

Royal Mail Group

**Former Royal Mail Sorting Office
Site, Caversham Road, Reading**

**Interpretative Report on Phase 2
Geo-Environmental Ground
Investigation**

REP/10-2012/001/RO

Issue | 14 November 2012

This report takes into account the particular instructions and requirements of our client.

Except as provided for in our agreement with our client, this report is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 211770-01

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1 Introduction

1.1 Scope and Purpose

This report has been prepared by Ove Arup & Partners Limited (Arup) at the instruction of the Royal Mail Group Limited (Client) in accordance with a supplementary appointment agreement dated 26 September, 2012. The report presents a geo-environmental assessment of ground conditions at the former Royal Mail sorting office site at Caversham Road, Reading, following a ground investigation conducted by Ian Farmer Associated Limited (IFA) in September 2012, for the Client. The report has been prepared to inform the sale of the site by the Client to Hermes Property Unit Trust.

This report should be read in conjunction with the following two reports:

- Arup, "Contaminated Land Preliminary Phase 1 Report, Royal Mail Site, Caversham Road, Reading", Draft 3, March 2010 (the Arup Phase 1 report).
- Ian Farmer Associates, "Final Phase 2 Factual Ground Investigation Report, Royal Mail Site, Caversham Road, Reading", Contract No. 20958, October 2010 (the IFA Phase 2 factual report).

The location of the site is shown on Figure 1. An aerial view of the site (circa 2008), when it was in use as a Royal Mail sorting office, indicating the locations of the boreholes drilled by IFA in September 2012, is included as Figure 2 of this report.

1.2 Background

In 2010 Arup undertook a geo-environmental desk study, site reconnaissance and preliminary risk assessment of the subject site as part of a contaminated land environmental impact assessment (EIA) for the Client's outline planning application for the site's redevelopment. The results of that assessment are contained within the Arup Phase 1 report, which was also included as Appendix 12.1 of the Environmental Statement, dated February 2011. No intrusive ground investigation was undertaken for the Phase 1 assessment, although samples of soil and groundwater from two shallow archaeological boreholes, denoted BH1 and BH2, were tested for a range of contamination determinands. The results of the geo-archaeological investigation were included as Appendix 12.4 of the Environmental Statement and are also contained in Appendix A of this report, for reference.

The outline planning application was for a predominantly residential development of the central and western parts of the site, with some commercial and retail floor space and possibly a hotel and development of those parts of the eastern side of the site not transferred to Network Rail (for a new (northern) entrance to Reading main line station) as public open space (Station Square). The future development parameter plan is included as Figure 3 of this report and a more detailed summary description of the proposed development is given in Section 5.2.1 of this report.

Outline planning permission (OPP) was granted by Reading Borough Council (RBC) in March 2012. There were three OPP planning conditions related to the requirement for ground investigation and remediation of the site prior to development, Nos. 28, 29 and 30. Copies of these conditions are contained in Appendix B of this report.

Since 2010 the site has been occupied by Network Rail as offices, stores, fabrication yard and parking for the Reading station entrance and track re-alignment works and this occupation is planned to continue until 2015.

Over the past several months, the Client has agreed the sale of the site to Hermes Property Unit Trust (Hermes). As part of the sale/purchase negotiations it was agreed that the Client would carry out a ground investigation to better inform the underlying ground conditions and presence of any significant contamination. The scope of the investigation was agreed between Arup (for the Client) and RPS Consultants (for Hermes). The exploration locations positions and the method of investigation were limited, to an extent, by working restrictions imposed by Network Rail. It was not the purpose of this investigation to satisfy OPP planning Condition 28 and no consultation with the RBC contaminated land officer, or the Environment Agency was carried out, although the results of this investigation can form part of the works required to discharge Condition 28.

1.3 Use of the Report and Limitations

This report takes into account the particular instructions and requirements of the Client. Except as provided for in our agreement with the Client, this report is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Notwithstanding any other provision of this report and in consideration of the sum of ten pounds (£10.00) paid by HSBC Bank plc (as trustee of Hermes Property Unit Trust), we, Ove Arup & Partners Limited, hereby acknowledge receipt of the aforementioned consideration and hereby irrevocably acknowledge and agree that HSBC Bank plc (as trustee of Hermes Property Unit Trust) and its successors and assigns (subject to a maximum of two assignments without our consent) shall have relied and will continue to rely on the findings of this report and in so doing we acknowledge a duty of care to them (provided that the duty of care shall be no greater in terms of obligation than that owed to Royal Mail Group Limited as the company which has commissioned the report from us) as if HSBC Bank plc (as trustee of Hermes Property Unit Trust) had been named jointly with the company/body which has commissioned the report in such appointment. In the event of a claim by HSBC Bank plc (as trustee of Hermes Property Unit Trust) we shall be entitled to rely on the same rights of defence and on any limitation in our appointment by Royal Mail Group Limited dated 31 January 2012 provided that we shall not be entitled to exercise any right of set-off or counter-claim that we may be entitled to exercise under that appointment.

Reasonable skill and care has been exercised in preparation of this report in accordance with the technical requirements of our brief. Notwithstanding the efforts made by the professional team in undertaking this contamination assessment, it is possible that the ground conditions other than those potentially indicated by this report may exist at the Site.

This interpretative report has been prepared based upon information collected by other parties. Arup has assumed that the factual information provided by others is reliable but does not take any responsibility to any party for the validity of those data.

2 Site History

The site has a history of railway usage from the mid to late 1800s to the early 1980s, when the Royal Mail sorting office was constructed. Extracts of Ordnance Survey (OS) maps dating between 1879 and 1993 are included in Appendix C, for reference.

The first available Ordnance Survey (OS) map, dating from 1879, shows the site as the “Great Western Railway Works”, comprising approximately six buildings and some railway sidings. A goods station and mainline railway tracks were present off-site to the south. Malhouses and a timber yard were present off-site to the west and the area off-site to the north is undeveloped.

The 1912 OS map also shows that the site occupied by the Great Western Railway Works, although the layout of the buildings had changed. A coal depot is located immediately to the north and a small portion of the coal depot intersects the north west corner of the Site. The Site is bounded by railway track and sidings on the north, south and east sides. Residential properties are present off-site to the west. An iron works is present on the northern side of Vastern Road.

The 1957 OS map shows one large building labelled “works” occupying the majority of the site and a small building located to the east of it. The site remains bounded by railway sidings and track on the north, south and east sides. Two warehouses are present on the former residential area off-site to the west.

The site layout generally remains unchanged during the 1962 to 1972 mapping period and the large works building is labelled as “railway works”. An electricity sub-station is present in the north-west corner of the site. One of the warehouse buildings located off-site to the west is labelled “motor accessories warehouse”. A garage, electricity and engineering works are located in the footprint of the former iron works off-site to the north.

By the time of the 1984 OS map there has been a major redevelopment of the site. The railway works buildings and sidings are gone and a new mail sorting office building is located in the north western part of the site. This layout is the same as exists as present and as illustrated by the aerial photo background to Figure 2 of this report.

Royal Mail used the site as a mail sorting centre and offices from the 1980s until they ceased these operations in 2009. The aerial photo background to Figure 2 illustrates the site when in use by Royal Mail, with Royal Mail lorries and vans parked in the southern and south-western part of the site, and staff vehicles parked to the east of the main sorting office building. At the entrance to the site was a security building, vehicle wash and fuel island, and at the eastern end of the site was a vehicle repair workshop building. Network Rail has occupied the site since 2010, as noted in section 1.2 above.

In December 2009 the two fuel tanks beneath the fuel island were decommissioned by a specialist contractor, Cameron Forecourt Limited. A copy of the Decommissioning Certificate is included in Appendix F of this report. The tanks remain in the ground but were foam filled after removal of any bottom waste.

3 Geological Setting

The geological map for the area indicates that the site is overlain by river alluvium (from the nearby River Thames) comprising Langley Silt overlying River Terrace Deposits (RTD). These superficial deposits are underlain by the Upper Chalk. The results of the Phase 2 ground investigation confirm this sequence of natural strata, which now underlie an overlying deposit of Made Ground.

The Upper Chalk is classified by the Environment Agency as a Principal Aquifer. The overlying RTD is in hydraulic continuity with this aquifer.

4 Results and Assessment of Investigations

4.1 Summary Scope of Investigations Completed

The scope of the Phase 2 ground investigation comprised the following:

- Three cable percussion boreholes (CP12-01 to CP 12-03) into the underlying RTD, with standpipes installed in the RTD to monitor groundwater levels and collect groundwater samples. One of the boreholes (CP 12-02) was extended to prove the top of the Chalk.
- Ten drive-in window sampler boreholes (WS 12-01 to WS 12-10) to prove the top of the RTD, although four of these boreholes (WS 12-04, WS 12-07, WS- 12-08 and WS 12-10) did not reach their final intended depth, due to obstructions. Standpipes were installed in all boreholes (except WS 12-07, WS- 12-08 and WS 12-10) to monitor groundwater and ground gas levels, and collect perched groundwater samples.
- Laboratory chemical testing of soil samples for contamination assessment and waste classification.
- Laboratory chemical testing of groundwater samples from the RTD for water quality assessment. (There was none, or insufficient, perched

groundwater present in any of the window sampler standpipes for sampling).

- One round of ground gas monitoring in all standpipes.

The results of all the field and laboratory investigations are contained in IFA's Phase 2 factual report.

4.2 Assessment of Field and Laboratory Observations, Measurements and Results

4.2.1 Stratigraphy

The sequence of strata revealed by the ground investigation was consistent with the published geology and the interpretation present in the Arup Phase 1 report. The findings are summarised in Table 1 below.

Layer	Description	Top elevation (mOD)	Thickness (m)	Notes
1	Surfacing : (see Notes)	37.7 – 38.25	0.1 – 0.3	Block paving or tarmac externally; concrete floor slab at WS-08 to WS-10
2	Made Ground (MG): Generally upper sandy/gravelly layer with some hardcore underlain with more clayey and ashy fill	37.6- 38.0	0.7 – 2.5	WS locations 12-04, 12-07, 12-08 and 12-10 did not extend to the base of the MG.
3	Alluvium (Langley Silt) : Greenish grey and brown silt and clay with some peat	35.65 – 37.05	0 – 2.2	No Alluvium encountered between base of MG and top of RTD at WS 12-02 and WS 12-03. Also, WS locations 12-04, 12-07, 12-08 and 12-10 did not extend to the base of the MG.
4	River Terrace Deposits (RTD): Fine to coarse sand and gravel	34.5 – 35.9	4.9	Full depth of gravels and top of Chalk only encountered at CP12-01
5	Chalk (Structureless at top of layer)	31.04	Top proved only	

4.2.2 Groundwater

Groundwater was encountered at the top of the RTD layer in all boreholes and measurements in standpipes installed in the RTD indicate that the pore water pressure in that layer was at between +35.95 and +36.1m OD at the time of the investigation. This pressure is equivalent to a standing water level just above the top of the RTD, in the Alluvium or base of Made Ground. The water depth

measurements indicate that the direction of groundwater flow in the gravels is from west to east.

Perched groundwater (in the Made Ground on top of the Alluvium layer) was generally not found to any significant extent.

4.2.3 Ground Gases

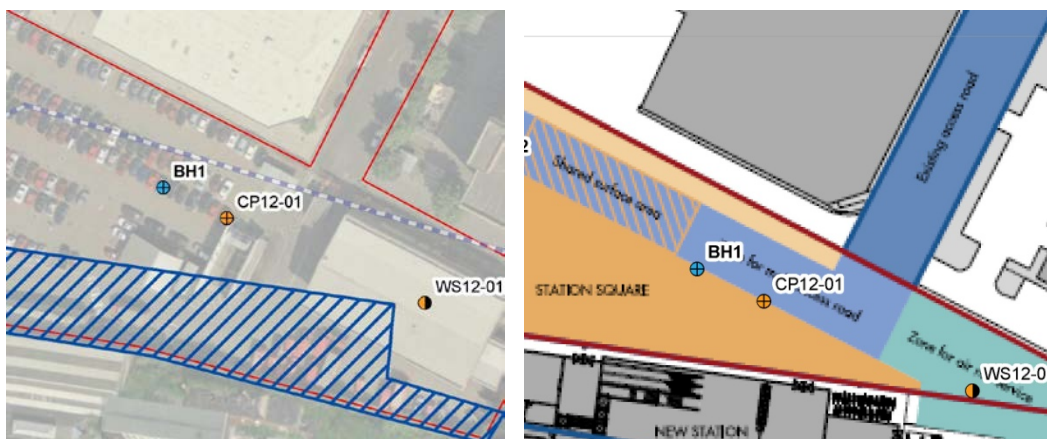
Field measurements of methane, carbon dioxide, carbon monoxide and oxygen concentrations, as well as gas flow rates, were made in all standpipes, although only the shallow standpipes installed in the window sampler boreholes (with a response zone across the Made Ground) would be expected to detect any possible elevated concentrations of methane or carbon dioxide). The monitoring was carried out at WS locations 12-01, 12-03, 12-04, 12-05 and 12-06, as well as at CP locations 12-01 to 12-03. The results are tabulated in the IFA Phase 2 factual report.

No methane was found to be present in any of the standpipes and carbon dioxide was absent or at very low concentrations in all of the standpipes, except WS 12-01. The concentration of carbon dioxide measured in WS 12-01 was 7.5 % by volume. It is noted that the location of WS 12-01 is at the extreme east of the site, in the new station forecourt, where no future buildings are planned.

4.2.4 Field observations of contamination

There were no field observations of any contamination at any of the borehole locations during soil sampling, except below 1.5m depth at CP 12-01, in the Made Ground and the top of Alluvium. There was no visual or olfactory evidence of contamination during groundwater sampling in any of the boreholes.

At CP 12-01, which is close to the former Royal Mail vehicle fuelling area (and will be within the future station forecourt area), the soils were described as having a “hydrocarbon odour” and “oil liquid on the material but not running liquid”. The results of laboratory testing on the sample of soil from CP 12-01 at 1.5m depth confirms some hydrocarbon impact (see Section 4.2.5.2 below). It is noted that there was no evidence of the hydrocarbon contamination at the base of the Made Ground at CP 12-01 in the Made Ground sampled at the nearby BH1 drilled in 2010 (see Appendix A). This indicates that the extent of hydrocarbon of the Made Ground at CP 12-01 does not extend as far west as BH1. There was also no evidence of hydrocarbon contamination of the Made Ground at the location of borehole WS 12-01, which indicates that the extent of hydrocarbon of the Made Ground at CP 12-01 does not extend as far east as WS 12-01. The locations of boreholes CP 12-01, BH1 and WS 12-01 are indicated in the extracts of the site plan below.



