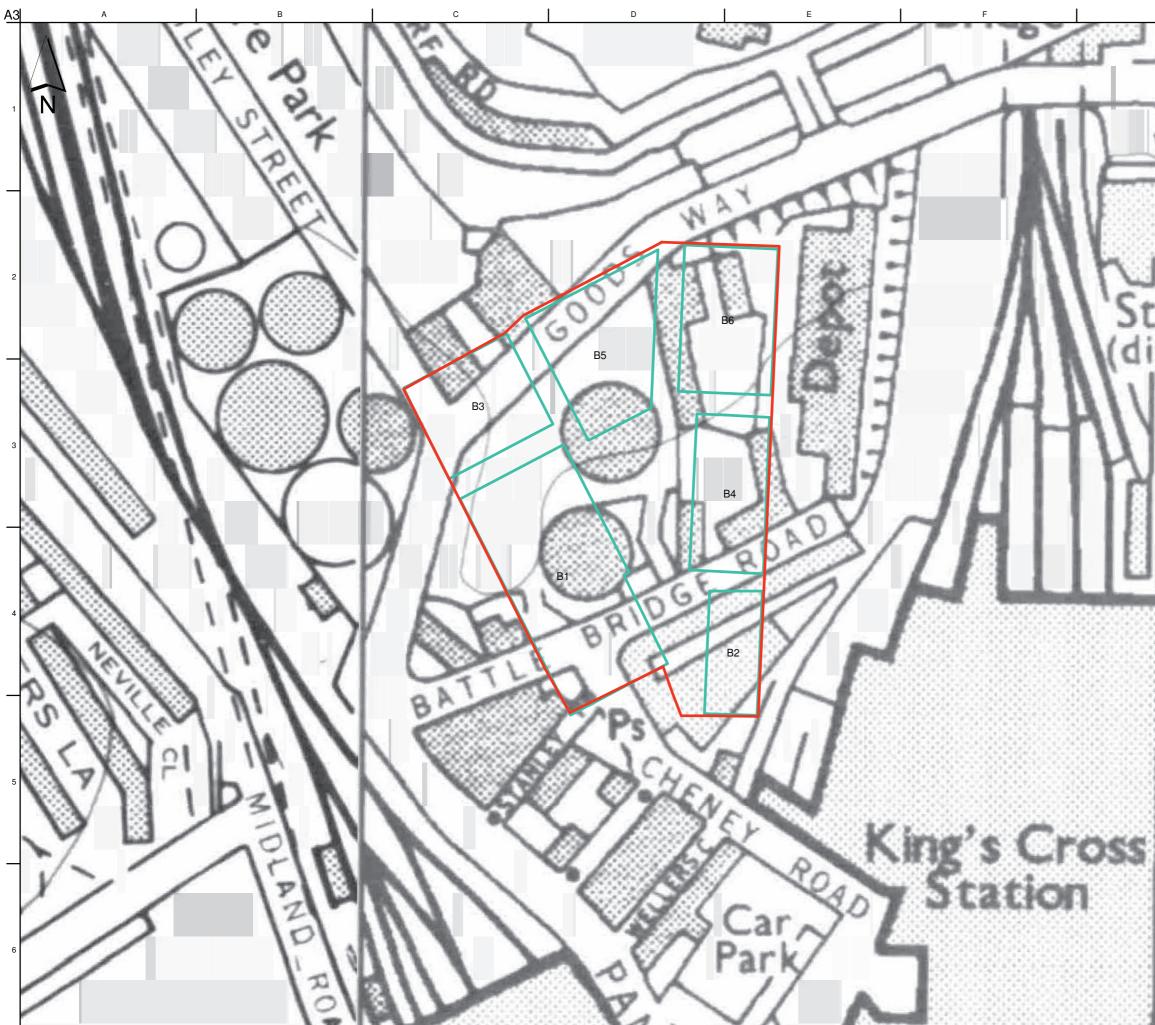


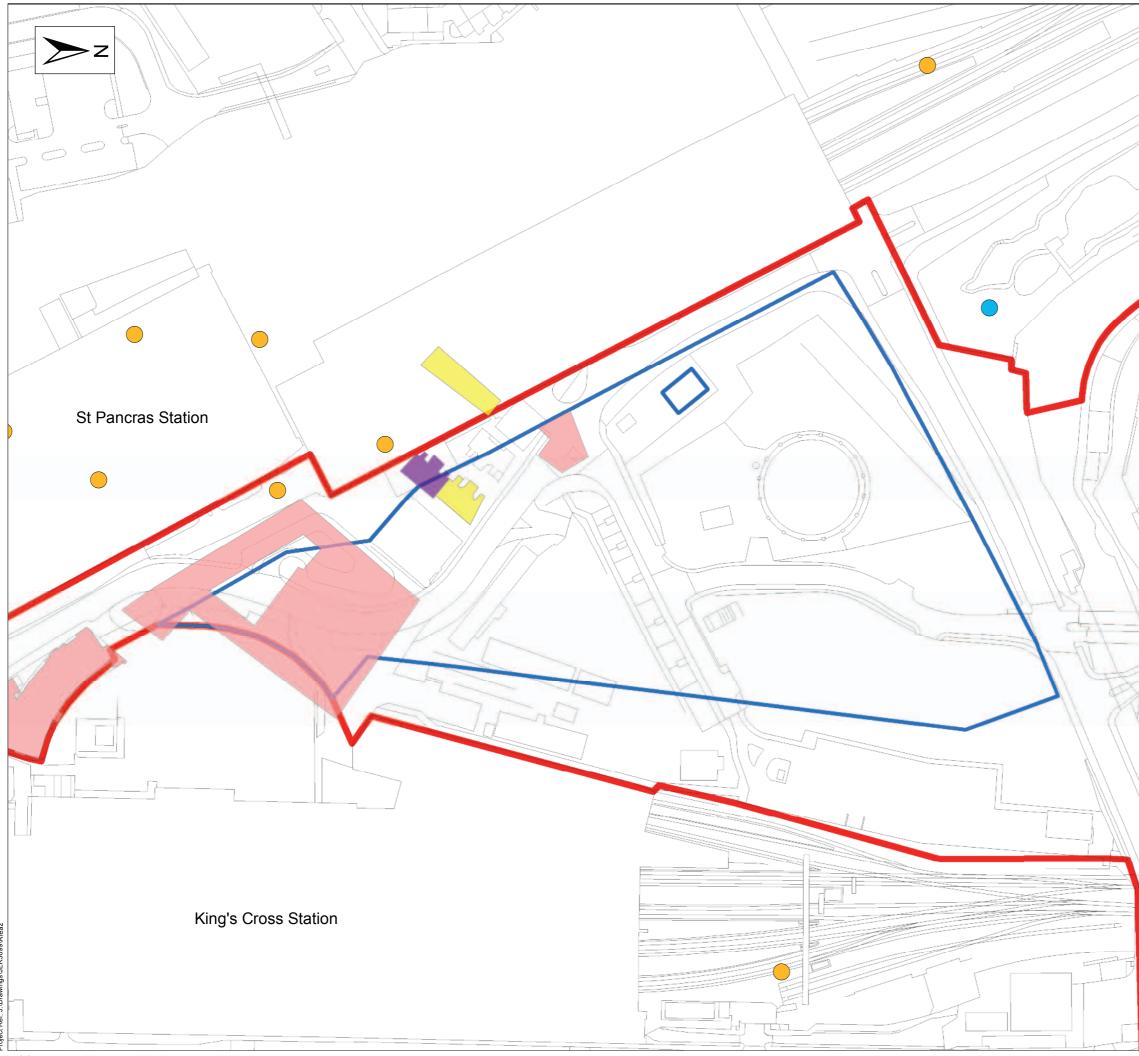
G				
	Legend			
	ERI	<sup>&gt;</sup> boundary	/	
	Zon	e B buildin	a bounda	aries
			goodina	
a				
a • 1 6				
3200	02 01-07-11	ML	VC	RO
	Issue Date	Ву	Chkd	Appd
	ARI 13 Fitzroy Street London W1T 4BC	JP		
TV-	Tel +44 (0)20 763 www.arup.com		(0)20 7580 393	24
RA	Client	o O a satural		
P	Kings Cros General Pa		ited	
	Job Title			
$\geq$	KXC Zone Earthworks		rediation	Plan
	Drawing Title			
Y	Historical r	napping 1	984 - 198	89
α		500		
- 2352		vironment		
O	Drawing Status			
CAL	Job No 216066	Drawing No Appe	o ndix A - Drawir	lssue ng 12 02



G	
	Legend
	ERP boundary
	Zone B building boundaries
1 - 1	
2 1 1	
IV-	
a 👘	
14 188	
S)    \     .	
( III Bid	
OF	
IT -	
1 41.0	
19	
8200	02 01-07-11 ML VC RO
	Issue Date By Chkd Appd
	1
	ARUP
	I II CO I
LAL .	13 Fitzroy Street London W1T 4BQ
	Tel +44 (0)20 7636 1531 Fax +44 (0)20 7580 3924 www.arup.com
RA	Client
	Kings Cross Central
	General Partner Limited
	Job Title
	KXC Zone B
	Earthworks and Remediation Plan
	Drawing Title
R. 2008	
X	Historical mapping 1992 - 1994
<u>~</u>	Scale at A3 1:1,500
201000	Discipline Environment
	Drawing Status
2000	Issue           Job No         Drawing No         Issue
>CAL	216066 Appendix A - Drawing 13 01
Unit.	· · ·

# Appendix B

RPS Unexploded Ordnance Plans



Crown copyright, All rights reserved. 2006 License number 0100031673

# Legend



Kings Cross Central Site Boundary

UXO Area 2

## <u>Notes</u>



Bomb strikes recorded between 7th October 1940 - 28th July 1941 Night Bomb strikes recorded up to 7th October 1940

# War Damage Locations

Blast Damage, Minor in Nature

Seriously Damaged, But Repairable at Cost

Damage Beyond Repair

# NOTE: Bomb strike, war damage & historical locations are approximate.

N	Rev:	Date:	Amendment	t:		Name:	Checked:
Ι		Data So	ource: RP	S 2007			
		Status:	FINAL				
		R	PS				
		Explosives	Engineering Te	am 185 Park	Street London	SE1 9DY	
		T 020 7928	3 0999 F 020	7928 0708 E	eetco-ord@rpsgro	up.com W ww	w.rpsuxo.com
		Client:	Argent				
		Project:	Kings C	ross Cen	tral		
		Title:	Summar UXO Are		) and Explo	sives Risl	K
7		Scale: A	3 @ 1:1,50	0			
-			0.025		0.05 km		≻z
_		Date: 12	2/06/2007	Datum: (	DSGB36	Projection:	BNG
		Drawn:	SRM	Checked	: -	Job Ref: JI	ER3699
		Drawin	g No: J	ER3699	9-02-003	Revisio	n: <b>-</b>
1							



<sup>©</sup> Crown copyright, All rights reserved. 2006 License number 0100031673

		.egei	nd			
	ſ		Kinas Cr	oss Central Site E	Boundarv	
				a Boundary	,	
	L			-		
	<u> </u>	Inexp	olodeo	l Ordnance F	<u>Risk</u>	
		l	_ow Risk	(		
12			ow / Mo	oderate Risk		
//						
/			Moderate	e RISK		
1						
11						
1						
1						
$\square$						
T						
1						
-15-10-1						
4						
11						
11						
11						
11						
())						
11						
141	D-:	Data	America		New	Chorlin
	Rev:	Date:	Amendment		Name:	Checked:
			FINAL	0 2007		
1			1110/12			
		D	PS			
		R	P2			
				am 185 Park Street London 7928 0708 E eetco-ord@rpsgr		vw.rpsuxo.com
		Client:	Argent			
		Project:	Kings Cr	oss Central		
			Unexplo	ded Ordnance Risk	Man	
		Title:	UXO Are			
		Scale: A	3 @ 1:1,50	0		
1		0 L	0.025	0.05km		≻z
1 1		Date: 12	2/06/2007	Datum: OSGB36	Projection:	BNG
-		Drawn:	SRM	Checked: -	Job Ref: J	
		_				
-		Drawin	g No: JE	ER3699-02-004	Revisio	n: -
-						

# Appendix C

Please see enclosed CD

# Ground Investigation Logs and Laboratory Test Data

# Appendix D

Screening Assessment

#### **Screening Assessment D1**

#### **D1.1** Introduction

To simplify the assessment of ground contamination risks, the UK statutory guidance suggests that generic soil quality guideline values may be used for initial screening of contamination testing results, provided that such guideline values are available and are appropriate to the site circumstances and the potential pollutant linkages in question. If the results from an adequate site investigation are below the scientific and appropriate guidelines then the site can be regarded as uncontaminated. If the results exceed the screening guidelines then more detailed risk assessment is required to determine whether or not there is a need for remediation.

#### **Human Health D1.2**

#### Methodology **D1.2.1**

Generic assessment criteria (GAC) and Soil Guideline Values (SGVs) have been used to assess whether further action is required to break an identified pollutant linkage. Due to the form of the future development, the commercial/industrial GAC and SGVs have been used as the "assessment criteria". GAC and SGV values have been calculated using the Contaminated Land Exposure Assessment (CLEA) model software (v.106) issued by the EA.

The assessment criteria used have been used as follows:

- SGV for 11 contaminants (arsenic, cadmium, mercury, nickel, selenium, BTEX, phenol and dioxins, furans and dioxin like polychlorinated biphenyls (PCB)) published during 2009 and 2010;
- Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH) GAC for 31 soil contaminants.
- Contaminated Land: Applications In Real Environments (CL:AIRE) has also developed GAC for 35 additional soil contaminants; and
- Arup has developed assessment criteria for determinands that using CLEA software and published toxicology reports in accordance with recommendations by the EA.

