	0.0657	0.0638	0.00722	0.0279	0.0371	0.0142	0.0195	0.0199	0.0192	0.0192	0.0109	0.00786	0.0098	0.00978	0.0088			
Chlorinated Dioxins and Furans																												
2378-TCDF	ng/kg	Various			3.81	<0.196	13	19.5	21	24.5	<0.939	<0.982	3.93	3.68	5.11	7.1	<0.685	7.25	5.89	2.13	5.92	6.88	7.37	11.3			
12378-PeCDD	ng/kg	Various			0.475	<0.113	16.2	8.97	10.5	9.92	0.766	<0.636	0.603	<0.4	1.63	<0.503	<0.642	1.7	1.08	<0.486	2.31	2.03	2.33	2.18			
123478-HxCDD	ng/kg	Various			0.901	0.593	25.2	13.4	18.5	16.5	<1.146	<0.66	1.04	1.11	1.1	1.4	<0.467	2.35	1.73	1.08	1.42	2.66	1.61	3.25			
123678-HxCDD	ng/kg	Various			3.35	1.84	43	39.9	55.9	41.1	4.84	1.61	2.12	2.62	3.51	3.85	6.99	3.28	4.39	4.38	2.96	6.8	6.34	6.05			
123789-HxCDD	ng/kg	Various			1.55	0.994	40.3	25.7	35	31.3	<1.28	<0.716	1.74	1.94	2.2	2.27	<0.519	2.25	3.08	<0.586	2.09	<0.649	4.57	4.84			
1234678-HpCDD	ng/kg	Various			66.7	91.9	1,040	1,230	2,190	1,440	226	66.9	47.1	43.6	51.5	75.4	84.2	75.1	61.8	117	35.5	76.4	75	81.5			
OCDD	ng/kg	Various			434	774	8,750	12,900	25,900	14,900	1,670	492	332	290	380	579	580	587	450	941	116	563	544	578			
OCDF	ng/kg	Various			31.9	31.1	1,040	1,470	2,680	1,750	91	71.6	24.3	27.3	25.9	31	35.8	26.3	24	48.1	11.8	33.8	31.1	36.9			
2378-TCDD	ng/kg	Various			<0.258	<0.132	<0.846	0.81	<0.437	1.68	<0.324	<0.311	<0.182	<0.201	<0.312	<0.344	<0.291	<0.373	<0.274	<0.252	<0.43	<0.646	<0.444	<0.545			
12378-PeCDF	ng/kg	Various			1.69	<0.132	9.81	12.3	11.6	12.5	4.91	<0.437	2.33	2.61	3.44	2.84	6.81	<0.405	3.69	<0.354	0.865	5.98	7.17	6.47			
23478-PeCDF	ng/kg	Various			0.811	<0.111	11.7	15.4	20.5	16.6	<0.573	<0.339	3.63	3.88	4.7	5.68	8.54	5.31	5.64	2.68	4.42	6.84	8.86	7.4			
123478-HxCDF	ng/kg	Various			2.25	0.998	14.1	10.5	14.4	17.9	<0.784	<0.378	2.71	4.61	4.89	5.36	7.9	5.69	4.68	2.79	3.95	6.53	7.13	7.22			
123678-HxCDF	ng/kg	Various			2.22	1.01	13.2	18	19.9	19.2	4.77	<0.413	2.87	3.65	4.24	4.09	6.51	3.56	3.88	2.25	4.13	6.21	6.08	3.21			
234678-HxCDF	ng/kg	Various			1.78	1.26	18.2	19.5	24.3	20.4	6.12	<0.459	2.88	4.61	4.18	4.96	7.51	4.1	4.45	2.59	2.77	5.62	5.84	5.46			
123789-HxCDF	ng/kg	Various			<0.26	<0.144	2.02	<1.201	1.55	1.55	<0.852	<0.595	<0.237	<0.315	0.552	<0.313	<0.337	<0.4	0.98	<0.332	<0.338	<0.362	0.909	0.395			
1234678-HpCDF	ng/kg	Various			25	18	275	384	535	441	82.8	131	19	23.7	33.6	36.3	60.5	33.4	29.8	28.7	19.3	31.4	30.8	31.8			
1234789-HpCDF	ng/kg	Various			1.43	0.744	34	24.1	33.5	26.3	4.72	<3.012	1.18	1.78	1.49	1.64	<0.276	1.94	1.91	1.23	1.26	2.18	2.69	1.64			
Brominated Dioxins and Furans																												
2378-TBDD	ng/kg	Various			<0.83	<0.76	<0.78	<0.78	<0.76	<0.76	<0.78	<0.79	<0.47	<0.48	<0.44	<0.49	0.42	<0.46	<0.45	<0.46	<0.47	<0.64	<0.66	<0.66			
12378-PBDD	ng/kg	Various			<0.83	<0.81	<0.81	<0.74	<0.8	<0.79	<0.8	<0.8	<0.5	<0.5	<0.49	<0.47	<0.426	<0.48	<0.5	<0.5	<0.5	<0.6	<0.69	<0.65			
123478-HxBDD	ng/kg	Various			<0.84	<0.79	<0.8	<0.8	<0.8	<0.77	<0.8	<0.81	<0.54	<0.54	<0.52	<0.5	<0.55	<0.54	<0.54	<0.54	<0.53	<0.59	<0.64	<0.58			
123678-HxBDD	ng/kg	Various			<0.82	<0.7	<0.78	<0.7	<0.76	<0.8	<0.8	<0.8	<0.47	<0.47	<0.48	<0.52	<0.45	<0.47	<0.49	<0.5	<0.44	<0.62	<0.62	<0.6			
123789-HxBDD	ng/kg	Various			<0.81	<0.75	<0.79	<0.77	<0.79	<0.79	<0.77	<0.78	<0.48	<0.49	<0.46	<0.51	<0.49	<0.49	<0.45	<0.46	<0.48	<0.58	<0.68	<0.57			
1234678-HpBDD	ng/kg	Various			<0.83	<0.74	2.56	1.11	1.88	2.68	<0.81	<0.81	<0.59	<0.6	<0.57	0.59	<0.55	<0.58	<0.59	<0.52	<0.55	<0.63	<0.7	<0.62			
OBDD	ng/kg	Various			<0.85	<0.78	<0.78	<0.81	<0.83	<0.81	<0.82	<0.8	<0.83	<0.85	<0.88	<0.79	<0.83	<0.86	<0.85	<0.8	<0.8	<0.8	<0.82	<0.78			
2378-TBDF	ng/kg	Various			1.89	1.29	16.89	12.66	23.55	11.09	3.78	3.91	2.13	2.22	2.81	3.39	4.91	2.62	2.33	3.78	2.25	2.29	3.42	3.81			
12378-PBDF	ng/kg	Various			1.9	0.92	12.29	10.91	18.91	8.89	2.57	2.66	1.7	1.51	1.75	1.95	2.77	1.84	1.61	2	1.24	2.08	2.14	2.47			
23478-PBDF	ng/kg	Various			1.14	<0.77	5.91	5.87	8.45	6.23	1.29	1.68	0.84	0.67	0.9	1.6	1.65	0.85	0.88	1.35	0.71	1.14	1.19	1.34			
123478-HxBDF	ng/kg	Various			0.88	0.71	6.88	3.87	7.9	5.52	1.85	1.29	0.55	0.55	0.61	0.89	0.94	0.66	0.55	0.88	0.55	<0.66	0.78	0.7			
123678-HxBDF	ng/kg	Various			<0.83	<0.8	5.4	4.21	4.13	3.16	0.75	0.89	0.54	0.6	0.58	0.67	0.75	0.6	0.63	0.79	0.49	0.71	1.03	0.91			
234678-HxBDF	ng/kg	Various			<0.85	<0.84	3.15	7.32	9.22	5.92	<0.82	<0.8	<0.45	<0.44	<0.41	0.48	0.44	0.44	<0.39	0.47	<0.48	0.8	0.9	0.72			
123789-HxBDF	ng/kg	Various			<0.85	<0.8	1.88	2.55	3.56	1.85	<0.83	<0.79	<0.5	<0.53	<0.33	0.37	<0.5	<0.55	<0.5	<0.52	<0.5	<0.59	<0.64	<0.6			
1234678-HpBDF	ng/kg	Various			<0.82	<0.8	5.03	8.35	12.11	14.77	1.8	1.5	<0.41	<0.4	<0.45	0.51	<0.39	<0.46	<0.4	<0.38	<0.39	<0.55	<0.63	<0.59			
1234789-HpBDF	ng/kg	Various			<0.83	0.82	1.22	2.7	4.9	6.32	<0.82	<0.78	<0.47	<0.46	<0.57	<0.5	<0.47	<0.46	<0.46	<0.45	<0.47	<0.68	<0.69	<0.64			
OBDF	ng/kg	Various			<0.84	<0.84	0.9	4.08	3.34	5.9	<0.8	<0.8	<0.58	<0.59	<0.62	<0.61	<0.59	<0.53	<0.59	<0.59	<0.53	<0.74	<0.8	<0.78			
Organophosphorous flame retardants																												
Triphenylphosphate	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
Tris(1-chloro-2-propyl)phosphate	mg/kg	Various	630[#1]		<0.15	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.15	<0.5	<0.15	<0.15	<0.15	<0.15	<0.15	<0.8	<0.1	<0.15	<0.15	<0.15			
Tris(2-ethylhexyl) phosphate	mg/kg	0.1	170[#1]		0.15	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-28	GTCS 1-29	GTCS 1-30				GTCS 1-31	GTCS 1-32	GTCS 1-33	GTCS 1-34	GTCS 1-35	GTCS 1-36				GTCS 1-37	GTCS 1-38	GTCS 1-39		
				Date	05/06/2019	06/06/2019	06/06/2019				07/06/2019	07/06/2019	04/06/2019	04/06/2019	04/06/2019	04/06/2019				04/06/2019	04/06/2019	04/06/2019		
				Sample Type	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Normal	Normal	Normal	Field_D			Normal	Normal	Normal	Field_D	
				Sample Area	Whitstable House	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	St. Quintin Community Kitchen Garden	Markland House	Markland House	Darfield Way	Darfield Way	Robinson House	Robinson House	Robinson House	Robinson House	Robinson House	Kensington Memorial Park	Kensington Memorial Park	West London Bowling Club	West London Bowling Club	West London Bowling Club
				Field ID	GTCS 1-28A	GTCS 1-29A	GTCS 1-30 PRIMARY SAMPLE	GTCS 1-30 FIELD DUPLICATE	GTCS 1-30 LAB DUPLICATE	GTCS 1-30 LAB FIELD DUPLICATE	GTCS 1-31A	GTCS 1-32A	GTCS 1-33A	GTCS 1-34A	GTCS 1-35A	GTCS 1-36 PRIMARY SAMPLE	GTCS 1-36 FIELD DUPLICATE	GTCS 1-36 LAB DUPLICATE	GTCS 1-36 LAB FIELD DUPLICATE	GTCS 1-37A	GTCS 1-38A	GTCS 1-39 PRIMARY SAMPLE	GTCS 1-39 FIELD DUPLICATE	GTCS 1-39 LAB DUPLICATE
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Brominated flame retardents (PBDEs)																								
2,2',4-tribromodiphenyl ether (BDE-17)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,4'-tribromodiphenyl ether (BDE-28)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',3,4,4'-pentabromodiphenyl ether (BDE-8	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5-pentabromodiphenyl ether (BDE-9	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',6-pentabromodiphenyl ether (BDE-1	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',3,4,4',5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5,5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1	13[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5,6'-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2,3,4,4,5,6-heptabromodiphenyl ether (BDE	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Polybrominated biphenyls (PBBs)																								
2,2-dibromobiphenyl (PBB 4)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4,4-dibromobiphenyl (PBB 15)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2,5-tribromobiphenyl (PBB 18)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tetrabromobiphenyl (3,3,5,5-) (PBB 80)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromobiphenyl (PBB 153)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrabromobisphenol A																								
tetrabromobisphenol A	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromocyclododecane (HBCDD)																								
Hexabromocyclododecane (HBCDD)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isocyanates																								
Isocyanic Acid	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Methyl Isocyanate	ug/kg	250	4,600[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Ethyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Propyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Phenyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Hexamethylene diisocyanate	ug/kg	250	3,100[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,4-Toluene diisocyanate	ug/kg	250	6,400[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,6-Toluene diisocyanate	ug/kg	250	5,300[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Isophorone Diisocyanate	ug/kg	500			<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
4,4-Methylene-bis(phenyl-isocyanate)	ug/kg	250	850,000,000[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Cyanides																								
Cyanide (Free)	mg/kg	0.5	20[#5]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cyanide Total	mg/kg	0.5	78[#1]		<0.5	<0.5	2.1	2.6	2.2	2.4	2.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.7	0.7
Thiocyanate	mg/kg	0.6	20[#5]		0.8	2.9	<0.6	<0.6	<0.6	<0.6	0.9	1.3	<0.6	1.2	0.9	0.9	1	1	0.8	4.1	1.7	1.3	1.5	1.4
Asbestos																								
General Description (Bulk Analysis)	None				soil-stones	soil-stones	soil-stones	soil-stones	soil-stones	soil/stones	soil.stones	soil.stones	soil.stones	soil.stones	soil.stones	soil-stones	soil.stones	soil.stones	soil.stones	soil.stones	soil.stones	soil-stones	soil-stones	soil-stones
Asbestos Fibres	None				NAD	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	NAD	NAD	NAD	NAD	NAD	Fibre Bundles	NAD	Fibre Bundles	NAD	NAD	NAD	Fibre Bundles	Fibre Bundles	NAD
Asbestos ACM	None				NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	ACM Debris	NAD	NAD	NAD	NAD	ACM Debris	NAD	NAD
Asbestos Type	None				NAD	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	NAD	NAD	NAD	NAD	NAD	Amosite	Chrysotile	Amosite	NAD	NAD	NAD	Chrysotile	Chrysotile	NAD
Asbestos Level Screen					NAD	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	NAD	NAD	NAD	NAD	NAD	less than 0.1%	less than 0.1%	less than 0.1%	NAD	NAD	NAD	determined from Scree	less than 0.1%	NAD
Potentially Respirable Fibres per gram	f/g	0			-	0	0	0	0	0	-	-	-	-	-	0	0	0	-	-	-	0	0	-
SVF / MMMF																								
Synthetic/MMMF	None				Absent	Present	Absent	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Asbestos Quantification																								
Asbestos Gravimetric & PCOM Total	mass %	0.001			-	<0.001	<0.001	<0.001	0.001	<0.001	-	-	-	-	-	<0.001	0.001	<0.001	-	-	-	<0.001	<0.001	-
Asbestos PCOM Quantification (Fibres)	mass %	0.001			-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	<0.001	<0.001	-	-	-	<0.001	<0.001	-
Total ACM Gravimetric Quantification (% Asb	mass %	0.001			-	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	<0.001	<0.001	<0.001	-	-	-	<0.001	<0.001	-
Total Detailed Gravimetric Quantification (% A	mass %	0.001			-	<0.001	<0.001	<0.001	0.001	<0.001	-	-	-	-	-	<0.001	0.001	<0.001	-	-	-	<0.001	<0.001	-
Asbestos Quantification - Total - %	mass %	0.001			-	<0.001	<0.001	<0.001	0.001	<0.001	-	-	-	-	-	<0.001	0.001	<0.001	-	-	-	<0.001	<0.001	-
Total Organic Carbon																								
TOC	percent	0.02			4.48	5.84	6.15	8.09	9.07	7.83	4.83	3	3.1	5.16	5.33	3.87	4.56	3.59	5.01	11.73	5.83	6.38	6.94	7.45
Inorganics																								
pH (Lab)	pH units	0.01			7.29	7.53	7.75	7.83	7.77	7.78	7.63	7.5	7.82	6.99	7.58	7.63	7.71	7.74	7.74	7.36	6.67	7.43	7.42	7.44
Other																								
Natural Moisture Content	percent	0.1			18.1	27.7	17.6	16.4	16	17.8	8.2	5.8	18	9.1	11.7	9.7	11	10.6	8.8	20	32.7	16.1	15	14.8
ESdat Calculated																								
Cresols Total	ug/kg	20	180[#3]		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	136	<20	<20	<20	<20
Benzo(a)pyrene (surrogate marker for PAH m	mg/kg	0.01	5.0[#6]		0.3	0.13	2.87	2.81	2.64	3.18	0.96	0.19	0.21	0.38	3.97	2.81	1.47	1.43	2.22	1.22	1.1	1.66	1.71	1.76
Xylene Total	ug/kg	8	130,000[#2]		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Trichlorobenzene (total)	ug/kg	14	2200[#5]		<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14
AECOM Calculated																								
Sum of PCDD/F +PCB12	ng/kg	Various	8700[#4]		2887	1420	13098	18758	33961	21417	5820	1288	3128	6007	2689	2265	2360	2204	2076	2217	1048	1890	1911	1844
PCDD/F+PBDD/F+PCB12 Hazard Index	-	-	1		0.06	0.02	0.6				0.08	0.03	0.06	0.09	0.08	0.08				0.06	0.08	0.12		
WHO2005 TEQ (PCDD/F + PBDD/F + PCB)	ng/kg	Various			5.744	2.273	60.851	58.536	82.803	66.384	7.815	3.532	6.206	8.079	8.234	8.073	9.041	9.088	8.675	5.781	8.122	11.275	12.718	12.454

Comments
#1 USEPA RSL (May 2019)
#2 LQM/CIEH S4ULs 2015
#3 EIC/AGS/CL:AIRE 2010
#4 EA SGV 2009
#5 Dutch IV 2013
#6 Defra C4SL 2014
#7 AECOM (modified EIC GAC to include plant uptake route)
GSC based on residential (with private gardens) land use scenario
2.5% soil organic matter content selected for GSC #2 and #3
(blank): No assessment criteria available
- : Not analysed
Field_D: Field Duplicate
NAD: No Asbestos Detected