4.2.5 Laboratory Testing of Soil Samples

4.2.5.1 Scope of Testing

A comprehensive suite of contamination tests were carried out on a total of 45 soil samples recovered from the investigation. All of the samples were analysed for heavy metals, aliphatic and aromatic hydrocarbons, PAHs¹, BTEX² and cyanide. A reduced number of the samples were also tested for asbestos, VOCs³, SVOCs⁴ and PCBs⁵. Leachates were also prepared from 7 soil samples and subjected to waste acceptance criteria (WAC) testing.

The results of the testing are given on the assessment spreadsheets included in Appendix D of this report and are briefly discussed below. Many of the sample analyses indicated extremely low concentrations (below the analysis detection limit).

4.2.5.2 Comparison with Commercial and Residential Screening Criteria

Comparison of the results of all the chemical tests with commercial land use General Assessment Criteria⁶ (GACs) derived using the standard UK CLEA⁷ model indicated no exceedance of the screening concentrations for any parameters.

Comparison of the results of all the chemical tests with residential (without plant uptake) land use General Assessment Criteria⁸ (GACs) derived using the standard UK CLEA model indicated a slight exceedance for Lead in 4 samples of Made Ground and exceedances of the screening concentrations for Aliphatic

¹ Polyaromatic hydrocarbons

² Benzene, Ethylbenzene, Toluene and Xylenes

³ Volatile organic compounds

⁴ Semi-volatile organic compounds

⁵ Polychlorinated biphenols

⁶ These are human health criteria

⁷ Contaminated Land Exposure Assessment

⁸ For residential 'without gardens'

Hydrocarbons (C8-C10, and C10-C12) in the sample of Made Ground from 1.5m in borehole CP 12-01 (noted in Section 4.2.4 above). The total petroleum hydrocarbon concentration in this sample was 5,300 mg/kg.

4.2.5.3 Asbestos testing

Twenty seven samples of the overlying Made Ground were subjected to asbestos screening tests. Three of these samples indicated the presence of asbestos fibres (chrysotile). These 3 samples were then subjected to asbestos quantification testing, which indicated that all of the samples had <0.001 % by mass of asbestos, which is the lowest accredited reporting limit in the UK and is a very low concentration. This concentration is also below the threshold for 'hazardous waste' to landfill.

It is also not unusual to encounter occasional traces of asbestos in Made Ground overlying sites of former industrial uses, including lands used for railway maintenance and repair. Standard site practices during earthworks operations, such as dampening down of spoil during dry weather to control dusts and wearing of appropriate PPE⁹ by construction workers, is expected to be adequate during site development for the conditions revealed by the Phase 2 investigation, rather than any more onerous measures.

4.2.5.4 Waste Classification Testing

The results from the 2012 ground investigation have been compared to thresholds published in the Environment Agency's Technical Guidance WM2¹⁰ (2011). The results of all metal analysis were below hazardous waste thresholds. The results of all hydrocarbon testing except the one result (5300mg/kg at 1.5m in borehole CP 12-01 - already noted above) were also below such thresholds.

The results of the analysis for TPH, PAH, BTEX and PCBs were all below inert thresholds (except the TPH result discussed above). Four of the 45 results for TOC exceeded the inert threshold and would therefore be non-hazardous category (approximately 10% of the samples).

The concentrations measured in leachates prepared from the 7 soil samples that were subjected to WAC testing also indicated that the samples were all within the allowable limits for inert waste.

4.2.6 Laboratory Testing of Groundwater Samples

A comprehensive suite of water quality testing was carried out on a sample of groundwater from each of the three standpipes installed with response zones in the RTD aquifer. The samples were analysed for heavy metals, aliphatic and aromatic hydrocarbons, PAHs, BTEX, cyanide, ammoniacal nitrogen, BOD¹¹, COD¹², VOCs, SVOCs and a number of other water quality determinands. The results of the testing are given on the assessment spreadsheets included in

⁹ Personal protective equipment

¹⁰ "Hazardous Waste, Interpretation of the definition and classification of Hazardous Waste"

¹¹ Biological oxygen demand

¹² Chemical oxygen demand

Appendix E of this report and are briefly discussed below. Many of the sample analyses indicated extremely low concentrations (below the analysis detection limit).

4.2.6.1 Comparison with Screening Criteria

The results of the analyses were compared with environmental quality standards (EQS's) published by the Environment Agency or with drinking water standards (where available). The results indicate that the quality of the groundwater in the underlying aquifer is good and there was no evidence of any significant contamination. The only exceedance of the selected criteria was for ammoniacal nitrogen in two of the samples, which is not uncommon in a built up area.

By comparison with the water quality at locations CP12-02 and CP 12-03, the water from the RTD sampled at location CP 12-01 showed slightly elevated dissolved phase TPH¹³ of 0.052mg/l (by comparison with <0.01 mg/l at the other two CP borehole locations). This result is similar to the slightly elevated result for water sampled from BH1 in 2010, which indicated 0.22 mg/l of TPH (C5 – C40). Neither of these results is considered to represent significant groundwater contamination.

4.3 Conceptual Model

A conceptual 'source-pathway-receptor' model for the site was defined in section 3.3 of the Arup Phase 1 report.

The Sources of contamination were defined as:

Sources

- Possible areas of contaminated Made Ground and perched groundwater.
- Possible dissolved phase contamination in the groundwater in the RTD.

The Receptors were defined as:

Human Receptors

- Site workers during construction.
- Site neighbours during construction.
- Future site users (after development).
- Future maintenance workers (engaged in ground disturbance works after development).

Controlled Waters Receptors

- The underlying RTD and Chalk aquifers beneath the site.
- The River Thames.

Property Receptors

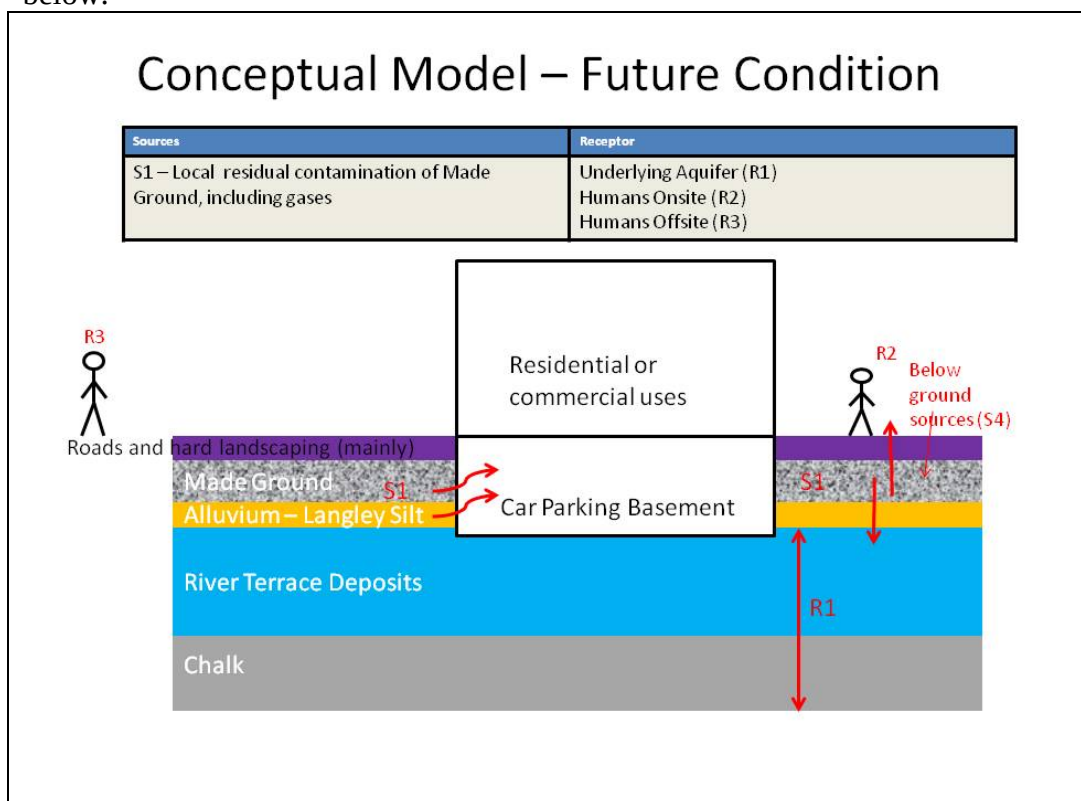
¹³ Total petroleum hydrocarbons (Aliphatic C5 – C35 and Aromatic C5 to C35)

- Below ground building materials and services.

It was assessed that potential source-pathway-linkages would be broken or mitigated by the following measures as part of the development:

- The removal of localised ‘hotspots’ of contamination, if present.
- The application of appropriate construction practices as set out in a project CEMP and CoCP during construction. This would include measures to control dusts and limit dermal contact by site construction and maintenance works, and a watching brief for unexpected contamination.
- The capping of all the site by buildings, hardstandings and clean subsoil/topsoil in soft landscape areas.
- The laying of underground services in clean backfills imported soils.
- Ground investigation to assess groundwater quality at the site (now completed).

A pictorial representation of the conceptual model after development is provided below.



5 Remediation Assessment

5.1 Existing Situation

The site is currently covered with buildings and hardstandings and is temporarily in use by Network Rail with security controlled access. Consideration has been given to the likely requirement for any ground contamination remediation for this current condition.

The ground investigation that has been carried out has not identified any significant contamination of either the underlying soils or the underlying shallow aquifer. Some hydrocarbon impacted ground has been found at one location between 1.5m and 2.5m depth, however the groundwater sample from that borehole did not indicate that the shallow contamination had penetrated to the underlying aquifer. In fact the available information indicates that the groundwater quality across the whole site is good.

In view of the available information, and in light of the hard cover surfacing across the whole site, it is assessed that the underlying ground conditions do not pose a significant risk to human health for persons on or adjacent to the site and that there is no evidence of the possibility of significant pollution of controlled waters. No remediation is therefore considered necessary for the current use.

5.2 With Future Development

5.2.1 Key features of future development

The future form of development for the site is indicated on the Parameter Plan include as Figure 3 of this report. In view of the need to retain flood storage capacity from the nearby River Thames, all future external ground areas will be at very similar levels to the existing ground levels.

The eastern end of the site will be public open space, which will comprise hard landscaping, vehicle access pavements and possibly discrete landscaped areas envisaged to be in planter beds or tree pits with imported subsoil and topsoil.

The central and western areas of the site will be developed as three building plots, separated by internal roads, with some surface parking, verges and pavements. Again it is envisaged that soft landscaping will be limited to tree pits and planter beds with imported soils and liners as necessary.

Each of the three building plots will be underlain by a basement/semi-basement to provide the main parking provision. These basements are envisaged to be naturally ventilated and to extend about 3m below existing ground level, which will result in the excavation of all (or almost all) of the Made Ground and Alluvium beneath the footprints. The basements beneath the future buildings may well be a single combined basement extending beneath the intervening internal roads.

The two larger plots will be residential, with some retail at ground level. The smallest plot is likely to be wholly or partly commercial. There will be some communal gardens, but no private gardens. The communal gardens will be constructed on top of the basement structure.

5.2.2 Possible remediation requirements

The final scope of remediation will be agreed with the local planning authority, following additional site investigations in accordance with planning conditions 28 to 30 (see Appendix B).

The Phase 2 ground investigation that has been carried out has not revealed any substantial contamination issues and therefore we would expect that 'remediation'

would simply involve the localised over-excavation of any contamination 'hotspots' encountered during the course of the construction of the public realm in the eastern (Station Forecourt) side of the site and construction of the public realm (roadways and services) on the northern and southern edges of the central and western side of the site. The requirement to remove local hotspots beneath final levels will depend on the nature and severity of the contamination and its potential impact on future users and services. The only hotspot revealed by the Phase 2 ground investigation was below 1.5m depth at location CP 12-01. The lateral extent of this hotspot will need to be delineated by future site investigation, however it may be possible for this material to stay in place.

The recommended scope of future site investigation to delineate the hotspot in the area of CP 12-01 would comprise 4 to 6 exploration positions between and surrounding the area of borehole CP 12-01 and the location of the decommissioned underground tanks (which are believed to be between the southern side of the security gatehouse and the location of the former re-fuelling pumps. The explorations (trial pits or window sampler boreholes) should extend into the top of the Alluvium, at about 2.5m depth. The type of exploration position will depend on access constraints, however trial pits are the most suitable form of exploration as this provides a better opportunity to inspect the ground and samples a larger volume of ground. A sampling, site monitoring and testing regime similar to that used for the Phase 2 investigation trial pits would be suitable.

The redevelopment of the site will involve mass excavation of Made Ground and Alluvium across most of the central and west sides of the site and excavations for services and pavements beyond the basement excavation(s). The mass basement excavation will effectively 'remediate' the basement footprint and no contamination of the ground beneath the basement dig level is anticipated.

It is envisaged that the bulk of excess spoil arising from the development excavations across the site will be classified as non-hazardous or inert. However there is the possibility that a small proportion of the spoil may be classified as hazardous due to the presence of hydrocarbon hotspot material. Also, the possible localised presence of asbestos in the Made Ground might also result in material that may be classified as hazardous, although testing carried out in the Phase 2 investigation did not indicate ground that would require disposal to a hazardous landfill.