The screening criteria are based on the GAC values for a fraction of organic carbon (foc) content of 1%. The reported results give an average foc of 3.8% and therefore the use of 1% is considered to be a conservative assumption.

Collated soil sample laboratory results are included in Section D2.

#### D1.2.2 Assessment

Three soil samples collected from the backfill of gasholder 1 and gasholder 3 exceeded the assessment criteria. It is noted that one of these samples is a duplicate collected at approximately the same depth for waste acceptance criteria testing. A summary of the samples collected from inside the gasholders that exceed the assessment criteria is provided overleaf.

Parameter	Units	No of Samples Tested	Range Measured	Assessment Criteria	No of Samples Exceeding Screening Value
Recent Investigation					
Lead	mg/kg	136	13-7,900	7,300	1
Total Cyanides	mg/kg	69	<0.5-130	78	3
Benzo[a]anthracene	mg/kg	200	290-1,000	90	5 (2.5%)
Benzo[a]pyrene	mg/kg	200	21-870	14	16 (8%)
Benzo[b]fluoranthene	mg/kg	200	140-700	100	5 (2.5%)
Benzo[k]fluoranthene	mg/kg	200	170-460	141	4 (2%)
Chrysene	mg/kg	200	290-1,000	137	4 (2%)
Dibenz(a,h)anthracene	mg/kg	200	20-45	13	2 (1%)
Indeno(1,2,3-c,d)pyrene	mg/kg	200	160-500	60	3 (1.5%)
Naphthalene	mg/kg	200	204-6,300	204	6 (3%)
Total TPH	mg/kg	172	7,100- 36,000	2,130	3 (1.5%)
Historical Investigation					
Benzo[a]pyrene	mg/kg	29	0.023-17	14	1
Total TPH	mg/kg	129	3,164- 51,488	2,130	6
Note: PAH results from the 'n	recent invest	igation' are fr	om gas chromat	ography-mass spe	ectroscopy analysis

(GC-MS).

Chrysotile and amosite asbestos fibres were identified in samples collected from the areas outside of the gasholders on some of the building plots and in the proposed Pancras Square during the BAM Ritchie ground investigation. A summary of the positive identifications of asbestos fibres on Zone B is provided below.

Location on Zone B	Exploratory hole	Depth (m)	Asbestos type	Asbestos proportion by weight (%)
B1	BH2015	0.3	Amosite	0.1
B6	TP2016-A	1.0	Chrysotile	0.007
Pancras Square	TP2018	0.3	Amosite and chrysotile	0.007

The results and assessment of the chemical testing indicate that elevated concentrations of PAH and asbestos fibres are present inside gasholders 3 and 9.

#### **Controlled Waters** D1.3

#### Methodology **D1.3.1**

In accordance with EA advice to third parties, laboratory results from water samples collected within the gasholder bases have been compared with the UK Drinking Water Standards (DWS). Where no DWS are available the results have been compared against the Environmental Quality Standards (EQS). Collated water sample laboratory results are included in Section D3.

#### **D1.3.2** Assessment

# **Gasholder 1**

Four water samples were collected during the BAM Ritchie ground investigation from a standpipe located inside gasholder 1 (BH2006).

Very high concentrations of TPH, PAH (specifically naphthalene) and BTEX (specifically benzene) were reported in some of the water samples as described below.

- TPH concentrations were reported up to 2,800µg/l (compared with an assessment criteria of 10µg/l);
- Naphthalene concentrations were reported up to 380µg/l (compared with an assessment criteria of 2.4µg/l) during sampling rounds 1 and 2, although concentrations were below method detection limits during sampling rounds 3 and 4; and
- Benzene concentrations were reported up to 910µg/l (compared with an assessment criterion of 1µg/l) during sampling rounds 1 and 2, although concentrations were below method detection limits during sampling rounds 3 and 4.

Slight to moderately high concentrations of cyanide, ethylbenzene and toluene were also reported in water samples collected during the monitoring rounds as described below:

- Total cyanide concentrations of up to 0.78mg/l slightly exceeded the assessment criteria of 0.5mg/l during three sampling rounds;
- A fluoranthene concentration of 0.7µg/l exceeded the assessment criteria of 0.1µg/l during sampling round four;
- Ethylbenzene concentrations of up to 60µg/l exceeded the assessment criteria of 20µg/l during sampling rounds one and two, although concentrations were below method detection limits during sampling rounds three and four; and
- Toluene concentrations of up to 110µg/l exceeded the assessment criteria of 50µg/l during sampling rounds one and two, although concentrations were below method detection limits during sampling rounds three and four.

One water sample was collected from gasholder 1 during the historical ground investigations by WYG. Concentrations of contaminants were low compared with the assessment criteria, with the exception of total cyanide which was moderately elevated.

# **Gasholder 3**

Ten water samples were collected during the BAM Ritchie ground investigation from three borehole locations located inside gasholder 1 (BH2007, BH2012 and BH2014). BH2012 and BH2007 were positioned close to the perimeter of the gasholder. BH2007 was located off-site in Pancras square and three water samples were collected from this borehole. BH2012 was positioned in the centre of the gasholder.

Very high concentrations of TPH, PAH (specifically naphthalene and anthracene), BTEX compounds (specifically benzene, toluene and ethylbenzene) and cyanide (total, free and thiocyanate) were reported in some of the water samples as described below:

- TPH concentrations were above the assessment criteria in samples collected from BH2012 during all sampling rounds, which concentrations reported up to 2,900µg/l (compared with an assessment criteria of 10µg/l). Similar concentrations (up to 3,900µg/l) were recorded in samples collected from BH2007. TPH was significantly elevated in water samples collected from the centre of the gasholder (BH2014) with concentrations of up to 44,000µg/l.
- Naphthalene concentrations were generally significantly elevated in all water samples with recorded concentrations of up to 4000µg/l (compared with an assessment criterion of 2.4µg/l). Anthracene concentrations exceeded the assessment criteria in six samples and was particularly elevated in samples collected from the centre of the gasholder (BH2014, concentrations up to 14µg/l compared with an assessment criteria of 0.1µg/l);
- BTEX compounds were elevated above the assessment criteria in the majority of water samples, although concentrations were particularly high in samples collected from the centre of the gasholder (BH2014). Concentrations of benzene were recorded up to 24,000µg/l during sampling round 3 (compared with an assessment criterion of  $1\mu g/l$ ). Elevated concentrations of toluene (up to 4,300µg/l in BH2014) and ethylbenzene (up to 510µg/l in BH2012) were also recorded; and
- Total cyanide exceeded the assessment criteria in all samples, although generally these were not significantly elevated. The cyanide concentration in the sample collected from the centre of the gasholder (BH2014) during the first round of sampling was recorded at 320mg/l (compared with assessment criteria of 0.5mg/l). Free cyanide and thiocyanate also exceeded the assessment criteria in some locations.

Concentrations of heavy metals were also reported in water samples collected during the monitoring rounds as described below:

- Five arsenic concentrations of up to 15µg/l slightly exceeded the assessment criteria of 10µg/l;
- Three mercury concentrations of up to 1.6µg/l slightly exceeded the assessment criteria of 1µg/l;
- Three selenium concentrations of up to 19µg/l slightly exceeded the assessment criteria of 10µg/l; and
- Four fluoranthene concentrations of up to 2.3µg/l slightly exceeded the assessment criteria of 0.1µg/l.

REP002 | Issue 4 | 13 July 2011 J1216000/216066 KXC B3 REMEDIATION SERVICES/4 INTERNAL PROJECT DATA(4-03 ARUP REPORTS)02 B3 ERP/03 ISSUE 4/ISSUE4 REP002 ZONE B ERP B3 AMENDMENT REPORT 13/UL11.DOCX

Groundwater samples were not collected from gasholder 3 during the historical ground investigations.

## **Gasholder 9**

Nine water samples were collected during the BAM Ritchie ground investigation from two boreholes located inside gasholder 9 (BH2004 and BH2016). Both boreholes were positioned close to the perimeter of the gasholder. BH2016 is located off-site on plot B3.

Very high concentrations of TPH, PAH (specifically naphthalene), BTEX compounds (specifically benzene, toluene and ethylbenzene) and cyanide (total, free and thiocyanate) were reported in some of the water samples as described below:

- TPH concentrations were above the assessment criteria in approximately half of the samples collected from both boreholes. TPH was significantly elevated in water samples collected from BH2004 during the first round of sampling, with concentrations of up to 310,000µg/l (compared with an assessment criteria of 10µg/l). TPH concentrations decreased during the later sampling rounds are were below detection limits in some instances;
- Naphthalene concentrations were significantly elevated in water samples collected from BH2004 during the first sampling round, with recorded concentrations of up to 5,500µg/l (compared with an assessment criteria of  $2.4\mu g/l$ ). Concentrations reduced to below detection limits during the later rounds of sampling and were also below detection limits in samples collected from BH2016:
- BTEX compounds in water samples collected during the first sampling round from BH2004 were elevated above the assessment criteria, although concentrations decreased in the following sampling rounds and were low in samples collected from BH2016. Concentrations of benzene were recorded up to 1,500µg/l during sampling round one (compared with assessment criteria of  $1\mu g/l$ ). Elevated concentrations of toluene (up to  $300\mu g/l$ ) and ethylbenzene (up to 57µg/l) were also recorded in samples collected from BH2004.

Slight to moderately high concentrations of lead, selenium, cyanide and ethylbenzene were also reported in water samples collected during the monitoring rounds as described below:

- Five lead concentrations of up to 110µg/l exceeded the assessment criteria of  $25\mu g/l;$
- Two total cyanide concentrations of up to 0.71mg/l slightly exceeded the assessment criteria of 0.5mg/l during the first sampling round; and
- Two fluoranthene concentrations of up to 0.6µg/l exceeded the assessment criteria of 0.1µg/l.

Samples collected from the northern side of gasholder 9 (off-site on plot B3) generally contained lower concentrations of contaminants, although it is noted that fewer sampling rounds were undertaken from this location.

The water results of the Oscar Faber ground investigation indicated significantly elevated concentrations of heavy metals (notably lead with concentrations up to

REP002 | Issue 4 | 13 July 2011 J3216000/216066 KXC B3 REMEDIATION SERVICES/4 INTERNAL PROJECT DATA/4-03 ARUP REPORTS/02 B3 ERPI03 ISSUE 4/ISSUE4 REP002 ZONE B ERP B3 AMENDMENT REPORT 13JUL11.DOCX

Page D5

830,000µg/l, cadmium with concentrations up to 510µg/l, arsenic with concentrations up to 1350µg/l and mercury up to 210µg/l in samples collected from BH4a). Coal tars and mineral oils were commonly tested for at this time (rather than TPH). Concentrations of coal tars exceeded 9000mg/l which is considered to be a significantly elevated result.

One water sample was collected from gasholder 9 during the historical ground investigations by WYG. Concentrations of contaminants were low compared with the assessment criteria, with the exception of total cyanide which was moderately elevated.

# **Gasholder 12**

Four water samples were collected from BH2001 installed inside gasholder 12 during the BAM Ritchie ground investigation.

Elevated concentrations of TPH, PAH (particularly naphthalene) and BTEX (particularly benzene and toluene) were reported in water samples collected during sampling rounds one, two and three as described below:

- TPH concentrations were reported up to 13,000µg/l (compared with an assessment criteria of 10µg/l);
- Naphthalene concentrations were reported up to 3,600µg/l (compared with an assessment criteria of 2.4µg/l);
- Benzene concentrations were reported up to 440µg/l (compared with an assessment criteria of 1µg/l); and
- Toluene concentrations were reported up to 140µg/l (compared with an assessment criterion of 50µg/l).

Slight to moderately elevated concentrations of PAH (specifically anthracene and fluoranthene), cyanides and BTEX (ethylbenzene) were also reported as described below:

- One anthracene concentration of  $0.3\mu g/l$  exceeded the assessment criteria of  $0.1 \mu g/l;$
- Two fluoranthene concentrations of up to 0.6µg/l exceeded the assessment criteria of  $0.1\mu g/l$ ;
- Total cyanide concentrations of up to 8mg/l exceeded the assessment criteria of 0.5mg/l during each monitoring round;
- Two thiocyanate concentrations of up to 1.6mg/l exceeded the assessment criteria of 0.17mg/l; and
- Ethylbenzene concentrations of up to 33µg/l exceeded the assessment criteria of 20ug/l during each monitoring round.

Ammoniacal nitrogen and sulphate concentrations were reported above the assessment criteria in all the water samples collected from gasholder 12. The highest concentrations of ammoniacal nitrogen and sulphate were 17mg/l and 1,400mg/l respectively.

## **Gasholder B**

One water sample was collected from gasholder B during the historical ground investigations by WYG. Concentrations of contaminants were low compared with the assessment criteria, with the exception of total cyanide which was moderately elevated.

# **Gasholder** C

One borehole was installed in BH1009 within gasholder base C. PBA reported elevated concentrations of PAHs in the water sample collected from the borehole.

# **Gasholders A, D and 8**

No groundwater samples were collected from within the bases of former gasholders A, D or 8.

# **Outside Gasholders**

Groundwater samples collected from BH2015 and BH2005C had determinand concentrations below the assessment criteria, with the exception of sulphate and ammoniacal nitrogen. An elevated lead result from BH2015 was reported from one sample.