				Location		GTCS 1-40	GTCS 1-41				GTCS 1-42	GTCS 1-43		GTCS 1-44		GTCS 1-45		GTCS 1-46		GTCS 1-47		GTCS 1-48		GTCS 1-49	
				Date		04/06/2019	04/06/2019				04/06/2019	05/06/2019		05/06/2019		05/06/2019		05/06/2019	05/06/2019	05/06/2019		05/06/2019		05/06/2019	
				Sample Type		Normal	Normal	Field_D			Normal	Normal		Normal		Normal		Normal	Normal	Normal		Normal		Normal	
				Sample Area	West London Bowling Club	West London Bowling Club	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintin's Roundabout	St. Quintin's Roundabout	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square
				Field ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-40A	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	GTCS 1-42A	GTCS 1-43A		GTCS 1-44A		GTCS 1-45A		GTCS 1-46A	GTCS 1-46A	GTCS 1-47A		GTCS 1-48A		GTCS 1-49A	
	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05
Metals																									
Aluminium	mg/kg	50	77,000[#1]		14,080 - 16,029	15,970	16,920	17,890	17,060	17,570	19,870	18,370 - 19,986	12,090 - 16,479	26,240	12,470	5,096	11,600	15,790	14,510 - 15,350	7,847	7,261 - 9,007	12,170	12,790	10,730 - 11,696	10,160 - 12,335
Arsenic	mg/kg	0.5	37[#2]		29.1 - 31.9	25.8	19.7	20.2	20.7	21.2	24.3	36.6 - 40.6	22.8 - 27.1	12.8	13.3	6.7	16	26.2	35.5 - 36.6	13.6	13 - 13.2	12.5	15.3	17.4 - 19.4	16.6 - 18.9
Barium	mg/kg	1	460[#7]		197 - 210	563	258	266	258	269	266	455 - 537	249 - 291	158	179	77	172	289	339 - 376	181	133 - 148	189	172	182 - 209	165 - 188
Beryllium	mg/kg	0.5	1.7[#2]		1.6 - 1.8	2.2	1.7	1.7	1.7	1.7	1.9	2 - 2.2	1.3 - 1.6	2	1.2	0.6	1.1	1.5	1.9 - 2	0.9	0.8 - 0.9	1.3	1.4	1.3	1.2 - 1.5
Boron	mg/kg	0.1	290[#2]		3.7 - 4	4.3	2.5	2.4	2.7	2.6	2.4	1.6	2.1 - 2.6	1	2.3	0.9	2	4.3	3.1 - 3.2	4.6	6.6 - 8	1.8	4.4	1.5 - 1.7	1.8 - 2
Cadmium	mg/kg	0.1	22[#6]		0.7	1	0.8	0.9	0.9	0.9	1	44.1 - 46.2	11.3 - 14.5	1.2	1.8	0.4	0.8	15.8	42.7 - 46.8	0.7	0.8	3.7	3.3	0.9 - 1.1	1 - 1.1
Chromium (Trivalent)	mg/kg	0.5	910[#2]		35.6 - 36.5	70.5	106	112.4	102.5	97.2	101.7	232.2 - 271.4	78.2 - 98.3	76.6	104.5	240.5	72.1	176.8	208.7 - 212.1	88.2	22.3 - 23.8	101.1	58.4	33.3	32 - 36.9
Chromium (hexavalent)	mg/kg	0.3	21[#6]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.5	Use either CrIII or CrVI[#2]		35.6 - 36.5	70.5	106	112.4	102.5	97.2	101.7	232.2 - 271.4	78.2 - 98.3	76.6	104.5	240.5	72.1	176.8	208.7 - 212.1	88.2	22.3 - 23.8	101.1	58.4	33.3	32 - 36.9
Copper	mg/kg	1	2,400[#2]		63 - 69	76	98	103	103	101	91	474 - 487	166 - 215	65	67	26	58	199	392 - 400	45	55 - 56	64	64	82 - 83	70 - 105
Lead	mg/kg	5	200[#6]		375 - 393	1,311	552	556	571	564	517	637 - 757	553 - 603	111	232	115	318	578	441 - 448	385	215 - 257	176	137	298 - 429	250 - 298
Mercury	mg/kg	0.1	40[#2]		2 - 3	2.1	1	0.9	2.4	1	0.9	1.4 - 1.8	1.1 - 1.2	0.3	0.6	0.3	0.9	0.8	0.9 - 1.6	0.5	0.3 - 0.6	1.8	1.3	0.2 - 1.1	0.4 - 1.2
Nickel	mg/kg	0.7	130[#2]		26.9 - 28.5	30	28.9	29.4	29.4	29.7	33.8	95.4 - 103.4	38.5 - 49	52.1	26.3	16.6	24.5	46.5	80.4 - 82.1	18.6	17 - 17.5	23.2	23.1	27.5 - 29.3	24.5 - 32
Selenium	mg/kg	1	250[#2]		1 - 2	2	2	2	2	2	3	2	2	2	2	1	1	2	2 - 3	2	1	2	2	1	1
Vanadium	mg/kg	1	410[#2]		65 - 67	59	70	74	72	73	80	86 - 95	53 - 67	94	49	30	53	62	73 - 75	37	35 - 38	48	49	52 - 55	49 - 57
Zinc	mg/kg	5	3,700[#2]		287	318	347	357	362	364	365	1,111 - 1,283	471 - 610	142	233	104	231	545	951 - 962	201	188 - 211	250	253	1,359 - 1,418	1,344 - 1,357
VOCs																									
1,1,1,2-tetrachloroethane	ug/kg	5	2,800[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-trichloroethane	ug/kg	5	18,000[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-tetrachloroethane	ug/kg	3	3,400[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1,2-trichloroethane	ug/kg	4	1,200[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,1-dichloroethane	ug/kg	6	1,200[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloroethene	ug/kg	6	3,900[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-trichlorobenzene	ug/kg	7	3,600[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2,3-trichloropropane	ug/kg	4	5.1[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2,4-trimethylbenzene	ug/kg	6	850[#2]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,2-dibromo-3-chloropropane	ug/kg	4	5.3[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2-dibromoethane	ug/kg	3	36[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-dichloroethane	ug/kg	5	11[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dichloropropane	ug/kg	4	42[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3,5-trimethylbenzene	ug/kg	3	270,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,3-dichloropropane	ug/kg	4	1,600,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,2-dichloropropane	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-chlorotoluene	ug/kg	3	1,600,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Benzene	ug/kg	5	870[#6]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromobenzene	ug/kg	2	2,000[#3]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/kg	4	150,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromodichloromethane	ug/kg	4	290[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoform	ug/kg	4	5,900[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromomethane	ug/kg	1	6,800[#3]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Methyl butanal	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	ug/kg	4	56[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorodibromomethane	ug/kg	5	8,300[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/kg	6	11,000[#3]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	8	<6	<6	<6	<6	<6	<6
Chloroform	ug/kg	5	1,700[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/kg	3	9.8[#3]		10	27	27	28	30	33	7	6	10	<3	10	<3	13	12	16	5	14	<3	10	<3	6
cis-1,2-dichloroethene	ug/kg	7	190[#3]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
cis-1,3-dichloropropene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromomethane	ug/kg	4	24,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dichlorodifluoromethane	ug/kg	2	87,000[#1]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dichloromethane	ug/kg	30	980[#3]		<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	72	<30	<30	<30	<30	<30	<30
Ethylbenzene	ug/kg	3	110,000[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Eucalyptol	ug/kg	100			614	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	ug/kg	3	27,000[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Methyl Methacrylate	ug/kg	100	4,400,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	ug/kg	6	84,000[#2]		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
n-butylbenzene	ug/kg	4	3,900,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
n-propylbenzene	ug/kg	4	82,000[#3]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
sec-butylbenzene	ug/kg	4	7,800,000[#1]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/kg	3	19,000[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-butylbenzene	ug/kg	5	7,800,000[#1]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/kg	3	390[#2]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Toluene	ug/kg	3	290,000[#2]		<3	<3	<3	<3	<3	<3	<3	9	<3	<3	<3	<3	<3	<3	6	<3	<3	<3	<3	<3	<3
trans-1,2-dichloroethene	ug/kg	3	340[#3]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,3-dichloropropene	ug/kg	3			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichloroethene	ug/kg	5	34[#2]		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/kg	3	23,000,000[#1]		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Undecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (m & p)	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	12	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Xylene (o)	ug/kg	4	140,000[#2]		<4	<4	<4	<4	<4	<4	<4	6	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Vinyl chloride	ug/kg	2	0.87[#2]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
VOC TICs	ug/kg	None			-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trihalomethanes	ug/kg				<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18