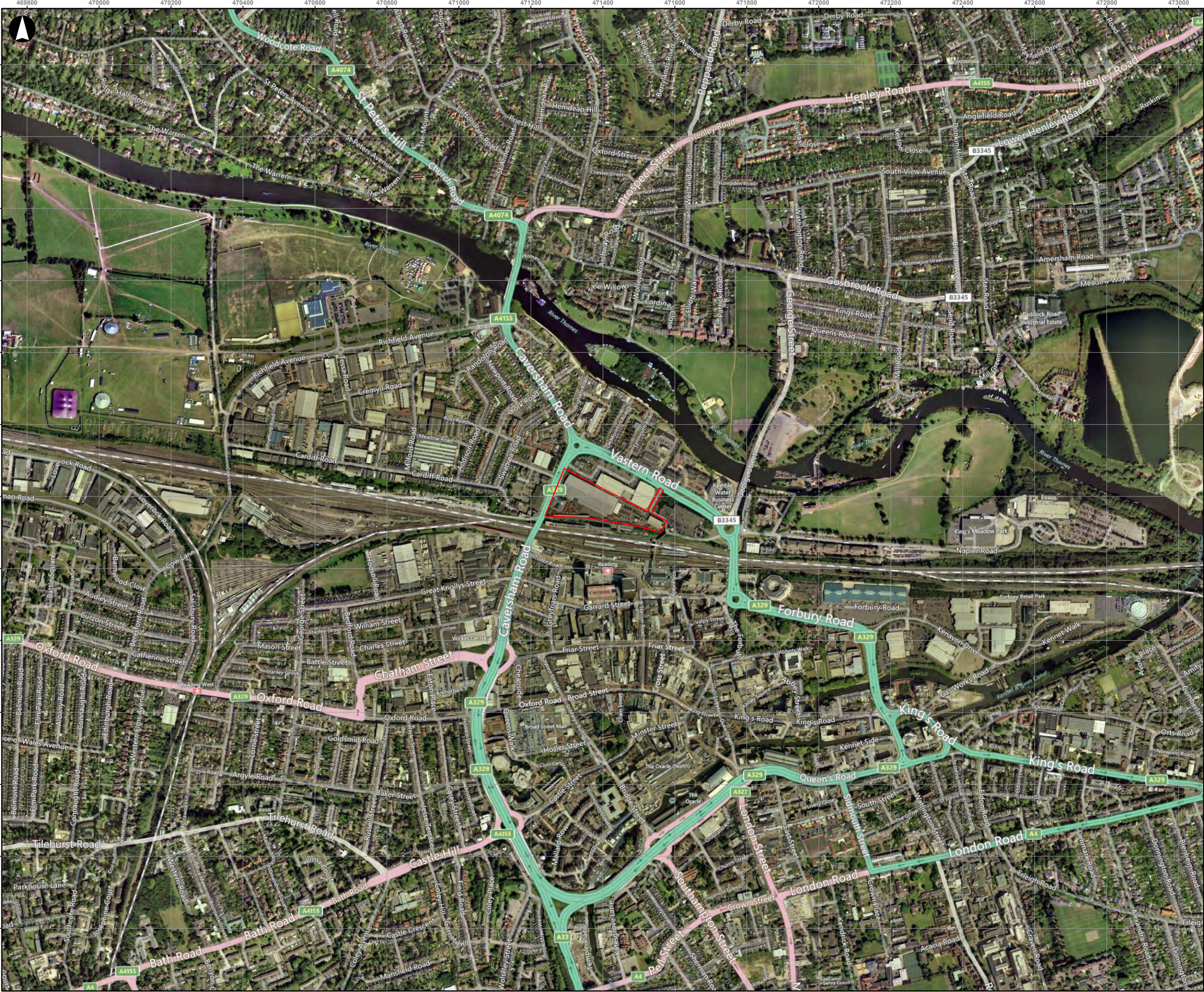
Figures

Figure 1 Site Location Plan

Figure 2 Exploratory Hole Location Plan

Figure 3 Future Development Parameter Plan

Figure 4 Borehole Locations in relation to future development



Legend

Site Boundary

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Metres				
0	275	550		

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Client

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Job Title

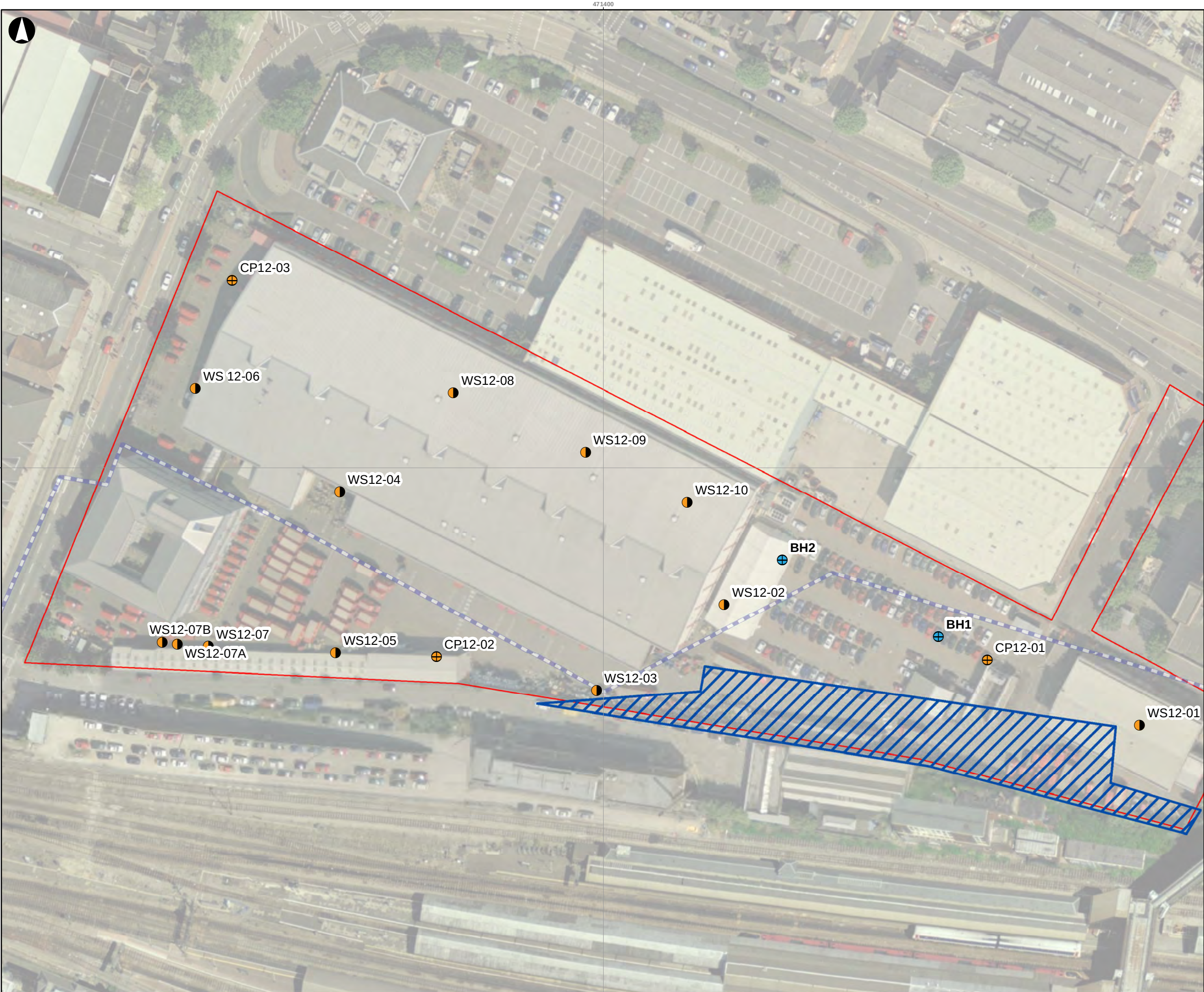
Royal Mail Site, Caversham Road

**Figure 1 -
Site Location Plan**

Scale at A3

1:10,000

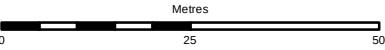
Job No	Drawing Status	Issue
211770-01	For Issue	F1
Drawing No		
001		



Legend

- Cable Percussion Borehole (2012)
- Windowless Sampling Borehole (2012)
- Existing Borehole (2010)
- Indicative Line of Culvert
- Area transferred to Network Rail
- Site Boundary

F1	2012-07-26	EF	EF	RO
Issue	Date	By	Chkd	Appd



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Tel +44 20 7636 1531 Fax +44 20 7580 3924
www.arup.com

Client

Royal Mail Group Ltd

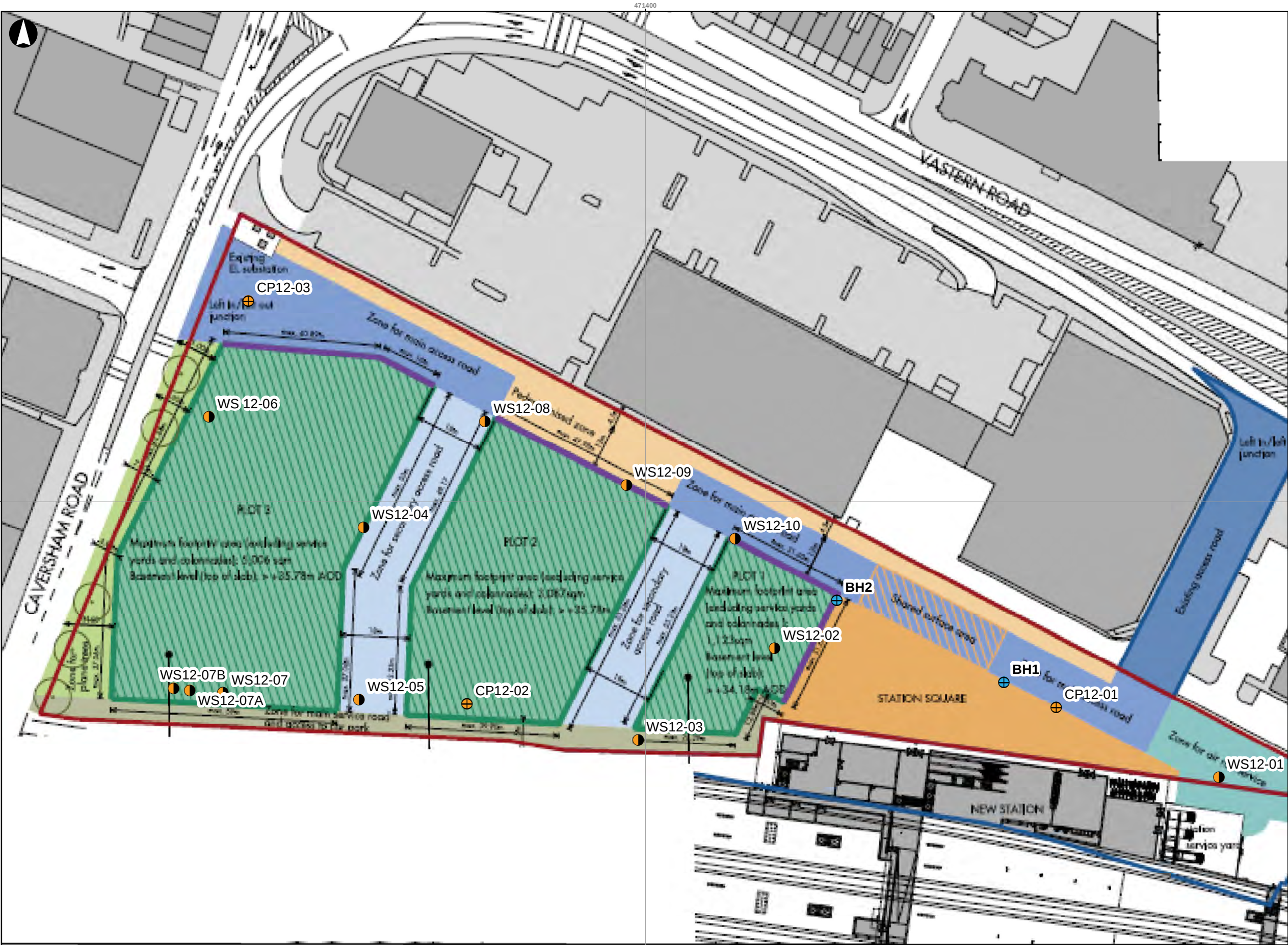
Job Title

Royal Mail Site, Caversham Road

**Figure 2 -
Exploratory Hole
Location Plan**

Scale at A3			1:1,000
Job No	Drawing Status		
211770-01	For Issue		
Drawing No			Issue
002			F1

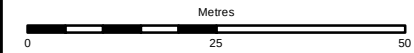




- Legend**
- Cable Percussion Borehole (2012)
 - Windowless Sampling Borehole (2012)
 - Existing Borehole (2010)

F1	2012-10-18	SK	RO	RO
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Issue	Date	By	Chkd	Appd
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Client
Royal Mail Group Ltd

Job Title
Royal Mail Site, Caversham Road

**Figure 4 -
Borehole Locations in relation
to future development**

Scale at A3

1:1,000

Job No 211770-01	Drawing Status For Issue
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Drawing No 004	Issue F1
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Appendix A

Geo-archaeological Investigation Results, January 2012

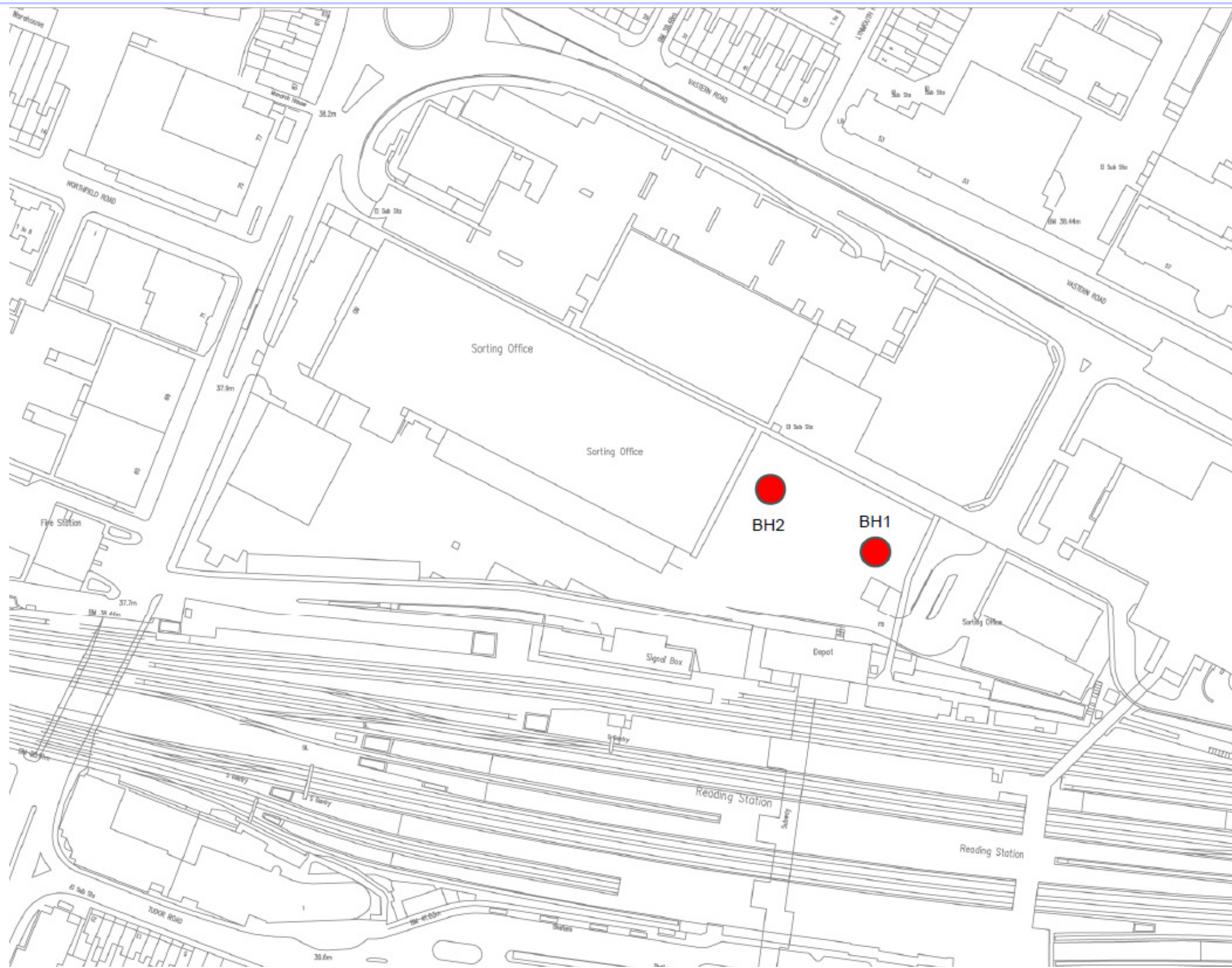


Figure:	1		
Title:	Geo-archaeological investigation location plan		
Project:	Caversham Road, Reading		
Date:	10/01/11	Scale:	Not to scale