#### **Ground Gas and Vapour D1.4**

#### Methodology **D1.4.1**

The ground gas/vapour regime has been assessed by considering both the concentrations of landfill gases in the ground, the quantity and variability of surface emission rates (which is related to ongoing biodegradation and further production of gases) and short term variations (especially peaks) in surface emissions.

The following published guidance on the assessment of ground gas has been used:

- The Building Regulations 2000 Approved Document C;
- CIRIA Report C665 Assessing risks posed by hazardous ground gases to buildings;
- BS 8485: Code of practice for the characterisation and remediation from ground gas in affected developments and
- The Local Authority Guide to Ground Gas, CIEH; London, 2008.

#### 4.6.4 Assessment

The gas monitoring results from the historical and recent ground investigations are provided in Section D4. A summary of the results is presented below:

All gas results from the 2010/11 PBA ground investigation were classified as characteristic situation (CS)1 which is defined as 'very low hazard potential';

- Carbon dioxide did not exceed 5% concentration by volume in any of the monitoring measurements;
- Hydrogen sulphide was at 1% or below detection limits for all monitoring rounds, (where measured); and
- Methane did not exceed 0.2% concentration by volume in any of the monitoring measurements during the 2010/11 PBA or WYG ground investigations.
- One gas sample was collected from BH2003 which is outside of the gasholder bases. Ammonia was reported at a concentration of 0.02mg/m<sup>3</sup>.
- The sample collected from BH2001 in gasholder 12 reported a naphthalene concentration of 2.83mg/m<sup>3</sup>.
- One sample collected from BH2004 in gasholder 9 reported toluene concentrations of 630mg/m<sup>3</sup> and 450mg/m<sup>3</sup> from the shallow and deep monitoring wells respectively.
- Gas samples collected in gasholder 3 (BH2007, BH2012, BH2014) reported concentrations of ammonia (maximum of 0.22mg/m<sup>3</sup>) and naphthalene  $(0.014 \text{mg/m}^3)$ .
- Gas samples collected from outside of the gasholders (BH2005C, BH2009 and BH2015) reported concentrations of ammonia (0.06mg/m<sup>3</sup> in BH2009), naphthalene (0.029mg/m<sup>3</sup> in BH2005C, 0.002 mg/m<sup>3</sup> in BH2009 and 0.003  $mg/m^3$  in BH2015).

### Historical Ground Investigations

- Gas monitoring was undertaken from standpipes located inside gasholders 1 and 9. Low concentrations of carbon dioxide and methane were recorded.
- Very high levels of methane were measured during the WYG ground investigation in gasholder B (BH107). These concentrations classify this area as CS3 which is defined as 'moderate hazard potential'. It was reported by WYG that the measured concentrations were 'above the detection limits' of the gas meter. Subsequently it is reported that a 'Transco engineer detected natural gas' at this location. A gas sample collected at this location reported elevated concentrations of methane, ethane, propane and butane. Elevated concentrations of methane (50%) were also detected in a standpipe (BH102) located in the area outside of the gasholders, which classifies this area as CS2 ('low hazard potential'). However no methane was measured at this location after it had been vented for one hour and sealed for a further two hours.
- A value of 4% methane was recorded in gasholder 9 during the Oscar Faber ground investigation. This concentration reduced to 0.5% after a certain amount of dissipation time, the duration of which was not specified in the report.

**Soil Screening Tables D2** 

REP002 | Issue 4 | 13 July 2011

J/2/16000/216066 KXC B3 REMEDIATION SERVICES/4 INTERNAL PROJECT DATA(4-03 ARUP REPORTS)/02 B3 ERP/03 ISSUE 4IISSUE4 REP002 ZONE B ERP B3 AMENDMENT REPORT 13JUL11.DOCX

King's Cross Central Zones B and E Earthworks & Remediation Plan

Ground Investigation	I		CTRL 1992 - 1997	CTRL 1992 - 1997	CTRL 1992 - 1997	CTRL 1992 - 1997	CTRL 1992 -	CTRL 1992 - 1997	Norwest Holst	Norwest Holst	Norwest Holst	Norwest Holst	White Young Green	CTRL 1992 - 1997	CTRL 1992 - 1997	Norwest Holst	CTRL 1992 - 1997											
Report Number			1997	1997	1997	1997	1997	1997	F15323	F15323	F15323	F15323	Green	Green	Gleen	Green	Green	Green	Gleen	Green	Green	Gleen	Green	Green	1997	1997	F15323	1997
Lab Ref			SA7323-0.2	SA7323-0.55		SA7323-3		TP5010-1	534-536(2)	529-541(7)	400-402(301)	406-408(305)	WYG11399	WYG11400	WYG11407	WYG11408	WYG11409	WYG11412	WYG11413	WYG11414	WYG11428	WYG11429	WYG11415	WYG11416	TP7327-0.2	TP7327-0.5		SA7324A-0.25
Date Exploatory hole location			Not known SA7323	Not known SA7323	Not known SA7323			Not known TP5010	20/08/2008 TP1021A	20/08/2008 TP1021A	15/08/2008 TP1022	15/08/2008 TP1022	15/7/99 BH102A	15/7/99 BH102A	15/7/99 BH104	15/7/99 BH104	15/7/99 BH104	15/7/99 BH106	15/7/99 BH106	15/7/99 BH106	15/7/99 TT109	15/7/99 TT109	15/7/99 BH107	15/7/99 BH107	Not known TP7327	Not known TP7327	13/08/2008 BH1017	Not known SA7324A
Zone B Location			B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1100	B1	B1	B1	B1	B1	BI1	Offsite B1	Offsite B1	Offsite B1	B3
Zone B Eocation			ы	ы	ы	ы	51	ы	DI	51	DI	DI	ы	ы	DI	ы	51	51	ы	DI	DI	51	Di	51				55
Location on plot/ gas holder number			Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	GH9 (interior)	GH9	CH0 (interior)	CH1 (interior)	GH1 (interior)	CLI1 (interior)	GH1 footprint	GH1 footprint	GHB (exterior)	GHB (exterior)	Footprint (immediately	Footprint (immediately	Footprint (immediately	Outside
Location on plot gas holder humber			gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	GH9 (Interior)	(interior)	GH9 (IIItellol)	GITT (ITTETIOT)	GHT (Interior)	GHT (Interior)	GHT100(phin)	GHT IOOIDIIII	GHB (exterior)	GHB (exterior)	south of boundary)	south of boundary)	south of boundary)	gasholders
Depth (m)			0.2m	0.55m	1.0m	3.0m	0.15m	1.0m	1.5m	3m	3.5m	4.0m	0.5m	1.5m	1.5m	2.5m	10.5m	1.0m	7.0m	11.0m	0.5m	1.0m	2.0m	5.0m	0.2m	0.5m	3m	0.25m
Strata	L		Made Ground	Made Ground	Made Ground	London Clay	Made Ground	Made Ground	Made Ground	Weathered London Clay	Made Ground	London Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	London Clay	London Clay	London Clay	Made Ground							
		Screening Criteria	Made croand		Ground	London oldy	Ground	Ground	Made Ground	London Oldy	Midde Cirodina	London Oldy	Made croand	Cirodina		Cirodina	Made Ground	Made Ground	Made croand	Made Ground	Made croand	Made Ground	Made Ground	Made circuita	London Oldy	London Oldy	London Olay	Made croand
Determinants Metals	Units	Commercial				-									_													
Arsenic	mg/kg	640	38	32	19	20	18	27	11	4	< 3	4	21	15	17	15	12	8	9	39	28	22	14	14	20	23	5	16
Cadmium	mg/kg	230.0	1	1	1	1	3	1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.8	0.6	0.5	< 0.5	< 0.5	1	1	< 0.2	1
Chromium Copper	mg/kg mg/kg	30400 71700	34 184	49 61	44 41	24 27	52 98	39 29	7.9 6	4/	11 8	45 28	45 47	44 36	33 48	40 49	19 18	6 48	11 27	24 145	29 89	26 67	31 33	41 40	35 33	25 36	43 28	22 87
Lead	mg/kg	7300	452	279	125	18			11	34	5	17	200	140	260	180	71	131	488	2516	303	424	170	45	28	27	17	230
Mercury Nickel	mg/kg mg/kg	3600 1800	1.13	0.89	0.31 20	0.09	21	1 26	< 0.4 6.9	0.6	< 0.4 6.5	< 0.4 48	< 0.3 46	< 0.3 38	0.8	< 0.3	< 0.3 20	0.3	< 0.3	< 0.3 49	< 0.3 54	0.4 29	< 0.3 30	< 0.3 35	0.09 40	0.06 39	0.4 45	0.29 42
Molybdenum	mg/kg	nc					646	71											1									
Selenium	mg/kg	13000	1.1	0.64 179	0.45 88	0.33	1	1	< 3	< 3 91	< 3	< 3 87	< 0.5 120	< 0.5	< 0.5	< 0.5 100	< 0.5 41	< 0.5 45	< 0.5 99	< 0.5	1 367	1.4	0.4	< 0.5 78	0.65 73	0.67 75	< 3 88	0.66
Zinc Miscellaneous	mg/kg	662000	580	1/9	52	65	326	60	26	91	21	0/	120	120	208	100	41	45	99	612	367	288	102	/8	13	10	00	159
Total Cyanide	mg/kg	nc	5	1	1	1			< 1	< 1	< 1	< 1	< 5	< 5	12	< 5	< 5	< 5	4	259	53	61	< 5	8			< 1	1
Free Cyanide Thiocyanate	mg/kg mg/kg	78.00																										
Boron	mg/kg	192000	0.6	0.7	1.1	1.8			< 3.5	< 3.5	< 3.5	< 3.5	1.5	1.7	2.6	2.2	0.9	0.6	0.8	1.1	1.7	3	1.4	2.5	1	1.4	< 3.5	1.4
Total organic carbon	%	nc	11.5	10	8.2	7.8	0.02	7.84	7.98	8.14	1.4 8.63	7.05	8.1	7.8											8.7	7.4	7.8	8.1
Asbestos identfication	pH Units	nc	Not detected	Not detected	0.2	7.0	8.93	7.04	7.30	0.14	0.03	7.85	0.1	7.0				1	1 1		1				Not detected	7.4		Not detected
Asbestos Concentration	%	nc	< 0.001	< 0.001																					<0.001			<0.001
Phenol Sulphur (free)	mg/kg	3200 nc	-										< 0.02															
Sulphide	mg/kg	nc																										
Total Sulphate Sulphur (elemental)	% as SO4 mg/kg	nc nc																										
Phenol (monohydric) SOM 1%	mg/kg	nc	0.5	0.5	0.5	0.5					< 0.15	< 0.15															< 0.15	0.5
Total sulphate	mg/kg	nc	0.522	0.0920	0.167	1 50			21000	0.20	1600 0.092	5200	20	30	35	230	26	45	33	527	64	34	25	30			01	0.124
Sulphate (2:1 water soluble) as SO4 Organic matter	g/l %	nc	0.533	0.0839	0.167	1.59			3.8	0.29	3.3	2.2 0.97															21 0.57	0.124
Moisture	%	nc											34															
Acid Neutralisation Capacity Loss on ignition	mol/kg %	nc																										
Stones content > 50mm	%	nc																										
BTEX Benzene	μg/kg	28000.00									< 0.01																	
Toluene	μg/kg μg/kg	870000.00									< 0.01																	
Ethylbenzene	µg/kg	581000									< 0.01																	
m- & p-Xylene o-Xylene	μg/kg μg/kg	575000 480000									< 0.01																	
Total BTEX	µg/kg	nc																										
Methyl tert-butyl ether Hydrocarbons	μg/kg	nc								ł – – –	< 0.01								+ +									
TEM	mg/kg	nc	700	500	1300	500																			500	500		800
Diesel range organics (DRO) Gasoline Range Organics by GC (GRO)	mg/kg mg/kg	2130 2130	0.1	57 0.1	65 0.1	39 0.1																			88 0.1	232 0.1		39 0.1
TPH (SUM DRO + GRO)	mg/kg	2130	127.1	57.1	65.1	39.1																			88.1	232.1		39.1
TPH (Mineral Oil/ Hydrocarbon oil)	mg/kg	2130													43	< 10			43			< 10	30					
TPH (Aromatic hydrocarbons) TPH (Solvent Extracted)	mg/kg mg/kg	2130 2130					1000	395																				
TPH	mg/kg	2130	127.1	57.1	65.1	39.1													ļ						88.1	232.1	~~	
EPH DRO (C10 - C40) Acenaphthene	mg/kg mg/kg	2130 84900	1	1	1	1			0.013		0.004	0.11	1.3	0.6	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.3	0.5	0.5	0.3	< 0.1	1	1	55	
Acenaphthylene	mg/kg	84300	1	1	1	1			0.014		0.003	0.094	3	0.2	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	1.6	1.6	0.3	< 0.1	1	1		
Anthracene Benzo(a)anthracene	mg/kg mg/kg	525000 90.0	1	1	1	1	-		0.032		0.008	0.34 0.79	23 26	0.4	0.4	< 0.1	0.2	0.6	1.5 5.4	0.9 6.3	3.2	3.5 8.5	1.1 3.1	0.1 0.3	1	1		
Benzo(a)pyrene	mg/kg	14.00	4	4	1	1			0.11		0.023	0.89	27	1.5	1.7	< 0.1	0.4	0.2	4.9	3.3	5.4	11.9	3.1	0.4	1	1		
Benzo(b)fluoranthene Benzo(k)fluoranthene	mg/kg mg/kg	100.0 141.0	3	3	1	1	<u> </u>		0.15	<u> </u>	0.032	1.1 0.51	26 16	1.6 1.4	1.6 1.4	< 0.1	0.2	0.2	8.2 2.1	6 1.7	7.9 2.8	13.6 7.1	5 1.4	< 0.1	1	1	T	
Benzo(g,h,i)perylene	mg/kg	654	3	2	1	1	1		0.17		0.015	0.6	17	1.9	1.5	< 0.1	0.2	0.1	2.8	2.2	2.8	7.3	1.5	0.1	1	1		
Chrysene	mg/kg	137.0	4	3	1	1			0.13 0.027		0.02	0.82 0.092	36 5.8	1.5 0.4	2.3 0.5	0.3	0.4	0.3	7.7 0.8	5.6 1.2	10.1	10.2 1.4	4.2 0.6	0.4	1	1		
Dibenzo(a,h)anthracene Fluoranthene	mg/kg mg/kg	13.00 22600	5	3	1	1			0.027		0.003	2.1	5.8 49	2	2.8	< 0.1	< 0.1	< 0.1 0.5	0.8 5.4	1.2	9	1.4	0.6 4.4	< 0.1 0.5	1	1		
Fluorene	mg/kg	63500	1	1	1	1			0.023		0.004	0.16	7.1	0.1	< 0.1	< 0.1	< 0.1	1.8	0.1	0.3	0.8	0.8	0.7	0.1	1	1		
Indeno(1,2,3-c,d)pyrene Naphthalene	mg/kg mg/kg	60.0 204.0	5	4	2	2			0.11		0.011 0.003	0.51 0.096	17	2	1.4	< 0.1	0.2	0.1	4.1 1.4	3.6 7.3	4	7.7 3.8	2.3 5.5	0.2	2	2		
Phenanthrene	mg/kg	21900	4	2	1	1			0.25		0.025	1.4	48	1.3	1.5	0.5	0.8	0.6	3.9	3.2	6.2	8.3	4.9	0.7	1	1		
Pyrene	mg/kg	54200	5	3	1	1			0.13	<u> </u>	0.04	1.7	36	1.6	2.3	0.1	0.6	0.8	< 0.1	6.5	11	13.6	4.9	0.2	1	1		
Coronene PAH (Sum of 16 - excluding coronene)	mg/kg mg/kg	nc nc	45	35	16	16	-		<10	<10		<10	341.2	19.3	20.6	2.9	5.5	5.7	48.3	50.4	84.6	115.9	43.3	6	16	16	<10	
PAH (Sum of 17 - including coronene)	mg/kg	nc	-			-			-		350			-		-	-											
PCB PCB 28	mg/kg	nc					-				< 0.003																	
PCB 20 PCB 52 PCB 101	mg/kg	nc									< 0.003																	
PCB 101	mg/kg	nc									< 0.003																	
PCB 118 PCB 138	mg/kg mg/kg	nc									< 0.003																	
PCB 153	mg/kg	nc									< 0.003																	
PCB 180	mg/kg	nc						$\vdash$		<u> </u>	< 0.003						<u> </u>		┨							T	T	
	Indicates	where the data exceeds the	screening criteria																								+	
																			-									