Location				GTCS 1-40	GTCS 1-41				GTCS 1-42	GTCS 1-43		GTCS 1-44		GTCS 1-45		GTCS 1-46		GTCS 1-47		GTCS 1-48		GTCS 1-49	
Date				04/06/2019	04/06/2019				04/06/2019	05/06/2019		05/06/2019		05/06/2019		05/06/2019	05/06/2019	05/06/2019		05/06/2019		05/06/2019	
Sample Type				Normal	Normal	Field_D			Normal	Normal		Normal		Normal		Normal	Normal	Normal		Normal		Normal	
Sample Area				West London Bowling Club	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintin's Roundabout	St. Quintin's Roundabout	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square
Field ID	Units	Method Detection Limit	Generic Screening Criteria (GSC)	GTCS 1-40A	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	GTCS 1-42A	GTCS 1-43A		GTCS 1-44A		GTCS 1-45A		GTCS 1-46A	GTCS 1-46A	GTCS 1-47A		GTCS 1-48A		GTCS 1-49A	
Sample_Depth_Range				0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05
SVOCs																							
Dibenzo[a,e]pyrene	ug/kg	100	42[#1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,277	-	-
2-methylnaphthalene	ug/kg	10	240,000[#1]	35	104	91	100	104	107	232	98	36	82	55	57	86	194	167 - 266	1,425	49	25	88	53
4-bromophenyl phenyl ether	ug/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chlorophenyl phenyl ether	ug/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Azobenzene	ug/kg	10	5,600[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethoxy) methane	ug/kg	10	190,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethyl)ether	ug/kg	10	230[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbazole	ug/kg	10		82	75	362	357	359	365	366	636	167	128	76	92	71	202	604	131	3,290	70	75	141	81
Dibenzofuran	ug/kg	10	73,000[#1]	40	27	98	81	93	88	67	249	77	51	36	50	40	96	230	93	3,082	36	26	79	48
Hexachlorobutadiene	ug/kg	4	700[#2]	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorocyclopentadiene	ug/kg	10	1,800[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	ug/kg	10	480[#3]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Anilines																								
2-nitroaniline	ug/kg	10	630,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
3-nitroaniline	ug/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloroaniline	ug/kg	10	2,700[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-nitroaniline	ug/kg	10	27,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Amino Aliphatics																								
N-nitrosodi-n-propylamine	ug/kg	10	78[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Explosives																								
2,4-Dinitrotoluene	ug/kg	10	3,200[#3]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-dinitrotoluene	ug/kg	10	1,700[#3]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	ug/kg	10	5,100[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phenolics																								
2,4-dimethylphenol	ug/kg	10	43,000[#3]	<10	<10	24	22	21	29	20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene	ug/kg	10	9,200[#3]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-methylphenol	ug/kg	10	Use Cresols Total[#3]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	67	<10	<10	<10	<10	<10
2-nitrophenol	ug/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloro-3-methylphenol	ug/kg	10	6,300,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-methylphenol	ug/kg	10	Use Cresols Total[#3]	<10	<10	<10	<10	<10	<10	76	<10	<10	<10	<10	<10	<10	<10	<10	246	<10	<10	<10	<10	<10
4-nitrophenol	ug/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Phenol	ug/kg	10	200,000[#2]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	310	<10	<10	<10	<10	<10
SVOC - Halogenated Phenols																								
2,4,5-trichlorophenol	ug/kg	10	6,300,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,6-trichlorophenol	ug/kg	10	49,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-dichlorophenol	ug/kg	10	190,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chlorophenol	ug/kg	10	390,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	ug/kg	10	520[#2]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Benzenes																								
1,2,4-trichlorobenzene	ug/kg	7	6,400[#2]	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2-dichlorobenzene	ug/kg	4	55,000[#2]	<4	<4	<4	<4	<4	<4	<4	<4 - 22	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3-dichlorobenzene	ug/kg	4	1,000[#2]	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,4-dichlorobenzene	ug/kg	4	150,000[#2]	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorobenzene	ug/kg	10	3,300[#2]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phthalates																								
Bis(2-ethylhexyl) phthalate	ug/kg	100	610,000[#3]	282	637	540	520	491	924	516	1,002	140	611	221	911	1,013	619	206	355	551	1,001	202	443
Butyl benzyl phthalate	ug/kg	100	3,300,000[#3]	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Diethylphthalate	ug/kg	100	260,000[#2]	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Dimethyl phthalate	ug/kg	100	16,400[#5]	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Di-n-butyl phthalate	ug/kg	100	31,000[#2]	<100	<100	<100	<100	<100	<100	152	1,520	698	<100	<100	<100	<100	822	2,226	<100	<100	980	617	<100	<100
Di-n-octyl phthalate	ug/kg	100	2,800,000[#3]	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SVOC - Solvents																								
Isophorone	ug/kg	10	570,000[#1]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC TIC																								
SVOC TICs	None			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Phellandrene	ug/kg	100		980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Pinene	ug/kg	100		1,009	216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.beta.-Guaiene	ug/kg	100		134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[1,1-Biphenyl]-4-carboxaldehyde	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1(2Aminobenzylidene)1234-tetrahydroacridine	ug/kg	100		-	-	-	-	-	-	-	-	-	1,994	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,4-tetrachloro-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,5-tetrachloro-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,4,6-tetrachloro-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-d	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,9,10-Dibenzopyrene	ug/kg	100		-	-	-	-	742	-	-	-	27,925	-	-	-	-	-	-	-	-	-	-	-	-
1,5,5-Trimethyl-6-methylene-cyclohexene	ug/kg	100		580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,6-Dimethylphenazine	ug/kg	100		-	-	-	-	-	-	-	-	885	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-5,7,9(10),11,13-pentaene	ug/kg	100		-	-	-	-	-	-	-	-	-	1,968	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-8,11,13-triene	ug/kg	100		-	-	-	-	-	-	-	-	-	3,492	-	-	-	-	-	-	-	-	-	-	-
10s,11s-Himachala-3(12),4-diene	ug/kg	100		3,879	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]carbazole	ug/kg	100		-	-	527	-	-	-	9,597	-	-	-	224	-	-	-	200	4,085	-	-	199	-	
11H-Benzo[a]fluoren-11-one	ug/kg	100		-	-	-	235	281	284	755	7,792	146	1,819	-	302	-	417	1,249	328	4,093	-	-	451	-
11H-Benzo[a]fluoren-11-one, 10-methyl-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,544	-	-	-	-
11H-Benzo[a]fluorene	ug/kg	100		-	-	1,129	1,160	-	1,232	-	-	-	-	-	-	-	-	-	1,115	-	-	-	-	-
11H-Benzo(b)fluorene	ug/kg	100		-	-	410	485	478	387	1,078	-	632	-	337	-	-	-	-	-	-	-	353	594	-
11H-Indeno(1,2-b)quinoline	ug/kg	100		-	-	-	-	-	-	-	-	-	2,706	-	-	-	-	-	-	-	-	-	-	-
13-Docosenamide, (Z)-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	1,273	-	-	-	-	-	-	-	-	-	-
13-Isopropylpodocarpen-12-ol-20-al	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	944	-	1,760	-	-	-	-	-
1H-Inden-1-one, 2,3-dihydro-	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Methyldibenzothiophene	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	1,290	-	-	-	-	-	-	-
1-Naphthalenecarboxylic acid, 2-benzoyl-	ug/kg	100		-	-	-	-	-	-	14,484	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(2H-Benzotriazol-2-yl)-5-methylphenol	ug/kg	100		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(Acetoxymethyl)-3-(methoxycarbonyl)biphen	ug/kg	100		-	-	-	-	-	-	7,465	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-40	GTCS 1-41				GTCS 1-42	GTCS 1-43		GTCS 1-44		GTCS 1-45		GTCS 1-46		GTCS 1-47		GTCS 1-48		GTCS 1-49	
				Date	04/06/2019	04/06/2019				04/06/2019	05/06/2019		05/06/2019		05/06/2019		05/06/2019	05/06/2019	05/06/2019		05/06/2019		05/06/2019	
				Sample Type	Normal	Normal	Field_D			Normal	Normal		Normal		Normal		Normal	Normal	Normal		Normal		Normal	
				Sample Area	West London Bowling Club	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintin's Roundabout	St. Quintin's Roundabout	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square
				Field ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-40A	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	GTCS 1-42A	GTCS 1-43A		GTCS 1-44A		GTCS 1-45A		GTCS 1-46A	GTCS 1-46A	GTCS 1-47A		GTCS 1-48A		GTCS 1-49A	
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05
2,3,3,,5,6-Pentachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,3,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Cycloheptatrien-1-one, 2-phenyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,122	-	-	-	-
2,6-Dimethyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	1,791	-	-	-	-	-	-	-	-	-	-	-	-	-
2,9-Dimethyl-2,3,4,5,6,7hexahydro-1H-2-benz	ug/kg	100			-	-	-	-	-	-	4,203	-	-	-	-	-	-	866	-	-	1,046	-	-	-
2-Bromo-4,5-dimethoxycinnamic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2Chloro2methyl1oxa2sila-1,2-dihydronaphtha	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylchrysene	ug/kg	100			-	180	-	-	-	-	15,129	-	5,119	-	-	-	-	-	930	-	-	-	-	-
2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	ug/kg	100			-	-	783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3-Dimethylbiphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4:8,9-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,671	-	-
3,4-Dichlorobenzonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,5-Dimethoxy-4-hydroxycinnamaldehyde	ug/kg	100			-	-	413	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,959	-	-	-
4,4-Bis(tetrahydrothiopyran)	ug/kg	100			-	-	575	496	631	583	229	-	-	-	-	267	-	618	-	546	-	-	-	190
4H-Cyclopenta[def]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	734	-	-	-	-	-	-	-
6H-Benz[de]anthracen-6-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7H-Benz(de)anthracen-7-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,001	-	-	-	-
8,9-Dihydro-7H-cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Anthracenedione	ug/kg	100	14,000 #1		-	-	215	313	199	-	6,326	-	-	-	118	-	372	1,381	313	1,864	-	-	-	-
9,10-Anthracenedione, 2-methyl-	ug/kg	100			-	-	-	-	-	-	3,572	-	-	-	-	-	-	1,430	-	-	-	-	-	-
9,10-Bis(bromomethyl)anthracene	ug/kg	100			-	-	-	-	-	-	-	-	1,138	-	-	-	-	-	-	-	-	-	-	-
9,10-Dimethylanthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9-Anthracenecarbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	251	-	-	-	-	-
9H-Cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-ol	ug/kg	100			-	-	-	-	-	-	1,577	-	-	-	-	-	-	-	-	730	-	-	-	-
9H-Fluoren-9-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	213	1,634	-	-	292	-
9H-Fluorene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	203	-	-	-	-	-
9H-Fluorene, 9-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	8,872	-	-	-	-	-	-	-	-	-	-
Alloaromadendrene	ug/kg	100			296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthra(1,2-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	542	-	-	-	512	-	-	-	-	-
Anthra(2,3-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	440	-
Anthracene, 1-methyl-	ug/kg	100			-	-	218	-	-	187	279	8,921	-	-	-	159	-	-	-	-	2,064	-	-	-
Anthracene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	177	-	-	-	-	-
Anthracene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,128	-	282	-
Aromandendrene	ug/kg	100			709	-	-	-	-	-	-	-	-	1,425	-	-	-	-	-	-	-	-	-	-
Benz(A)anthracene-7,12-dione	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	921	-	-	-	-
Benz(a)anthracene-7-carbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,671	-	-	-	-
Benz[a]anthracene, 12-methyl-	ug/kg	100			-	-	794	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	966	-
Benz[a]anthracene, 7-methyl-	ug/kg	100			-	-	786	-	979	835	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[j]aceanthrylene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	6,337	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenamine, 2,4,6-tribromo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene, (4,5,5-trimethyl-1,3-cyclopentadien-	ug/kg	100			-	-	-	-	-	-	1,135	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Sulfonylbis (4-chlorobenzene)	ug/kg	100	51,000 #1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenesulfonamide, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,400	-	-	-	-
Benzo(c)carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	1,178	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,1-d]thiophene	ug/kg	100			-	-	1,102	562	584	739	765	9,542	-	2,821	-	236	690	2,396	-	3,939	2,276	-	-	-
Benzo[b]naphtho[2,3-d]furan	ug/kg	100			-	-	286	446	412	455	396	6,475	235	1,194	-	207	144	1,649	386	2,865	860	-	-	-
Benzo[b]naphtho[2,3-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	476	-
Benzo[b]triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,785	-	-	-	-
Benzo[c]cinnoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,561	-	-	-	-
Benzo(e)pyrene	ug/kg	100			-	-	2,453	1,991	2,636	2,335	2,286	30,260	-	16,972	-	2,136	-	3,012	17,873	3,091	6,399	8,828	-	2,311
Benzo[ghi]fluoranthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[h]quinoline, 2,4-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,220	-	-
Benzo[kl]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,578	-	-	-	-
Benzoic acid, hexyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl	ug/kg	100	160,000 #3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	276	-	-	-	-
Biphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,580	-	-	-	-
Butylated Hydroxytoluene	ug/kg	100	150,000 #1		-	-	-	-	-	-	-	-	-	1,566	-	-	-	-	-	-	-	-	-	-
Camphor (TIC)	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 1-methyl-	ug/kg	100			-	-	437	488	470	441	738	-	409	-	-	635	314	715	2,844	-	4,408	-	-	-
Chrysene, 5-methyl-	ug/kg	100			-	-	-	-	-	-	460	-	-	-	-	-	-	-	-	514	-	-	-	-
Chrysene, 6-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,382	-	-
Cyclopenta(cd)pyrene, 3,4-dihydro-	ug/kg	100			-	-	-	758	1,002	-	548	-	-	-	-	-	-	-	-	-	4,726	-	-	-
Cyclopenta(def)phenanthrenone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,053	-	330	-
Dehydroabietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	47,248	-	-	-	-	-	-	-	-	-	-
D-Homoandrostane, (5.alpha.,13.alpha.)-	ug/kg	100			-	-	-	-	-	-	14,596	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,e)aceanthrylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,408	-	-
Dibenzo(a,i)pyrene	ug/kg	100			-	-	-	-	-	-	-	-	11,644	-	-	-	-	-	-	-	-	978	-	-
Dibenzo[def,mno]chrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,950	-	-	-	-
Dibenzofuran, 4-methyl-	ug/kg	100			-	-	-	-	-	-	1,396	-	-	-	-	-	-	-	143	-	-	-	-	-
Dibenzothiophene	ug/kg	100	780,000 #1		-	-	-	-	-	-	-	-	-	-	-	-	-	499	-	-	-	-	-	-
Dibenzothiophene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	1,830	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 4,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	663	-	-	-	-	-	-
Dicyclohexyl phthalate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenyl sulfide	ug/kg	100			-	-	300	394	244	250	204	-	-	-	-	-	-	-	-	-	-	-	-	-
di-p-Tolylacetylene	ug/kg	100			-	-	-	-	-	-	-	4,840	-	760	-	137	-	-	812	-	-	-	-	-
D-Limonene	ug/kg	100			1,603	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eicosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	318
Ferruginol	ug/kg	100			-	2,005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene, 2-methyl-	ug/kg	100			-	-	-	-	1,169	-	-	15,811	-	3,442	-	645	450	1,117	4,204	510	-	-	-	-
Fluorene, 2,4a-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane	ug/kg	100			-	1,432	-	-	-	-	-	-	-	5,074	-	454	-	-	-	-	-	-	-	-
Heneicosane, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptadecane	ug/kg	100			-	485	-	-	-	-	-	-	-	-	-	2,103	-	-	-	-	-	-	-	-
Hexadecane	ug/kg	100			1,613	-	-	-	-	-	-	-	1,467	-	-	1,311	-	-	-	1,976	-	-	-	-
Hexathiane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-40	GTCS 1-41				GTCS 1-42	GTCS 1-43		GTCS 1-44		GTCS 1-45		GTCS 1-46		GTCS 1-47		GTCS 1-48		GTCS 1-49	
				Date	04/06/2019	04/06/2019				04/06/2019	05/06/2019		05/06/2019		05/06/2019		05/06/2019	05/06/2019	05/06/2019		05/06/2019		05/06/2019	
				Sample Type	Normal	Normal	Field_D			Normal	Normal		Normal		Normal		Normal	Normal	Normal		Normal		Normal	
				Sample Area	West London Bowling Club	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintin's Roundabout	St. Quintin's Roundabout	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square
				Field ID	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-40A	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	GTCS 1-42A	GTCS 1-43A		GTCS 1-44A		GTCS 1-45A		GTCS 1-46A	GTCS 1-46A	GTCS 1-47A		GTCS 1-48A		GTCS 1-49A	
				Sample_Depth_Range	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05
Indene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno[1,2,3-fg]naphthacene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,132	-	-
Indole, 5-methyl-2-(4-pyridyl)-	ug/kg	100			-	-	-	-	-	238	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isocil	ug/kg	100			-	-	296	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
isoledene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Longifolene	ug/kg	100			-	561	-	-	-	-	-	-	-	7,933	-	-	-	-	-	-	-	-	-	-
Methyl dehydroabietate	ug/kg	100			-	-	-	-	-	-	-	-	-	5,678	-	-	-	-	-	-	-	-	-	-
Morpholine, 4-(1-cyclohepten-1-yl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,5-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	432	-	-	-	-
Naphthalene, 1,4,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	1,026	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6,7-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	1,373	-	-	-	-	-	240	166	503	-	-	136	-
Naphthalene, 1,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	999	-	-	-	-	-	251	158	583	-	-	-	-
Naphthalene, 1,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	205	-	-	-	-	-
Naphthalene, 2,3,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	973	-	-	-	-	-	-	-	135	257	-	-	-	-
Naphthalene, 2,3-dimethyl-	ug/kg	100			-	-	-	-	-	-	750	-	-	-	-	-	-	-	-	752	-	-	-	-
Naphthalene, 2,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	561	-	-	-	-	-	-	-	-	826	-	-	-	-
Naphthalene, 2,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	165	379	-	-	-	-
Naphthalene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	137	-	-	-	-	-
Naphthalene, 2-phenyl-	ug/kg	100			-	-	284	-	-	345	-	-	-	-	179	-	-	-	-	3,093	-	-	-	-
Naphtho[1,2-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	306	1,910	-	-	-	-
Naphtho[2,1,8,7-klmn]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,664	-	-	-	-
Naphtho[2,1-b]thiophene	ug/kg	100			-	-	-	-	-	-	1,995	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Decanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	2,983	-	-	-	-	-	-	-	-	-	-
Neocuproine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	196,284	-	-	-	-	-	-	-	-	-	-
Nonadecane	ug/kg	100			-	-	-	-	-	-	17,081	-	-	-	-	-	-	-	-	-	-	1,174	-	-
n-Pentafluorosulfanyl-S,S-diphenoxysulfilimine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,790	-	-	-	-
Octadecane	ug/kg	100			-	-	-	-	-	-	-	-	484	-	-	-	-	-	-	-	-	-	-	-
Octadecane, 1-iodo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	147,477	-	-	-	-	-	-	-	-	-	-
Octadecanoic acid, butyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Cymene	ug/kg	4			16 - 1,642	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Perylene	ug/kg	100			361	492	-	-	-	-	-	-	-	-	-	630	-	3,653	-	4,791	-	-	-	1,132
Phenanthrene, 1-methyl-	ug/kg	100			-	180	507	252	484	-	381	5,459	-	1,537	-	114	159	1,253	229	4,246	573	-	223	116
Phenanthrene, 2,5-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	289	-	-	-	-	-
Phenanthrene, 2-methyl-	ug/kg	100			-	-	428	413	409	393	482	-	-	1,095	-	259	-	392	1,804	3,412	1,094	-	351	-
Phenanthrene, 3,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	967	2,284	-	-	-	-
Phenanthrene, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	191	862	-	190	196	282	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	ug/kg	100			-	-	-	727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2-methoxy-4-(1-propenyl)-, (Z)-	ug/kg	100			-	-	-	327	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1,3-dimethyl-	ug/kg	100			-	-	-	-	-	370	-	7,437	-	-	-	-	-	-	367	634	-	-	-	-
Pyrene, 1-methyl-	ug/kg	100			-	-	458	331	444	438	483	7,242	362	2,101	-	317	182	480	1,649	5,147	4,236	-	344	264
Pyrene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	395	-	-	-	-	-	-	-	-	-	-	-	-	-
Quinoxaline, 6-(3-nitrobenzylidenamino)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	1,199	-	-	-	-	-	-
Retene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	286	-	-	-	-	-	-	158
Rubicene-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,432
Tetrachloro-o-benzoquinone	ug/kg	100			-	-	-	-	-	-	2,648	-	-	-	-	-	-	763	203	-	-	-	305	-
Tetracosane	ug/kg	100			-	-	-	-	-	-	-	-	-	2,884	-	-	-	-	1,055	-	-	-	-	-
Tetradecanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	2,707	-	-	-	-	-	-	-	-	-	-
trans-1,2-Bis(methyldichlorosilyl)ethylene	ug/kg	100			-	-	-	-	-	-	-	-	-	8,137	-	-	-	-	-	-	-	-	-	-
Trichlorovinylsilane	ug/kg	100			116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	1,585	-	-	-	1,155	-	-	32,197	-	-	-	-
Triphenylene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-01	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-02	ug/kg	100			-	-	-	-	-	-	-	-	-	4,677	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-03	ug/kg	100			927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-04	ug/kg	100			1,613	-	-	-	-	-	-	-	-	-	-	-	-	744	-	-	-	-	-	-
GT-SVOC-TIC-05	ug/kg	100			-	10,624	-	-	-	-	-	-	-	-	-	-	-	-	215	-	2,278	-	-	-