CONCEPT SITE INVESTIGATIONS

8 Warple Mews, Warple Way
London W3 0RF
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Borehole No

BH1

Project

Royal Mail Sorting Office

Job No 10/2329	Date Started 17/12/10 Date Completed 17/12/10	Ground Level (mOD)	Co-Ordinates	Final Depth 3.50m
Client Arup			Method/ Plant Used Cable Percussion	Sheet 1 of 1

PROGRESS			STRATA				SAMPLES & TESTS			Field Records	Instrument/ Backfill
Date	Casing	Water	Level (mOD)	Legend	Depth (Thickness)	Strata Description	Depth (m)	Type No	Test Result		
17/12/10		Dry			0.10	Brick Paving.					
					0.18	Brown Coarse Sand. (MADE GROUND)					
					(0.42)	Type 1 Gravel (MADE GROUND)					
					0.60		0.60	ES01		...VOC 0.0ppm	
					(1.00)	Blackish Brown slightly gravelly coarse SAND with frequent brick and ash fragments and occasional clinker and concrete fragments. (MADE GROUND)	0.60				
					1.60						
					(0.90)	Soft dark brown mottled brownish grey slightly silty CLAY with a slight organic odour. (ALLUVIUM) ... becoming brown mottled grey below 1.80m.	2.00	ES02		...VOC 0.0ppm	
					2.50		2.00				
17/12/10					(1.00)	Brown sandy angular to subrounded fine to coarse flint GRAVEL. (RIVER TERRACE DEPOSITS)					
					3.50						
17/12/10						End of Borehole					

Chiselling (m)			Water Added (m)		GENERAL REMARKS
From	To	Hours	From	To	

1. Borehole drilled by others.
2. Water seepage encountered at 2.50m.
3. Ø50mm monitoring well installed at 3.50m depth, slotted between 2.00m and 3.50m.
4. Borehole backfilled with pea shingle between 3.50m and 2.00m and bentonite pellets between 2.00m and 0.30m depth. Concrete with lockable stopcock cover installed between 0.30m and ground level.

Issue No.	Driller	
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CONCEPT SITE INVESTIGATIONS

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London W3 0RF
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E-mail: si@conceptconsultants.co.uk



Borehole No

BH2

Project

Royal Mail Sorting Office

Job No 10/2329	Date Started 17/12/10	Ground Level (mOD)	Co-Ordinates	Final Depth 3.50m
Client Arup			Method/ Plant Used Cable Percussion	Sheet 1 of 1

PROGRESS			STRATA				SAMPLES & TESTS			Field Records	Instrument/ Backfill
Date	Casing	Water	Level (mOD)	Legend	Depth (Thickness)	Strata Description	Depth (m)	Type No	Test Result		
17/12/10		Dry			0.10	Brick Paving					
					0.18	Brown Coarse SAND. (MADE GROUND)					
					(0.62)	Type 1 Gravel. (MADE GROUND)					
					0.80		0.80	ES01		...VOC 0.0ppm	
					(1.40)	Soft dark brown slightly gravelly sandy CLAY with occasional brick and concrete fragments. Gravel is subangular to subrounded fine to coarse flint. (MADE GROUND)	0.80				
17/12/10		↓			2.20	... becoming very gravelly below 2.10m.	2.10	ES02		...VOC 0.0ppm	
					(1.30)	Brown sandy subangular to subrounded fine to coarse flint GRAVEL. (RIVER TERRACE DEPOSITS)	2.10				
17/12/10					3.50						
						End of Borehole					

Chiselling (m)			Water Added (m)		GENERAL REMARKS
From	To	Hours	From	To	

1. Borehole drilled by others.
2. Water seepage encountered at 2.20m.
3. Ø50mm monitoring well installed at 3.50m depth, slotted between 2.00m and 3.50m.
4. Borehole backfilled with pea shingle between 3.50m and 2.00m and bentonite pellets between 2.00m and 0.30m depth. Concrete with lockable stopcock cover installed between 0.30m and ground level.

Issue No.	Driller	
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Ground Investigation			Concept 2010	Concept 2010	Concept 2010	Concept 2010
Report Number			S10_8989	S10_8989	S10_8989	S10_8989
Lab Ref			CL/1040062	CL/1040063	CL/1040064	CL/1040065
Date			10/12/2010	10/12/2010	10/12/2010	10/12/2010
Exploatory hole location			BH1	BH1	BH2	BH2
Depth (m)			0.6m	2.0m	0.8m	2.1m
Strata			Made Ground	Alluvium	Made Ground	Made Ground
		Assessment Criteria				
Determinants	Units	Residential (no plant uptake)				
Metals						
Antimony	mg/kg	27	6.4	0.7	4.2	2.1
Arsenic	mg/kg	35	17.3	25.5	20	20
Barium	mg/kg	20500	175	81	158	70
Beryllium	mg/kg	51	0.8	1.4	0.7	0.5
Cadmium	mg/kg	85.0	0.8	0.24	0.47	0.22
Chromium	mg/kg	3010	13.9	49.7	21.6	19.7
Chromium VI	mg/kg	4.3	< 0.1	< 0.1	< 0.1	< 0.1
Copper	mg/kg	6200	266.8	26.9	705.6	154
Lead	mg/kg	369	954.4	41.5	425.6	128.4
Mercury	mg/kg	238	5.76	0.2	5.91	1.44
Nickel	mg/kg	130	34.9	51.7	27	19.6
Selenium	mg/kg	595	0.9	0.9	0.7	<0.5
Zinc	mg/kg	40300	795.4	94.3	248.8	136
Vanadium	mg/kg	nc	25.1	72.9	37.4	37.8
Miscellaneous						
Total Cyanide	mg/kg	nc	< 0.5	< 0.5	< 0.5	< 0.5
Boron (soluble)	mg/kg	10300	<0.5	1.9	<0.5	<0.5
Total organic carbon	%	nc	7.81	0.66	5.4	1.41
pH	pH Units	nc	8.2	8	9.6	8.7
Asbestos identification	nc	nc	NAIIS	NAIIS	NAIIS	NAIIS
Asbestos Concentration	%	nc	< 0.001	< 0.001	< 0.001	< 0.001
Phenol	mg/kg	310	< 0.5	< 0.5	< 0.5	< 0.5
Sulphate (2:1 water soluble) as SO4	g/l	nc	1290	166	813	514
BTEX						
Benzene	µg/kg	270.00	40	< 1	1	< 1
Toluene	µg/kg	607000	36	< 5	< 5	< 5
Ethylbenzene	µg/kg	167000.00	70	< 2	< 2	2
Xylenes	µg/kg	53000	64	< 8	11	12
Hydrocarbons						
Aliphatic C5-C6	mg/kg	30	< 0.2	< 0.2	< 0.2	< 0.2
Aliphatic >C6-C8	mg/kg	73	< 0.2	< 0.2	< 0.2	< 0.2
Aliphatic >C8-C10	mg/kg	19	< 4	< 4	< 4	< 4
Aliphatic >C10-C12	mg/kg	93	< 4	< 4	< 4	< 4
Aliphatic >C12-C16	mg/kg	745	< 4	< 4	< 4	< 4
Aliphatic >C16-C21	mg/kg	8360	5.06	<4	5.12	<4
Aliphatic >C21-C35	mg/kg	8360	11	11.2	17.6	12.2
Aliphatic >C35-C44	mg/kg	8360	< 5.62	< 5.63	< 5.64	< 5.65
Aliphatic >C8 - C44	mg/kg	nc	21.8	<20	27.2	<20
Aromatic C5-C7	mg/kg	263	0.02	< 0.01	0.01	< 0.01
Aromatic >C7-C8	mg/kg	607	0.04	< 0.01	0.02	< 0.01
Aromatic >C8-C10	mg/kg	33	< 4	< 4	< 4	< 4
Aromatic >C10-C12	mg/kg	177	< 4	< 4	< 4	< 4
Aromatic >C12-C16	mg/kg	1240	< 4	< 4	< 4	< 4
Aromatic >C16-C21	mg/kg	971	12.1	<4	9.6	7.75
Aromatic >C21-C35	mg/kg	1330	43.4	10.6	42.3	17.9
Aromatic >C35-C44	mg/kg	1330	< 5.62	< 5.63	< 5.64	< 5.65
Aromatic >C8 - C44	mg/kg	nc	64.4	<20	56.4	31.6
Total hydrocarbons (aliphatics and aromatics)	mg/kg	nc				
Acenaphthene	mg/kg	2020	<0.08	<0.08	<0.08	<0.08
Acenaphthylene	mg/kg	1950	< 0.08	< 0.08	0.12	< 0.08
Anthracene	mg/kg	19800	0.12	< 0.08	0.19	0.08
Benzo(a)anthracene	mg/kg	3.7	0.46	< 0.08	0.83	0.23
Benzo(a)pyrene	mg/kg	1.00	0.37	< 0.08	0.62	0.13
Benzo(b)fluoranthene	mg/kg	7.0	0.47	< 0.08	0.82	0.18
Benzo(k)fluoranthene	mg/kg	10.0	0.32	< 0.08	0.61	0.14
Benzo(g,h,i)perylene	mg/kg	46.7	0.27	< 0.08	0.32	< 0.08
Chrysene	mg/kg	8.8	0.56	< 0.08	0.97	0.28
Dibenzo(a,h)anthracene	mg/kg	87.00	0.1	< 0.08	0.11	< 0.08
Fluoranthene	mg/kg	972	0.65	< 0.08	1.29	0.89
Fluorene	mg/kg	1850	< 0.08	< 0.08	< 0.08	< 0.08
Indeno(1,2,3-c,d)pyrene	mg/kg	4.2	0.3	< 0.08	0.39	0.09
Naphthalene	mg/kg	1.6	0.1	< 0.08	< 0.08	< 0.08
Phenanthrene	mg/kg	834	0.53	< 0.08	0.46	0.93
Pyrene	mg/kg	2330	0.51	< 0.08	1.36	0.63
PAH (Sum of 16)	mg/kg	nc	< 5.00	< 1.28	< 8.33	< 4.06
PCB						
PCB 28	ug/kg	nc		< 5.0	< 5.0	
PCB 52	ug/kg	nc		< 5.0	< 5.0	
PCB 101	ug/kg	nc		< 5.0	< 5.0	
PCB 118	ug/kg	nc		< 5.0	< 5.0	
PCB 138	ug/kg	nc		< 5.0	< 5.0	
PCB 153	ug/kg	nc		< 5.0	< 5.0	
PCB 180	ug/kg	nc		< 5.0	< 5.0	