Ground Investigation			CTRL 1992 -	CTRL 1992 -	CTRL 1992 -	CTRL 1992 -	White Young	White Young	White Young	CTRL 1992 -			CTRL 1992 -	CTRL 1992 -	CTRL 1992 -	CTRL 1992 -	CTRL 1992 -
Report Number			1997	1997	1997	1997	Green	Green	Green	1997	1997	1997	1997	1997	1997	1997	1997
Lab Ref			SA7324A-0.5	SA7324A-1.0	SA7324A-3.0	SA7324A-4.0	WYG11422	WYG11423	WYG11424	SA3838-0.5	SA3838-2.0	SA3838-2.8	SA7322-0.2	SA7322-0.2	SA7322-0.2	SA7322-1.2	SA7322-0.2
Date			Not known	Not known	Not known	Not known	15/7/99	15/7/99	15/7/99	Not known	Not known	Not known	Not known	Not known	Not known	Not known	Not known
Exploatory hole location			SA7324A	SA7324A	SA7324A	SA7324A	TT105	TT105	TT106	SA3838	SA3838	SA3838	SA7322 Pancras	SA7322 Pancras	SA7322 Pancras	SA7322A Pancras	SA7322A Pancras
Zone B Location			B3	B3	B3	B3	B3	B3	B3	B6	B6	B6	Square	Square	Square	Square	Square
Location on plot/ gas holder number			Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	GH9/ footprint	GH9/ footprint	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders
Depth (m)			0.5m	1.0m	3.0m	4.2m	1.5m	2.4m	1.0m	0.5m	2m Made	2.8m Made	0.2m	1.0m	1.2m Made	1.2m	2.6m
Strata		Screening Criteria	Made Ground	Made Ground	Made Ground	London Clay	Made Ground	Made Ground	Made Ground	Made Ground	Ground	Ground	Made Ground	Made Ground	Ground	Made Ground	London Clay
Determinants	Units	Commercial															
Metals Arsenic	mg/kg	640	18	16	25	23	13	13	43	23	16	12	12	64		20	28
Cadmium	mg/kg	230.0	1	1	1	1	< 0.5	< 0.5	1.2	1	1	1	1	1		1	1
Chromium	mg/kg	30400 71700	32 51	32 52	41 37	37 39	25 33	34 36	28 120	22 56	17 51	27 13	15 29	31 102		47 48	45 40
Copper Lead	mg/kg mg/kg	7300	1030	1350	151	132	236	100	1000	262	168	7	142	407		108	64
Mercury	mg/kg	3600	1.37	1.67	4.05	5.99	< 0.3	< 0.3	1.9	1	1	1	0.7	0.77		0.26	0.21
Nickel	mg/kg	1800	22	20	35	36	23	30	40	19	16	23	12	24		34	38
Molybdenum Selenium	mg/kg mg/kg	nc 13000	0.68	0.89	1.32	1.32	< 0.5	< 0.5	1	1	1	1	0.63	0.37		0.54	0.67
Zinc	mg/kg	662000	552	628	114	122	132	79	790	96	165	45	195	404		150	113
Miscellaneous	malin		F		4		.5	.5	451				•			4	
Total Cyanide Free Cyanide	mg/kg mg/kg	nc 78.00	5	1	1	1	< 5	< 5	451				2	1		1	1
Thiocyanate	mg/kg	nc															
Boron Total organic carbon	mg/kg	192000	1	1.5	2.6	2.7	2	1.5	6.3				2.2	2.7		0.7	0.5
Total organic carbon pH	% pH Units	nc	7.4	7.9	8.4	8.3				8.24	9.51	8.23	9.9	9.2		10.2	8.5
Asbestos identfication		nc								Not detected			Not detected	Not detected		Not detected	5.0
Asbestos Concentration	%	nc 2200								<0.001			< 0.001	< 0.001		< 0.001	<u> </u>
Phenol Sulphur (free)	mg/kg	3200 nc															
Sulphide	mg/kg	nc															1
Total Sulphate	% as SO4	nc															
Sulphur (elemental) Phenol (monohydric) SOM 1%	mg/kg mg/kg	nc	0.5	0.5	0.5	0.5							0.5	0.5		0.5	0.5
Total sulphate	mg/kg	nc					160	250	200								
Sulphate (2:1 water soluble) as SO4	g/l	nc	0.856	0.751	0.334	0.399				0.3	0.48	0.03	0.537	0.645		0.168	0.106
Organic matter Moisture	%	nc															
Acid Neutralisation Capacity	mol/kg	nc															
Loss on ignition Stones content > 50mm	%	nc															
BTEX	70	nc															1
Benzene	µg/kg	28000.00													1		
Toluene Ethylbenzene	μg/kg μg/kg	870000.00 581000													1		
m- & p-Xylene	μg/kg μg/kg	575000															1
o-Xylene	µg/kg	480000													1		
Total BTEX Methyl tert-butyl ether	µg/kg	nc													4		
Hydrocarbons	µg/kg	nc															
TÊM	mg/kg	nc	2500	2300	500	500							800	1500		500	500
Diesel range organics (DRO) Gasoline Range Organics by GC (GRO)	mg/kg mg/kg	2130 2130	82 0.1	60 0.1	69 0.1	96 0.1							118 0.1	262		28	66 0.1
TPH (SUM DRO + GRO)	mg/kg mg/kg	2130	82.1	60.1	69.1	96.1							118.1	262.1		28.1	66.1
TPH (Mineral Oil/ Hydrocarbon oil)	mg/kg	2130					123		69	581			-				
TPH (Aromatic hydrocarbons) TPH (Solvent Extracted)	mg/kg	2130 2130								110 4399	177	60					
TPH (Solvent Extracted)	mg/kg mg/kg	2130								4033	1//	00	118.1	262.1		28.1	66.1
EPH DRO (C10 - C40)	mg/kg	2130						-									
Acenaphthene Acenaphthylene	mg/kg mg/kg	84900 84300					0.9	< 0.1	0.4				1	1	2	1	1
Anthracene	mg/kg	525000					0.3	0.2	2.4				1	1	4	1	1
Benzo(a)anthracene	mg/kg	90.0					1	0.5	7.3				2	4	3	1	1
Benzo(a)pyrene Benzo(b)fluoranthene	mg/kg mg/kg	14.00					0.9	0.4	6.8 12				3	5	6 12	1	1
Benzo(k)fluoranthene	mg/kg mg/kg	141.0					0.7	0.6	3.7				2	4	12	1	1
Benzo(g,h,i)perylene	mg/kg	654					0.8	0.2	4.7				2	3	5	1	1
Chrysene Dibenzo(a b)anthracene	mg/kg	137.0 13.00					1.2 0.3	0.8	9.5 1.8				2	4	5	1	1
Dibenzo(a,h)anthracene Fluoranthene	mg/kg mg/kg	22600					0.3	0.1	1.8				4	6	16	1	2
Fluorene	mg/kg	63500					1.5	< 0.1	0.9				1	1	2	1	1
Indeno(1,2,3-c,d)pyrene	mg/kg	60.0 204.0					0.8	0.2	6.3 1.7				3	4	5	2	2
Naphthalene Phenanthrene	mg/kg mg/kg	204.0					4.1	0.5	8.5				3	5	13	1	2
Pyrene	mg/kg	54200					3.5	0.1	11				4	6	15	1	1
Coronene	mg/kg	nc	L		L		23.1	7.4	94.8				32	49	99	16	18
PAH (Sum of 16 - excluding coronene) PAH (Sum of 17 - including coronene)	mg/kg mg/kg	nc					23.1	/.4	94.8				32	49	99	16	18
PCB																	
PCB 28	mg/kg	nc															
PCB 52 PCB 101	mg/kg mg/kg	nc															
PCB 118	mg/kg	nc															
		20															
PCB 138	mg/kg	nc															
PCB 138 PCB 153	mg/kg	nc															
PCB 138																	