GT-SVOC-TIC-06	ug/kg	100			825	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-07	ug/kg	100			-	777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-08	ug/kg	100			812	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-09	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,665	-	-	-	-
GT-SVOC-TIC-10	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,094	-	-	-	-
GT-SVOC-TIC-11	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-12	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-13	ug/kg	100			208	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-14	ug/kg	100			-	-	-	-	-	-	-	8,803	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-15	ug/kg	100			-	-	-	294	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-16	ug/kg	100			-	-	2,141	-	-	-	2,128	-	1,735	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-17	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	1,182	-	-	-	-	-	-
GT-SVOC-TIC-18	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	2,064	-	-	-	-	-	-
Benzo(b)naphtho(1,2-d)furan	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Location		Method Detection Limit	Generic Screening Criteria (GSC)	GTCS 1-40	GTCS 1-41				GTCS 1-42	GTCS 1-43		GTCS 1-44		GTCS 1-45		GTCS 1-46		GTCS 1-47		GTCS 1-48		GTCS 1-49	
Date				04/06/2019	04/06/2019				04/06/2019	05/06/2019		05/06/2019		05/06/2019		05/06/2019	05/06/2019	05/06/2019		05/06/2019		05/06/2019	
Sample Type				Normal	Normal	Field_D			Normal	Normal		Normal		Normal		Normal	Normal	Normal		Normal		Normal	
Sample Area				West London Bowling Club	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintin's Roundabout	St. Quintin's Roundabout	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square
Field ID	Units			GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-40A	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	GTCS 1-42A	GTCS 1-43A		GTCS 1-44A		GTCS 1-45A		GTCS 1-46A	GTCS 1-46A	GTCS 1-47A		GTCS 1-48A		GTCS 1-49A	
Sample_Depth_Range				0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05		0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05
PAH																							
Acenaphthene	mg/kg	0.01	510[#2]	<0.05	<0.05	0.12	0.1	0.11	0.11	0.11	0.39	0.07	<0.05	<0.05	0.06	1.08	0.09	0.23	<0.05	<0.05	<0.05	0.08	0.11	<0.05
Acenaphthylene	mg/kg	0.01	420[#2]	0.44	0.22	1.14	1.04	1.13	1.02	0.73	0.79	0.41	0.24	0.25	0.32	0.35	0.41	0.7	0.36	0.32	0.36	0.21	0.52	0.27
Anthracene	mg/kg	0.01	5,400[#2]	0.4	0.25	1.15	1.05	1.18	1.02	0.81	2.01	0.57	0.25	0.23	0.44	2.22	0.69	1.43	0.46	0.44	0.56	0.39	0.82	0.34
Benz(a)anthracene	mg/kg	0.01	11[#2]	1.49	0.96	4	3.95	4.14	3.69	3.06	8.55	2.1	1.06	0.95	2.06	6.38	2.36	6.06	1.89	1.9	1.55	1.33	2.18	1.56
Benzo(a) pyrene	mg/kg	0.01	2.7[#2]	1.86	1.12	5.11	5.04	5.34	4.88	3.8	8.61	2.75	1.4	1.25	3.13	5.55	3.27	6.93	2.3	2.16	1.78	1.46	2.24	1.43
Benzo(b)fluoranthene	mg/kg	0.01	3.3[#2]	2.38	1.54	7.02	6.83	7.21	6.65	5.23	11.28	3.87	1.85	1.64	3.83	7.34	4.47	9.33	2.89	2.85 - 6.397	2.36	1.88	3	1.94
Benzo(b)&(k)fluoranthene	mg/kg	0.01		3.31	2.14	9.75	9.49	10.02	9.24	7.26	15.67	5.37	2.57	2.28	5.32	10.2	6.21	12.96	4.01	3.96	3.28	2.61	4.17	2.69
Benzo(g,h,i)perylene	mg/kg	0.01	340[#2]	1.23	0.79	3.99	4.06	4.4	3.91	3	7.43	2.61	0.99	0.94	2.49	3.7	2.68	5.86	1.55	1.36	1.3	0.93	1.53	1.13
Benzo(k)fluoranthene	mg/kg	0.01	93[#2]	0.93	0.6	2.73	2.66	2.81	2.59	2.03	4.39	1.5	0.72	0.64	1.49	2.86	1.74	3.63	1.12	1.11	0.92	0.73	1.17	0.75
Chrysene	mg/kg	0.01	22[#2]	1.72	1.07	4.51	4.38	4.64	4.27	3.59	7.76	2.42	1.05	1.09	2.38	5.68	3.01	6.38	1.96	1.92	1.61	1.34	1.98	1.23
Coronene	mg/kg	0.04		0.29	0.2	1.04	0.92	0.99	1.05	0.72	1.48	0.67	0.25	0.25	0.43	0.67	0.64	1.28	0.4	0.3	0.28	0.23	0.37	0.27
Dibenz(a,h)anthracene	mg/kg	0.01	0.28[#2]	0.32	0.16	1	0.8	0.87	0.79	0.56	1.51	0.44	0.2	0.22	0.69	0.96	0.66	1.44	0.38	0.36	0.23	0.23	0.34	0.29
Fluoranthene	mg/kg	0.01	560[#2]	3.08	1.83	7.35	6.9	7.38	6.69	6.09	13.8	4.29	2.18	1.81	3.63	10.97	5.18	11.38	3.48	3.15	2.93	2.4	4.94	2.09
Fluorene	mg/kg	0.01	400[#2]	0.07	<0.04	0.17	0.14	0.15	0.15	0.12	0.43	0.08	<0.04	<0.04	0.06	0.09	0.09	0.24	0.06	0.06	0.07	0.07	0.18	0.04
Indeno(1,2,3-c,d)pyrene	mg/kg	0.01	36[#2]	1.22	0.84	3.93	3.97	4.18	3.81	2.86	7.08	2.44	1.03	0.94	2.67	3.52	2.49	5.28	1.59	1.41	1.33	0.97	1.53	1.13
Naphthalene	mg/kg	0.01	5.6[#2]	<0.027 - 0.08	<0.027 - 0.06	<0.027 - 0.23	<0.027 - 0.2	<0.027 - 0.23	<0.027 - 0.23	<0.027 - 0.16	<0.027 - 0.61	<0.027 - 0.15	<0.027 - 0.06	<0.027 - 0.07	<0.027 - 0.09	<0.027 - 2.67	<0.027 - 0.15	<0.027 - 0.25	<0.027 - 0.11	<0.027 - 0.13	<0.027 - 0.07	<0.027 - 0.05	<0.027 - 0.2	<0.027 - 0.1
Phenanthrene	mg/kg	0.01	220[#2]	1	0.65	2.44	2.17	2.31	2.03	2.1	5.74	1.38	0.77	0.55	1.27	8.41	1.63	3.94	0.96	1.08	1.3	0.99	3.36	0.8
Pyrene	mg/kg	0.01	1,200[#2]	2.7	1.61	6.31	5.95	6.43	5.78	5.35	11.79	3.61	1.91	1.61	3.23	9.26	4.32	9.64	3.16	2.73	2.58	2.08	4.15	1.82
PAH 16 Total	mg/kg	0.6		18.9	11.7	51.2	49.2	52.5	47.6	39.6	92.2	28.7	13.7	12.2	27.8	71.6	33.2	72.7	22.3	21	19	15.1	28.3	14.9
PAH 17 Total	mg/kg	0.64		19.21	11.9	52.24	50.16	53.5	48.67	40.32	93.65	29.36	13.96	12.44	28.27	72.28	33.88	74	22.67	21.28	19.23	15.37	28.62	15.19
PCB (Dutch 7) congeners																								
PCB 28	ug/kg	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	<5	<5
PCB 52	ug/kg	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	19	22	<5	<5
PCB 101	ug/kg	5		<5	<5	<5	<5	<5	<5	<5	8	<5	<5	<5	<5	<5	<5	<5	<5	<5	22	27	<5	<5
PCB 118	ug/kg	5	120[#1]	<5 - 0.533	<5 - 0.548	<5 - 0.915	<5 - 0.953	<5 - 0.881	<5 - 0.839	<5 - 1.03	4.97 - 8	<5 - 3.48	<5 - 0.516	<5 - 0.725	<5 - 0.989	<5 - 1.21	<5 - 2.33	<5 - 2.79	<5 - 0.856	<5 - 1.06	17.2 - 19	23 - 33.3	<5 - 1.96	<5 - 10.1
PCB 138	ug/kg	5		<5	<5	<5	<5	<5	<5	<5	42	15	<5	<5	<5	<5	8	12	<5	<5	16	11	<5	<5
PCB 153	ug/kg	5		<5	<5	<5	<5	<5	<5	<5	33	11	<5	<5	<5	<5	6	6	<5	<5	13	10	<5	<5
PCB 180	ug/kg	5		<5	<5	<5	<5	<5	<5	<5	59	17	23	<5	<5	<5	10	23	<5	<5	9	6	<5	<5
Total PCB 7 Congeners	ug/kg	35	200[#5]	<35	<35	<35	<35	<35	<35	<35	150	43	<35	<35	<35	<35	<35	41	<35	<35	98	106	<35	<35
PCB (WHO12) 12 congeners																								
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	ug/kg	Various	38[#1]	0.049	0.0393	0.0697	0.0737	0.0667	0.0658	0.0752	0.477	0.218	0.0501	0.0674	0.0386	0.0396	0.162	0.256	0.0354	0.0419	1.87	5.24	0.0708	0.0932
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	ug/kg	Various	12[#1]	0.00322	0.000963	0.00231	0.00438	0.00211	0.00365	0.00202	0.0155	0.00622	0.00123	0.00229	0.000682	0.000936	0.00648	0.0102	0.00124	0.000818	0.0856	0.223	0.00206	0.00296
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	ug/kg	Various	120[#1]	0.282	0.263	0.447	0.467	0.426	0.411	0.486	2.64	1.57	0.267	0.359	0.452	0.543	1.17	1.33	0.383	0.446	11.2	22.3	0.898	4.31
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	ug/kg	Various	120[#1]	0.0074	0.00545	0.00665	0.00702	0.00377	0.00363	0.00593	0.0512	0.029	0.00641	0.00381	0.0113	0.0095	0.0234	0.0684	0.00655	0.00721	0.379	0.938	0.0247	0.195
Pentachlorobiphenyl, 2,3',4,4',5- (PCB-118)	ug/kg	Various	120[#1]	0.533	0.548	0.915	0.953	0.881	0.839	1.03	4.97	3.48	0.516	0.725	0.989	1.21	2.33	2.79	0.856	1.06	17.2	33.3	1.96	10.1
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	ug/kg	Various	120[#1]	0.0147	0.014	0.036	0.0356	0.0304	0.0239	0.0441	0.222	0.0811	0.0241	0.026	0.0216	0.0283	0.0785	0.138	0.0214	0.0289	0.66	0.843	0.0428	0.179
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	ug/kg	Various	0.036[#1]	0.0117	0.00984	0.0138	0.014	0.0145	0.0144	0.0171	0.0497	0.04	0.00176	0.00758	0.00612	0.00603	0.0317	0.0247	0.00629	0.00785	0.0856	0.169	0.0114	0.0168
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	ug/kg	Various	120[#1]	0.0887	0.0919	0.197	0.203	0.19	0.183	0.233	1.6	0.941	0.15	0.177	0.219	0.238	0.635	0.593	0.181	0.226	1.54	2	0.307	1.51
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	ug/kg	Various	120[#1]	0.0204	0.0225	0.0456	0.047	0.0442	0.0412	0.0527	1.12	0.417	0.0492	0.0585	0.065	0.0722	0.305	0.508	0.0688	0.0783	0.529	0.579	0.0923	0.34
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	ug/kg	Various	120[#1]	0.0395	0.0413	0.0833	0.086	0.0791	0.0759	0.0957	1.83	0.646	0.0744	0.0897	0.0876	0.105	0.379	0.605	0.0934	0.118	0.773	0.823	0.126	0.504
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	ug/kg	Various	0.12[#1]	0.00264	0.00255	0.00236	0.000699	0.0026	<0.000243	<0.000289	0.0115	0.00343	0.000884	0.000256	0.00125	0.0011	<0.000469	0.00675	0.0014	0.00103	0.00147	0.00152	0.000557	0.00176
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189	ug/kg	Various	130[#1]	0.00923	0.00929	0.0215	0.0228	0.0203	0.0194	0.0261	0.62	0.207	0.0156	0.0193	0.0177	0.0211	0.129	0.296	0.0246	0.0306	0.136	0.109	0.0291	0.0636
Chlorinated Dioxins and Furans																								
2378-TCDF	ng/kg	Various		8.6	8.5	11.8	8.02	12.8	10.2	10.9	29.9	14.5	2.55	3.05	8.32	8.78	15.7	27.4	7.08	6.83	3.51	<0.427	5.41	3.63
12378-PeCDD	ng/kg	Various		1.63	1.62	<0.746	3.63	1.89	4.12	<0.852	8.54	2.12	0.859	<0.676	1.36	0.761	3.55	9.28	1.03	1.15	0.58	<0.631	1.41	1.25
123478-HxCDD	ng/kg	Various		2.19	2.37	3.12	1.89	2.07	2.5	2.97	7.76	3.82	1.29	1.08	0.726	1.15	3.91	9.25	1.26	1.41	1.91	0.868	1.63	1.89
123678-HxCDD	ng/kg	Various		6.72	6.7	8.41	7.29	7.88	8.22	7.03	30.1	13.6	2.47	3.07	3.82	4.02	12.2	29.7	5.02	6.51	11	8.82	7.43	6.1
123789 HxCDD	ng/kg	Various		4.05	4.46	6.35	5.02	5.03	4.89	4.05	16.7	6.96	1.67	1.66	2.06	2.15	7.74	14.3	0.996	2.3	3.54	4.79	3.99	2.96
1234678-HpCDD	ng/kg	Various		77.6	134	84.8	78.7	78.6	68.1	72.4	557	232	39.6	68	52	60.5	224	478	162	212	356	278	92.4	86.7
OCDD	ng/kg	Various		567	981	397	413	377	367	362	5,300	1,840	331	483	443	449	1,820	4,310	1,690	1,940	4,280	2,920	700	624
OCDF	ng/kg	Various		34.2	50.2	62	53.8	57.8	54.2	70.6	476	167	16.2	20.4	28	29.4	222	451	131	135	187	141	67.7	47.9
2378-TCDD	ng/kg	Various		<0.427	<0.288	<0.644	0.99	<0.457	<0.461	<0.587	2.36	<0.291	<0.339	<0.204	<0.206	<0.171	<0.618	2.3	<0.228	<0.149	<0.236	<0.398	<0.428	<0.442
12378-PeCDF	ng/kg	Various		4.6	3.67	6.87	6.87	7.24	7.53	1.65	17.4	5.52	<0.32	4.18	6.3	5.13	6.46	19.4	6.25	5.09	4.56	3.63	3.38	2.99
23478-PeCDF	ng/kg	Various		8	6.25	13	11.2	12.1	10.4	9.45	29.7	15.6	2.91	3.33	7.5	7.52	14	33.5	6.15	4.71	4.59	2.97	7.1	5.07
123478-HxCDF	ng/kg	Various		6.2	5.96	11.9	10.2	9.48	6.41	9.19	23.5	11	3.22	3.55	9.66	9.16	13	32.1	8.78	5.56	6.72	4.33	6.58	4.67
123678-HxCDF	ng/kg	Various		4.78	1.41	9.9	8.35	9.02	7.47	8.85	16.5	10.8	2.54	2.47	4.6	5.49	<0.595	20.8	3.98	3.57	3.29	3.27	5.43	3.65
234678-HxCDF	ng/kg	Various		5.68	5.48	10.4	10	8.61	7.41	9.24	18.1	13.1	2.3	3.27	4.09	2.74	<0.56	25	3.53	4.45	4.29	3.46	5.5	4.33
123789-HxCDF	ng/kg	Various		0.684	0.655	<0.378	0.756	<0.442	0.577	<0.545	2.49	1.79	0.314	<0.443	0.876	<0.465	<603	2.01	<0.265	<0.517	0.901	0.545	1.02	0.51
1234678-HpCDF	ng/kg	Various		30.2	38.4	55.6	50.6	56.8	49.2	80.8	396	170	16.3	25.6	24.9	29.3	155	346	53.7	73.4	86.1	59.9	54.8	41.2
1234789-HpCDF	ng/kg	Various		1.82	0.723	3.08	2.3	3.49	2.86	2.54	16.9	8.46	1.04	<0.724	2.58	3.36	6.2	14.2	4	4.25	6.86	5.49	2.19	1.31
Brominated Dioxins and Furans																								
2378-TBDD	ng/kg	Various		<0.69	<0.82	<0.47	<0.5	<0.47	<0.51	<0.49	<0.71	<0.47	<0.75	<0.5	<0.74	<0.55	<0.85	<0.82	<0.7	<0.58	<0.75	<0.6	<0.72	<0.6
12378-PBDD	ng/kg	Various		<0.72	<0.79	<0.5	<0.47	<0.5	<0.47	<0.47	<0.75	<0.52	<0.78	<0.53	<0.8	<0.53	<0.83	<0.83	<0.77	<0.55	<0.8	<0.57	<0.77	<0.59
123478-HxBDD	ng/kg	Various		<0.65	<0.79	<0.55	<0.59	<0.55	<0.62	<0.5	<0.68	<0.54	<0.66	<0.55	<0.69	<0.57	<0.82	<0.82	<0.68	<0.6	<0.77	<0.59	<0.74	<0.57
123678-HxBDD	ng/kg	Various		<0.62	<0.84	<0.49	<0.48	<0.46	<0.54	<0.48	<0.63	<0.59	<0.65	<0.6	<0.7	<0.61	<0.82	<0.84	<0.7	0.63	<0.69	0.6	<0.69	<0.6
123789-HxBDD	ng/kg	Various		<0.7	<0.78	<0.51	<0.55	<0.52	<0.49	<0.47	<0.7	<0.48	<0.7	<0.53	<0.74	<0.55	<0.84	<0.84	<0.7	0.61	<0.73	0.67	<0.7	<0.54
1234678-HpBDD	ng/kg	Various		<0.73	<0.8	0.88	<0.58	<0.6	<0.66	0.58	1.81	<0.6	<0.71	<0.61	<0.73	0.63	0.97	1.78	<0.81	0.92	0.92	0.77	<0.8	<0.6
OBDD	ng/kg	Various		<0.8	<0.8	<0.8	<0.79	<0.8	<0.83	<0.8	<0.84	<0.81	<0.8	<0.8	<0.81	<0.78	<0.83	<0.85	<0.8	<0.8	<0.8	<0.78	<0.74	<0.79
2378-TBDF	ng/kg	Various		2.86	2.48	5.92	4.98	6.09	4.4	5.03	17.5	0.98	1.01	2.51	2.55	3.01	11.14	19.67	3.76	8.93	6.23	7.14	2.09	3.18
12378-PBDF	ng/kg	Various		2.4	1.99	3.29	3.66	3.81	3.31	2.87	8.34	1	0.87	0.98	1.36	1.25	7.91	14.53	1.77	4.56	4.18	4.12	1.36	2.29
23478-PBDF	ng/kg	Various		1.04	1.03	2.01	2.46	2.13	2.87	1.7	4.91	<0.5	1.19	0.78	1.7	1.1	4.23	8.19	1.19	2.33	2.18	2.09	0.81	1.58
123478-HxBDF	ng/kg	Various		0.66	0.82	1.48	2.03	1.79	2.66	1.44	6.12	<0.55	0.9	0.6	0.75	0.75	2.55	5.71	1.39	1.54	1.69	1.33	1.29	0.89
123678-HxBDF	ng/kg	Various		1.4	0.79	1.49	1.89	1.6	2.06	1.39	3	<0.49	1.46	0.52	1.99	0.68	2.71	4.4	3.01	1.29	1.44	1.4	0.8	0.65
234678-HxBDF	ng/kg	Various		1.25	<0.75	0.77	<0.45	<0.42	1.44	0.46	<0.74	<0.46	<0.78	<0.49	<0.8	0.47	1.12	2.57	0.74	0.91	0.9	1.06	<0.77	0.62
123789-HxBDF	ng/kg	Various		<0.67	<0.82	<0.5	<0.52	<0.5	<0.5	0.41	1.29	<0.44	<0.72	<0.45	<0.75	<0.48	<0.85	1.15	<0.76	0.56	<0.78	<0.57	<0.8	<0.57
1234678-HpBDF	ng/kg	Various		<0.69	<0.83	<0.41	<0.46	<0.42	<0.49	<0.4	2.27	<0.48	<0.68	<0.5	<0.69	<0.53	<0.82	<0.84	<0.67	0.5	<0.7	0.5	<0.75	<0.53
1234789-HpBDF	ng/kg	Various		<0.7	<0.74	<0.48	<0.56	<0.49	<0.6	<0.42	3.16	<0.55	<0.73	<0.56	<0.72	<0.6	1.33	3.09	<0.7	<0.58	<0.79	<0.6	<0.79	<0.66
OBDF	ng/kg	Various		<0.78	<0.85	<0.55	<0.6	<0.55	<0.58	<0.53	1.11	<0.65	<0.82	<0.68	<0.8	<0.7	<0.85	1.22	<0.77	<0.7	<0.82	<0.72	<0.81	<0.72
Organophosphorous flame retardants																								
Triphenylphosphate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tris(1-chloro-2-propyl)phosphate	mg/kg	Various	630[#1]	<0.15	<0.15	<0.5	<0.2	<0.2	<0.2	<0.15	<0.5	<0.15	<0.15	<0.15	<0.15	<0.5	<0.15	<0.5	<0.15	<0.15	<0.15	<0.1	<0.15	<0.15
Tris(2-ethylhexyl) phosphate	mg/kg	0.1	170[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Location				GTCS 1-40	GTCS 1-41					GTCS 1-42	GTCS 1-43		GTCS 1-44		GTCS 1-45		GTCS 1-46		GTCS 1-47		GTCS 1-48		GTCS 1-49	
Date				04/06/2019	04/06/2019					04/06/2019	05/06/2019		05/06/2019		05/06/2019		05/06/2019	05/06/2019	05/06/2019		05/06/2019		05/06/2019	
Sample Type				Normal	Normal	Field_D				Normal	Normal		Normal		Normal		Normal	Normal	Normal		Normal		Normal	
Sample Area				West London Bowling Club	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintins' Roundabout	St. Quintin's Roundabout	St. Quintin's Roundabout	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square
Field ID	Units	Method Detection Limit	Generic Screening Criteria (GSC)	GTCS 1-39 LAB FIELD DUPLICATE	GTCS 1-40A	GTCS 1-41 PRIMARY SAMPLE	GTCS 1-41 FIELD DUPLICATE	GTCS 1-41 LAB DUPLICATE	GTCS 1-41 LAB FIELD DUPLICATE	GTCS 1-42A	GTCS 1-43A		GTCS 1-44A		GTCS 1-45A		GTCS 1-46A	GTCS 1-46A	GTCS 1-47A		GTCS 1-48A		GTCS 1-49A	
Sample_Depth_Range				0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0.1-0.15	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05
Brominated flame retardents (PBDEs)																															
2,2',4-tribromodiphenyl ether (BDE-17)	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,4'-tribromodiphenyl ether (BDE-28)	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	mg/kg	0.1	6.3[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',3,4,4'-pentabromodiphenyl ether (BDE-8	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5-pentabromodiphenyl ether (BDE-9	mg/kg	0.1	6.3[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',6-pentabromodiphenyl ether (BDE-1	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',3,4,4',5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5,5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1	13[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2',4,4',5,6'-hexabromodiphenyl ether(BDE-	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2,3,4,4,5,6-heptabromodiphenyl ether (BDE	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Polybrominated biphenyls (PBBs)																															
2,2-dibromobiphenyl (PBB 4)	mg/kg	0.5	0.018[#1]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4,4-dibromobiphenyl (PBB 15)	mg/kg	0.5	0.018[#1]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2,5-tribromobiphenyl (PBB 18)	mg/kg	0.5	0.018[#1]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tetrabromobiphenyl (3,3,5,5-) (PBB 80)	mg/kg	0.5	0.018[#1]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromobiphenyl (PBB 153)	mg/kg	0.5	0.018[#1]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrabromobisphenol A																															
tetrabromobisphenol A	mg/kg	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexabromocyclododecane (HBCDD)																															
Hexabromocyclododecane (HBCDD)	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isocyanates																															
Isocyanic Acid	ug/kg	250		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Methyl Isocyanate	ug/kg	250	4,600[#1]	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Ethyl Isocyanate	ug/kg	250		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Propyl Isocyanate	ug/kg	250		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Phenyl Isocyanate	ug/kg	250		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Hexamethylene diisocyanate	ug/kg	250	3,100[#1]	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,4-Toluene diisocyanate	ug/kg	250	6,400[#1]	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
2,6-Toluene diisocyanate	ug/kg	250	5,300[#1]	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Isophorone Diisocyanate	ug/kg	500		<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
4,4-Methylene-bis(phenyl-isocyanate)	ug/kg	250	850,000,000[#1]	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
Cyanides																															
Cyanide (Free)	mg/kg	0.5	20[#5]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cyanide Total	mg/kg	0.5	78[#1]	0.7	0.9	1	0.8	0.8	0.8	<0.5	4.9	1.2	0.6	0.8	<0.5	1	1.9	10.5	1	1	3.6	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thiocyanate	mg/kg	0.6	20[#5]	1.5	2.2	2.5	2.8	2.6	2.5	1.6	<0.6	0.8	<0.6	<0.6	0.6	0.9	0.9	<0.6	0.7	1	<0.6	1	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Asbestos																															
General Description (Bulk Analysis)	None			soil-stones	soil-stones	soil.stones	soil.stones	soil.stones	soil.stones	soil.stones	soil-stones	Soil/Stones	soil.stones	soil.stones	soil.stones	soil.stones	Soil/Stone	Soil/Stone	Soil/Stones	soil.stones	Soil/Stones	soil-stones	soil.stones	soil-stones	soil.stones	soil-stones	soil.stones	soil-stones	soil.stones	soil-stones
Asbestos Fibres	None			Fibre Bundles	NAD	NAD	NAD	NAD	NAD	NAD	Fibre Bundles	Fibre Bundles	NAD	NAD	NAD	NAD	NAD	Fibre Bundles	NAD	Fibre Bundles	NAD	NAD	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles	Fibre Bundles
Asbestos ACM	None			NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
Asbestos Type	None			Chrysotile	NAD	NAD	NAD	NAD	NAD	NAD	Chrysotile	Amosite	NAD	NAD	NAD	NAD	NAD	Chrysotile	NAD	Amosite	NAD	NAD	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile
Asbestos Level Screen				less than 0.1%	NAD	NAD	NAD	NAD	NAD	NAD	termined from Scr	less than 0.1%	NAD	NAD	NAD	NAD	NAD	less than 0.1%	NAD	less than 0.1%	NAD	NAD	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%	less than 0.1%
Potentially Respirable Fibres per gram	f/g	0		0	-	-	-	-	-	-	99,523	66,027	-	-	-	-	-	0	-	0	-	-	67,482	0	0	0	0	0	0	0	0
SVF / MMMF																															
Synthetic/MMMF	None			Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Asbestos Quantification																															
Asbestos Gravimetric & PCOM Total	mass %	0.001		<0.001	-	-	-	-	-	-	0.001	<0.001	-	-	-	-	-	0.002	-	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos PCOM Quantification (Fibres)	mass %	0.001		<0.001	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total ACM Gravimetric Quantification (% Asb)	mass %	0.001		<0.001	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Detailed Gravimetric Quantification (% A	mass %	0.001		<0.001	-	-	-	-	-	-	0.001	<0.001	-	-	-	-	-	0.002	-	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos Quantification - Total - %	mass %	0.001		<0.001	-	-	-	-	-	-	0.001	<0.001	-	-	-	-	-	0.002	-	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Organic Carbon																															
TOC	percent	0.02		6.67	7.05	7.01	6.64	6.58	7.17	6.51	4.8	4.83	3.68	4.1	1.36	3.76	4.85	5.12	4.71	4.52	2.34	6.8	3.79	3.74	3.79	3.74	3.79	3.74	3.79	3.74	3.79
Inorganics																															
pH (Lab)	pH units	0.01		7.4	7.37	6.59	6.39	6.64	6.39	6.85	7.93	7.57	7.82	7.7	7.72	7.6	7.84	8.05	8.17	7.99	7.8	7.64	8.06	7.79	8.06	7.79	8.06	7.79	8.06	7.79	8.06
Other																															
Natural Moisture Content	percent	0.1		14.9	16.7	19.5	19.8	19	20.9	17.3	13.3	13.1	13.7	15.5	7.3	10.5	16.2	13.2	20.3	15.4	16.9	13.9	8.4	8.2	8.4	8.2	8.4	8.2	8.4	8.2	8.4
ESdat Calculated																															
Cresols Total	ug/kg	20	180[#3]	<20	<20	<20	<20	<20	<20	<20	76	<20	<20	<20	<20	<20	<20	<20	<20	313	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo(a)pyrene (surrogate marker for PAH m	mg/kg	0.01	5.0[#6]	1.86	1.12	5.11	5.04	5.34	4.88	3.8	8.61	2.75	1.4	1.25	3.13	5.55	3.27	6.93	2.3	2.16	1.78	1.46	2.24	1.43	2.24	1.43	2.24	1.43	2.24	1.43	2.24
Xylene Total	ug/kg	8	130,000[#2]	<8	<8	<8	<8	<8	<8	<8	18	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Trichlorobenzene (total)	ug/kg	14	2200[#5]	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14
AECOM Calculated																															
Sum of PCDD/F +PCB12	ng/kg	Various	8700[#4]	1843	2316	2547	2608	2433	2316	2740	20610	10165	1596	2173	2527	2908	8399	12518	3784	4480	39446	69988	4547	18171	4547	18171	4547	18171	4547	18171	4547
PCDD/F+PBDD/F+PCB12 Hazard Index	-	-	1		0.11	0.15				0.13	0.57	0.24	0.05	0.06	0.1	0.09	0.25	0.57	0.11	0.12	0.25	0.34	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
WHO2005 TEQ (PCDD/F + PBDD/F + PCB)	ng/kg	Various		11.621	11.071	15.053	18.016	16.032	17.073	13.046	56.596	23.699	5.002	5.469	9.939	9.166	24.28	57.252	10.894	12.474	23.039	29.304	11.034	10.462	11.034	10.462	11.034	10.462	11.034	10.462	11.034