Ground Investigation				Concept 2010	Concept 2010
Report Number				W11_4740	W11_4740
Lab Ref				EX/1100318	EX/1100319
Date				Jan-10	Jan-10
Exploratory Hole Location				BH01	BH02
Depth (m)					
Type					
Area	Assessment Criteria	Units	Standard		
Inorganics					
Antimony	0.005	mg/l	UK DWS	<0.001	<0.001
Arsenic	0.01	mg/l	UK DWS	<0.001	<0.001
Barium	1	mg/l	UK DWS	0.04	0.03
Beryllium	nc	mg/l	nc	< 0.01	< 0.01
Cadmium	0.005	mg/l	UK DWS	<0.0001	<0.0001
Chromium	0.05	mg/l	UK DWS	0.003	0.002
Chromium VI	nc	mg/l	nc	<0.01	<0.01
Copper	2	mg/l	UK DWS	0.003	0.002
Lead	0.025	mg/l	UK DWS	<0.001	<0.001
Magnesium	50	mg/l	nc	12	7
Mercury	0.001	mg/l	UK DWS	<0.0001	<0.0001
Nickel	0.05	mg/l	UK DWS	0.003	0.005
Selenium	0.01	mg/l	UK DWS	0.005	<0.001
Zinc	5	mg/l	UK DWS	0.002	0.005
Vanadium	0.02	mg/l	FEQS	0.001	<0.001
Miscellaneous					
Alkalinity	nc	mg/l	nc	431	355
Cyanide total	0.5	mg/l	UK DWS	<0.02	<0.02
Ammoniacal Nitrogen as N	0.39	mg/l	UK DWS	0.01	4.5
pH	nc	pH units	nc	7.4	7.1
Total hardness	nc	mg/l	nc	354	391
Total organic carbon	nc	mg/l	nc	2.5	2.5
Phenol index	0.0005	mg/l	UK DWS	< 0.05*	< 0.05*
PAH					
Acenaphthene	2570	ug/l	DIV	0.02	< 0.010
Acenaphthylene	4010	ug/l	DIV	< 0.051	< 0.010
Anthracene	0.02	ug/l	FEQS	< 0.133*	< 0.010
Benzo(a)anthracene	1	ug/l	DIV	0.637	< 0.010
Benzo(a)pyrene	0.01	ug/l	UK DWS	0.69	< 0.010
Benzo(b)fluoranthene	17	ug/l	DIV	< 0.897	0.012
Benzo(k)fluoranthene	0.36	ug/l	DIV	< 0.352	< 0.010
Benzo(g,h,i)perylene	0.18	ug/l	DIV	< 0.408*	< 0.010
Chrysene	1.2	ug/l	DIV	0.562	< 0.010
Dibenzo(a,h)anthracene	0.83	ug/l	DIV	< 0.118	< 0.010
Fluoranthene	0.002	ug/l	FEQS	< 1.110*	0.011
Fluorene	nc	ug/l	nc	0.04	< 0.010
Indeno(1,2,3-c,d)pyrene	0.0036	ug/l	DIV	0.466	< 0.010*
Naphthalene	10	ug/l	FEQS	0.02	< 0.010
Phenanthrene	30	ug/l	DIV	0.443	< 0.010
Pyrene	106	ug/l	DIV	< 0.969	0.014
Total PAH	nc	ug/l	nc	< 6.916	< 0.167
TPH					
Aliphatic C5-C6	nc	mg/l	nc	<0.1	<0.1
Aliphatic >C6-C8	0.444	mg/l	DIV	<0.1	<0.1
Aliphatic >C8-C10	0.015	mg/l	DIV	< 0.01	< 0.01
Aliphatic >C10-C12	0.01	mg/l	DIV	< 0.01	< 0.01
Aliphatic >C12-C16	0.00056	mg/l	DIV	< 0.01*	< 0.01*
Aliphatic >C16-C21	0.000001	mg/l	DIV	0.017	< 0.01*
Aliphatic >C21-C35	nc	mg/l	nc	0.104	< 0.01
Aliphatic >C35-C44	nc	mg/l	nc	<0.01	<0.01
Aliphatic >C8 - C40	nc	mg/l	nc	0.127	< 0.01
Aromatic C5-C7	nc	mg/l	nc	<0.005	<0.005
Aromatic >C7-C8	nc	mg/l	nc	<0.005	<0.005
Aromatic >C8-C10	0.64	mg/l	nc	< 0.01	< 0.01
Aromatic >C10-C12	1.33	mg/l	nc	< 0.01	< 0.01
Aromatic >C12-C16	1.33	mg/l	nc	< 0.01	< 0.01
Aromatic >C16-C21	0.543	mg/l	nc	0.022	< 0.01
Aromatic >C21-C35	0.0066	mg/l	nc	0.062	< 0.01*
Aromatic >C35-C44	nc	mg/l	nc	< 0.01	< 0.01
Aromatic C8-C40	nc	mg/l	nc	0.093	< 0.01
BTEX					
Benzene	1	ug/l	UK DWS	< 1	< 1
Ethylbenzene	20	ug/l	FEQS	< 1	< 1
Toluene	50	ug/l	FEQS	< 1	< 1
Xylenes	nc	ug/l	nc	< 2	< 2

Appendix B

Planning Conditions 28, 29 and 30

28. Subject to the caveat below, no development (including demolition) of the site or any part of the site shall take place until a detailed site investigation has been carried out to assess the degree and nature of any contamination present on the site and the resultant site investigation report submitted to and approved in writing by the local planning authority. The site investigation shall assess any contamination on the site - whether or not it originates on the site - shall include relevant soil, gas, surface water and ground water sampling, and shall be carried out by a suitably qualified consultant and a UKAS (United Kingdom Accreditation Service) accredited contractor. The site investigation shall follow a sampling and analysis methodology previously agreed with the local planning authority, but notwithstanding the foregoing, it shall include:

(i) a survey of the extent, scale and nature of contamination;

(ii) an assessment of the potential risks to:

-human health,

-property (existing or proposed) including buildings, pets and service lines and pipes,

-adjoining land,

-groundwaters and surface waters,

-ecological systems,

-archaeological sites and ancient monuments.

Caveat: for the avoidance of doubt, the requirements of this condition shall apply to the land at station square dedicated or to be dedicated as public highway and any other land to be used by the Council as Highway Authority in connection with works to the land so dedicated only if the improvements works by the Highway Authority to make that land available for public use have not commenced before implementation of the development.

Reason: to provide full contaminated land investigation of the whole site prior to any development taking place.

Policies: PPS23; RBCS Policy CS34

29. Where, in relation to any Phase (Phases as set out in the Phasing Strategy in condition 2 above), the site investigation report approved pursuant to condition 28 above has revealed contamination that would require remediation, no development (including demolition) of that Phase shall take place until the following documents (elaborated upon below) have been submitted to and approved in writing by the local planning authority:

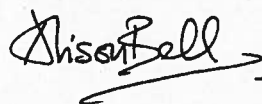
a) a Remediation Strategy based upon a risk assessment and with -

b) associated Remediation Method Statements incorporating quality assurance procedures to demonstrate compliance with the proposed methodology and best practice guidance; and

c) a Monitoring Regime for the on-going monitoring of any contamination present on the site.

The Remediation Strategy, Remediation Method Statements and Monitoring Regime referred to above shall be submitted in relation to either the whole site or a Phase or Phases as appropriate to suit the progress of the development hereby permitted. If

Date: 26th March 2012



Head of Planning & Building Control

DR

during any approved remediation works in relation to a Phase, contamination is encountered which has not previously been identified, or if site conditions requiring a change in methodology are encountered, then construction of the Phase shall cease forthwith and the additional contamination or site conditions shall be fully assessed in accordance with this Condition and (an) appropriate amendment(s) made to the previously approved Remediation Strategy, Remediation Method Statements and Monitoring Regime - which amended document(s) shall be submitted to and approved in writing by the local planning authority before development re-commences. The development shall be implemented and completed in accordance with the measures approved. Reason: to ensure that remediation is undertaken in relation to the whole site or a Phase or Phases as appropriate to suit the progress of the development hereby permitted, but in any event to a suitable standard for the end uses of the Phase(s).

Policies: PPS23; RBCS CS34

30. No development within a Phase shall be occupied/brought into first use (as appropriate) before:
- a) the completion of the remediation works (as approved in condition 29 above) (relevant to that Phase of the development); and ,
 - b) a Phase-specific Closure Report (elaborated upon below) has been submitted to and approved in writing by the local planning authority.

Each Closure Report shall include:

- a) details of the methodology approved (including any amendments subsequently approved) pursuant to condition 29 and confirmation that the remediation works have been carried out in full accordance with that approved methodology together with details of any ongoing bio-remediation and/or Monitoring Regimes; and
- b) details of any Phase-specific post-remediation sampling and analysis to demonstrate that that Phase has been remediated in accordance with the approved Remediation Strategy and associated Remediation Method Statements together with the relevant documentation detailing what waste materials have been removed from site.

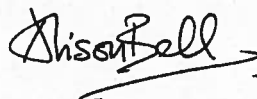
The details in each approved Closure Report in respect of any ongoing bio-remediation and/or Monitoring Regimes shall be carried out and/or maintained for the whole of the period stated in the relevant Closure Report. Reason: to ensure the development is suitable for its end uses and the wider environment and does not create undue risks to occupiers of the site or surrounding areas.

Policies: PPS23; RBCS CS34

31. No penetrative piling of foundations shall commence unless and until full details of such have been submitted to and approved in writing by the local planning authority. The foundations shall thereafter only be undertaken in accordance with the approved details. Reason: to protect groundwater quality from pathways caused by piling operations in areas of contaminated land.

Policies: RBCS CS34

Date: 26th March 2012



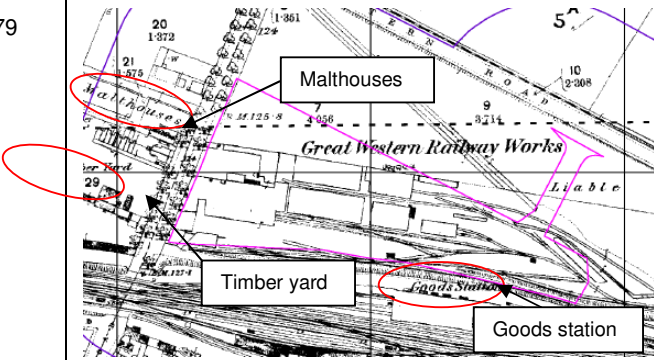
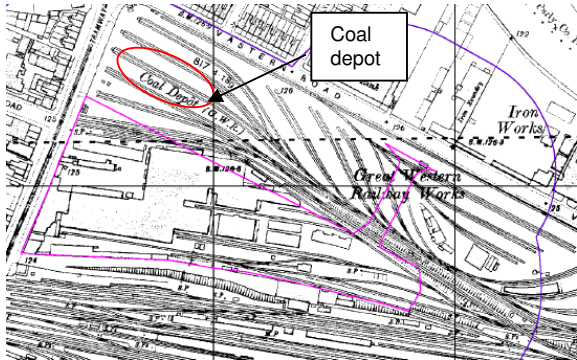
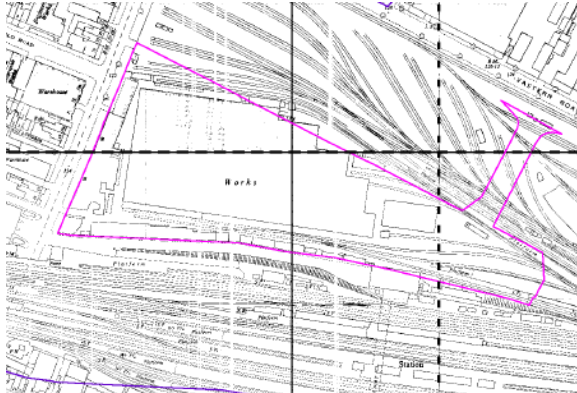
Head of Planning & Building Control

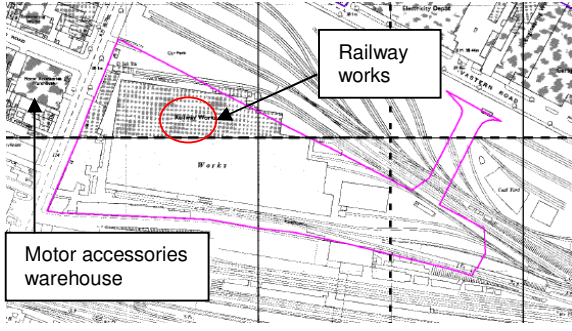
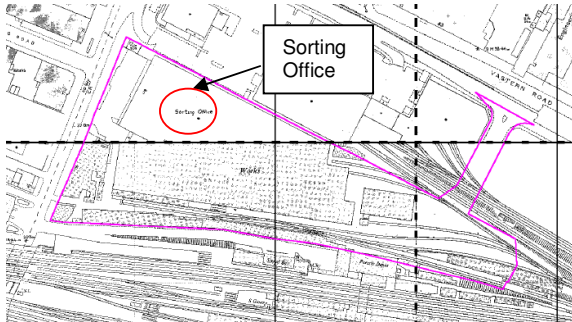
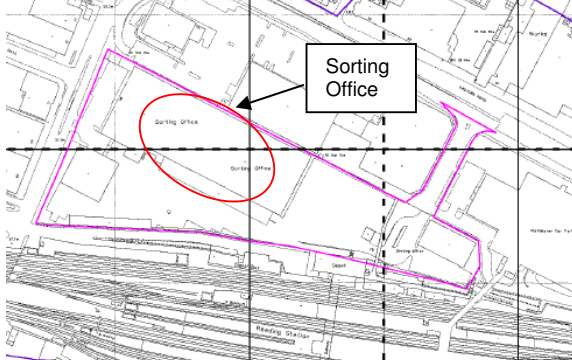


Appendix C

Summary of Historical Maps

A summary of the site history is provided by the extracts of OS maps at different times which are represented and annotated in the Table overleaf (taken from Section 2.6 of the Arup “Contaminated Land Preliminary Phase 1 Report”, March 2010).

Date of map	Extract from OS map	On site and off site features
1879		The site is labelled as the "Great Western Railway Works". There are buildings and some railway sidings located on the site. A goods station and railway lines are present off-site to the south of the site. Malthouses and a timber yard are present off-site to the west of the site. The site is undeveloped off-site to the north.
1912 - 1913		The site remains occupied by the Great Western Railway works. The layout of the buildings have changed since 1879. Railway sidings and part of a coal depot are present on the site. The site is surrounded by railway sidings to both the north and south. An iron works is present off-site to the north.
1957		The site is labelled "works", although it is assumed this still refers to the railway works. The layout of the site buildings are now one large building with a few smaller buildings. Warehouses are present off-site to the west. Railway sidings continue to surround the site.

Date of map	Extract from OS map	On site and off site features
1962 - 1972	 This map extract shows a site outlined in pink. A red circle highlights a building labeled 'Railway works'. Another red circle highlights a building labeled 'Motor accessories warehouse'. The site is situated near railway tracks and a road labeled 'EASTERN ROAD'.	The site is labelled “railway works”. An electricity sub-station is shown at the north west of the site. A coal depot is shown off-site to the east of the site. A motor accessories warehouse is shown off-site to the west. Railway sidings continue to surround the site.
1979 - 1989	 This map extract shows the same site outlined in pink. A red circle highlights a building labeled 'Sorting Office'. The site is situated near railway tracks and a road labeled 'EASTERN ROAD'.	The sorting office is shown on the site.
1993	 This map extract shows the same site outlined in pink. A red circle highlights a building labeled 'Sorting Office'. The site is situated near railway tracks and a road labeled 'EASTERN ROAD'.	The site layout resembles the current site layout. The main sorting office building is shown with the building that connects to it (currently used by Network Rail). The warehouse building is also shown. The long stay railway car park is shown to the east of the site.