Ove Arup & Partners Ltd

		[							<b></b>																		
Ground Investigation	PBA 2010/ PBA 2010/ 2011 2011	2011	2011 2011	2011	2011 2011	2011	PBA 2010/ 2011	2011 2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	2011	2011	PBA 2010/ PBA 2 2011 201	2011	2011	PBA 2010/ 201	PBA 2010/ 2011	2011	PBA 2010/ PBA 2010/2011 2011
Report Number	121863 121864	-	121863 121864		121863 121863	121863	58477	58477 58477	58477	58477	58477	58477	58477	122210	122209	122211	122209		122210		122210 1222		_	133344 (Rev01		133343	133344 (Rev01) 121863
Lab Ref	AF60247 AF60283	AF60249	AF60251 AF6028	4 AF60252 10 10/12/2010	AF60253 AF60254	AF60255	AF56035	AF56036 AF56037	AF56038	AF56039	AF56040	AF56041		AF68351 25/01/2011	AF68283	AF68427	AF68284	AF68285	AF68352	AF68286	AF68353 AF68	87 AF68288 011 25/01/201		AF61314	AF61275	AF61276 04/01/2011	AF61315 AF60263
Exploatory hole location	1 1			6 BH2006	BH2006 BH2006	BH2006							TT2002 (B)	BH2014	BH2014	BH2014	BH2014	BH2014 B1			BH2014 BH20	14 BH2014	BH2012	BH2012	BH2012		BH2012 TP2021
Zone B Location	B1 B1	B1	B1 B1	B1	B1 B1	B1	B1	B1 B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	ВІ	B1	B1	B1 B1	B1	B1	B1	B1	ВІ	B1 B1
Location on plot/ gas holder number	Inside GH1 Inside GH1				Inside GH1 Inside GH1 8m 8m			Inside GH1 Inside GH1	GH3	GH3											Inside GH3 Inside				Inside GH3	Inside GH3 3m	Inside GH3 Outside gasholder 3 4m 0.3m
Depth (m) Strata Strata Screening Criteria	Made Made Ground Ground	Made Ground	Made Made Ground Ground		Made			Made Ground Made Ground						Made Ground	Made Ground			Made	Made	Made Ground	Made		y Made Groun			Made Ground	Made
Determinants Units Commercial Metals																											
Arsenic         mg/kg         640           Cadmium         mg/kg         230.0           Chromium         mg/kg         30400	14 0.43 17	15 1.4	15 0.16 17		15 0.21		11 < 0.10	11 0.15 27		8.7 0.24	14 0.34 52		13 0.18 37		16 <0.10 24		6.4 <0.10 <5.0			14 <0.10 11	14 <0.1	0 0.11		11 0.24 11			11 14 0.22 0.69 15 15
Chromium         mg/kg         30400           Copper         mg/kg         71700           Lead         mg/kg         7300	39 260	16 48 290	57 300		19 68 370		26 220 260	110 310		34 31 43	52 53 260		37 34 21		24 24 62		<5.0 26 23			20 95	28	34	28 300	26 200			15         15           27         38           220         480
Mercury mg/kg 3600 Nickel mg/kg 1800	0.54 23	0.74	0.9 24		6.8 26		0.6 27	1 32		0.44 35	0.59 51		0.11 44		0.29 27		<0.10 18			1.3 28	0.1	<0.10		0.44			0.5 0.52 18 22
Molybdenum mg/kg nc Selenium mg/kg 13000	< 0.20	< 0.20	< 0.20		< 0.20		< 0.20	< 0.20		0.87	0.93		0.74		<0.20		<0.20			<0.20		0 0.3	<0.20	<0.2			<0.2 < 0.20
Zinc         mg/kg         662000           Miscellaneous	< 0.5	1.6	0.6		0.9		81 < 0.50	< 0.50		55 <0.50	88		57 <0.50		66		33			5/	71	88	85	38			150 210
Free Cyanide mg/kg 78.00 Thiocyanate mg/kg nc	< 0.5 < 5.0	< 0.5 < 5.0	< 0.5 < 5.0		< 0.5 < 5.0		< 0.50 < 5.0	< 0.50 < 5.0		<0.50 <5.0	<0.50 <5.0		<0.50 <5.0										<0.50 <5.0	< 0.5 <5			<0.5 < 0.5 <5 < 5.0
Boron mg/kg 192000 Total organic carbon % nc	2.1		2											2					1.4		3.1						
pH pH Units nc Asbestos identification nc	10.4 11.3	9.5	8.8 9.1		8.4 Not detected			9.5		8.3	8.9		8.3	10.7	12	Not detected	10.5		8.4	8.6	8.7 8.3	8.5	11.3	11	9.4	10.7	9.9 9.5
Asbestos Concentration % nc Phenol mg/kg 3200	< 0.3	< 0.3	< 0.3		< 0.3			<0.3		<0.3	<0.3		<0.3		<0.3		<0.3			7.1	4.8	1.3	<0.3				< 0.3
Sulphur (free) nc Sulphide mg/kg nc																							+				
Total Sulphate         % as SO4         nc           Sulphur (elemental)         mg/kg         nc           Phenol (monohydric) SOM 1%         mg/kg         nc		<u> </u>																					1				
Total sulphate         mg/kg         nc           Sulphate (2:1 water soluble) as SO4         g/l         nc	1.3	1.1	1		0.9		0.5	2.2				0.94			0.64		0.87			1.1	1.1		1.1	1.1			1 1.5
Organic matter % nc Moisture % nc	3.3 10.4 11.2	3.3 14	3.8 24.6 23.9		3.1 24.4	23.1	1.3	0.43 21.3	21.1	1.6 24.4	1.5 24.8	27.9	1.5 27.6		1.7 7.11		0.95 17	30.2		7.6 31.1		1.1 23.9	3.4 10.4	3.1	12.8		3.1 5 16.9
Acid Neutralisation Capacity         mol/kg         nc           Loss on ignition         %         nc           Stones content > 50mm         %         nc	0.168 3.72 <0.02		0.058 <0.02 <0.02											0.099 3.14 <0.02					0.039 5.49 <0.02		0.096 3.96 <0.02		<0.02		4.48	0.124 3.75 <0.02	
BTEX Benzene μg/kg 28000.00	<1 <1	<1	13 17		4			64	79			440		5.7					660		3900		1.6		3.1	2.5	<1
Toluene         μg/kg         870000.00           Ethylbenzene         μg/kg         581000	<1 1.2 <1	<1	<1 <1		<1			1.8	< 1 6.7			6.9 49		1.6 < 1					99 88 210		130000 7200		<1		1.4	<1 <1	<1
m-&p-Xylene µg/kg 575000 o-Xylene µg/kg 480000 Total BTEX µg/kg nc	2.8 <1 1.1 <1	<1 <1	<1 <1 <1 <1 0.013		<1 3.3			<1 <1	2.4 4.1			68 76		< 1 < 1 0.0064					210 100 0.83		130000 39000 230		1.7		<1 <1	< 1 < 1 <0.005	<1 <1
Total BTEX         μg/kg         nc           Methyl tert-butyl ether         μg/kg         nc           Hydrocarbons	<0.005		0.010	<1.0		<1.0		<1.0	<1.0			<1.0		0.0001				<1.0	0.00		230	<1.0				40.000	
Aliphatic C5-C6         mg/kg         3380           Aliphatic >C6-C8         mg/kg         8250				< 0.1 < 0.1		< 0.1 < 0.1			< 0.1 < 0.1			< 0.1 < 0.1						< 0.1 < 0.1				< 0.1					
Aliphatic >C8-C10         mg/kg         2130           Aliphatic >C10-C12         mg/kg         10300           Aliphatic >C12-C16         mg/kg         60800				< 0.1 < 0.1 < 0.1		< 0.1 3.6 7.9			< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1						< 0.1 < 0.1 < 0.1				< 0.1 < 0.1 < 0.1					
Aliphatic >C16-C21         mg/kg         673000           Aliphatic >C21-C35         mg/kg         673000				< 0.1		120 110			< 0.1			< 0.1 < 0.1						< 0.1				< 0.1					
Aliphatic >C35-C44         mg/kg         673000           Aromatic >C5-C7         mg/kg         27700				< 0.1		< 0.1			< 0.1			< 0.1 < 0.1						< 0.1 < 0.1				< 0.1					
Aromatic >C7-C8         mg/kg         59000           Aromatic >C8-C10         mg/kg         3670           Aromatic >C10-C12         mg/kg         16900				< 0.1 < 0.1 < 0.1		2.7 18 50			< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 3.5						< 0.1 27 60				< 0.1 < 0.1 3.1					
Aromatic >C12-C16 mg/kg 36200 Aromatic >C16-C21 mg/kg 26700				2.4		18 30			0.72			2.9						28 37				4.9					
Aromatic >C21-C35         mg/kg         28400           Aromatic >C35-C44         mg/kg         28400           Aliphatic S5-C35         mg/kg         nc           Aromatic S5-C35         mg/kg         nc				5.4 < 0.1		40 < 0.1			0.7 < 0.1			4.2 < 0.1						22 < 0.1				7.4 < 0.1					
Aliphatic C5-C35         mg/kg         nc           Aromatic C5-C35         mg/kg         nc           Total hydrocarbons (alihpatics and aromatics)         mg/kg         2130	1500	43	21	13	16	400		86	4	16	< 10	14	< 10		48		< 10	170		5800	60	27	61	38			53 87
TPH Total WAC         mg/kg         nc           TEM         mg/kg         nc	35	10	< 10			100				10	(10		(10	< 10	10		<b>C</b> 10		24	0000	3500				88	97	
Diesel range organics (DRO) mg/kg 2130 Gasoline Range Organics by GC (GRO) mg/kg 2130																											
TPH (SUM DRO + GRO)         mg/kg         2130           TPH (Mineral Oil/ Hydrocarbon oil)         mg/kg         2130           TPH (Aromatic hydrocarbons)         mg/kg         2130																							1				
TPH (Solvent Extracted)         mg/kg         2130           TPH         mg/kg         2130																											
EPH DRO (C10 - C40) mg/kg 2130	3.1 0.3	0.69	9.9 0.2		0.17		< 0.1	0.3		0.34 0.38	0.1 0.11			0.5			0.28		0.9	5.9	14 0.1	0.52				0.3	< 0.1
Acenaphrinene         mg/kg         84300           Acenaphrinylene         mg/kg         84300           Anthracene         mg/kg         825000           Benzo(a)anthracene         mg/kg         90.0           Benzo(a)anthracene         mg/kg         14.00           Benzo(a)nuranthene         mg/kg         141.0           Benzo(k)fluoranthene         mg/kg         141.0           Benzo(k)fluoranthene         mg/kg         147.0           Chrysene         mg/kg         137.0	0.56 <0.1 5.3 0.5 5.7 1.9	1.3	110 0.3 290 1.3	-	0.36		< 0.1 < 0.1 0.21	0.24 0.14		1.2 1.3	0.63		0.24	0.9 2.2 2	0.18 0.37 < 0.1 < 0.1		0.29 0.67		3	44 50	38         1.4           58         3.1           61         4.5           43         3.3	0.25			0.8	0.3 0.8 1.7	0.13
Benzo(a)pyrene mg/kg 14.00 Benzo(b)fluoranthene mg/kg 100.0	4.6 2.6 3.8 2.2	3.4 3.5	280 2.2 270 2		0.64 0.87		< 0.1 < 0.1	0.12		1.1	1.1 0.98		0.3	2	< 0.1		1.3 < 0.1		3.2	33	50 < 0	< 0.1			2.3 2.2	1.6 2	1.2
Benzo(k)fluoranthene         mg/kg         141.0           Benzo(g,h,i)perylene         mg/kg         654           Chrysene         mg/kg         137.0	2.8 2 3 1.7 6 2	1.7 2.3	170 1 140 1.4 290 1.0		0.46 0.52 0.73		< 0.1 < 0.1 0.21	0.15 < 0.1 0.17		0.88 0.57	0.89 0.4 1.2		0.25	1.5 2	< 0.1 < 0.1 < 0.1 < 0.1		< 0.1 1.3 0.81		2.4 1.6 3.2	27 14 53	30 < 0 16 1.2 61 5	< 0.1 < 0.1 0.21			1.2 2.7	1.1 1.3 1.8	0.83 0.92 1.3
Chrysene mg/kg 137.0 Dibenzo(a,h)anthracene mg/kg 13.00 Fluoranthene mg/kg 22600	6 2 0.52 1.5 16 4.3	0.49	45 1.5		0.73 < 0.1 1.3		<pre>0.21 &lt; 0.1 0.29</pre>	0.17 < 0.1 0.37		1.4 0.17 3.1	1.2 < 0.1 2.2		< 0.1 0.85	1.9 2 5.2	< 0.1 < 0.1		0.81 0.16 < 0.1		2	4	61 5 20 0.2 130 < 0	< 0.1			1.2	1.8 1.2 3.4	1.3 0.25 1.6
Eluorene ma/ka 63500	3.4 0.2 2.8 0.3	0.58	42 <0.1		0.12		< 0.1 < 0.1	< 0.1		1.4 0.7	0.47		0.53	1.2			< 0.1 1.1		2.5	69	62 < 0 3.4 1.5 870 14	< 0.1			0.2	0.3 0.1 0.8	0.19 0.81
Phenanthrene mg/kg 21900	19 2.5	4	390 1.1		0.27 0.97		< 0.1	0.1 0.32 0.32		0.46 4.8 2.1	0.58		0.27	14 6.5	0.46 0.44 0.39		0.68		18 8.2	600 230	870 14 490 15 85 7.1 2.9	< 0.1			2.7	0.8 2.2 2.8	0.46
Pyrene         mg/kg         54200           Coronene         mg/kg         nc           PAH (Sum of 16 - excluding coronene)         mg/kg         nc	11 3.8 <0.1 90		510 1.6 <0.1 3400		8.7		< 2	2.5		2.1	1.6			<0.1	2.2		0.83				85 7. 2.9 57				3.8 <0.1	<0.1	1.2
PAH (Sum of 17 - including coronene) mg/kg nc PCB	26		16											49					63		2000				27		
PCB 52 mg/kg 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		<0.1 <0.1 <0.1				<0.1	<0.1 <0.1 <0.1	
PCB 101         mg/kg         nc           PCB 118         mg/kg         nc           PCB 138         mg/kg         nc           PCB 153         mg/kg         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	<0.1	
PCB 180 mg/kg 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	
Total PCBs (7 congeners) mg/kg nc	<1		<1			<10		<10	-10			_10		<1					<1		<1				<1	<1	
Dichlorodifluoromethane μg/kg nc Chloromethane μg/kg nc Vinyl chloride μg/kg nc				<1.0 <1.0 <1.0		<1.0 <0.1 <0.1		< 1.0 < 1.0 < 1.0	<1.0 <1.0 <1.0			<1.0 <1.0 <1.0						<1.0 <1.0 <1.0				<1.0 <1.0 <1.0					
Bromomethane μg/kg nc Chloroethane μg/kg nc				<20 <2.0		<20 <2.0		< 20 < 2.0	<20 <2.0			<20 <2.0						<20 <2.0				<20 <2.0					
1,1-Dichloroethene µg/kg nc				<1.0 <1.0		<1.0 <1.0		< 1.0 < 1.0	<1.0 <1.0			<1.0 <1.0						<1.0 <1.0				<1.0 <1.0					
Dichloromethane         μg/kg         nc           trans-1,2-Dichloroethane         μg/kg         nc           1,1-Dichloroethane         μg/kg         nc				ne <1.0 <1.0		ne <1.0 <1.0		ne <1.0 <1.0	ne <1.0 <1.0			ne <1.0 <1.0						ne <1.0 <1.0				ne <1.0 <1.0					
r, i biomoloetitaite µg/kg nc		I	L – –	<1.0	I I	<1.U		<1.U	<1.0	ı – I		<1.U		1	ı – – – – – – – – – – – – – – – – – – –			<1.U	I		I	<1.0	1	1	1	1	