Comments
#1 USEPA RSL (May 2019)
#2 LQM/CIEH S4ULs 2015
#3 EIC/AGS/CL:AIRE 2010
#4 EA SGV 2009
#5 Dutch IV 2013
#6 Defra C4SL 2014
#7 AECOM (modified EIC GAC to include plant uptake route)
GSC based on residential (with private gardens) land use scenario
2.5% soil organic matter content selected for GSC #2 and #3
(blank): No assessment criteria available
- : Not analysed
Field_D: Field Duplicate
NAD: No Asbestos Detected

	Units	Method Detection Limit	Generic Screening Criteria (GSC)		Location	GTCS 1-50		GTCS 1-51		GTCS 1-52	GTCS 1-53	GTCS 1-54	GTCS 1-55	GTCS 1-56	GTCS 1-57	GTCS 1-58	GTCS 1-59	GTCS101		GTCS102	GTCS103	GTCS104
					Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	10/04/2019		10/04/2019	10/04/2019	10/04/2019
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field_D	Normal	Normal	Normal
					Sample Area	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon
					Field ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS101	DUP01	GTCS102	GTCS103	GTCS104
					Sample_Depth_Range	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Metals																						
Aluminium	mg/kg	50	77,000[#1]			13,020	9,700 - 10,759	11,880	8,884 - 10,088	9,573 - 12,353	12,500	11,350	9,007 - 11,780	11,210	12,190	10,730	6,998 - 15,028	-	-	-	-	-
Arsenic	mg/kg	0.5	37[#2]			13.7	14.1 - 16.3	15.2	17.6	16.1 - 18	16.1	12.4	14.3 - 16.8	18.9	17.1	23.1	14.6 - 16.5	5.2	5.5	9	6.4	6.6
Barium	mg/kg	1	460[#7]			183	157 - 185	177	149 - 175	177 - 191	194	158	134 - 179	172	170	96	102 - 173	62	63	93	89	83
Beryllium	mg/kg	0.5	1.7[#2]			1.1	0.9	1.1	1.1 - 1.2	1 - 1.1	1.2	1	0.9 - 1.1	1.3	1.1	1	0.7 - 1.8	0.7	0.7	1.3	0.7	0.7
Boron	mg/kg	0.1	290[#2]			3	1.9 - 2.1	1.9	1.3 - 1.6	1.8 - 2	2.1	1.7	1.7 - 1.8	1.9	2.5	1.3	4.4 - 6.9	-	-	-	-	-
Cadmium	mg/kg	0.1	22[#2]			3.6	4 - 5.3	0.6	0.5	0.5 - 0.7	0.7	0.7	0.6 - 1	0.8	1.4	0.7	0.6 - 0.7	<0.1	<0.1	<0.1	<0.1	0.1
Chromium (Trivalent)	mg/kg	0.5	910[#2]			153.1	43.2 - 47.2	145.3	26.6 - 26.8	27.6 - 30.2	202.6	268.8	26.2 - 31.3	132.2	129	121.6	22.2 - 33.1	-	-	-	-	-
Chromium (hexavalent)	mg/kg	0.3	21[#6]			<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	-	-	-
Chromium (III+VI)	mg/kg	0.5	Use either CrIII or CrVI[#2]			153.1	43.2 - 47.2	145.3	26.6 - 26.8	27.6 - 30.2	202.6	268.8	26.2 - 31.3	132.2	129	121.6	22.2 - 33.1	49	52	58.4	27.3	52.1
Copper	mg/kg	1	2,400[#2]			81	80 - 85	59	46 - 48	43 - 52	56	50	46 - 62	54	57	28	41 - 48	14	15	30	101	20
Lead	mg/kg	5	200[#6]			222	193 - 195	331	298 - 334	319 - 422	330	287	476 - 484	274	263	102	128	17	18	72	52	57
Mercury	mg/kg	0.1	40[#2]			1.5	0.4 - 1.5	0.8	0.1 - 0.7	0.3 - 0.7	0.7	0.6	0.4 - 0.8	0.6	0.8	0.1	<0.1 - 0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	0.7	130[#2]			28.1	23.9 - 24.7	25.9	20.8 - 22.2	21.1 - 24.7	28.5	28.9	19.3 - 23.7	29.5	25.1	27.9	17.5 - 23.4	12.3	11.1	27.4	12.4	13
Selenium	mg/kg	1	250[#2]			1	<1 - 1	1	<1	<1 - 1	<1	1	<1 - 1	1	1	2	1 - 2	<1	<1	1	<1	<1
Vanadium	mg/kg	1	410[#2]			53	43	55	46 - 49	47 - 52	58	54	43 - 52	56	53	49	36 - 57	30	30	67	32	32
Zinc	mg/kg	5	3,700[#2]			332	285 - 329	221	191 - 204	182 - 242	223	190	186 - 244	207	227	152	189 - 296	63	63	90	126	82
VOCs																						
1,1,1,2-tetrachloroethane	ug/kg	5	2,800[#2]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-trichloroethane	ug/kg	5	18,000[#2]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-tetrachloroethane	ug/kg	3	3,400[#2]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1,2-trichloroethane	ug/kg	4	1,200[#3]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,1-dichloroethane	ug/kg	6	1,200[#3]			<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloroethene	ug/kg	6	3,900[#3]			<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,1-dichloropropene	ug/kg	3				<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2,3-trichlorobenzene	ug/kg	7	3,600[#2]			<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2,3-trichloropropane	ug/kg	4	5.1[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2,4-trimethylbenzene	ug/kg	6	850[#3]			<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
1,2-dibromo-3-chloropropane	ug/kg	4	5.3[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,2-dibromoethane	ug/kg	3	36[#1]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,2-dichloroethane	ug/kg	5	11[#2]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dichloropropane	ug/kg	4	42[#3]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3,5-trimethylbenzene	ug/kg	3	270,000[#1]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,3-dichloropropane	ug/kg	4	1,600,000[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2,2-dichloropropane	ug/kg	4				<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
2-chlorotoluene	ug/kg	3	1,600,000[#1]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
4-chlorotoluene	ug/kg	3	1,600,000[#1]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Benzene	ug/kg	5	870[#6]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Bromobenzene	ug/kg	2	2,000[#3]			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Bromochloromethane	ug/kg	4	150,000[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromodichloromethane	ug/kg	4	290[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoform	ug/kg	4	5,900[#3]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromomethane	ug/kg	1	6,800[#1]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-Methyl butanal	ug/kg	100				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	ug/kg	4	56[#2]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorobenzene	ug/kg	4	1,000[#2]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Chlorodibromomethane	ug/kg	5	8,300[#1]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/kg	6	11,000[#3]			<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
Chloroform	ug/kg	5	1,700[#2]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/kg	3	9.8[#3]			11	<3	4	<3	4	4	3	3	4	3	5	9	6	5	4	4	5
cis-1,2-dichloroethene	ug/kg	7	190[#3]			<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
cis-1,3-dichloropropene	ug/kg	4				<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromomethane	ug/kg	4	24,000[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dichlorodifluoromethane	ug/kg	2	87,000[#1]			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dichloromethane	ug/kg	30	980[#3]			<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	41	<30	<30	<30	<30	<30
Ethylbenzene	ug/kg	3	110,000[#2]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Eucalyptol	ug/kg	100				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene	ug/kg	3	27,000[#3]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Methyl Methacrylate	ug/kg	100	4,400,000[#1]			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	ug/kg	6	84,000[#1]			<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6
n-butylbenzene	ug/kg	4	3,900,000[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
n-propylbenzene	ug/kg	4	82,000[#3]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
sec-butylbenzene	ug/kg	4	7,800,000[#1]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/kg	3	19,000[#3]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
tert-butylbenzene	ug/kg	5	7,800,000[#1]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/kg	3	390[#2]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Toluene	ug/kg	3	290,000[#2]			<3	<3	6	<3	4	5	5	3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,2-dichloroethene	ug/kg	3	340[#3]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
trans-1,3-dichloropropene	ug/kg	3				<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Trichloroethene	ug/kg	5	34[#2]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/kg	3	23,000,000[#1]			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Undecane	ug/kg	100				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (m & p)	ug/kg	4				<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Xylene (o)	ug/kg	4	140,000[#2]			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Vinyl chloride	ug/kg	2	0.87[#2]			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
VOC TICs	None					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trihalomethanes	ug/kg					<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18	<18