Appendix D

Soil Screening Assessment Spreadsheets

Soil Samples

Our Ref: 12-69052
Client Ref: 20958
Contract Title: Caversham Road, Reading

[illegible]

Commercial Screening Assessment - Soil WS 12-01 to WS 12-09

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69053

Client Ref: 20958

Contract Title: Caversham Road, Reading

Lab No.				446386	446387	446388	446389	446390	446391	446392	446393	446394	446395	446396	446397	446398	446399
Sample ID				CP12-01	CP12-01	CP12-01	CP12-01	CP12-01	CP12-02	CP12-02	CP12-02	CP12-02	CP12-02	CP12-03	CP12-03	CP12-03	CP12-03
Depth				0.20	0.80	1.50	2.50	3.30	0.80	1.80	2.00	2.50	7.10	0.40	0.80	2.80	3.10
Sample Ref				1	2	3	4	7	2	3	4	5	12	1	2	5	7
Sample Type				ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Sampling Date				18/09/2012	18/09/2012	18/09/2012	18/09/2012	18/09/2012	17/09/2012	17/09/2012	17/09/2012	17/09/2012	17/09/2012	18/09/2012	18/09/2012	18/09/2012	18/09/2012
Sampling Time																	
Screening criteria				(commercial 1%)													
Test	Units	DETSxx	LOD	492	640	640	640	640	640	640	640	640	640	640	640	640	640
Antimony	mg/kg	DETS 042*	0.2	492	640	640	640	640	640	640	640	640	640	640	640	640	640
Arsenic	mg/kg	DETS 042#	0.2	420	570	570	570	570	570	570	570	570	570	570	570	570	570
Barium	mg/kg	DETS 042#	0.1	230	300	300	300	300	300	300	300	300	300	300	300	300	300
Cadmium	mg/kg	DETS 042#	0.15	30400	39000	39000	39000	39000	39000	39000	39000	39000	39000	39000	39000	39000	39000
Chromium	mg/kg	DETS 042#	0.2	71700	92000	92000	92000	92000	92000	92000	92000	92000	92000	92000	92000	92000	92000
Copper	mg/kg	DETS 042#	0.3	7300	9300	9300	9300	9300	9300	9300	9300	9300	9300	9300	9300	9300	9300
Lead	mg/kg	DETS 2325#	0.05	360	470	470	470	470	470	470	470	470	470	470	470	470	470
Mercury	mg/kg	DETS 042#	1	1800	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
Nickel	mg/kg	DETS 042#	0.5	13000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000
Selenium	mg/kg	DETS 042#	0.8	3160	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Vanadium	mg/kg	DETS 042#	1	662000	830000	830000	830000	830000	830000	830000	830000	830000	830000	830000	830000	830000	830000
Zinc	mg/kg	DETS 020#	0.2	192000	240000	240000	240000	240000	240000	240000	240000	240000	240000	240000	240000	240000	240000
Boron (water soluble)	mg/kg	DETS 2130#	0.1	16200	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
Cyanide total	mg/kg	DETS 2002#	0.1	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Total Organic Carbon	%	DETS 2008#	0.01	3380	4200	4200	4200	4200	4200	4200	4200	4200	4200	4200	4200	4200	4200
pH		DETS 3321*	0.01	8250	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Aliphatic C5-C6	mg/kg	DETS 3321*	0.01	2130	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600
Aliphatic C6-C8	mg/kg	DETS 3072#	1.5	10300	12500	12500	12500	12500	12500	12500	12500	12500	12500	12500	12500	12500	12500
Aliphatic C8-C10	mg/kg	DETS 3072#	1.2	60800	73000	73000	73000	73000	73000	73000	73000	73000	73000	73000	73000	73000	73000
Aliphatic C10-C12	mg/kg	DETS 3072#	1.5	673000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000
Aliphatic C12-C16	mg/kg	DETS 3072#	3.4	673000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000	810000
Aliphatic C16-C21	mg/kg	DETS 3072#	0.01	27700	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500
Aliphatic C21-C35	mg/kg	DETS 3072#	0.01	59000	71000	71000	71000	71000	71000	71000	71000	71000	71000	71000	71000	71000	71000
Aromatic C5-C7	mg/kg	DETS 3072#	0.01	3670	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
Aromatic C7-C8	mg/kg	DETS 3072#	0.9	16900	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
Aromatic C8-C10	mg/kg	DETS 3072#	0.5	36200	43000	43000	43000	43000	43000	43000	43000	43000	43000	43000	43000	43000	43000
Aromatic C10-C12	mg/kg	DETS 3072#	0.6	26700	31500	31500	31500	31500	31500	31500	31500	31500	31500	31500	31500	31500	31500
Aromatic C12-C16	mg/kg	DETS 3072#	1.4	28400	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500	33500
Aromatic C16-C21	mg/kg	DETS 3072*	10	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Aromatic C21-C35	mg/kg	DETS 3072*	10	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
TPH Ali/Aro	mg/kg	DETS 3072*	10	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Benzene	mg/kg	DETS 062#	0.01	518	630	630	630	630	630	630	630	630	630	630	630	630	630
Ethylbenzene	mg/kg	DETS 062#	0.01	870	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
Toluene	mg/kg	DETS 062#	0.01	480	570	570	570	570	570	570	570	570	570	570	570	570	570
Xylene	mg/kg	DETS 2130#	0.3	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Phenol - Monohydric	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 105	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 114	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 118	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 123	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 126	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 156	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 157	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 167	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 169	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 189	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 77	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
PCB 81	mg/kg	DETS 3401*	0.01	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc
Acenaphthene	mg/kg	DETS 3303#	0.03	84900	102000	102000	102000	102000	102000	102000	102000	102000	102000	102000	102000	102000	102000
Acenaphthylene	mg/kg	DETS 3303#	0.03	84300	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000
Anthracene	mg/kg	DETS 3303#	0.03	90	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
Benzo(a)anthracene	mg/kg	DETS 3303#	0.03	14	165	165	165	165	165	165	165	165	165	165	165	165	165
Benzo(a)pyrene	mg/kg	DETS 3303#	0.03	141	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Benzo(b)fluoranthene	mg/kg	DETS 3303#	0.03	100	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150	1150
Benzo(k)fluoranthene	mg/kg	DETS 3303#	0.03	654	7600	7600	7600	7600	7600	7600	7600	7600	7600	7600	7600	7600	7600
Chrysene	mg/kg	DETS 3303#	0.03	137	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Dibenzo(a,h)anthracene	mg/kg	DETS 3303#	0.03	13	150	150	150	150	150	150	150	150	150	150	150	150	150
Fluoranthene	mg/kg	DETS 3303#	0.03	22600	26500	26500	26500	26500	26500	26500	26500	26500	26500	26500	26500	26500	26500
Fluorene	mg/kg	DETS 3303#	0.03	63500	75000	75000	75000	75000	75000	75000	75000	75000	75000	75000	75000	75000	75000
Indeno(1,2,3-c,d)pyrene	mg/kg	DETS 3303#	0.03	60	690	690	690	690	690	690	690	690	690	690	690	690	690
Naphthalene	mg/kg	DETS 3303#	0.03	204	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350
Phenanthrene	mg/kg	DETS 3303#	0.03	21900	25500	25500	25500	25500	25500	25500	25500	25500	25500	25500	25500	25500	25500
Pyrene	mg/kg	DETS 3303#	0.03	54200	63500	63500	63500	63500	63500	63500	63500	63500	63500	63500	63500	63500	63500
Total PAH - USEPA 16	mg/kg	DETS 3303	0.1	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc

Commercial Screening Assessment - Soil
CP 12-01 to CP12-03

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69052

Client Ref: 20958

Contract Title: Caversham Road, Reading

Lab No. Sample ID Depth Sample Ref Sample Type Sampling Date Sampling Time	Units	DETSxx	LOD	Screening criteria (commercial 1%)	446345	446349	446350	446351	446357	446358	446363	446370	446372	449868	449869	449870
					WS12-01	WS12-01	WS12-02	WS12-02	WS12-04	WS12-05	WS12-06	WS12-08	WS12-09	WS12-09	WS12-09	WS12-09
					0.70	3.80	0.80-1.50	0.80-1.50	0.60	0.20	1.30	0.25	0.25	1.80	2.20	3.50
					2	6	2	3	2	1	3	1	1			
					14/09/2012	14/09/2012	13/09/2012	13/09/2012	12/09/2012	13/09/2012	12/09/2012	15/09/2012	15/09/2012	29/09/2012	29/09/2012	29/09/2012
Test	Units	DETSxx	LOD	Screening criteria (commercial 1%)												
Phenol	mg/kg	DETS 071*	0.1	3200	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	mg/kg	DETS 071*	0.1	nc	< 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-Chlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	mg/kg	DETS 071*	0.1	nc	< 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-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 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-Dimethylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	mg/kg	DETS 071*	0.1	nc	< 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-Dichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	mg/kg	DETS 071*	0.1	108	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	DETS 071*	0.1	nc	< 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-Methylnaphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 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-Chloronaphthalene	mg/kg	DETS 071*	0.1	nc	< 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-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 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-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	DETS 071*	0.1	63500	< 0.1	< 0.1	< 0.1	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 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-Methyl-4,6-Dinitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	mg/kg	DETS 071*	0.1	47	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	mg/kg	DETS 071*	0.1	630	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	DETS 071*	0.1	21900	0.3	< 0.1	0.2	3.8	0.5	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	DETS 071*	0.1	525000	< 0.1	< 0.1	< 0.1	1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	DETS 071*	0.1	nc	0.4	< 0.1	0.3	6.3	0.7	< 0.1	< 0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	DETS 071*	0.1	nc	0.4	< 0.1	0.3	5.6	0.7	< 0.1	< 0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	DETS 071*	0.1	90	0.3	< 0.1	0.2	2.5	0.4	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	DETS 071*	0.1	nc	0.3	< 0.1	0.2	2.1	0.3	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	DETS 071*	0.1	100	0.3	< 0.1	0.2	1.9	0.3	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	DETS 071*	0.1	141	0.1	< 0.1	< 0.1	0.8	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	DETS 071*	0.1	14	0.2	< 0.1	0.2	1.6	0.2	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Indeno(123cd)pyrene	mg/kg	DETS 071*	0.1	60	< 0.1	< 0.1	< 0.1	0.6	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Dibenzo(ah)anthracene	mg/kg	DETS 071*	0.1	13	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	DETS 071*	0.1	654	< 0.1	< 0.1	< 0.1	0.7	0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	mg/kg	DETS 071*	0.1	4480	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	mg/kg	DETS 071*	0.1	32	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	mg/kg	DETS 071*	0.1	2140	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	3900	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Commercial Screening Assessment - Soil SVOC

WS 12-01 to WS 12-09

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69053

Client Ref: 20958

Contract Title: Caversham Road, Reading

				Lab No.	446387	446388	446389	446396
				Sample ID	CP12-01	CP12-01	CP12-01	CP12-03
				Depth	0.80	1.50	2.50	0.40
				Sample Ref	2	3	4	1
				Sample Type	ES	ES	ES	ES
				Sampling Date	18/09/2012	18/09/2012	18/09/2012	18/09/2012
				Sampling Time				
Test	Units	DETSxx	LOD	Screening criteria (commercial 1%)				
Phenol	mg/kg	DETS 071*	0.1	3200	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	mg/kg	DETS 071*	0.1	108	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	DETS 071*	0.1	63500	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	mg/kg	DETS 071*	0.1	47	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	mg/kg	DETS 071*	0.1	630	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	DETS 071*	0.1	21900	0.5	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	DETS 071*	0.1	525000	0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	DETS 071*	0.1	nc	0.6	0.2	< 0.1	< 0.1
Pyrene	mg/kg	DETS 071*	0.1	nc	0.5	0.3	< 0.1	< 0.1
Butylbenzylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	DETS 071*	0.1	90	0.4	0.2	< 0.1	< 0.1
Chrysene	mg/kg	DETS 071*	0.1	nc	0.4	0.2	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	DETS 071*	0.1	100	0.4	0.2	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	DETS 071*	0.1	141	0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	DETS 071*	0.1	14	0.3	< 0.1	< 0.1	< 0.1
Indeno(123cd)pyrene	mg/kg	DETS 071*	0.1	60	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzo(ah)anthracene	mg/kg	DETS 071*	0.1	13	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	DETS 071*	0.1	654	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	mg/kg	DETS 071*	0.1	4460	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	mg/kg	DETS 071*	0.1	32	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	mg/kg	DETS 071*	0.1	2140	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	3900	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1

Commercial Screening Assessment - SVOCs CP 12-01 to CP12-03

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69052
Client Ref: 20958
Contract Title: Caversham Road, Reading

Lab No.	446345	446349	446350	446351	446357	446358	446363	446370	446372	449868	449869	449870				
Sample ID	WS12-01	WS12-01	WS12-02	WS12-02	WS12-04	WS12-05	WS12-06	WS12-08	WS12-09	WS12-09	WS12-09	WS12-09				
Depth	0.70	3.80	0.80-1.50	0.80-1.50	0.60	0.20	1.30	0.25	0.25	1.80	2.20	3.50				
Sample Ref	2	6	2	3	2	1	3	1	1							
Sample Type																
Sampling Date	14/09/2012	14/09/2012	13/09/2012	13/09/2012	12/09/2012	13/09/2012	12/09/2012	15/09/2012	15/09/2012	29/09/2012	29/09/2012	29/09/2012				
Sampling Time																
Test	Units	DETSxx	LOD	Screening criteria (commercial 1%)												
Total VOC's	mg/kg	DETS 3431*	0.01	nc	0.06	0.13	0.13	0.1	0.2	0.08	0.13	0.08	0.26	< 0.01	< 0.01	< 0.01
1,1-Dichloroethylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	mg/kg	DETS 3431*	0.01	700	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	mg/kg	DETS 3431*	0.01	0.7	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	mg/kg	DETS 3431*	0.01	115	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m-p-Xylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	mg/kg	DETS 3431*	0.01	32	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	0.08	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	mg/kg	DETS 3431*	0.01	4460	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	mg/kg	DETS 3431*	0.01	2140	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	mg/kg	DETS 3431*	0.01	228	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	mg/kg	DETS 3431*	0.01	nc	0.06	0.13	0.13	0.1	0.12	0.08	0.13	0.08	0.26	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	mg/kg	DETS 3431*	0.01	108	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Vinyl Chloride	mg/kg	DETS 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-butanol, 2-methyl- (TIC)	mg/kg	DETS 3431*	nc	nc				1.123	1.268							
1S- alpha- pinene (TIC)	mg/kg	DETS 3431*	nc	nc				2.976								
heptane, 2,2-dimethyl- (TIC)	mg/kg	DETS 3431*	nc	nc			1.17						1.155			
hexane, 3,4-dimethyl- (TIC)	mg/kg	DETS 3431*	nc	nc>												

Commercial Screening Assessment - Soil VOC WS 12-01 to WS 12-09

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69053
 Client Ref: 20958
 Contract Title: Caversham Road, Reading