Ground Investigation	DDA 0010	( DBA 0010)	DDA 0010/	DDA 0010	/ PBA 2010/	DDA 2010/	DDA 0010/	PBA 2010/	DDA 0010/	DDA 0010/	PBA 2010/	DDA 0010/	PBA 2010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	PBA 2010/	DDA 0010/	DDA 2010/ DI	24.0010/ D	0010/	DDA 0010/	PBA 2010/	PBA 2010/		PBA 2010/	PBA 2010/		PBA 2010/
Report Number	2011 121863	2011	2011 121863	2011	2011 121864	2011 121863	2011 121863	2011 121863	2011 121863	2011 58477	2011 58477	2011 58477	2011 58477	2011 58477	2011 58477	2011 58477	2011	2011 122210	2011 122209	2011 122211	2011 122209	2011	2011	2011	2011	2011 122209	2011 122209	2011 133344	PBA 2010/ 2011 133344 (Rev01)	2011 133343	2011	PBA 2010/2011 133344 (Rev01)	2011
Lab Ref	AF60247			AF60251	+ +	AF60252	AF60253	AF60254	AF60255	AF56035	AF56036	AF56037	AF56038	AF56039	AF56040	AF56041	AF56042		AF68283	AF68427	AF68284					AF68287	AF68288	AF61313	AF61314	AF61275	AF61276	AF61315	AF60263
Date Exploatory hole location	10/12/2010	0 10/12/2010	10/12/2010	10/12/2010	0 10/12/2010	10/12/2010	10/12/2010	10/12/2010	10/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011 25	6/01/2011 25	/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011 BH2012	04/01/2011	04/01/2011	04/01/2011	10/12/2010
Zone B Location	B1	B12000	B12000	B1	B1	B12000	B1	B1	B12000	B1	B1	B1	B1	B1	B1	B1	B1	BH2014	B12014	BI	B1	B1		B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
Location on plot/ gas holder number Depth (m)											Inside GH1		GH3	GH3							Inside GH3 5m							Inside GH3			Inside GH3 3m	Inside GH3	Outside gasholder 3 0.3m
Strata	Made Ground	Made	Made Ground	Made Ground	Made	Made Ground <1.0	Made Groun	Made	Made Ground <1.0	Made Ground	Made Ground <1.0							Made	Made Ground			Made Ground	Made		Made				Made Ground				Made
Bromochloromethane μg/kg nc Trichloromethane μg/kg 107000						<1.0 <1.0			<1.0 <1.0		<1.0 <1.0		<1.0 <1.0			<1.0 <1.0						<1.0 <1.0					<1.0 <1.0						
1,1,1-Trichloroethane         µg/kg         700000           Tetrachloromethane         µg/kg         3000           1,1-Dichloropropene         µg/kg         nc						<1.0 <1.0 <1.0			<1.0 <1.0 <1.0		<1.0 <1.0 <1.0		<1.0 <1.0 <1.0			<1.0 <1.0 <1.0						<1.0 <1.0 <1.0					<1.0 <1.0 <1.0						
1,2-Dichloroethane µg/kg 700						28 <2.0			4000 <2.0		64 < 2.0		<2.0			<2.0						3100 <1.0					1400 <1.0						
Trichloroethene         μg/kg         12000           1,2-Dichloropropane         μg/kg         nc           Dibromomethane         μg/kg         nc						<1.0 <1.0 <10			<1.0 <1.0 <10		< 1.0 < 1.0 < 10		<1.0 <1.0 <10			<1.0 <1.0 <10						<1.0 <1.0 <10					<1.0 <1.0 <10						
Bromodichloromethane μg/kg nc cis-1,3-Dichloropropene μg/kg nc						<5.0 <10			<5.0 <10		< 5.0 < 10		<5.0 <10			<5.0 <10						<5.0 <10					<5.0 <10						
Toluene         μg/kg         870000           trans-1,3-Dichloropropene         μg/kg         nc           1,1,2-Trichloroethane         μg/kg         nc						<1.0 <10 <10			4500 <10 <10		1.8 < 10 < 10		<10 <10			<10 <10						1000 <10 <10					95 <10 <10						
Tetrachloroethene μg/kg 131000 1,3-Dichloropropane μg/kg nc						<1.0 <2.0			<1.0 <2.0		< 1.0 < 2.0		<1.0 <2.0			<1.0 <2.0						<1.0 <2.0					<1.0 <2.0						
Dibromochloromethane         µg/kg         nc           1,2-Dibromoethane         µg/kg         nc           Chlorobenzene         µg/kg         59000						<10 <5.0 <1.0			<10 <5.0 <1.0		< 10 < 5.0 < 1.0		<10 <5.0 <1.0			<10 <5.0 <1.0						<10 <5.0 <1.0					<10 <5.0 <1.0						
1,1,2-Tetrachloroethane         μg/kg         115000           Ethylbenzene         μg/kg         581000						<2.0 1.1			<2.0 5500		< 2.0 < 1		<2.0			<2.0						<2.0 300					<2.0 14						
m- & p-Xylene μg/kg 575000 o-Xylene μg/kg 480000						4.8 3.3 <1.0			4900 2100		<1 <1 <1.0		<1.0			<1.0						3400 1200 <1.0			-		160 63 <1.0						
Tribromomethane μg/kg nc Isopropylbenzene μg/kg nc						<10 <1.0			<1.0 <10 150		< 10 < 1.0		<10 <1.0			<10 2.1						<10 31					<10 <1.0						
Bromobenzene µg/kg nc 1,2,3-Trichloropropane µg/kg nc						<1.0 <50			<1.0 <50 66 <1.0		< 1.0 < 50 < 1.0		<1.0 <50 <1.0			<1.0 <50 1.8						<1.0 <50 24					<1.0 <50 <1.0						
n-Propylbenzene µg/kg nc 2-Chlorotoluene µg/kg nc 1,2,4-Timethylbenzene µg/kg nc						<1.0 <1.0 <1.0			<1.0 1900		< 1.0 < 1.0 < 1.0		<1.0 <1.0 <1.0			<1.0 <1.0 110						7.5					<1.0 <1.0 75						
4-Chlorotoluene µg/kg nc tert-Butylbenzene µg/kg nc						<1.0 <1.0			<1.0 <1.0		< 1.0 < 1.0		<1.0 <1.0			<1.0 <1.0						<1.0 <1.0					<1.0 7.3 74						
1,3,5-Trimethylbenzene         µg/kg         nc           sec-Butylbenzene         µg/kg         nc           1,3-Dichlorobenzene         µg/kg         nc						<1.0 <1.0 <1.0			<1.0 620 <1.0 <1.0		< 1.0 < 1.0 < 1.0		<1.0 <1.0 <1.0			29 <1.0 <1.0						1300 2.2 <1.0					74 <1.0 <1.0						
4-Isopropyltoluene         μg/kg         nc           1,4-Dichlorobenzene         μg/kg         nc						<1.0 <1.0			<1.0 <1.0		< 1.0 < 1.0		<1.0 <1.0			1.5 <1.0						<1.0 <1.0					<1.0 <1.0						
n-Butylbenzene <u>µg/kg nc</u> 1,2-Dichlorobenzene <u>µg/kg</u> 2140000 1,2-Dibromo-3-chloropropane µg/kg nc						<1.0 <1.0 <50			<1.0 <1.0 <50		< 1.0 < 1.0 < 50		<1.0 <1.0 <50			<1.0 <1.0 <50						<1.0 <1.0 <50					<1.0 <1.0 <50						
1,2,4-Trichlorobenzene µg/kg nc Hexachlorobutadiene µg/kg nc						<1.0 <1.0			<1.0 <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-Trichlorobenzene µg/kg 108000 Tentatively Identified Compounds µg/kg nc Велгеле, 1-ethenyi-3-methyl µg/kg nc						<2.0 None Detected	1		<2.0 Detected 410		< 2.0 None Detected		<2.0 Detected			<2.0 Detected						<2.0 Detected					<2.0 None Detected						
Indane μg/kg nc 2-Benzothiphene μg/kg nc									410				9.1			16																	
Benzofuran         μg/kg         nc           Benzo(B)thiophene         μg/kg         nc           Phenol,4Methyl         μg/kg         nc																						340											
Benzo(B)Thiophene µg/kg nc Accenaphthene mg/kg 84900						2.3	-		<0.50		<0.50		<0.50			<0.50						<0.50					<0.50						
Acenaphthylene mg/kg 84300 Anthracene mg/kg 525000 Anshoarene						<0.50 2.6 <0.50			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 0.72 <0.50			<0.50 <0.50 <0.50						1.1 1.4 <0.50					<0.50 <0.50 <0.50						
Azobenzene         mg/kg         nc           Benzo[a]anthracene         mg/kg         90           Benzo[a]pyrene         mg/kg         14						<0.50 5.7 6.3			<0.50 1.2 0.98		<0.50 1.2 0.97		<0.50 <0.55 <0.50			<0.30 1 0.79						2					<0.50 <0.50 <0.50						
Benzo[b/fluoranthene mg/kg 100 Benzo[b/fluoranthene mg/kg 654 Benzo[k/fluoranthene mg/kg 141						6.7 3.4			1.3 <0.50		1.3 <0.50		<0.50 <0.50			1.1 <0.50						2.4 0.77					<0.50 <0.50						
						2.2 <0.50 <0.50			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<0.50 <0.50 <0.50						1 <0.50 <0.50					<0.50 <0.50 <0.50						
bis(2-Chloroisopropyl)ether mg/kg nc bis(2-Ethylhexyl)phthalate mg/kg nc						<0.50 <0.50			<0.50 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50					<0.50 <0.50						
Butylbenzylphthalate         mg/kg         nc           Carbazole         mg/kg         nc           Chrysene         mg/kg         137						<0.50 1.6 4.8			<0.50 <0.50 1.4		<0.50 <0.50 0.83		<0.50 <0.50 <0.50			<0.50 <0.50 0.68						<0.50 0.8 2					<0.50 <0.50 <0.50						
Di-n-butylphthalate mg/kg nc Di-n-octylphthalate mg/kg nc						<0.50 <0.50			<0.50 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50					<0.50 <0.50						
Dibenzo[a,h]anthracene         mg/kg         nc           Dibenzofuran         mg/kg         nc           Diethylphthalate         mg/kg         nc						0.81 1.2 <0.50			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 0.69 <0.50			<0.50 <0.50 <0.50						<0.50 1.4 <0.50			_		<0.50 <0.50 <0.50						
Dimethylphthalate mg/kg nc Fluoranthene mg/kg 22600						<0.50 <0.50 12 1.7			<0.50 2.2 <0.50		<0.50 2.1		<0.50 1.8			<0.50 1.7						<0.50 4					<0.50 <0.50						
Fluorene         mg/kg         63500           Hexachlorobenzene         mg/kg         47           Hexachlorobutadiene         mg/kg         nc						1.7 <0.50 <0.50			<0.50 <0.50 <0.50		<0.50		0.86 <0.50 <0.50			<0.50 <0.50 <0.50						1.6 <0.50 <0.50			_		<0.50 <0.50 <0.50						
Hexachlorocyclopentadiene mg/kg nc Hexachloroethane mg/kg nc						<0.50 <0.50			<0.50 <0.50 <0.50 <0.50		<0.50 <0.50 <0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50 0.7					<0.50 <0.50						
Indeno[1,2,3-cd]pyrene mg/kg 60 Isophorone mg/kg nc N-Nitrosodi-n-propylamine mg/kg nc		+				2.4 <0.50 <0.50			<0.50 <0.50		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<0.50 <0.50 <0.50						0.7 <0.50 <0.50					<0.50 <0.50 <0.50						
N-Nitrosodimethylamine mg/kg nc Naphthalene mg/kg 204						<0.50 3			<0.50 <0.50 20 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 4.2						<0.50 28					<0.50						
Nitrobenzene         mg/kg         nc           Pentachlorophenol         mg/kg         1220           Phenanthrene         mg/kg         21900						<0.50 <0.50			<0.50 <0.50 1.3		<0.50 <0.50 1.7		<0.50 <0.50 2.5			<0.50 <0.50 2						<0.50 <0.50 5.2					<0.50 <0.50 0.51						
Phenol         mg/kg         3200           Pyrene         mg/kg         54200						<0.50 10			<0.50 2.3		<0.50 1.8		<0.50 1.3			<0.50 1.2						0.79 3					<0.50 <0.50						
1,2-Dichlorobenzene         mg/kg         2140           1,2,4-Trichlorobenzene         mg/kg         228		+				<0.50 <0.50 <0.50			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<0.50 <0.50 <0.50						<0.50 <0.50 <0.50			$\neg$		<0.50 <0.50 <0.50						
1,4-Dichlorobenzene         mg/kg         4460           2-Chloronaphthalene         mg/kg         nc						<0.50 <0.50			<0.50 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50			_		<0.50 <0.50						
2-Chlorophenol mg/kg 3540 2-Methyl-4.6-dinitrophenol mg/kg nc						<0.50 <0.50			<0.50 <0.50 1.7		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50 4					<0.50 <0.50						
2-Methylnaphthalene mg/kg nc 2-Methylphenol mg/kg nc 2-Nitroaniline mg/kg nc		+				1 <0.50 <0.50			1.7 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<0.50 <0.50 <0.50						4 <0.50 <0.50					<0.50 <0.50 <0.50						
2-Nitrophenol ma/ka nc						<0.50 <0.50			<0.50 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50					<0.50 <0.50						
2.4-Dichlorophenol         mg/kg         3470           2.4-Dimethylphenol         mg/kg         nc           2.4-Dirittotoluene         mg/kg         nc           2.4.5-Tichlorophenol         mg/kg         nc						<0.50 <0.50 <0.50			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<0.50 <0.50 <0.50						<0.50 <0.50 <0.50					<0.50 <0.50 <0.50						<b> </b>
2,4,6-Trichlorophenol mg/kg 3880 2,6-Dinitrotoluene mg/kg nc						<0.50 <0.50			<0.50 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50					<0.50 <0.50						
3-Nitroaniline mg/kg nc 4-Bromophenylphenylether mg/kg nc						<0.50 <0.50 <0.50			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<0.50 <0.50 <0.50						<0.50 <0.50 <0.50					<0.50 <0.50 <0.50						
4-Chloro-3-methylphenol mg/kg nc 4-Chloroaniline mg/kg nc				1		<0.50 <0.50			<0.50 <0.50		<0.50 <0.50		<0.50 <0.50			<0.50 <0.50						<0.50 <0.50					<0.50 <0.50						