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-50		GTCS 1-51		GTCS 1-52	GTCS 1-53	GTCS 1-54	GTCS 1-55	GTCS 1-56	GTCS 1-57	GTCS 1-58	GTCS 1-59	GTCS101		GTCS102	GTCS103	GTCS104
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	10/04/2019		10/04/2019	10/04/2019	10/04/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field_D	Normal	Normal	Normal
				Sample Area	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon
				Field ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS101	DUP01	GTCS102	GTCS103	GTCS104
				Sample_Depth_Range	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
SVOCs																					
Dibenzo[a,e]pyrene	ug/kg	100	42[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	ug/kg	10	240,000[#1]		31	37	54	239	52	56	58	69	57	48	18	28	<10	<10	<10	<10	<10
4-bromophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chlorophenyl phenyl ether	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Azobenzene	ug/kg	10	5,600[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethoxy) methane	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethyl)ether	ug/kg	10	230[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbazole	ug/kg	10			112	51	68	3,554	73	182	166	133	109	93	49	97	<10	15	<10	<10	17
Dibenzofuran	ug/kg	10	73,000[#1]		53	26	33	1,027	34	78	66	63	41	49	23	32	<10	<10	<10	<10	<10
Hexachlorobutadiene	ug/kg	4	700[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorocyclopentadiene	ug/kg	10	1,800[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	ug/kg	10	480[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Anilines																					
2-nitroaniline	ug/kg	10	630,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
3-nitroaniline	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloroaniline	ug/kg	10	2,700[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-nitroaniline	ug/kg	10	27,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Amino Aliphatics																					
N-nitrosodi-n-propylamine	ug/kg	10	78[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Explosives																					
2,4-Dinitrotoluene	ug/kg	10	3,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,6-dinitrotoluene	ug/kg	10	1,700[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrobenzene	ug/kg	10	5,100[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phenolics																					
2,4-dimethylphenol	ug/kg	10	43,000[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene	ug/kg	10	9,200[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-chloro-3-methylphenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-methylphenol	ug/kg	10	Use Cresols Total[#3]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-nitrophenol	ug/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Phenol	ug/kg	10	200,000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Phenols																					
2,4,5-trichlorophenol	ug/kg	10	6,300,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4,6-trichlorophenol	ug/kg	10	49,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2,4-dichlorophenol	ug/kg	10	190,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chlorophenol	ug/kg	10	390,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Pentachlorophenol	ug/kg	10	520[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Halogenated Benzenes																					
1,2,4-trichlorobenzene	ug/kg	7	6,400[#2]		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
1,2-dichlorobenzene	ug/kg	4	55,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,3-dichlorobenzene	ug/kg	4	1,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
1,4-dichlorobenzene	ug/kg	4	150,000[#2]		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hexachlorobenzene	ug/kg	10	3,300[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC - Phthalates																					
Bis(2-ethylhexyl) phthalate	ug/kg	100	610,000[#3]		370	350	402	282	428	395	2,080	322	313	945	473	844	<100	<100	163	135	143
Butyl benzyl phthalate	ug/kg	100	3,300,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Diethylphthalate	ug/kg	100	260,000[#2]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Dimethyl phthalate	ug/kg	100	16,400[#5]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Di-n-butyl phthalate	ug/kg	100	31,000[#2]		532	688	<100	<100	<100	<100	<100	<100	<100	195	<100	<100	<100	<100	<100	<100	<100
Di-n-octyl phthalate	ug/kg	100	2,800,000[#3]		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
SVOC - Solvents																					
Isophorone	ug/kg	10	570,000[#1]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC TIC																					
SVOC TICs	None				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Phellandrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.alpha.-Pinene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.beta.-Guaiene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[1,1-Biphenyl]-4-carboxaldehyde	ug/kg	100			-	-	-	2,731	-	-	-	-	-	-	-	-	-	-	-	-	-
1(2Aminobenzylidene)1234-tetrahydroacridine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,4-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	156	-	-	-	-	-	-
1,1-Biphenyl, 2,3,3,5-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	449	-	-	-	-	-	-
1,1-Biphenyl, 2,3,4,6-tetrachloro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	177	-	-	-	-	-	-
1,2,4,8-Tetramethylbicyclo[6.3.0]undeca-2,4-d	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,9,10-Dibenzopyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,5,5-Trimethyl-6-methylene-cyclohexene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,6-Dimethylphenazine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-5,7,9(10),11,13-pentaene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10,18-Bisnorabieta-8,11,13-triene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10s,11s-Himachala-3(12),4-diene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]carbazole	ug/kg	100			-	-	-	4,042	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]fluoren-11-one	ug/kg	100			-	-	-	8,528	-	539	259	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]fluoren-11-one, 10-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo[a]fluorene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11H-Benzo(b)fluorene	ug/kg	100			-	-	-	-	-	534	-	-	-	-	-	403	-	-	-	-	-
11H-Indeno(1,2-b)quinoline	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Docosenamide, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13-Isopropylpodocarpen-12-ol-20-al	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H-Cyclopropa[l]phenanthrene,1a,9b-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1H-Inden-1-one, 2,3-dihydro-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Methyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Naphthalenecarboxylic acid, 2-benzoyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(2H-Benzotriazol-2-yl)-5-methylphenol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-(Acetoxymethyl)-3-(methoxycarbonyl)biphen	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-50		GTCS 1-51		GTCS 1-52	GTCS 1-53	GTCS 1-54	GTCS 1-55	GTCS 1-56	GTCS 1-57	GTCS 1-58	GTCS 1-59	GTCS101		GTCS102	GTCS103	GTCS104
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	10/04/2019		10/04/2019	10/04/2019	10/04/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field_D	Normal	Normal	Normal
				Sample Area	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon
				Field ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS101	DUP01	GTCS102	GTCS103	GTCS104
				Sample_Depth_Range	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
2,3,3,,5,6-Pentachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	475	-	-	-	-	-	-
2,3,3,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	259	-	-	-	-	-	-
2,3,4,6-Tetrachloro-1,1-biphenyl	ug/kg	100			-	-	-	-	-	-	-	-	-	-	262	-	-	-	-	-	-
2,4,6-Cycloheptatrien-1-one, 2-phenyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-Dimethyldibenzothiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,9-Dimethyl-2,3,4,5,6,7hexahydro-1H-2-benz	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Bromo-4,5-dimethoxycinnamic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2Chloro2methyl1oxa2sila-1,2-dihydronaphtha	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylchrysene	ug/kg	100			-	-	-	-	-	-	512	-	-	362	-	-	-	-	-	-	-
2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3-Dimethylbiphenyl	ug/kg	100			-	-	-	857	-	-	-	-	-	-	-	-	-	-	-	-	-
3,4:8,9-Dibenzopyrene	ug/kg	100			-	-	-	-	8,787	-	-	-	-	-	-	-	-	-	-	-	-
3,4-Dichlorobenzonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,5-Dimethoxy-4-hydroxycinnamaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Bromo-5-ethoxy-4-hydroxybenzaldehyde	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4,4-Bis(tetrahydrothiopyran)	ug/kg	100			-	-	-	-	-	804	511	-	-	-	-	-	-	-	-	-	-
4H-Cyclopenta[def]phenanthrene	ug/kg	100			-	-	-	18,172	-	-	-	433	-	-	-	-	-	-	-	-	-
6H-Benz[de]anthracen-6-one	ug/kg	100			-	-	-	1,490	-	-	-	-	-	-	-	-	-	-	-	-	-
7H-Benz(de)anthracen-7-one	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8,9-Dihydro-7H-cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Anthracenedione	ug/kg	100	14,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Anthracenedione, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Bis(bromomethyl)anthracene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9,10-Dimethylanthracene	ug/kg	100			-	-	-	7,707	-	-	-	-	-	-	-	-	-	-	-	-	-
9-Anthracenecarbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Cyclopenta[a]pyrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-ol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluoren-9-one	ug/kg	100			-	-	-	3,761	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 1-methyl-	ug/kg	100			-	-	-	1,940	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 2-methyl-	ug/kg	100			-	-	-	1,333	-	-	-	-	-	-	-	-	-	-	-	-	-
9H-Fluorene, 9-methyl-	ug/kg	100			-	-	-	2,473	-	-	-	-	-	-	-	-	-	-	-	-	-
Abietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alloaromadendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthra(1,2-b)thiophene	ug/kg	100			-	-	-	3,334	-	-	531	-	-	-	-	-	-	-	-	-	-
Anthra(2,3-b)thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	576	-	-	-	-	-	169	-	-	-	-	-
Anthracene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene, 2-methyl-	ug/kg	100			-	-	-	7,713	-	-	-	-	-	233	-	-	-	-	-	-	-
Aromandendrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(A)anthracene-7,12-dione	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene-7-carbonitrile	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 12-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benz[a]anthracene, 7-methyl-	ug/kg	100			-	-	-	9,215	-	762	-	-	-	-	-	-	-	-	-	-	-
Benz[j]aceanthrylene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzaldehyde, 4-hydroxy-3,5-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenamine, 2,4,6-tribromo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene, (4,5,5-trimethyl-1,3-cyclopentadien-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Sulfonylbis (4-chlorobenzene)	ug/kg	100	51,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzenesulfonamide, 4-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]furan	ug/kg	100			-	-	-	4,079	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(c)carbazole	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[1,2-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,1-d]thiophene	ug/kg	100			-	-	-	7,544	-	727	-	443	296	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,3-d]furan	ug/kg	100			-	-	-	6,072	-	469	258	-	-	-	-	-	-	-	-	-	-
Benzo[b]naphtho[2,3-d]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	289	-	-	-	-	-	-	-
Benzo[b]triphenylene	ug/kg	100			-	-	-	9,355	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]cinnoline	ug/kg	100			-	-	-	5,569	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[c]phenanthrene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(e)pyrene	ug/kg	100			1,393	1,113	23,694	24,414	1,368	2,719	1,974	1,822	1,542	1,655	500	1,048	-	-	-	-	-
Benzo[ghi]fluoranthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[h]quinoline, 2,4-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo[kl]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzoic acid, hexyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Biphenyl	ug/kg	100	160,000[#2]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylated Hydroxytoluene	ug/kg	100	150,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camphor (TIC)	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 1-methyl-	ug/kg	100			-	-	-	-	-	-	-	410	403	-	-	-	-	-	-	-	-
Chrysene, 5-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene, 6-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclopenta(cd)pyrene, 3,4-dihydro-	ug/kg	100			-	-	-	8,621	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclopenta(def)phenanthrenone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dehydroabietic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Homoandrostane, (5.alpha.,13.alpha.)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,e)aceanthrylene	ug/kg	100			-	-	-	-	8,583	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a,i)pyrene	ug/kg	100			-	-	-	-	3,176	-	125	-	-	-	-	-	-	-	-	-	-
Dibenzo[def,mno]chrysene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran, 4-methyl-	ug/kg	100			-	-	-	2,768	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene	ug/kg	100	780,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzothiophene, 4,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dicyclohexyl phthalate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenyl sulfide	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
di-p-Tolylacetylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D-Limonene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eicosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferruginol	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene, 2-methyl-	ug/kg	100			509	-	4,271	-	-	1,173	-	576	585	647	-	-	-	-	-	-	-
Fluorene, 2,4a-dihydro-	ug/kg	100			-	-	-	2,428	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane, 3-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexathiane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-50		GTCS 1-51		GTCS 1-52	GTCS 1-53	GTCS 1-54	GTCS 1-55	GTCS 1-56	GTCS 1-57	GTCS 1-58	GTCS 1-59	GTCS101		GTCS102	GTCS103	GTCS104
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	10/04/2019		10/04/2019	10/04/2019	10/04/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field_D	Normal	Normal	Normal
				Sample Area	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon
				Field ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS101	DUP01	GTCS102	GTCS103	GTCS104
				Sample_Depth_Range	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Indene	ug/kg	100			-	-	-	1,445	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno[1,2,3-fg]naphthacene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indole, 5-methyl-2-(4-pyridyl)-	ug/kg	100			-	-	-	-	-	-	226	-	-	-	-	-	-	-	-	-	-
Isocil	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
isoledene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Longifolene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl dehydroabietate	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morpholine, 4-(1-cyclohepten-1-yl)-	ug/kg	100			-	-	-	6,083	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,5-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,4,6-trimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6,7-trimethyl-	ug/kg	100			-	-	-	2,037	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,6-dimethyl-	ug/kg	100			-	-	-	1,297	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 1,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3,6-trimethyl-	ug/kg	100			-	-	-	1,231	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,3-dimethyl-	ug/kg	100			-	-	-	1,506	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2,7-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-ethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene, 2-phenyl-	ug/kg	100			-	-	-	7,408	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[1,2-b]thiophene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1,8,7-klmn]xanthene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphtho[2,1-b]thiophene	ug/kg	100			-	-	-	4,450	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Decanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neocuproine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Pentafluorosulfanyl-S,S-diphenoxysufilimine	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecane, 1-iodo-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic Acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic acid, butyl ester	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-Cymene	ug/kg	4			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Perylene	ug/kg	100			-	-	-	12,492	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 1-methyl-	ug/kg	100			-	-	-	15,948	-	521	-	-	-	-	-	120	-	-	-	-	-
Phenanthrene, 2,5-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 2-methyl-	ug/kg	100			-	135	-	7,956	-	434	384	278	230	-	-	-	-	-	-	-	-
Phenanthrene, 3,6-dimethyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene, 4-methyl-	ug/kg	100			273	-	-	-	-	-	233	212	171	173	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2,6-dimethoxy-4-(2-propenyl)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol, 2-methoxy-4-(1-propenyl)-, (Z)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1,3-dimethyl-	ug/kg	100			-	-	-	1,499	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene, 1-methyl-	ug/kg	100			201	-	-	19,565	-	613	656	386	-	-	-	-	-	-	-	-	-
Pyrene, 2-methyl-	ug/kg	100			-	-	-	-	-	353	-	-	-	-	-	-	-	-	-	-	-
Quinoxaline, 6-(3-nitrobenzylidenamino)-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retene	ug/kg	100			312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rubicene-	ug/kg	100			-	-	-	-	-	722	-	-	-	-	-	-	-	-	-	-	-
Tetrachloro-o-benzoquinone	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetracosane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetradecanoic acid	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Bis(methyldichlorosilyl)ethylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorovinylsilane	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Triphenylene, 2-methyl-	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-01	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-02	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-03	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-04	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-05	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-06	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-07	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-08	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-09	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-10	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-11	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-12	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-13	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-14	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-15	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-16	ug/kg	100			-	-	-	-	-	1,946	-	-	819	-	-	-	-	-	-	-	-
GT-SVOC-TIC-17	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GT-SVOC-TIC-18	ug/kg	100			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)naphtho(1,2-d)furan	ug/kg	100			-	-	-	4,079	-	-	-	-	-	-	-	-	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-50		GTCS 1-51		GTCS 1-52	GTCS 1-53	GTCS 1-54	GTCS 1-55	GTCS 1-56	GTCS 1-57	GTCS 1-58	GTCS 1-59	GTCS101		GTCS102	GTCS103	GTCS104
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	10/04/2019		10/04/2019	10/04/2019	10/04/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field_D	Normal	Normal	Normal
				Sample Area	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon
				Field ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS101	DUP01	GTCS102	GTCS103	GTCS104
				Sample_Depth_Range	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
PAH																					
Acenaphthene	mg/kg	0.01	510[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	mg/kg	0.01	420[#2]		0.15	0.14	0.12	0.15	0.14	0.5	0.19	0.23	0.19	0.24	0.1	0.09	<0.01	<0.03 - 0.015	0.039 - 0.08	0.04 - 0.051	0.031 - 0.05
Anthracene	mg/kg	0.01	5,400[#2]		0.15	0.2	0.17	0.26	0.18	0.71	0.2	0.28	0.33	0.28	0.1	0.09	<0.04 - 0.016	<0.04 - 0.025	0.048 - 0.08	<0.04 - 0.059	0.046 - 0.08
Benz(a)anthracene	mg/kg	0.01	11[#2]		1.15	1.13	1.02	1.44	1.09	4.14	1.38	1.76	1.61	1.72	0.74	0.71	<0.06 - 0.077	<0.06 - 0.102	0.266 - 0.28	0.17 - 0.233	0.217 - 0.22
Benzo(a) pyrene	mg/kg	0.01	2.7[#2]		1.25	1.3	1.29	1.66	1.29	4.54	1.53	2.08	1.8	2.17	0.78	0.78	0.037 - 0.06	<0.04 - 0.059	0.25 - 0.253	0.16 - 0.207	0.22 - 0.225
Benzo(b)fluoranthene	mg/kg	0.01	3.3[#2]		1.76	1.81	1.71	2.23	1.78	6.03	2.09	2.97	2.47	2.9	1.09	1.09	0.052 - 0.08	0.06 - 0.077	0.303 - 0.32	0.242 - 0.27	0.253 - 0.35
Benzo(b)&(k)fluoranthene	mg/kg	0.01			2.45	2.51	2.38	3.1	2.47	8.37	2.9	4.13	3.43	4.03	1.51	1.52	0.072 - 0.11	0.09 - 0.107	0.421 - 0.45	0.336 - 0.37	0.351 - 0.48
Benzo(g,h,i)perylene	mg/kg	0.01	340[#2]		0.99	0.98	0.95	1.15	0.92	2.74	1.19	1.51	1.26	1.55	0.54	0.58	0.026 - 0.05	<0.04 - 0.04	0.162 - 0.23	0.13 - 0.16	0.142 - 0.19
Benzo(k)fluoranthene	mg/kg	0.01	93[#2]		0.69	0.7	0.67	0.87	0.69	2.34	0.81	1.16	0.96	1.13	0.42	0.43	0.02 - 0.03	0.03	0.118 - 0.13	0.094 - 0.1	0.098 - 0.13
Chrysene	mg/kg	0.01	22[#2]		1.11	1.23	1.05	1.58	1.15	3.9	1.36	1.86	1.59	1.82	0.74	0.68	0.055 - 0.06	0.04 - 0.077	0.229 - 0.24	0.19 - 0.219	0.191 - 0.22
Coronene	mg/kg	0.04			0.26	0.24	0.22	0.25	0.21	0.64	0.27	0.34	0.27	0.34	0.12	0.13	<0.04	<0.04	0.06	<0.04	<0.04
Dibenz(a,h)anthracene	mg/kg	0.01	0.28[#2]		0.21	0.15	0.16	0.27	0.15	0.74	0.27	0.38	0.22	0.37	0.14	0.1	<0.01	<0.01	<0.04 - 0.049	<0.04 - 0.038	0.04 - 0.06
Fluoranthene	mg/kg	0.01	560[#2]		1.78	2.07	2.11	2.81	2.09	8.48	2.49	3.34	3.38	3.23	1.35	1.1	0.086 - 0.1	0.06 - 0.164	0.33 - 0.399	0.27 - 0.287	0.32 - 0.44
Fluorene	mg/kg	0.01	400[#2]		<0.04	0.04	<0.04	0.05	<0.04	0.09	<0.04	<0.04	0.05	0.04	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-c,d)pyrene	mg/kg	0.01	36[#2]		0.89	0.91	0.89	1.03	0.88	2.77	1.1	1.47	1.18	1.52	0.52	0.56	<0.04 - 0.024	<0.04 - 0.037	0.155 - 0.21	0.108 - 0.15	0.12 - 0.19
Naphthalene	mg/kg	0.01	5.6[#2]		<0.027 - 0.06	<0.027 - 0.06	<0.027 - 0.09	<0.027 - 0.1	<0.027 - 0.08	<0.027 - 0.15	<0.027 - 0.13	<0.027 - 0.09	<0.027 - 0.09	<0.027 - 0.09	<0.027	<0.027	<0.01	<0.01	<0.01	<0.027 - 0.016	<0.01
Phenanthrene	mg/kg	0.01	220[#2]		0.49	0.73	0.77	0.98	0.67	2.37	0.74	1.03	1.15	1.01	0.26	0.3	0.029 - 0.05	<0.03 - 0.051	0.104 - 0.11	0.1 - 0.114	0.11 - 0.19
Pyrene	mg/kg	0.01	1,200[#2]		1.53	1.71	1.85	2.44	1.84	7.57	2.21	2.93	2.81	2.83	1.19	0.99	0.076 - 0.09	0.06 - 0.138	0.33 - 0.349	0.25 - 0.271	0.275 - 0.37
PAH 16 Total	mg/kg	0.6			12.2	13.2	12.9	17	13	47.1	15.7	21.1	19.1	20.9	8	7.5	-	-	-	-	-
PAH 17 Total	mg/kg	0.64			12.47	13.4	13.07	17.27	13.16	47.71	15.96	21.43	19.36	21.24	8.09	7.63	<0.64	<0.64	2.65	1.86	2.71
PCB (Dutch 7) congeners																					
PCB 28	ug/kg	5			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	43	9	-	-	-	-	-
PCB 52	ug/kg	5			<5	<5	<5	<5	14	<5	<5	<5	<5	<5	100	29	-	-	-	-	-
PCB 101	ug/kg	5			<5	7	<5	<5	16	<5	<5	<5	<5	<5	86	25	-	-	-	-	-
PCB 118	ug/kg	5	120[#1]		<5 - 3.92	2.53 - 6	7 - 8.2	<5 - 5.59	24 - 33.1	<5 - 2.71	<5 - 1.12	<5 - 0.863	<5 - 2.26	<5 - 5.75	115 - 154	31 - 52.4	<5	<5	<5	<5	<5
PCB 138	ug/kg	5			7	12	<5	<5	9	<5	<5	<5	<5	<5	30	9	-	-	-	-	-
PCB 153	ug/kg	5			<5	9	<5	<5	7	<5	<5	<5	<5	<5	25	8	-	-	-	-	-
PCB 180	ug/kg	5			<5	7	<5	<5	<5	<5	<5	<5	<5	<5	8	<5	-	-	-	-	-
Total PCB 7 Congeners	ug/kg	35	200[#5]		<35	41	<35	<35	70	<35	<35	<35	<35	<35	407	111	-	-	-	-	-
PCB (WHO12) 12 congeners																					
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	ug/kg	Various	38[#1]		0.174	0.282	0.977	0.437	3.29	0.227	0.069	0.0557	0.222	0.594	0.595	0.579	<5	<5	<5	<5	<5
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	ug/kg	Various	12[#1]		0.00534	0.00854	0.0446	0.0227	0.14	0.0086	0.00323	0.00221	0.0102	0.0254	0.0253	0.0242	<5	<5	<5	<5	<5
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	ug/kg	Various	120[#1]		2	1.39	5.17	3.61	21.5	1.63	0.536	0.405	1.35	3.42	103	34.9	<5	<5	<5	<5	<5
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	ug/kg	Various	120[#1]		0.0301	0.0358	0.14	0.111	0.787	0.047	0.0151	0.0105	0.045	0.11	4.53	1.21	<5	<5	<5	<5	<5
Pentachlorobiphenyl, 2,3',4,4',5- (PCB-118)	ug/kg	Various	120[#1]		3.92	2.53	8.2	5.59	33.1	2.71	1.12	0.863	2.26	5.75	154	52.4	<5	<5	<5	<5	<5
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	ug/kg	Various	120[#1]		0.162	0.12	0.311	0.211	1.04	0.0983	0.0304	0.0227	0.0897	0.221	6	1.65	<5	<5	<5	<5	<5
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	ug/kg	Various	0.036[#1]		0.017	0.023	0.0462	0.0208	0.12	0.0154	0.00859	0.00329	0.0114	0.0352	0.0313	0.0276	<5	<5	<5	<5	<5
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	ug/kg	Various	120[#1]		0.803	0.595	0.496	0.329	1.49	0.233	0.21	0.161	0.239	0.59	6.27	2.27	<5	<5	<5	<5	<5
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	ug/kg	Various	120[#1]		0.255	0.233	0.137	0.101	0.398	0.0804	0.0608	0.051	0.0727	0.183	1.62	0.589	<5	<5	<5	<5	<5
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	ug/kg	Various	120[#1]		0.388	0.339	0.195	0.136	0.552	0.105	0.0897	0.073	0.101	0.244	2.07	0.757	<5	<5	<5	<5	<5
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	ug/kg	Various	0.12[#1]		<0.00665	0.000701	0.00288	<0.000298	0.00102	<0.000352	0.0013	0.0008	0.000306	0.000518	0.00174	0.000736	<5	<5	<5	<5	<5
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189	ug/kg	Various	130[#1]		0.0725	0.0718	0.0263	0.0207	0.0515	0.0189	0.0209	0.0191	0.0202	0.0431	0.173	0.0718	<5	<5	<5	<5	<5
Chlorinated Dioxins and Furans																					
2378-TCDF	ng/kg	Various			<0.806	4.1	8.64	<1.34	<2.86	<1.395	4.75	3.39	5.45	<0.591	5.07	5.88	1.46	1	1.01	1	5.88
12378-PeCDD	ng/kg	Various			<0.894	2.02	0.929	<0.599	<0.639	<0.719	1.41	1.09	0.71	<0.548	0.63	<0.581	1	1	1	1	1
123478-HxCDD	ng/kg	Various			<1.972	3.22	1.25	<0.887	<0.888	<0.81	0.717	1.28	0.976	1.68	0.537	<0.712	1	1	1	1	0.865
123678-HxCDD	ng/kg	Various			13.8	13.9	6.06	<0.9	<0.932	2.04	2.96	3.85	2.55	3.16	4.99	3.95	1	1	0.86	1	1.94
123789-HxCDD	ng/kg	Various			5.43	7.15	3.85	<0.927	<0.96	<0.849	2.8	<0.577	1.95	1.96	2.57	1.25	1	1	1	1	0.877
1234678-HpCDD	ng/kg	Various			403	542	88.9	61.4	72.5	79.1	80.1	73.7	74.7	126	116	118	1	19.1	27.2	52.3	55.1
OCDD	ng/kg	Various			3,390	4,500	562	439	568	480	655	557	612	1,140	1,110	1,060	130	119	214	336	350
OCDF	ng/kg	Various			134	214	44.6	31.2	29.5	26.6	39.1	36.8	40.3	63.8	58	58.1	2.62	2	10.3	18.8	12.6
2378-TCDD	ng/kg	Various			<0.363	<0.538	<0.729	<0.407	<0.459	<0.302	<0.316	<0.36	<0.3	<0.335	<0.282	<0.31	1	1	1	1	1
12378-PeCDF	ng/kg	Various			<0.574	2.78	7.1	4.81	2.34	4.79	4.25	3.94	1.66	5.52	3.89	5.49	0.69	1	1	1	2.27
23478-PeCDF	ng/kg	Various			<0.641	4.08	10.4	<0.759	<0.796	<0.689	6.05	<0.451	4.84	4.68	3.56	5.7	1	1	1	0.657	2.52
123478-HxCDF	ng/kg	Various			3.26	7.3	14.1	3.85	<0.72	4.14	8.12	7.4	7.22	8.09	7.19	8.38	1	0.998	1	1	1.7
123678-HxCDF	ng/kg	Various			4.69	4.77	11.3	<0.774	<0.723	<0.74	5.01	4.06	4.51	4.26	3.89	3.95	1	1	1	1	2.91
234678-HxCDF	ng/kg	Various			2.12	6.77	9.98	<0.751	<0.579	<0.59	5.1	5.04	3.78	2.57	4.09	1.69	1	1.1	1	1	1
123789-HxCDF	ng/kg	Various			<1.024	<0.523	0.954	<0.891	<0.827	<0.719	0.712	0.648	<0.325	0.819	0.918	0.672	1	1	1	1	0.752
1234678-HpCDF	ng/kg	Various			111	93.9	52.8	30.6	44.3	39.6	33.9	29.4	28.3	40	35.9	36.8	6.8	7.48	9.34	9.44	11.1
1234789-HpCDF	ng/kg	Various			4.73	6.1	5.05	3.21	<1.373	<1.369	2.95	1.68	2.12	3.7	3.59	2.74	1	0.537	0.505	1	1.39
Brominated Dioxins and Furans																					
2378-TBDD	ng/kg	Various			<0.79	<0.8	<0.83	<0.8	<0.83	<0.78	<0.8	<0.82	<0.84	<0.85	<0.83	<0.82	-	-	-	-	-
12378-PBDD	ng/kg	Various			<0.8	<0.8	<0.82	<0.82	<0.82	<0.8	<0.8	<0.8	<0.8	<0.82	<0.82	<0.82	-	-	-	-	-
123478-HxBDD	ng/kg	Various			<0.77	<0.76	<0.83	<0.8	<0.83	<0.83	<0.81	<0.84	<0.84	<0.84	<0.83	<0.84	-	-	-	-	-
123678-HxBDD	ng/kg	Various			<0.74	<0.77	<0.84	<0.84	<0.84	<0.81	<0.81	<0.83	<0.83	<0.85	<0.85	<0.85	-	-	-	-	-
123789-HxBDD	ng/kg	Various			<0.82	<0.8	<0.82	<0.83	<0.83	<0.83	<0.8	<0.8	<0.81	<0.81	<0.83	<0.84	-	-	-	-	-
1234678-HpBDD	ng/kg	Various			<0.84	<0.8	<0.8	<0.8	<0.81	<0.82	<0.84	<0.85	<0.85	<0.83	<0.83	<0.83	-	-	-	-	-
OBDD	ng/kg	Various			<0.82	<0.82	<0.8	<0.82	<0.82	<0.84	<0.85	<0.85	<0.83	<0.85	<0.84	<0.81	-	-	-	-	-
2378-TBDF	ng/kg	Various			5.17	6.94	4.87	1.97	1.65	1.33	2.76	2.33	3.03	3.5	3.06	2.84	-	-	-	-	-
12378-PBDF	ng/kg	Various			3.57	4.33	3.3	1.28	1.09	1.26	1.98	1.41	2.09	2.36	1.85	2.13	-	-	-	-	-
23478-PBDF	ng/kg	Various			1.96	2.28	1.78	0.83	1	1.1	2.2	0.88	1.26	1.09	1.68	1.77	-	-	-	-	-
123478-HxBDF	ng/kg	Various			1.55	1.19	1.55	<0.77	0.8	0.97	2.34	0.75	1.04	1.74	2.22	1.48	-	-	-	-	-
123678-HxBDF	ng/kg	Various			1.73	2.04	1.41	<0.77	<0.77	<0.8	0.91	0.86	1.66	1.3	1.19	1.87	-	-	-	-	-
234678-HxBDF	ng/kg	Various			<0.8	0.97	<0.8	<0.8	<0.83	<0.83	<0.79	<0.8	<0.85	<0.85	<0.84	0.86	-	-	-	-	-
123789-HxBDF	ng/kg	Various			<0.8	<0.8	<0.8	<0.81	<0.81	<0.8	<0.8	<0.8	<0.83	<0.84	<0.84	<0.83	-	-	-	-	-
1234678-HpBDF	ng/kg	Various			1.03	1.55	0.98	<0.78	<0.82	<0.82	<0.82	<0.84	<0.84	<0.84	<0.83	<0.83	-	-	-	-	-
1234789-HpBDF	ng/kg	Various			<0.77	<0.77	<0.77	<0.79	<0.8	<0.79	<0.83	<0.83	<0.83	<0.85	<0.84	<0.81	-	-	-	-	-
OBDF	ng/kg	Various			<0.8	<0.79	<0.81	<0.81	<0.83	<0.83	<0.84	<0.85	<0.85	<0.85	<0.83	<0.82	-	-	-	-	-
Organophosphorous flame retardants																					
Triphenylphosphate	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Tris(1-chloro-2-propyl)phosphate	mg/kg	Various	630[#1]		<0.15	<0.15	<0.15	<0.5	<0.15	<0.15	<0.15	<0.15	<0.15	<0.2	<0.1	<0.2	-	-	-	-	-
Tris(2-ethylhexyl) phosphate	mg/kg	0.1	170[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-