				Lab No.	446387	446388	446389	446396
				Sample ID	CP12-01	CP12-01	CP12-01	CP12-03
				Depth	0.80	1.50	2.50	0.40
				Sample Ref	2	3	4	1
				Sample Type	ES	ES	ES	ES
				Sampling Date	18/09/2012	18/09/2012	18/09/2012	18/09/2012
				Sampling Time				
Test	Units	DETSxx	LOD	Screening criteria (commercial 1%)				
Total VOC's	mg/kg	DETSC 3431*	0.01	nc	0.51	< 0.01	0.03	< 0.01
1,1 Dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	mg/kg	DETSC 3431*	0.01	700	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	mg/kg	DETSC 3431*	0.01	0.7	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	mg/kg	DETSC 3431*	0.01	115	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	mg/kg	DETSC 3431*	0.01	32	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	mg/kg	DETSC 3431*	0.01	4460	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	mg/kg	DETSC 3431*	0.01	2140	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	mg/kg	DETSC 3431*	0.01	228	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	mg/kg	DETSC 3431*	0.01	nc	0.49	< 0.01	0.03	< 0.01
1,2,3-trichlorobenzene	mg/kg	DETSC 3431*	0.01	108	< 0.01	< 0.01	< 0.01	< 0.01
Vinyl Chloride	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,22- docosanediol (TIC)	mg/kg	DETSC 3431*		nc		1.013		
1-dodecanol, 3,7, 11-trimethyl- (TIC)	mg/kg	DETSC 3431*		nc		1.128		
6-octen-1-ol, 3,7-dimethyl- (TIC)	mg/kg	DETSC 3431*		nc		0.936		
bicyclo [3.1.1] heptan-3-one, 2,6,6- trimet (TIC)	mg/kg	DETSC 3431*		nc		1.092		

Commercial Screening Assessment - Soil VOC

CP 12-01 to CP 12-03

Summary of Chemical Analysis
Soil Samples

Our Ref: 12-69052
Client Ref: 20958
Contract Title: Caversham Road, Reading

Lab No.				446345	446346	446347	446348	446349	446350	446351	446352	446353	446354	446355	446356	446357	446358	446359	446360	446361	446362	446363	446364	446365	446366	446368	446369	446370	446371	446372	446373	449868	449869	449870		
Sample ID				WS12-01	WS12-01	WS12-01	WS12-01	WS12-01	WS12-02	WS12-02	WS12-02	WS12-03	WS12-03	WS12-03	WS12-04	WS12-04	WS12-05	WS12-05	WS12-05	WS12-06	WS12-06	WS12-06	WS12-06	WS12-07	WS12-07	WS12-07A	WS12-07B	WS12-08	WS12-08	WS12-09	WS12-09	WS12-09	WS12-09	WS12-09		
Depth				0.70	1.70	2.40	3.50	3.80	0.80-1.50	0.80-1.50	2.20	0.20	0.90	2.00	0.50	0.60	0.20	1.50	2.30	0.50	0.80	1.30	2.40	0.20	0.70	0.60	0.20	0.25	0.80	0.25	0.80	1.80	2.20	3.50		
Sample Ref				2	3	4	5	6	2	3	4	1	2	3	1	2	1	3	4	1	2	3	5	1	2	2	1	1	2	1	2	2	2	3		
Sample Type																																				
Sampling Date				14/09/2012	14/09/2012	14/09/2012	14/09/2012	14/09/2012	13/09/2012	13/09/2012	13/09/2012	13/09/2012	13/09/2012	13/09/2012	13/09/2012	12/09/2012	12/09/2012	13/09/2012	13/09/2012	13/09/2012	12/09/2012	12/09/2012	12/09/2012	12/09/2012	12/09/2012	12/09/2012	14/09/2012	14/09/2012	15/09/2012	15/09/2012	15/09/2012	29/09/2012	29/09/2012	29/09/2012		
Sampling Time																																				
Screening criteria (residential without plant uptake, 1%)																																				
Test	Units	DETSxx	LOD	27	4	1.6	2.4	1.8	1.1	1.9	1.2	1.4	< 1.0	1.6	1.2	< 1.0	1.9	< 1.0	2.8	2.4	< 1.0	< 1.0	1.5	1.4	< 1.0	8.5	5.1	< 1.0	< 1.0	1.7	< 1.0	1.6	2.1	1.4	1.4	
Antimony	mg/kg	DETS 042"	1	35	9.3	14	25	18	17	9	15	28	3.8	33	22	4.1	12	10	17	14	4.1	8.7	18	24	3.2	13	17	4.9	4.9	6.6	5.3	7.4	16	12	17	
Arsenic	mg/kg	DETS 042#	0.2	51	1.4	0.6	1	1	0.5	0.3	0.6	0.5	< 0.2	0.5	0.4	< 0.2	0.5	0.3	0.6	0.6	< 0.2	0.3	0.8	0.5	< 0.2	0.5	0.6	< 0.2	0.3	< 0.2	0.2	0.7	0.5	0.3		
Beryllium	mg/kg	DETS 042#	0.2	85	1	1.4	2.6	2.4	1.6	1.1	4.3	2.4	0.7	1.3	1.8	0.6	1.3	1	3.4	3.3	0.4	1.1	2	2.2	0.7	2	2.1	0.6	0.6	0.8	0.5	0.9	0.9	0.6	0.6	
Cadmium	mg/kg	DETS 042#	0.15	3010	24	28	44	37	15	11	20	16	3.6	16	14	4.1	14	9.7	19	22	13	14	30	16	4	9.5	10	4.8	6.1	9.4	5.4	8.6	27	18	11	
Chromium	mg/kg	DETS 042#	0.1	6200	84	28	18	18	11	59	34	9.4	8.7	34	9	2.6	50	7.8	95	74	4	12	12	12	2.6	81	97	17	14	26	11	130	18	8.2	7.3	
Copper	mg/kg	DETS 042#	0.2	370	89	31	15	13	6.4	120	64	8.1	19	18	6.5	23	88	11	450	100	24	22	14	8.2	26	530	510	69	48	81	44	69	35	8.3	6.1	
Lead	mg/kg	DETS 042#	0.3	238	15	26	1	0.16	0.06	1.3	0.43	< 0.05	0.27	0.83	0.06	< 0.05	0.61	< 0.05	0.79	0.48	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.89	1.9	0.33	0.24	0.42	0.28	0.43	< 0.05	< 0.05	< 0.05
Mercury	mg/kg	DETS 2325#	0.05	130	63	20	23	27	16	9.3	16	17	4.2	13	14	2.6	14	8.9	24	25	5.7	9.6	21	16	1.7	16	19	4.6	5.2	11	5.6	9.4	21	16	12	
Nickel	mg/kg	DETS 042#	1	595	< 0.5	< 0.5	0.8	< 0.5	0.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	< 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	
Selenium	mg/kg	DETS 042#	0.5	188	31	42	67	60	33	20	36	42	5.7	30	34	6.1	29	18	33	32	5.8	60	49	36	4.3	21	25	8.2	8.4	18	10	12	40	25	22	
Vanadium	mg/kg	DETS 042#	0.8	40300	51	39	82	51	27	97	100	35	130	45	96	99	76	29	74	61	62	23	51	40	130	130	130	64	55	42	58	170	63	32	23	
Zinc	mg/kg	DETS 042#	1	10300	2.8	1.1	1.7	1.1	0.9	1.3	1.3	0.8	0.7	0.9	0.7	0.9	2.8	1.9	1.4	1.4	1	2.3	1.4	0.8	0.5	1.7	1.5	1.1	1.8	2.3	1.8	1.7	2	0.9	0.6	
Boron (water soluble)	mg/kg	DETS 020#	0.2	800	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.1	0.1	0.3	0.7	0.2	0.3	0.5	0.5	1.4	0.2	0.1	0.2	< 0.1	0.1	< 0.1	0.2	0.6	< 0.1	< 0.1	< 0.1	< 0.1	0.7	< 0.1	0.1	
Cyanide total	mg/kg	DETS 2130#	0.1	nc	3.3	0.4	0.6	0.3	0.2	0.6	0.7	< 0.1	0.2	0.3	< 0.1	< 0.1	0.8	0.1	1.2	0.7	0.1	0.3	0.5	< 0.1	< 0.1	2.8	3.5	0.5	0.2	0.4	0.6	0.5	0.7	0.3	< 0.1	
Total Organic Carbon	%	DETS 2002#	0.1	30	10.3	8.2	7.8	7.7	7.9	9.2	9.3	8.6	10	8.9	8.6	10.5	12	11.4	9.4	9.5	9.4	10.4	8.6	8.7	9.1	10.4	9.5	10.2	10.9	11	10.4	10.3	8	8.1	8.4	
pH		DETS 2008#		nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic C5-C6	mg/kg	DETS 3321*	0.01	73	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic C6-C8	mg/kg	DETS 3321*	0.01	19	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	2.3	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic C8-C10	mg/kg	DETS 3321*	0.01	93	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5	
Aliphatic C10-C12	mg/kg	DETS 3072#	1.5</																																	

Client Ref: 20958
Contract Title: Caversham Road, Reading

Residential Screening Assessment - Soil

CP 12-01 to CP12-03

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69052
Client Ref: 20958
Contract Title: Caversham Road, Reading

Test	Units	DETSxx	LOD	Screening Criteria, Residential without plant uptake, 1%	446345	446349	446350	446351	446357	446358	446363	446370	446372	449868	449869	449870
					WS12-01	WS12-01	WS12-02	WS12-02	WS12-04	WS12-05	WS12-06	WS12-08	WS12-09	WS12-09	WS12-09	WS12-09
		Depth			0.70	3.80	0.80-1.50	0.80-1.50	0.60	0.20	1.30	0.25	0.25	1.80	2.20	3.50
		Sample Ref			2	6	2	3	2	1	3	1	1			
		Sample Type														
		Sampling Date			14/09/2012	14/09/2012	13/09/2012	13/09/2012	12/09/2012	13/09/2012	12/09/2012	15/09/2012	15/09/2012	29/09/2012	29/09/2012	29/09/2012
		Sampling Time														
Phenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	mg/kg	DETS 071*	0.1	nc	< 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-Chlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	mg/kg	DETS 071*	0.1	nc	< 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-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3,4-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 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-Dimethylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	mg/kg	DETS 071*	0.1	nc	< 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-Dichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	mg/kg	DETS 071*	0.1	1.6	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	DETS 071*	0.1	nc	< 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-Methylnaphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 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-Chloronaphthalene	mg/kg	DETS 071*	0.1	nc	< 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-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 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-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	DETS 071*	0.1	2020	< 0.1	< 0.1	< 0.1	0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	DETS 071*	0.1	1850	< 0.1	< 0.1	< 0.1	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 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-Methyl-4,6-Dinitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	DETS 071*	0.1	834	0.3	< 0.1	0.2	3.8	0.5	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	DETS 071*	0.1	19,800	< 0.1	< 0.1	< 0.1	1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	DETS 071*	0.1	972	0.4	< 0.1	0.3	6.3	0.7	< 0.1	< 0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	DETS 071*	0.1	2330	0.4	< 0.1	0.3	5.6	0.7	< 0.1	< 0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	DETS 071*	0.1	3.7	0.3	< 0.1	0.2	2.5	0.4	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	DETS 071*	0.1	8.8	0.3	< 0.1	0.2	2.1	0.3	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	DETS 071*	0.1	7	0.3	< 0.1	0.2	1.9	0.3	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	DETS 071*	0.1	10	0.1	< 0.1	< 0.1	0.8	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	DETS 071*	0.1	1	0.2	< 0.1	0.2	1.3	0.2	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Indeno(123cd)pyrene	mg/kg	DETS 071*	0.1	4.2	< 0.1	< 0.1	< 0.1	0.6	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Dibenzo(a,h)anthracene	mg/kg	DETS 071*	0.1	0.87	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	DETS 071*	0.1	48.7	< 0.1	< 0.1	< 0.1	0.7	0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Residential Screening Assessment - Soil SVOC
WS 12-01 to WS 12-09

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69053
 Client Ref: 20958
 Contract Title: Caversham Road, Reading

				Lab No.	446387	446388	446389	446396
				Sample ID	CP12-01	CP12-01	CP12-01	CP12-03
				Depth	0.80	1.50	2.50	0.40
				Sample Ref	2	3	4	1
				Sample Type	ES	ES	ES	ES
				Sampling Date	18/09/2012	18/09/2012	18/09/2012	18/09/2012
				Sampling Time				
				Screening Criteria, Residential without plant uptake, 1%				
Test	Units	DETSxx	LOD					
Phenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
3,4-Methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	mg/kg	DETS 071*	0.1	1.6	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	DETS 071*	0.1	2020	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	DETS 071*	0.1	1850	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	DETS 071*	0.1	834	0.5	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	DETS 071*	0.1	19,800	0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	DETS 071*	0.1	972	0.6	0.2	< 0.1	< 0.1
Pyrene	mg/kg	DETS 071*	0.1	2330	0.5	0.3	< 0.1	< 0.1
Butylbenzylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	DETS 071*	0.1	3.7	0.4	0.2	< 0.1	< 0.1
Chrysene	mg/kg	DETS 071*	0.1	8.8	0.4	0.2	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	DETS 071*	0.1	7	0.4	0.2	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	DETS 071*	0.1	10	0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	DETS 071*	0.1	1	0.3	< 0.1	< 0.1	< 0.1
Indeno(123cd)pyrene	mg/kg	DETS 071*	0.1	4.2	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzo(ah)anthracene	mg/kg	DETS 071*	0.1	0.87	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	DETS 071*	0.1	46.7	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	mg/kg	DETS 071*	0.1	nc	< 0.1	< 0.1	< 0.1	< 0.1

Residential Screening Assessment - Soil SVOCs

CP 12-01 to CP12-03

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69052
Client Ref: 20958
Contract Title: Caversham Road, Reading