			1	-	-		_									-		-																	
Ground Investigation			PBA 2010/	PBA 2010	D/ PBA 2010/	PBA 2010	/ PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/		PBA 2010/	PBA 2010/		PBA 2010/
			2011	2011		2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	PBA 2010/2011	
Report Number			121863	121864	121863	121863	121864	121863	121863	121863	121863	58477	58477	58477	58477	58477	58477	58477	58477	122210	122209	122211	122209	122209	122210	122209	122210	122209	122209	133344	133344 (Rev01)	133343	133343	133344 (Rev01)	) 121863
					_		-		-						1																. ,	-		<u> </u>	
Lab Ref			AF60247	AF60283	3 AF60249	AF60251	AF60284	AF60252	AF60253	AF60254	AF60255	AF56035	AF56036	AF56037	AF56038	AF56039	AF56040	AF56041	AF56042	AF68351	AF68283	AF68427	AF68284	AF68285	AF68352	AF68286	AF68353	AF68287	AF68288	AF61313	AF61314	AF61275	AF61276	AF61315	AF60263
Date			10/12/2010	10/12/201	10 10/12/2010	0 10/12/201	0 10/12/2010	10/12/2010	10/12/2010	10/12/2010	10/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	07/12/2010	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	10/12/2010
Exploatory hole location			BH2006	BH2006	6 BH2006	BH2006	BH2006	BH2006	BH2006	BH2006	BH2006	TT2002	TT2002	TT2002	TT2002 (A)	TT2002 (A)	TT2002 (B)	TT2002 (B)	TT2002 (B)	BH2014	BH2014	BH2014	BH2014	BH2014	BH2014	BH2014	BH2014	BH2014	BH2014	BH2012	BH2012	BH2012	BH2012	BH2012	TP2021
Zone B Location			B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
					_																														
															Between	Between																	(		Outside
Location on plot/ gas holder number			Inside GH1	Inside GH	11 Inside GH1	I Inside GH	1 Inside GH1	Inside GH1	Inside GH1	Inside GH1	Inside GH1	Inside GH1	Inside GH1	Inside GH1	GH1 and GH3	GH1 and GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	gasholder 3
															GIIG	Grio																			
Depth (m)			1m	2m	3m	6m	6m	7m	8m	8m	9m	1.5m	4m	4.3m	3.5m	4m	3.5m	3.5m	4.5m	2m	3m	4m	5m	6m	6m	7m	7m	8m	9m	1m	2m	2m	3m	4m	0.3m
Strata			Made	Made	Made	Made	Made			Made										Made				Made	Made		Made								Made
otata			Ground	Ground		Ground		Made Ground	Made Ground		Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground		Made Ground	Made Ground	Made Ground	Ground		Made Ground		London Clay	London Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	
	mg/kg	nc						< 0.50			<0.50		<0.50		< 0.50			< 0.50						<0.50				,	<0.50						
	mg/kg	nc					_	<0.50			<0.50		<0.50		<0.50			<0.50						<0.50					<0.50					L	
	mg/kg mg/kg				-	-	-																									-		<b>└───</b>	
	mg/kg					-		Not detected			Not detected		Not detected		Not detected			Not detected						None Detected	1				None Detected					t	+
	mg/kg																			1			1 1										1	1	-
biphenyl	mg/kg																																		
1-methylnahthalene	mg/kg																																		
	mg/kg		_		_	-																										-		<b></b>	
Indene 2-benzothiophene	mg/kg mg/kg	nc			-	-	-																									-		<b>└───</b>	
Cinnamaldehde	mg/kg	nc	-																															<u> </u>	
Biphenyl	mg/kg																																		
naphtho[2,3-B]thiophene	mg/kg	nc																																	
	mg/kg		_		_	-		<1			<1		<1		<1			<1						<1					<1			-		<b></b>	
2-sec-Butyl-4,6-dinitrophenol 4-Chloro-3-methylphenol	mg/kg mg/kg								-																									<u> </u>	+
	mg/kg	nc																															<u> </u>	t	
2,4-Dichlorophenol	mg/kg	nc																																	
	mg/kg																																		
2,4-Dimethylphenol	mg/kg						_																											L	
	mg/kg mg/kg				-	+																											+	<b></b>	+
	mg/kg			-	-	+			1						1				-														+	1	+
3-Methylphenol	mg/kg	nc				1			1						1				İ	1	İ	İ								l .		1			
4-Methylphenol	mg/kg	nc																																	
	mg/kg																				l	I												<b></b>	+
4-Nitrophenol Pentachlorophenol	mg/kg mg/kg														L						L	L										l	+	ł	<b>∔</b> −−−−
	mg/kg			-	-	+			1						1				-														+	t	+
2,3,4,5-Tetrachlorophenol	mg/kg	nc							1						1														i .			1			
2,3,4,6-Tetrachlorophenol	mg/kg																																		
2,3,5,6-Tetrachlorophenol	mg/kg																																<u> </u>	<b></b>	+
	mg/kg														L						L	L										l	+	ł	<u>+</u>
	mg/kg mg/kg				-	+	1 1		1						1						1	1								1		1	1	1	+
2,4,5-Trichlorophenol	mg/kg			1	1	1	1 1		1						1			1			1	1							1	1		1	1	t	+
2,4,6-Trichlorophenol	mg/kg	nc																															1		1
3,4,5-Trichlorophenol	mg/kg	nc																																<u> </u>	
	In discourse of	l				+			1												l	l								l		+		t	<b>∔</b> ]
	indicates wh	here the data exceeds the	creening criteria		1	1	1		1	L		1			1	I	1	I	L	1	1	1								L	L	I		<u> </u>	

Ground Investigation			PBA 2010/ 2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011 115023 &	2011	PBA 2010/ 2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011		PBA 2010/ 2011	2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	2011	PBA 2010/ 2011	PBA 2010/ 2011
Report Number			121863		121863	121863	121863	121863	121863	121863	115023	115023	122039 AF54175 &	115023	115023	115023	115023	115023	115023	115023	115023	133346	133347	133347	133347		133347	133347	133346	133347	133347	133347	133347	133347	133347 AF61367
Lab Ref			AF60264 10/12/2010	10/12/2010	AF60266		AF60268 10/12/2010	AF60269 10/12/2010	AF60270 10/12/2010	AF60271 10/12/2010	AF54173 Not known	AF54174 Not known	AF64437 Not known	AF54176 Not known	AF54177 Not known	AF54178 Not known	Not known		AF54181 Not known	AF54182 Not known					AF61358 04/01/2011	04/01/2011 0			AF61340 04/01/2011	04/01/2011		AF61364 04/01/2011		AF61366 04/01/2011	04/01/2011
Exploatory hole location Zone B Location			TP2021 B1	TP2021 B1	TP2021 B1	TP2021 B1	TP2021A B1	TP2021A B1	TP2021A B1	TP2021A B1	TT2001 B1	TT2001 B1	TT2001 B1	TT2001 B1	TT2001 B1	TT2001 B1	TT2001(A) B1	TT2001(B) B1	TT2001(B) B1	TT2001(B) B1	TT2001(B) B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1
			Outside	Outside	Outside	Outside											Between																		
Location on plot/ gas holder number			gasholder 3			gasholder 3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	gas holder 3 and 9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9 In	iside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9
Depth (m)			1m			4.4m	1	2.5m		4.3m	0.2m	1m			4m					4m	4.5m	1m	0.3m		2m		Reworked			Reworked			Reworked	11m	Reworked
Strata		Screening Criteria	Made Ground	Made Ground	Made Ground	Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Reworked London Clay	London Clay	Reworked London Clay	Reworked London Clay	London Clay	London Clay	Reworked London Clay	London Clay	Reworked London Clay	London Clay
Metals	Units	Commercial																																	
Cadmium	mg/kg mg/kg	230.0		8.2 0.11	<0.10	14 0.16 33	18 0.3		16 <0.10 23		15 2.3 17			14 0.38 18		21 0.26	27 0.94	21 0.55 33			11 <0.10 14			19 0.5 18			6.1 <0.10 9.5			< 0.10	6.1 <0.10 10		10 0.1 16		9.4 0.11
Copper Lead	mg/kg mg/kg mg/kg	71700		21	22	31 79	44		29 290		50 260			54 260			86	58	29		15			43 610			21 340			29	20 230		23 86		12 62 1500
Mercury Nickel	mg/kg mg/kg	3600 1800		<0.10 32	0.17 35	0.37 43			0.81 20		0.45 18			0.51 16		0.29 27	0.54 22	0.67 26	0.13 42		0.32			0.77 25			0.27 17			0.63 20	0.34 16		0.16 29		0.25 24
Selenium	mg/kg mg/kg mg/kg	13000		< 0.20	< 0.20	0.27	< 0.20		< 0.20 56		<0.20 190			<0.20 240				<0.20 590			<0.20 45			<0.20 290			<0.20 62				<0.20 38		0.33 56		0.36
Miscellaneous Total Cyanide	mg/kg	nc		0.7	1.2	1	< 0.5		0.6															1.6			<0.50			<0.50	<0.50		<0.50		<0.50
Thiocyanate	mg/kg mg/kg mg/kg	nc				< 0.5 < 5.0			< 0.5 < 5.0															<0.50 <5.0			<0.50 <5.0				<0.50 <5.0		<0.50 <5.0		<0.50 <5.0
Total organic carbon	% pH Units	nc		7.7	7.6	7.9	9.3		7.8		9.8			11.4		11.9	9.5	9.2	9		9.1	10 8.4		8.3		1.4 8.4	8.6		1.5 9.4	10.5	8.7		8.4		8.5
Asbestos identifcation Asbestos Concentration	%	nc	Not detected					Chrysotile 0.006					Chrysotile		Not detected					Not detected			Not detected		Not detected							Not detected			
	% mg/kg			< 0.3	< 0.3	< 0.3	< 0.3	0.000	< 0.3		<0.3		0.000	<0.3		<0.3	<0.3	<0.3	<0.3		<0.3			<0.3			<0.3			<0.3	<0.3		<0.3		<0.3
Sulphide Total Sulphate	mg/kg % as SO4	nc																													Ē				
Phenol (monohydric) SOM 1%	mg/kg mg/kg mg/kg	nc																													╞═╛				$\square$
Sulphate (2:1 water soluble) as SO4 Organic matter	g/l %	nc nc		1.3 0.9	1.7 1	1 1.6 31.9	0.68 3.1		0.19 2.4		0.55 3.3			0.78 3.8		1.9	0.79 11	4.1	0.14 0.9		0.63 1.2			1.2 7.1			0.56 1.6			1.7	0.45 0.91		0.53 1.7		0.69 0.95
	% mol/kg %	nc		27	27.4	31.9	13.8		17.1	21.3	13	11.5		7.91		11.9	12.8	10.4	18.5	18.3	22.3	10.9 0.046 7.84		16.5		15 0.036 3.9	27.2	25.7	20.4 0.042 5.33	18	22.5		21.7	21.6	22.3
	%																					<0.02		<0.02			<0.02	<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02
	μg/kg μg/kg	870000.00		<1	1.7	470	<1		<1													1.6 < 1 < 1		11 4.3 <1		3.2 1.3 < 1	4.5 2.2 < 1		<1 <1 <1		1.5 <1 <1		<1 <1 <1		2.6 < 1 < 1
m- & p-Xylene	μg/kg μg/kg μg/kg	575000		< 1	< 1	260 190	<1		<1 <1 <1													<1 <1		<1 <1 <1			<1 <1 <1		<1 <1 <1	1.6	<1 <1 <1		<1 <1		<1 <1 <1
Total BTEX Methyl tert-butyl ether	μg/kg μg/kg	nc								<1.0		<1.0								<1.0		<0.005				<0.005		<1.0	<0.005					<1.0	
	mg/kg mg/kg									< 0.1 < 0.1		< 0.1 < 0.1								< 0.1 < 0.1								< 0.1 < 0.1						< 0.1 < 0.1	
Aliphatic >C8-C10 Aliphatic >C10-C12	mg/kg mg/kg	2130 10300								< 0.1		< 0.1								0.6								< 0.1 < 0.1						< 0.1 < 0.1	
Aliphatic >C16-C21	mg/kg mg/kg mg/kg	673000								< 0.1 < 0.1 < 0.1		< 0.1 < 0.1 < 0.1								12 5.8 2.1								< 0.1 < 0.1 < 0.1						< 0.1 < 0.1 < 0.1	
Aliphatic >C35-C44 Aromatic >C5-C7	mg/kg mg/kg	673000 27700								< 0.1		< 0.1								< 0.1 < 0.1								< 0.1 < 0.1						< 0.1 < 0.1	
Aromatic >C8-C10	mg/kg mg/kg mg/kg	3670								< 0.1 < 0.1 < 0.1		< 0.1 < 0.1 < 0.1								< 0.1 < 0.1								< 0.1 < 0.1 < 0.1						< 0.1 < 0.1 < 0.1	
Aromatic >C12-C16	mg/kg mg/kg	36200								< 0.1		2.5								6.3 3								< 0.1			╞══┦			0.38	
Aromatic >C21-C35 Aromatic >C35-C44	mg/kg mg/kg	28400 28400								< 0.1 < 0.1		20 < 0.1								4.7 < 0.1								< 0.1 < 0.1						0.68 < 0.1	
	mg/kg mg/kg mg/kg	nc		< 10	15	38	46		< 10	< 2	59	29		180		140	130	37	< 10	40	< 10			16			< 10	< 2		< 10	< 10		< 10	2	< 10
TPH Total WAC TEM	mg/kg ma/ka	nc																				60				14			< 10						
Diesel range organics (DRO) Gasoline Range Organics by GC (GRO) TPH (SUM DRO + GRO)	mg/kg mg/kg ma/ka	2130 2130 2130																													╞══┦				
TPH (Mineral Oil/ Hydrocarbon oil) TPH (Aromatic hydrocarbons)	mg/kg mg/kg	2130 2130																																	
TPH	mg/kg mg/kg mg/kg	2130																																	
Acenaphthene Acenaphthylene	mg/kg mg/kg	84900 84300		< 0.1	< 0.1	0.11 0.14	0.13		< 0.1 < 0.1		0.19 < 0.1			0.38 < 0.1		< 0.1 < 0.1	0.12 0.12	1.7 0.1	0.2 < 0.1		< 0.1 < 0.1	<0.1		0.39 0.61		<0.1	0.42 < 0.1			< 0.1	< 0.1 < 0.1		< 0.1 < 0.1		0.15 < 0.1
Anthracene Benzo(a)anthracene	mg/kg mg/kg	525000 90.0		< 0.1 < 0.1	< 0.1 0.43	1.5 2.8 2.3	0.24		< 0.1 < 0.1 < 0.1		0.56 2.2 2.4			0.51 1.8 1.6		< 0.1 0.29 1.5 1.7	0.63	3.8 4.5 4.8	0.41		0.31 0.95 0.84			1.1 4 5.6		1.2	0.43 0.42 < 0.1		0.7	0.19 0.36 < 0.1	0.12		0.16 0.27 < 0.1		0.14 0.16 0.14
Benzo(b)fluoranthene Benzo(k)fluoranthene	mg/kg mg/kg mg/kg	100.0 141.0		< 0.1	0.43	2.9	1.5		< 0.1		2.8 1.5			2.3 1.1		1.8	5.3	5	0.42		0.93 0.66	7.3 5.2		5 3.8		1.1 0.5	0.18 < 0.1		0.3	< 0.1	< 0.1 < 0.1 < 0.1 < 0.1		0.1 < 0.1		< 0.1 < 0.1
Benzo(g,h,i)perylene Chrysene Dibenzo(a,h)anthracene	mg/kg mg/kg	654 137.0		< 0.1	< 0.1	1.3	0.94 0.92 1.4 0.26		< 0.1		1.4 2.5			0.88 2 0.14		0.95	3.3 3.9	3.2 2.8 5.2 0.52	0.31		0.53 1.1 0.11	6 5.3		4.5 4.1 1.1		1	0.33		0.5	0.35	< 0.1 < 0.1 < 0.1		< 0.1 0.28		< 0.1
Fluoranthene Fluorene	mg/kg mg/kg mg/kg	22600 63500		< 0.1	0.58	5 0.31	2.4		< 0.1 0.15 < 0.1		0.29 5 0.26			4.4 0.18		2.4 < 0.1	5.4 0.16	11	1.5 0.5		0.11 2.2 0.2	5.7		6 0.4		0.9	< 0.1 0.85 < 0.1		0.6	0.59	< 0.1 0.25 < 0.1		< 0.1 0.49 0.14		< 0.1 0.42 0.14
Indeno(1,2,3-c,d)pyrene Naphthalene	mg/kg mg/kg	60.0 204.0		< 0.1 < 0.1	< 0.1 0.23	1.2 1.7	0.97 0.16 1.4		< 0.1 0.18		1.5 0.17			0.99		0.96 0.43 1.3	3.5 1.5	3.3 0.52	< 0.1 < 0.1		0.52	2.2		4.3 0.79		<0.1 0.1	0.4 0.18		<0.1 <0.1	0.27	< 0.1		< 0.1 < 0.1		0.16
Pyrene Coronene	mg/kg mg/kg mg/kg	54200 nc		< 0.1 < 0.1	0.32	3.9 3.5	1.4 2.1		0.19 0.18		3.4 4.1			3.1 3.5		1.3 1.9	2.7 4.5	11 8.9	1.5 1.4		1 1.7	3.6 4.5 <0.1		3.6 4.8			0.64 0.58		0.4 0.5 <0.1	0.43 0.64	0.13 0.17		0.45 0.48		0.28 0.14
PAH (Sum of 16 - excluding coronene)	mg/kg mg/kg	nc		< 2	2.8	32	15		< 2		28			23		16	42	68	7.9		11	62		50		9.9	4.8		3.1	3.7	< 2		2.4		< 2
PCB PCB 28	mg/kg mg/kg	nc																				<0.1 <0.1				<0.1 <0.1			<0.1 <0.1		╞═┚				
PCB 101 PCB 118	mg/kg mg/kg	nc																				<0.1 <0.1				<0.1 <0.1			<0.1 <0.1						
PCB 153	mg/kg mg/kg	nc																				<0.1 <0.1				<0.1 <0.1			<0.1 <0.1		Þ				
Total PCBs (7 congeners) VOCs	mg/kg mg/kg	nc																				<0.1 <1				<0.1 <1			<0.1 <1		╞═╛				$\square$
Dichlorodifluoromethane Chloromethane	μg/kg μg/kg	nc								<1.0 <1.0		<1.0 <1.0								<1.0 <1.0								<1.0 <1.0			E			<1.0 <1.0	
Bromomethane	μg/kg μg/kg	nc								<1.0 <20 <2.0		<1.0 <20 <2.0								<1.0 <20 <2.0								<1.0 <20 <2.0			╞═┛			<1.0 <20 <2.0	$\square$
Trichlorofluoromethane 1,1-Dichloroethene	μg/kg μg/kg μg/kg	nc								<1.0 <1.0		<1.0 <1.0								<1.0 <1.0								<1.0 <1.0						<1.0 <1.0	
Dichloromethane trans-1,2-Dichloroethene	μg/kg μg/kg	nc								ne <1.0		ne <1.0								ne <1.0								ne <1.0			Þ			ne <1.0	
	µg/kg	nc						L	I	<1.0		<1.0	I							<1.0			I					<1.0						<1.0	