	Units	Method Detection Limit	Generic Screening Criteria (GSC)	Location	GTCS 1-50		GTCS 1-51		GTCS 1-52	GTCS 1-53	GTCS 1-54	GTCS 1-55	GTCS 1-56	GTCS 1-57	GTCS 1-58	GTCS 1-59	GTCS101		GTCS102	GTCS103	GTCS104
				Date	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	06/06/2019	10/04/2019		10/04/2019	10/04/2019	10/04/2019
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Field_D	Normal	Normal	Normal
				Sample Area	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Waynflete Square	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon	Tower Cordon
				Field ID	GTCS 1-50A	GTCS 1-50A	GTCS 1-51A	GTCS 1-51A	GTCS 1-52A	GTCS 1-53A	GTCS 1-54A	GTCS 1-55A	GTCS 1-56A	GTCS 1-57A	GTCS 1-58A	GTCS 1-59A	GTCS101	DUP01	GTCS102	GTCS103	GTCS104
				Sample_Depth_Range	0-0.05	0.1-0.15	0-0.05	0.1-0.15	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05
Brominated flame retardents (PBDEs)																					
2,2',4-tribromodiphenyl ether (BDE-17)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,4,4'-tribromodiphenyl ether (BDE-28)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,3',4,4'-tetrabromodiphenyl ether (BDE-66)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',3,4,4'-pentabromodiphenyl ether (BDE-8	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',4,4',5-pentabromodiphenyl ether (BDE-9	mg/kg	0.1	6.3[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',4,4',6-pentabromodiphenyl ether (BDE-1	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',3,4,4',5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',4,4',5,5'-hexabromodiphenyl ether(BDE-	mg/kg	0.1	13[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2',4,4',5,6'-hexabromodiphenyl ether(BDE-	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
2,2,3,4,4,5,6-heptabromodiphenyl ether (BDE	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Polybrominated biphenyls (PBBs)																					
2,2-dibromobiphenyl (PBB 4)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
4,4-dibromobiphenyl (PBB 15)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
2,2,5-tribromobiphenyl (PBB 18)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
tetrabromobiphenyl (3,3,5,5-) (PBB 80)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
Hexabromobiphenyl (PBB 153)	mg/kg	0.5	0.018[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
Tetrabromobisphenol A																					
tetrabromobisphenol A	mg/kg	0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
Hexabromocyclododecane (HBCDD)																					
Hexabromocyclododecane (HBCDD)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Isocyanates																					
Isocyanic Acid	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Methyl Isocyanate	ug/kg	250	4,600[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Ethyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Propyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Phenyl Isocyanate	ug/kg	250			<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Hexamethylene diisocyanate	ug/kg	250	3,100[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
2,4-Toluene diisocyanate	ug/kg	250	6,400[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
2,6-Toluene diisocyanate	ug/kg	250	5,300[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Isophorone Diisocyanate	ug/kg	500			<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	-	-	-	-	-
4,4-Methylene-bis(phenyl-isocyanate)	ug/kg	250	850,000,000[#1]		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	-	-	-	-	-
Cyanides																					
Cyanide (Free)	mg/kg	0.5	20[#5]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-
Cyanide Total	mg/kg	0.5	78[#1]		0.9	1.1	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Thiocyanate	mg/kg	0.6	20[#5]		0.9	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	1.6	-	-	-	-	-
Asbestos																					
General Description (Bulk Analysis)	None				Soil/Stone	Soil/Stone	Soil/Stone	Soil/Stone	soil-stones	soil-stones	soil-stones	soil-stones	Soil/Stones	Soil/Stones	Soil/Stones	Soil/Stones	soil-stones	soil-stones	soil-stones	soil-stones	soil-stones
Asbestos Fibres	None				NAD	Fibre Bundles	NAD	Fibre Bundles	Fibre Bundles	NAD	NAD	Fibre Bundles	NAD	NAD	NAD	Fibre Bundles	NAD	NAD	NAD	Fibre Bundles	NAD
Asbestos ACM	None				NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	ACM Debris	NAD	NAD	NAD	NAD	NAD
Asbestos Type	None				NAD	Chrysotile	NAD	Amosite	Amosite	NAD	NAD	Chrysotile	NAD	NAD	NAD	Chrysotile	NAD	NAD	NAD	Chrysotile	NAD
Asbestos Level Screen					NAD	less than 0.1%	NAD	less than 0.1%	less than 0.1%	NAD	NAD	less than 0.1%	NAD	NAD	NAD	less than 0.1%	NAD	NAD	NAD	less than 0.1%	NAD
Potentially Respirable Fibres per gram	f/g	0			-	0	-	0	0	-	-	0	-	-	-	0	-	-	-	-	-
SVF / MMMF																					
Synthetic/MMMF	None				Present	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	-	-	-	-	-
Asbestos Quantification																					
Asbestos Gravimetric & PCOM Total	mass %	0.001			-	<0.001	-	<0.001	<0.001	-	-	<0.001	-	-	-	0.083	-	-	-	-	-
Asbestos PCOM Quantification (Fibres)	mass %	0.001			-	<0.001	-	<0.001	<0.001	-	-	<0.001	-	-	-	<0.001	-	-	-	-	-
Total ACM Gravimetric Quantification (% Asb	mass %	0.001			-	<0.001	-	<0.001	<0.001	-	-	<0.001	-	-	-	<0.001	-	-	-	-	-
Total Detailed Gravimetric Quantification (% A	mass %	0.001			-	<0.001	-	<0.001	<0.001	-	-	<0.001	-	-	-	0.083	-	-	-	-	-
Asbestos Quantification - Total - %	mass %	0.001			-	<0.001	-	<0.001	<0.001	-	-	<0.001	-	-	-	0.083	-	-	-	-	-
Total Organic Carbon																					
TOC	percent	0.02			4.15	2.4	3.81	2.63	3.64	4.03	3.67	3.68	3.42	3.88	2.31	5.86	2.3	2.57	2.15	-	3.24
Inorganics																					
pH (Lab)	pH units	0.01			7.64	7.84	7.44	7.76	7.42	7.74	7.38	7.6	7.53	7.46	7.08	7.49	-	-	-	-	-
Other																					
Natural Moisture Content	percent	0.1			12.4	10.1	11	8.5	9.9	8.3	9.8	10.3	8.9	9.5	7.3	11.4	24	24.6	25.4	23.7	29.1
ESdat Calculated																					
Cresols Total	ug/kg	20	180[#3]		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzo(a)pyrene (surrogate marker for PAH m	mg/kg	0.01	5.0[#6]		1.25	1.3	1.29	1.66	1.29	4.54	1.53	2.08	1.8	2.17	0.78	0.78	0.06	0.059	0.253	0.207	0.225
Xylene Total	ug/kg	8	130,000[#2]		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Trichlorobenzene (total)	ug/kg	14	2200[#5]		<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14	<14
AECOM Calculated																					
Sum of PCDD/F +PCB12	ng/kg	Various	8700[#4]		11930	11069	16597	11187	63213	5834	3038	2414	5232	12644	279697	95814	n/a	n/a	n/a	n/a	n/a
PCDD/F+PBDD/F+PCB12 Hazard Index	-	-	1		0.12	0.2	0.19	0.05	0.2	0.05	0.1	0.06	0.09	0.12	0.23	0.15	0.003		0.006	0.008	0.03
WHO2005 TEQ (PCDD/F + PBDD/F + PCB)	ng/kg	Various			12.671	20.335	18.208	4.54	16.163	4.411	10.035	6.108	8.415	10.852	19.426	13.323	0.274	-	0.615	0.921	3.101

Comments
#1 USEPA RSL (May 2019)
#2 LQM/CIEH S4ULs 2015
#3 EIC/AGS/CL:AIRE 2010
#4 EA SGV 2009
#5 Dutch IV 2013
#6 Defra C4SL 2014
#7 AECOM (modified EIC GAC to include plant uptake route)
GSC based on residential (with private gardens) land use scenario
2.5% soil organic matter content selected for GSC #2 and #3
(blank): No assessment criteria available
- : Not analysed
Field_D: Field Duplicate
NAD: No Asbestos Detected

Appendix TN15-F – Data QA/QC reports

DATA VALIDATION SUMMARY REPORT

Site name:	Grenfell Tower and surroundings	**Samples collected by:**	**Jess Storey, Will Hartas, Jon Craggs, David Dyson**
Project number:	60595731	Date	
Project Manager:	Neil Cooper	Signed	
Matrix type:	Soil	**Analytical data checked by:**	**David Dyson**
Primary samples:		Date	09/07/2019
Laboratory used:	Exova (+ subcontracts to RPS and Marchwood)	Signed	
Lab batch reference (s):	19-5906 b1; 19-9004 b1; 19-9004 b2; 19-9004 b3; 19-9004 b4 19-9004 b5 contains isocyanate method QA data.	**Project Manager:**	**Neil Cooper**
		Date	
		Signed	

General Issues	**Task Name**	**Errors (Y/N)**	**Comments**	**Completed by**
# #	Deliverables checked against chain of custody	N	All scheduled testing reported as expected	DD
# #	Sample IDs reviewed	N	AECOM requested minor edits to ID reporting for duplicates	DD
# # # # # # # #	Sample temperature on receipt checked	N	samples received at lab at temperatures between 6.1degC and 8.6degC. Temperatures lower than ambient, indicating samples were cooled during transit but likely beginning to rise. Temperatures considered suitable for subsequent testing and samples not deviating for laboratory accrediation purposes.	DD
	Holding times acceptable (including subcontracted analyses)	N	No deviating or non-conforming samples reported by lab	DD
# #	Unit consistency reviewed	N	Units checked	DD
# #	Check LOD / MDL are as expected.	N	as expected	DD
# #	Are the results accredited?	N	Some accredited, some not, but as expected	DD
	Do the results fit with previous concentration trends?	N/A	No previous sampling on this project. However, no results considered to be unusual	DD
# #	Comparison of data to visual/ olfactory evidence	N	consistent	DD

Specific Issues	**Task Name**	**Errors (Y/N)**	**Comments**	**Completed by**
# #	Duplicate samples identified	N	Duplicate IDs correctly labelled and no obvious data inconsistencies	DD
# #	Duplicate frequency appropriate (1 in 20 samples)	N	9 duplicates in total, better than 1 in 10	DD
# # # # # # # #	RPD assessment acceptable	N	RPDs generally within acceptable limits. Rare high values are sporadic and considered to be a result of inherent heterogeneity in the sampled material. More detailed assessment of duplicate variability completed in accordance with 'Duplicate Method' described further in measurement uncertainties memo in Appendix TN15-F	DD
# #	Trip blanks results acceptable	N/A		
# #	Field & Equipment/Rinsate blank results acceptable	N/A		
# #	Laboratory blank acceptable	N	Target compounds not detected in laboratory blank samples	DD
# # # # # # # # #	Surrogate laboratory data acceptable	N - though see comments for minor non-conformances	Element laboratory certificates indicate that the surrogate recovery for 2,4-toluene diisocyanate-d was outside the calibration range for 22 of the 93 samples tested. The laboratory certificate indicates that the result in these cases should be taken as indicative. It is noted that all 22 surrogate recoveries that were outside the calibration range were reported at >100%, suggesting potential over-reporting of concentrations rather than under-reporting.	DD
# #	AQC data acceptable	N	No AQC failures reported by the laboratory	DD
# #	Matrix spike (and Matrix Spike duplicate) data acceptable (optional)	N	Matrix spike data for isocyanate method provided by laboratory and indicates acceptable recovery	DD
# # # #	Relevant data added to table footnotes & any deviation issues identified	N	No deviating / non-conforming samples identified. Summary of DVSR findings presented in TN15 report text	DD

Specific Issues	**Task Name**	**Errors (Y/N)**	**Comments**	**Completed by**
# #	10% minimum check of tabulated laboratory data against lab certificates	N	Checks completed and data OK	DD
# #	Tabulated field data (e.g. water quality parameters) checked for input errors	N	Field notes checked	DD, KB

Other Observations

Approvals

The data set is considered appropriate for reporting	N	All data considered appropriate for reporting	Assessor DD
The data set is considered appropriate for reporting with the identified issue	N	Rare elevated RPDs and occasional 2,4-diisocyanate surrogate recoveries outside calibration range indicate occasional heterogeneity of soils and indicative results for one isocyanate compound in 22 of 93 samples. However, surrogate recoveries exceeded 100% suggesting that concentrations will not be under-estimated.	Assessor DD

Appendix TN15-F

Measurement Uncertainty and the Duplicate Method Assessment

1. INTRODUCTION

The purpose of this assessment is to investigate uncertainties in the reported concentrations of chemicals of potential concern (COPC) in soil samples from the vicinity of Grenfell Tower that were sent for laboratory analysis as part of the Stage 1 exploratory sampling. Given that many of the COPC analysed are present at low concentrations that may be spatially variable over relatively small areas, a key objective was to obtain estimates of representative or typical concentrations and assess how they may vary within an area of interest. An important aspect of the assessment is to understand how uncertainties associated with the analytical process may affect the final concentration estimate. Statistical analysis can be used to help quantify the relative contributions of natural or geochemical, sampling and analytical variability in estimates of the 95% upper confidence limit (UCL95) for the mean concentration for each data set of interest.

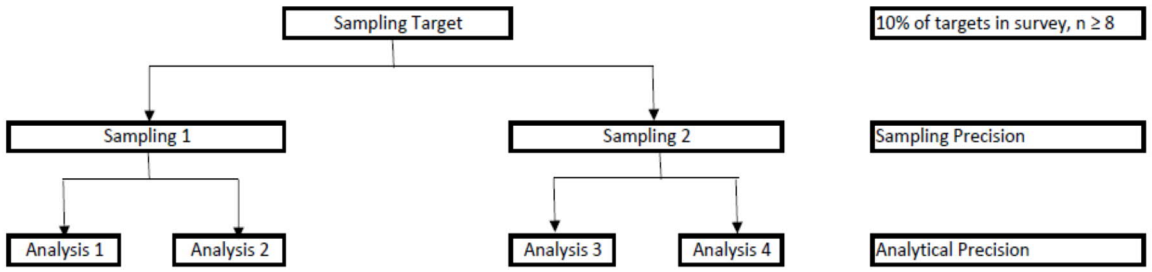
2. METHODOLOGY

The objective of the statistical analysis is to use the available samples to estimate or infer key parameters, such as the mean or other measure of central tendency, for the entire statistical population from which the sample was obtained. Frequently, this is involves making assumptions about the sample distribution and, by the Central Limit Theorem, about the distribution of estimates of the mean. Where these assumptions do not apply, alternative methods that do not make assumptions that cannot be justified from the data must be used.

Since any particular sample typical represents only a small fraction of the total number of samples that could be taken, it is obvious that natural variability across a statistical population is likely to be a source of uncertainty in estimating population statistical parameters. A probabilistic approach by which the statistic of interest is estimated at a pre-chosen confidence limit (often 95%) is therefore adopted. This inevitably yields a range of values between an upper and lower 95% confidence limit. This is discussed in detail in multiple guidance documents[1]. Uncertainty that arises from the natural variability of a sampled population may conveniently be referred to as 'geochemical uncertainty'.

There are at least two further sources of uncertainty that ought to be considered. These relate to 'sampling uncertainty (or precision)' and 'analytical uncertainty (or precision)'. Rather than to natural variability in concentrations across the population, sampling and analytical uncertainty relate to uncertainty in actually measuring the concentration. Measurement uncertainty can be defined as 'an estimate attached to a test result which characterises the range of values within which the true value is asserted to lie'[2]. Measurement uncertainty may be quantified by split or duplicate sampling and analysis[3].

For duplicate sampling, a primary soil sample and a duplicate sample are obtained at the same time and by the same method. These two samples are then split at the lab and all four samples analysed in the same way. As a minimum it is recommended that eight duplicate samples are obtained. The method is referred to as the Duplicate Method and is summarised below.



[1] Guidance on Comparing Soil Contamination Data with a Critical Concentration. Contaminated Land: Applications in Real Environments (CL:AIRE)/Chartered Institute of Environmental Health (CIEH). May 2008.
[2] Cost-Effective Investigation of Contaminated Land. CL:AIRE Research Report Project RP4. August 2007
[3] BS ISO 18400 – 104: 2018. Soil Quality – Sampling. Part 104: Strategies. BSI.

Once the analytical data have been obtained, each set of four analyses can be subjected to statistical assessment. The objective is to investigate the variance in contaminant concentrations between the two duplicate samples obtained in the field (sampling variance) and between the analytical duplicates (analytical variance). The measurement variance or uncertainty is the sum of the sampling and analytical variance, i.e.

$$s^2_{measurement} = s^2_{analytical} + s^2_{sampling}$$

The statistical analysis is typically carried out using ANOVA, which divides the variability in a set of observations into distinct components. The test can be conveniently carried out using the freeware statistical package ROBAN, which was developed by the University of Newcastle-upon-Tyne.

ROBAN allows both classical and robust analysis of variance to be carried out. Classical ANOVA can be applied to broadly Gaussian frequency distributions. Distribution testing should therefore be carried out before analysing variance. If the distribution contains outliers, robust ANOVA, which works well for data sets with up to approximately 10% outliers, should be applied to the whole data set. If possible, heavily skewed distributions, such as lognormal or power distributions, should be transformed before the application of classical ANOVA.

3. RESULTS

For the Stage 1 exploratory sampling, duplicate samples suitable for assessment by the Duplicate Method were obtained at eight locations. The samples were analysed for a range of COPC; however four particular COPC were selected for statistical assessment as follows:

- Arsenic;
- Lead;
- Benzo(a)pyrene; and,
- Dioxins, Furans & Dioxin-like PCBs (reported as WHO 2005 TEQ)

These COPC were selected due to their reported presence in all exploratory soil samples and/or the reported exceedances of their GSC for residential land uses in at least one soil sample.

Each of the analytes are discussed separately below. In addition to ROBAN, the freeware package ProUCL was also used in the assessment. ProUCL was used to calculate descriptive statistics, undertake distribution analysis and to estimate UCL95 values for the population means. Note that ProUCL offers a range of methods by which to estimate UCL95 values. In general, however, it can reasonably be assumed that the Student's t-distribution yields reliable estimates in all but the most extreme distributions.

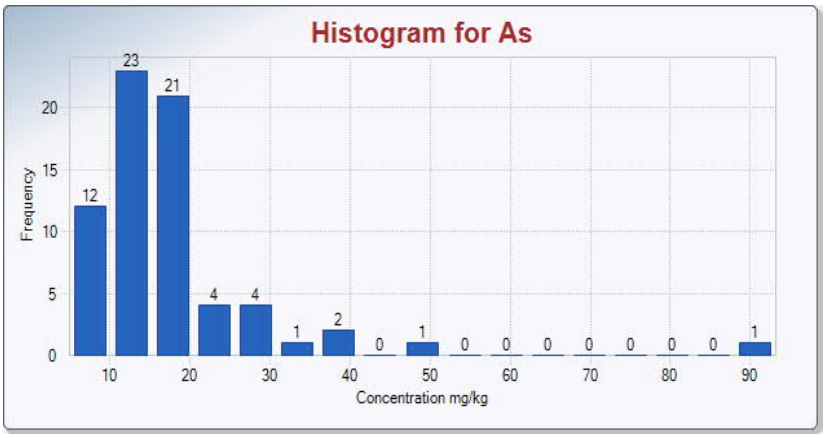
3.1 Arsenic

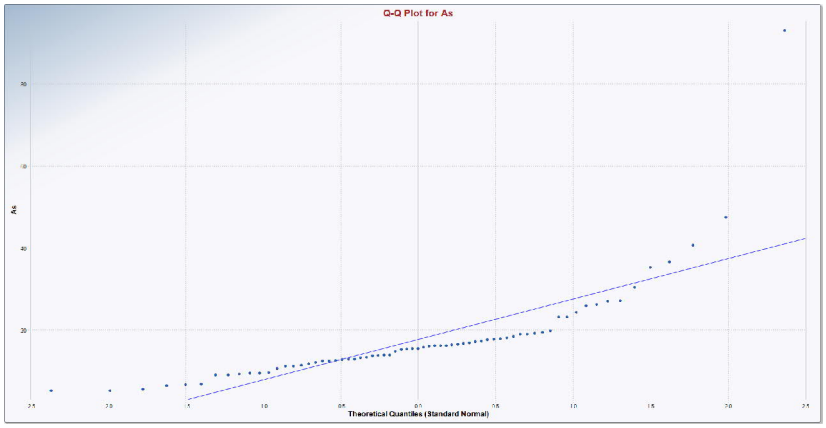
Key statistical parameters for the set of reported arsenic concentrations are presented in Table 1.

Table 1. Basic Statistics for Arsenic (mg/kg)

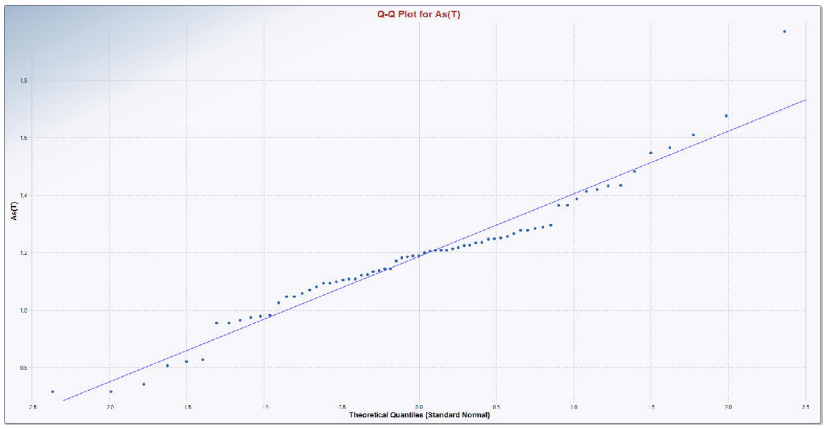
Parameter	Value
Minimum	5.2
Maximum	92.9
Mean	17.66
Standard Deviation	12.6
Median	15.4
Skewness	3.88

As noted above, the distribution of the concentration data was examined before undertaking further assessment. The distribution of analyses for arsenic found to be significantly skewed to the left and is non-normal. This is illustrated by the histogram and Q-q plots shown below.





Given the significantly skewed distribution of the arsenic concentrations, the data were log transformed and re-plotted. The Q-q plot below shows a closer fit to the Q-q line suggesting that the data may be approximately log-normal. This is supported by the Shapiro-Wilk test, which suggests the transformed data are approximately normal at 95% confidence. In view of this, and in light of the guidance referred to above, it is considered that the measurement error should be assessed using classical ANOVA applied to the log transformed data.



The log-transformed data yield mean and standard deviation values of 1.19 and 0.22 respectively. The Student's t-distribution was used to estimate the UCL95 and yielded a value of 1.23. Note that log transformed data are not usually associated with units. The log transformed concentrations for the samples field and analytical duplicates were input to ROBAN.