				Lab No.												
Sample ID					446345	446349	446350	446351	446357	446358	446363	446370	446372	449868	449869	449870
Depth					WS12-01	WS12-01	WS12-02	WS12-02	WS12-04	WS12-05	WS12-06	WS12-08	WS12-09	WS12-09	WS12-09	WS12-09
Sample Ref					0.70	3.80	0.80-1.50	0.80-1.50	0.60	0.20	1.30	0.25	0.25	1.80	2.20	3.50
Sample Type					2	6	2	3	2	1	3	1	1			
Sampling Date					14/09/2012	14/09/2012	13/09/2012	13/09/2012	12/09/2012	13/09/2012	12/09/2012	15/09/2012	15/09/2012	29/09/2012	29/09/2012	29/09/2012
Sampling Time																
Test	Units	DETSxx	LOD	Screening criteria (residential without plant uptake, 1%)												
Total VOC's	mg/kg	DETSC 3431*	0.01	nc	0.06	0.13	0.13	0.1	0.2	0.08	0.13	0.08	0.26	< 0.01	< 0.01	< 0.01
1,1-Dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	mg/kg	DETSC 3431*	0.01	6.3	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	mg/kg	DETSC 3431*	0.01	0.27	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	mg/kg	DETSC 3431*	0.01	607	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	mg/kg	DETSC 3431*	0.01	167	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m-p-Xylene	mg/kg	DETSC 3431*	0.01	53.3	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	mg/kg	DETSC 3431*	0.01	59.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	mg/kg	DETSC 3431*	0.01	0.31	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	0.08	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	mg/kg	DETSC 3431*	0.01	42.4	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	mg/kg	DETSC 3431*	0.01	16	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	mg/kg	DETSC 3431*	0.01	1.8	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	mg/kg	DETSC 3431*	0.01	1.6	0.06	0.13	0.13	0.1	0.12	0.08	0.13	0.08	0.26	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	mg/kg	DETSC 3431*	0.01	1	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Vinyl Chloride	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1-butanol, 2-methyl- (TIC)	mg/kg	DETSC 3431*		nc				1.123	1.268							
1S- α -pinene (TIC)	mg/kg	DETSC 3431*		nc					2.976							
heptane, 2,2-dimethyl- (TIC)	mg/kg	DETSC 3431*		nc			1.17									
hexane, 3,4-dimethyl- (TIC)	mg/kg	DETSC 3431*		nc									1.155			
pentane, 2,3-dimethyl- (TIC)	mg/kg	DETSC 3431*		nc						1.299		1.304				

Residential Screening Assessment - Soil VOC
WS 12-01 to WS 12-09

Summary of Chemical Analysis

Soil Samples

Our Ref: 12-69053
 Client Ref: 20958
 Contract Title: Caversham Road, Reading

				Lab No.	446387	446388	446389	446396
				Sample ID	CP12-01	CP12-01	CP12-01	CP12-03
				Depth	0.80	1.50	2.50	0.40
				Sample Ref	2	3	4	1
				Sample Type	ES	ES	ES	ES
				Sampling Date	18/09/2012	18/09/2012	18/09/2012	18/09/2012
				Sampling Time				
Test	Units	DETSxx	LOD	Screening criteria (residential without plant uptake, 1%)				
Total VOC's	mg/kg	DETSC 3431*	0.01	nc	0.51	< 0.01	0.03	< 0.01
1,1 Dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	mg/kg	DETSC 3431*	0.01	6.3	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	mg/kg	DETSC 3431*	0.01	0.27	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	mg/kg	DETSC 3431*	0.01	607	< 0.01	0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	mg/kg	DETSC 3431*	0.01	167	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	mg/kg	DETSC 3431*	0.01	53.3	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	mg/kg	DETSC 3431*	0.01	59.5	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	mg/kg	DETSC 3431*	0.01	0.31	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	mg/kg	DETSC 3431*	0.01	42.4	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	mg/kg	DETSC 3431*	0.01	16	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	mg/kg	DETSC 3431*	0.01	1.8	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	mg/kg	DETSC 3431*	0.01	1.6	0.49	< 0.01	0.03	< 0.01
1,2,3-trichlorobenzene	mg/kg	DETSC 3431*	0.01	1	< 0.01	< 0.01	< 0.01	< 0.01
Vinyl Chloride	mg/kg	DETSC 3431*	0.01	nc	< 0.01	< 0.01	< 0.01	< 0.01
1,22- docosanediol (TIC)	mg/kg	DETSC 3431*		nc		1.013		
1-dodecanol, 3,7, 11-trimethyl- (TIC)	mg/kg	DETSC 3431*		nc		1.128		
6-octen-1-ol, 3,7-dimethyl- (TIC)	mg/kg	DETSC 3431*		nc		0.936		
bicyclo [3.1.1] heptan-3-one, 2,6,6- trimet (TIC)	mg/kg	DETSC 3431*		nc		1.092		

Residential Screening Assessment - Soil VOC CP 12-01 to CP 12-03

Appendix E

Groundwater Screening Assessment Spreadsheets

Summary of Chemical Analysis

Water Samples

Our Ref: 12-69619

Client Ref: 20958

Contract Title: Caversham Road, Reading

Test	Units	Lab No. Sample ID Sample Type Sampling Date Sampling Time	DETSxx	LOD	screening criteria	449906	449907	449908
						CP12-01	CP12-02	CP12-03
						RTD	RTD	RTD
						02/10/2012	02/10/2012	02/10/2012
						1100	1145	1230
Antimony, Dissolved	ug/l	DETS 2306	0.17	5		0.42	< 0.17	< 0.17
Arsenic, Dissolved	ug/l	DETS 2306	0.16	20		1.5	0.84	0.81
Beryllium, Dissolved	ug/l	DETS 2306*	0.1	nc		< 0.10	< 0.10	< 0.10
Cadmium, Dissolved	ug/l	DETS 2306	0.03	5		0.037	< 0.030	< 0.030
Chromium, Dissolved	ug/l	DETS 2306	0.25	50		< 0.25	< 0.25	< 0.25
Copper, Dissolved	ug/l	DETS 2306	0.4	20		0.86	0.73	0.64
Lead, Dissolved	ug/l	DETS 2306	0.09	50		0.15	< 0.090	< 0.090
Mercury, Dissolved	ug/l	DETS 2306	0.01	1		< 0.010	0.014	< 0.010
Nickel, Dissolved	ug/l	DETS 2306	0.5	50		17	18	3.2
Selenium, Dissolved	ug/l	DETS 2306	0.25	10		1.3	2.1	0.74
Vanadium, Dissolved	ug/l	DETS 2306	0.6	100		< 0.60	< 0.60	< 0.60
Zinc, Dissolved	ug/l	DETS 2306	1.25	300		7	6.7	2.2
Chloride	mg/l	DETS 2055*	0.1	250		73	40	37
Total Biochemical Oxygen Demand	mg/l	DETS 2031	1	nc		6.5	< 1.0	< 1.0
Total Chemical Oxygen Demand	mg/l	DETS 2032	10	nc		110	42	47
Cyanide total	ug/l	DETS 2130	40	50		< 40.0	< 40.0	< 40.0
Hardness	mg/l	DETS 2303*	0.1	nc		396	404	337
Ammoniacal Nitrogen as N	mg/l	DETS 2207	0.015	nc		4.2	0.098	3.9
pH		DETS 2008		nc		6.8	6.9	6.9
Aliphatic C5-C6	ug/l	DETS 3322	0.1	nc		< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	ug/l	DETS 3322	0.1	nc		< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	ug/l	DETS 3322	0.1	nc		< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	ug/l	DETS 3072*	1	nc		2.4	< 1.0	< 1.0
Aliphatic C12-C16	ug/l	DETS 3072*	1	nc		9.5	< 1.0	< 1.0
Aliphatic C16-C21	ug/l	DETS 3072*	1	nc		8.6	< 1.0	< 1.0
Aliphatic C21-C35	ug/l	DETS 3072*	1	nc		7.9	< 1.0	< 1.0
Aromatic C5-C7	ug/l	DETS 3322	0.1	nc		< 0.1	< 0.1	< 0.1
Aromatic C7-C8	ug/l	DETS 3322	0.1	nc		< 0.1	< 0.1	< 0.1
Aromatic C8-C10	ug/l	DETS 3322	0.1	nc		< 0.1	< 0.1	< 0.1
Aromatic C10-C12	ug/l	DETS 3072*	1	nc		6.1	< 1.0	< 1.0
Aromatic C12-C16	ug/l	DETS 3072*	1	nc		12	< 1.0	< 1.0
Aromatic C16-C21	ug/l	DETS 3072*	1	nc		5.3	< 1.0	< 1.0
Aromatic C21-C35	ug/l	DETS 3072*	1	nc		< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	ug/l	DETS 3072*	10	nc		28	< 10	< 10
Aromatic C5-C35	ug/l	DETS 3072*	10	nc		24	< 10	< 10
TPH Ali/Aro	ug/l	DETS 3072*	10	nc		52	< 10	< 10
Acenaphthene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Anthracene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Chrysene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Fluorene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Naphthalene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	< 0.01
Pyrene	ug/l	DETS 074*	0.01	nc		< 0.01	< 0.01	0.02
PAH	ug/l	DETS 074*	0.2	nc		< 0.20	< 0.20	< 0.20
Benzene	ug/l	DETS 3322	1	1		< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/l	DETS 3322	1	200		< 1.0	< 1.0	< 1.0
Toluene	ug/l	DETS 3322	1	40		< 1.0	< 1.0	< 1.0
Xylene	ug/l	DETS 3322	1	30		< 1.0	< 1.0	< 1.0
Phenol	ug/l	DETS 079*	0.5	nc		< 0.50	< 0.50	< 0.50

Summary of Chemical Analysis

Water Samples

Our Ref: 12-69619

Client Ref: 20958

Contract Title: Caversham Road, Reading

		Lab No.		449906	449907	449908
		Sample ID		CP12-01	CP12-02	CP12-03
		Sample Type		RTD	RTD	RTD
		Sampling Date		02/10/2012	02/10/2012	02/10/2012
		Sampling Time		1100	1145	1230
Test	Units	DETSxx	LOD			
Total VOC's	ug/l	DETSC 3432*	1	< 1	14	9
1,1 Dichloroethylene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Trans-1,2-dichloroethylene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,1-dichloroethane	ug/l	DETSC 3432*	1	< 1	1	< 1
Cis-1,2-dichloroethylene	ug/l	DETSC 3432*	1	< 1	13	9
2,2-dichloropropane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Bromochloromethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Chloroform	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,1,1-trichloroethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,1-dichloropropene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Carbon tetrachloride	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Benzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2-dichloroethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Trichloroethylene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2-dichloropropane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Dibromomethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Bromodichloromethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
cis-1,3-dichloropropene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Toluene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
trans-1,3-dichloropropene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,1,2-trichloroethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Tetrachloroethylene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,3-dichloropropane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Dibromochloromethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2-dibromoethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Chlorobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,1,1,2-tetrachloroethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Ethylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
m+p-Xylene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
o-Xylene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Styrene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Bromoform	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Isopropylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Bromobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2,3-trichloropropane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
n-propylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
2-chlorotoluene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,3,5-trimethylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
4-chlorotoluene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Tert-butylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2,4-trimethylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
sec-butylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
p-isopropyltoluene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,3-dichlorobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Chloromethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Trichlorofluoromethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,1,2,2-tetrachloroethane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,4-dichlorobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
n-butylbenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2-dichlorobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2-dibromo-3-chloropropane	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2,4-trichlorobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Hexachlorobutadiene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Naphthalene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
1,2,3-trichlorobenzene	ug/l	DETSC 3432*	1	< 1	< 1	< 1
Vinyl Chloride	ug/l	DETSC 3432*	1	< 1	< 1	< 1

Summary of Chemical Analysis

Water Samples

Our Ref: 12-69619

Client Ref: 20958

Contract Title: Caversham Road, Reading

Test	Units	Lab No.		449906	449907	449908
		Sample ID		CP12-01	CP12-02	CP12-03
		Sample Type		RTD	RTD	RTD
		Sampling Date		02/10/2012	02/10/2012	02/10/2012
		Sampling Time		1100	1145	1230
		DETSxx	LOD			
Aniline	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Phenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2-Chlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Bis(2-chloroisopropyl)ether	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Benzyl Alcohol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2-Methylphenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
3&4-Methylphenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,4-Dimethylphenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Bis(2-chloroethoxy)methane	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,4-Dichlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Naphthalene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
4-Chloro-3-methylphenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2-Methylnaphthalene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Hexachlorocyclopentadiene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,4,6-Trichlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,4,5-Trichlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2-Chloronaphthalene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2-Nitroaniline	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
1,4-Dinitrobenzene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Dimethylphthalate	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
1,3-Dinitrobenzene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Acenaphthylene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,6-Dinitrotoluene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
1,2-Dinitrotoluene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
3-Nitroaniline	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Acenaphthene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Dibenzofuran	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,4-Dinitrotoluene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
4-Nitrophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,3,4,6-Tetrachlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
2,3,5,6-Tetrachlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Diethylphthalate	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Fluorene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
4-Chlorophenylphenylether	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
4-Nitroaniline	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Diphenylamine	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Azobenzene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
4-Bromophenylphenylether	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Hexachlorobenzene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Pentachlorophenol	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Phenanthrene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Anthracene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Carbazole	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Di-n-butylphthalate	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Butylbenzylphthalate	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Bis(2-ethylhexyl)ester	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Fluoranthene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Pyrene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Benzo(a)anthracene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Chrysene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Bis(2-ethylhexyl)phthalate	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Di-n-octylphthalate	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Benzo(b)fluoranthene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Benzo(k)fluoranthene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Benzo(a)pyrene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Indeno(123cd)pyrene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Dibenzo(ah)anthracene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0
Benzo(ghi)perylene	ug/l	DETS 071*	1	< 1.0	< 1.0	< 1.0

Appendix F

Underground Tanks Decommissioning Certificate



Certificate of Decommissioning for a Commercial Fuel Installation/Tank(s)*

Customer/Occupier: Royal Mail
Site Address: Royal Mail Reading MC 80 Caversham Road (via) Vastern Road, Reading, Berkshire RG1 1AA

Detail of Decommission:

Pump(s)	Qty: 2	Type:	Tokheim 93XA
FMS	Qty: 1	Type:	Timeplan
Tanks Below Ground	Qty: 2	Size:	46,000 litres/27,000 litres
Tanks Above Ground	Qty:	Size:	None
Other:			N/A

Method of Inerting Tank(s) if applicable:		Tick*
Method 1	Remove bottom waste, cut back/cap off suction and vent lines. Fill tanks with RG22 Bacel Hard Foam	✓
Method 2	Remove bottom waste, cut back/cap off suction and vent lines. Fill tanks with RMC Slurry Tankfill	
Method 3	Remove bottom waste, cut up tank (if required). Remove tank from site.	
Other		

This is to certify that the above installation/ tank(s) have been decommissioned in accordance with current regulations.

Signed:
For and on behalf of Cameron Forecourt Ltd

Date: 21/12/09

* as applicable