When the model is run (classical ANOVA), it yields analytical and sampling standard deviations of 0.032 (s^2 = 0.0010) and 0.089 (s^2 = 0.0079) representing 2.25 and 17.3% of the total variance of 0.044. Therefore, natural or geochemical variance represents the single largest contribution to variability between laboratory results.

To calculate the measurement uncertainty in the result, the following equation is used:

$$s_{meas} = \sqrt{\left[s_{amp}^2 + s_{anal}^2\right]}$$

Based on the values above, the measurement standard deviation is 0.095. The measurement uncertainty in the UCL95 (1.23) relative to the mean (1.39) is therefore 1.23*0.095/1.39 = 0.084. This suggests that the estimated upper 95% confidence level for the log of the mean concentration of arsenic is known with a relatively high degree of precision, the value being 1.23 ± 0.084 representing approximately 15% uncertainty. Note that these are log values and should therefore be compared only with the logarithms of relevant screening criteria. In the case of arsenic in soil, a human health-based screening criterion of 37 mg/kg yielding a log value of 1.57 was adopted. The estimated UCL of 1.23 ± 0.084 is below this value.

The same procedure as that adopted for arsenic was adopted for the other COPC.

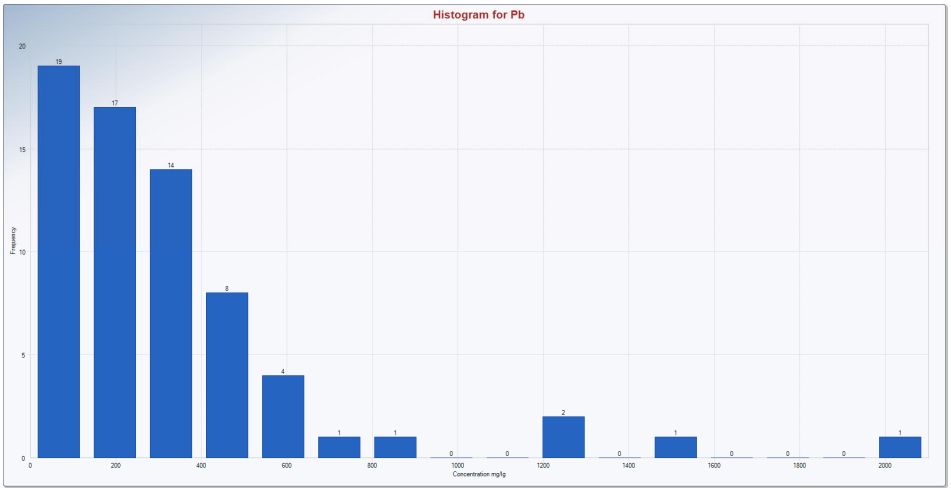
3.2 Lead

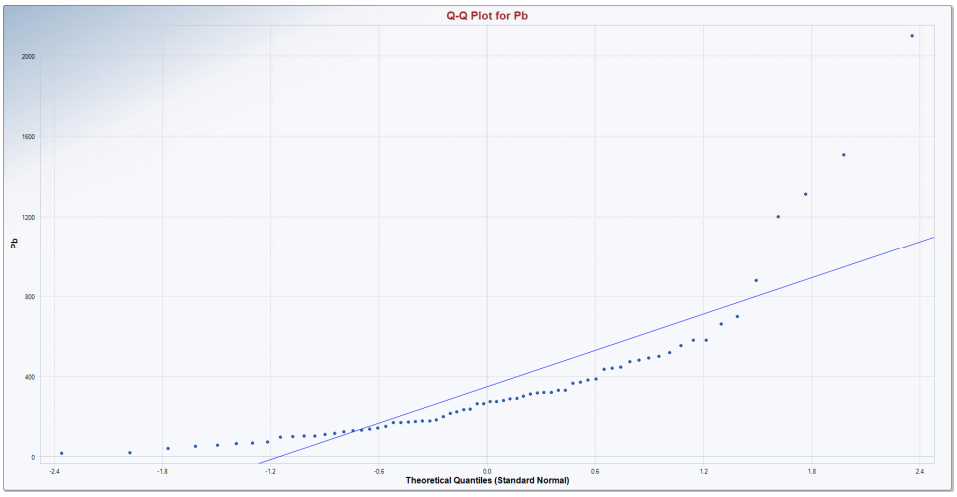
Basic statistical parameters for lead are presented in Table 2.

Table 2. Basic Statistics for Lead (mg/kg)

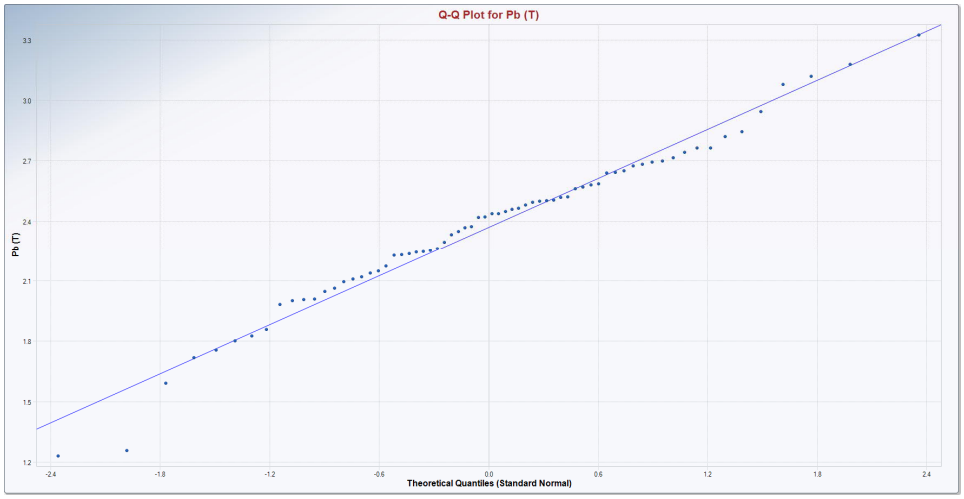
Parameter	Value
Minimum	17
Maximum	2099
Mean	348
Standard Deviation	356
Median	289
Skewness	2.81

A histogram and Q-q plot for lead are presented below. It is immediately apparent that the data are significantly skewed to the left. The data appear to be non-normal.





As for arsenic, the distribution of the lead data appears to be log normal (Shapiro-Wilk at 95% confidence). The log transformed data are shown of the following Q-q plot.



The log-transformed data yield mean and standard deviation values of 2.37 and 0.389 respectively. The Student's t-distribution was used to estimate the UCL95 and yielded a value of 2.46.

When the model is run (classical ANOVA), it yields analytical and sampling standard deviations of 0.010 (s^2 = 0.0001) and 1.15 (s^2 = 1.32) representing 0.067 and 1.15% respectively of the total variance. The mean of the input data was 2.77. As above therefore, geochemical variation represents the single largest contribution to variability between laboratory results.

Based on the values above, the measurement standard deviation is 1.15. The measurement uncertainty in the UCL95 (2.46) relative to the mean of 2.77 is therefore 2.46*1.15/2.77 = 1.10. This suggests that there may be a relatively high degree of uncertainty in the estimated UCL95 for the log of the mean concentration of lead, the value being 2.46 ± 1.10. The percentage uncertainty in the UCL95 for the log transformed data is approximately 45%. The calculated estimate compares with a log for the human health assessment criterion of 2.30. Since the upper estimate of the UCL95 is above this value, while the lower estimate is below it, it is uncertain whether the population mean exceeds the health-based screening threshold. Further analytical data may assist.

3.3 Benzo(a)pyrene

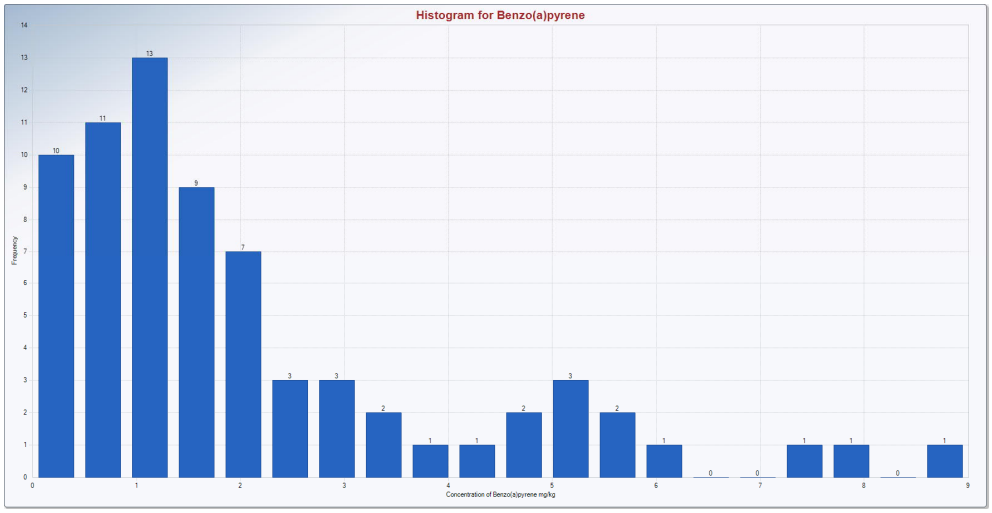
Basic statistical parameters for benzo(a)pyrene are presented in Table 3

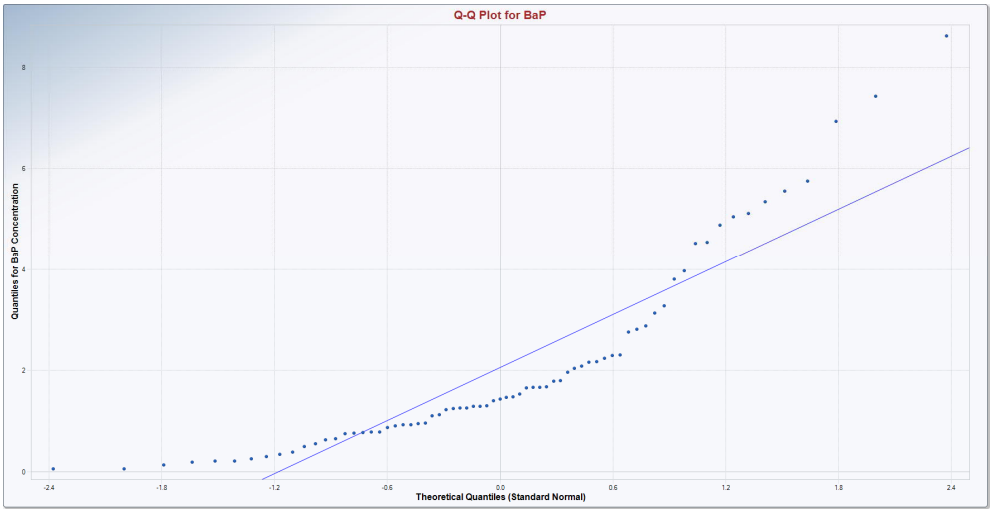
Table 3. Basic Statistics for Benzo(a)pyrene

Parameter	Value
Minimum	0.059

Parameter	Value
Maximum	8.61
Mean	2.056
Standard Deviation	1.89
Median	1.43
Skewness	1.54

A histogram and Q-q plot for lead are presented below. The data are significantly skewed to the left and are non-normal.





The data were approximately lognormal at 95% confidence, the ANOVA was carried on the log transformed data as above.

The log-transformed data yield mean and standard deviation values of 0.117 and 0.465 respectively. The Student's t-distribution was used to estimate the UCL95 and yielded a value of 0.209.

When the model is run (classical ANOVA), it yields an analytical and sampling standard deviation of 0.000 and 0.072 (s^2 = 0.0052) respectively, representing 0.00 and 3.88% respectively of the total variance of 0.132. The mean of the input data was 0.308. Therefore geochemical variation represents the single largest contribution to variability between laboratory results.

Based on the values above, the measurement standard deviation is 0.0712. The measurement uncertainty in the UCL at 95% confidence of 0.209 relative to the input mean of 0.308 is therefore 0.209*0.0712/0.308 = 0.048. This suggests that there the measurement uncertainty in estimated upper 95% confidence level for the log of the mean concentration of

benzo(a)pyrene of 0.308 ± 0.048 amounts to approximately 15%. The calculated estimate compares with a log for the human health assessment criterion of 0.43. The estimated UCL95 is below this value when measurement uncertainty is taken into account.

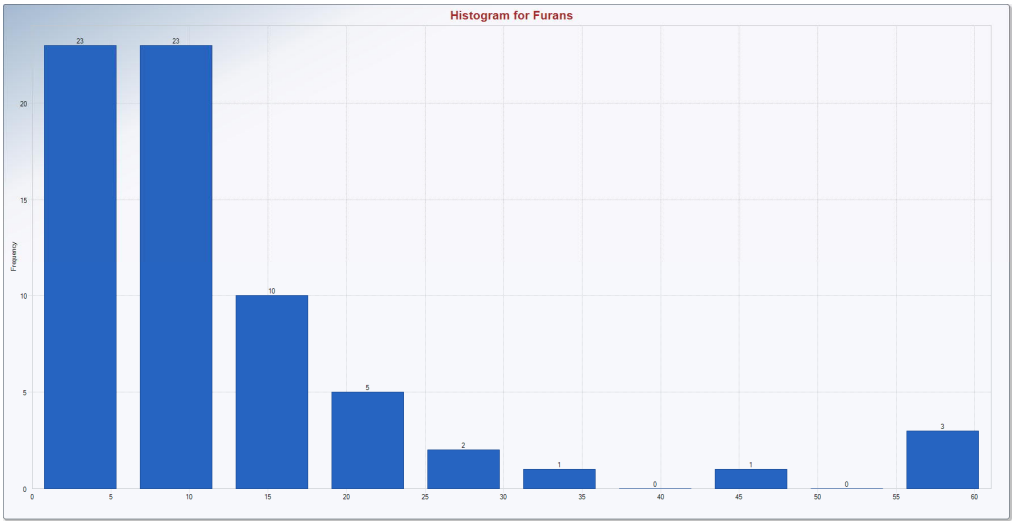
3.3 Dioxins, Furans & Dioxin-like PCBs

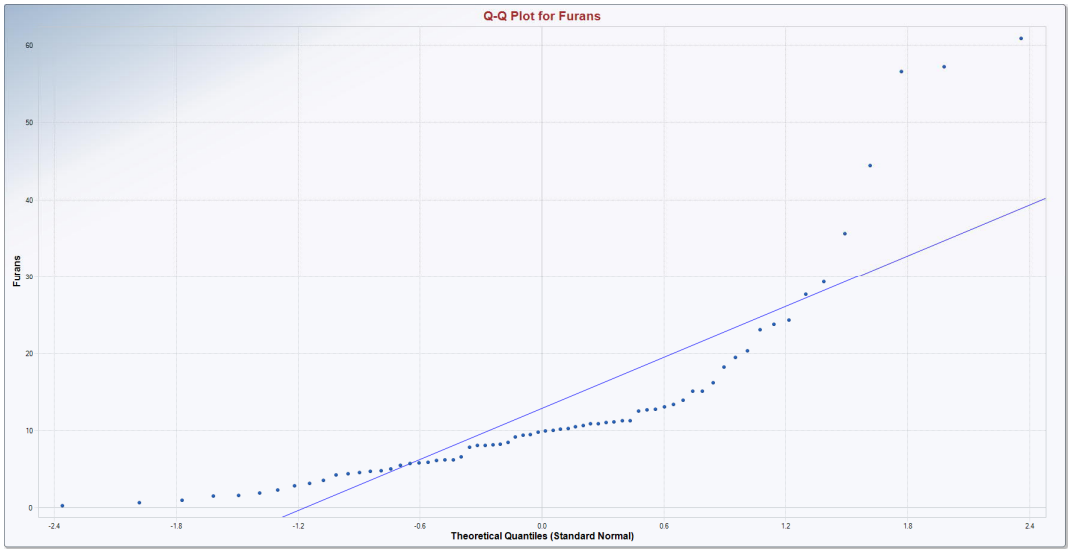
Basic statistical parameters for furans are presented in Table 4. The data refer to toxic equivalents (TEQ) rather than individual analytical data.

Table 4. Basic Statistics for Dioxins, Furans & Dioxin-like PCBs (TEQ)

Parameter	Value
Minimum	0.274
Maximum	60.9
Mean	12.8
Standard Deviation	12.8
Median	9.85
Skewness	2.34

A histogram and Q-q plot for dioxins, furans & dioxin-like PCBs are presented below. The data are skewed to the left and do not follow a discernible distribution. They do not appear to be log normal.





The UCL95 mean concentration was calculated using the non-parametric Chebyshev inequality yielding a value of 19.1.

In the absence of a discernible distribution, the data were tested for outliers using Rosner's test. The test identified five potential outliers at 95% confidence. Assuming these are not anomalous and come from the same distribution as the remaining data, they were included in subsequent statistical analysis. Since they represent less than ten percent of the total number of samples analysed, the measurement uncertainty was assessed using robust ANOVA on untransformed data.

When the model is run (classical ANOVA), it yields analytical and sampling standard deviations of 1.34 (s^2 = 1.80) and 3.54 (s^2 = 12.5) representing 0.54 and 3.78% respectively of the total variance of 331. Therefore geochemical variation represents the single largest contribution to variability between laboratory results. The (robust) mean of the input data was 19.6.

Based on the values above, the measurement standard deviation is 3.78. The measurement uncertainty in the UCL at 95% confidence of 19.6 relative to the input mean of 19.1 is therefore 19.6*3.78/19.1 = 3.88. This suggests that the measurement uncertainty in the estimated upper 95% confidence level for the mean TEQ of 19.6 ± 3.88 amounts to approximately 20%.

4. CONCLUSIONS

The objective of the assessment was to assess the statistical uncertainty in the results of laboratory analysis for a number of COPC present in soil surrounding the Grenfell Tower site. The assessment was carried out using the Duplicate Method described in British Standard BS ISO 18400-102:2018 on soil sampling. The results of the laboratory analysis were analysed using ANOVA or robust ANOVA to estimate the relative contributions to uncertainty in the reported results associated with geochemical, sampling and analytical variance. Four chemical analytes were considered. The findings of the assessment are presented in Table 5. The 95% upper confidence limit for the population mean for each analyte is presented along with the estimated range in uncertainty.

Table 5. Results of Statistical Analysis.

Analyte	Analytical Uncertainty (% total variance)	Sampling Uncertainty (% total variance)	UCL95 (mean) ± measurement uncertainty
Arsenic (log transformed)	2.25	17.3	1.23 ± 0.084
Lead (log transformed)	0.067	1.15	2.46 ± 1.10
Benzo(a)pyrene (log transformed)	0.00	3.88	0.308 ± 0.048
Dioxins, Furans & Dioxin-like PCBs (TEQ)	0.54	3.78	19.6 ± 3.88

The UCL95 mean values and their associated measurement uncertainty presented in Table 5 can be compared with appropriate screening thresholds. The result for furans (TEQ) can be compared directly while the results for arsenic, lead and benzo(a)pyrene should be compared with the logarithm (base 10) of the relevant screening value.

For arsenic, the UCL95 value of 1.23 ± 0.084 is lower than the relevant criteria of 1.57 (log to base 10 of residential C4SL of 37mg/kg). For benzo(a)pyrene, the UCL95 value of 0.308 ± 0.048 is lower than the relevant criteria of 0.70 (log to base 10 of residential C4SL of 5mg/kg). In both of these cases, the measurement uncertainty appears sufficiently small that it is unlikely to have a significant effect on the risk assessment process.

For lead, the UCL95 value of 2.46 ± 1.10 slightly exceeds the relevant criteria of 2.30 (log to base 10 of residential C4SL of 200mg/kg). The relatively high measurement uncertainty also has a significant effect on whether the UCL95 exceeds the criteria, with the lower bound i.e. 2.46 – 1.10 being below the criteria, and the upper bound i.e. 2.46 + 1.10 being above the criteria by a factor of 1.5. This suggests that reducing the measurement uncertainty for the lead dataset could help improve the reliability of the risk assessment process.

The dioxins, furans & dioxin-like PCBs (TEQ) dataset UCL95 value equates to a hazard index in a residential scenario of between 0.17 and 0.25. In this case the measurement uncertainty appears sufficiently small that it is unlikely to have a significant effect on the risk assessment process.