Ground Investigation			PBA 2010/	PPA 2010/	PPA 2010/	PPA 20	10/ BRA 2010	( BRA 3010/	PPA 2010/	PBA 2010/	PPA 2010/	PBA 2010/	PBA 2010/	PPA 2010/		PPA 2010/	PPA 2010/	PBA 2010/	PPA 2010/	PPA 2010/	PBA 2010/	PPA 2010/		PBA 2010/		PPA 2010/	PPA 2010/	PPA 2010/	PPA 2010/	PPA 2010/	PA 2010/	PBA 2010/ PE	A 2010/	PBA 2010/	PBA 2010/
Report Number			2011	2011	2011	2011	2011 3 121863	2011	2011 121863	2011	2011 115023	2011	2011 115023 &	2011 115023	PBA 2010/ 2011	2011	2011	2011 115023	2011	2011 115023	2011 115023	2011 133346	PBA 2010/ 2011 133347	2011 F	PBA 2010/ 2011 133347	2011 133346	2011		2011 133346	2011	2011	2011	2011 33347	2011 133347	2011 133347
Lab Ref			AF60264		+	-	67 AF60268	+		AF60271	AF54173	AF54174	122039 AF54175 & AF64437	AF54176				AF54180		AF54182	AF54183	AF61338	AF61356	AF61357	AF61358	AF61339	<del>   </del>	AF61361	AF61340	AF61362					AF61367
Date Exploatory hole location				10/12/2010	0 10/12/2010	10/12/20	010 10/12/2010	0 10/12/2010	10/12/2010	10/12/2010	Not known	Not known TT2001	Not known	Not known TT2001	Not known TT2001	Not known	Not known	Not known	Not known	Not known TT2001(B)	Not known	04/01/2011	04/01/2011 BH2004	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011 0	4/01/2011	04/01/2011 04	/01/2011	04/01/2011	04/01/2011
Zone B Location			B1	B1	B1	B1		B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1		B1	B1	B1
Location on plot/ gas holder number		g	-	-	-	-											and 9						Inside GH9												
Depth (m) Strata			1m lade Ground	2m Made Ground	Made		Made		Made	4.3m Made Ground		1m Made Ground	2m Made Ground	Made	4m Made Ground	4.5m Made Ground	1.5m Made Ground	1m Made Ground	2.7m Made Ground	4m Made Ground	Made		0.3m Made Ground	Made	2m Made Ground	4m Reworked London Clay	Reworked London	Reworked	7m Reworked London Clay	Reworked	Reworked London	Reworked I	eworked ondon	11m Reworked London Clay	12m Reworked London Clay
cis-1,2-Dichloroethene Bromochloromethane	μg/kg nc μg/kg nc			Cirodina	Citodila	Oldy	Circuita	inidde ciround	Giodila	<1.0 <1.0	Made cround	<1.0 <1.0	Ground	Citodila	Made croand	Circuito	Citodila	Circuito	Gibana	<1.0 <1.0	Crodina	made cround	Made cround	Circuito	Made croand	Echoon olay	Ulay 1	<1.0 <1.0	Eondon Olay	Oldy	Ulay L	chidon olay	Ciay	<1.0 <1.0	Olay
1,1,1-Trichloroethane	µg/kg 107000 µg/kg 700000 µg/kg 3000									<1.0 <1.0 <1.0		<1.0 <1.0 <1.0								<1.0 <1.0 <1.0								<1.0 <1.0 <1.0						<1.0 <1.0 <1.0	
1,1-Dichloropropene Benzene	µg/kg nc µg/kg 28000									<1.0 4.3		<1.0 9								<1.0 28								<1.0 <1.0						<1.0 <1.0	
1,2-Dichloroethane	μg/kg 700 μg/kg 12000 μg/kg nc									<2.0 <1.0 <1.0		<2.0 <1.0 <1.0								<2.0 <1.0 <1.0								<2.0 <1.0 <1.0						<2.0 <1.0 <1.0	
Dibromomethane Bromodichloromethane	μg/kg nc μg/kg nc									<10 <5.0		<10 <5.0								<10 <5.0								<10 <5.0						<10 <5.0	
cis-1,3-Dichloropropene Toluene trans-1,3-Dichloropropene	<u>µg/kg nc</u> µg/kg 870000 µg/kg nc									<10 <1.0 <10		<10 2.6 <10								<10 6.9 <10								<10 <1.0 <10						<10 <1.0 <10	
1,1,2-Trichloroethane Tetrachloroethene	µg/kg nc µg/kg 131000									<10 <1.0		<10 <1.0								<10 <1.0								<10 <1.0						<10 <1.0	
1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane	µg/kg nc µg/kg nc µg/kg nc									<2.0 <10 <5.0		<2.0 <10 <5.0								<2.0 <10 <5.0								<2.0 <10 <5.0						<2.0 <10 <5.0	
Chlorobenzene 1,1,1,2-Tetrachloroethane Ethylbenzene	μg/kg 59000 μg/kg 115000									<1.0 <2.0 <1.0		<1.0 <2.0 <1.0								<1.0 <2.0 <1.0								<1.0 <2.0 <1.0						<1.0 <2.0 <1.0	
m- & p-Xylene	µg/kg 575000 µg/kg 480000									<1.0 <1.0		<1.0 <1.0								2.4 <1.0								<1.0 <1.0						<1.0 <1.0	
Styrene Tribromomethane	µg/kg nc µg/kg nc µg/kg nc									<1.0 <10 <1.0		<1.0 <10 <1.0								<1.0 <10 <1.0								<1.0 <10 <1.0						<1.0 <10 <1.0	
Bromobenzene 1,2,3-Trichloropropane	μg/kg nc μg/kg nc									<1.0 <50		<1.0 <50								<1.0 <50								<1.0 <50						<1.0 <50	
	<u>µg/kg nc</u> µg/kg nc µg/kg nc						_			<1.0 <1.0 <1.0		<1.0 <1.0 <1.0								<1.0 <1.0 <1.0								<1.0 <1.0 <1.0						<1.0 <1.0 <1.0	
4-Chlorotoluene tert-Butylbenzene	μg/kg nc μg/kg nc									<1.0 <1.0		<1.0 <1.0								<1.0 <1.0								<1.0 <1.0						<1.0 <1.0	
1,3,5-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene	µg/kg nc µg/kg nc µg/kg nc					-				<1.0 <1.0 <1.0		<1.0 <1.0 <1.0								<1.0 <1.0 <1.0								<1.0 <1.0 <1.0						<1.0 <1.0 <1.0	
4-Isopropyltoluene	µg/kg пс µg/kg пс µg/kg пс									<1.0 <1.0		<1.0 <1.0								1.2 <1.0 <1.0								3.4 <1.0						<1.0 <1.0	
1,2-Dichlorobenzene 1,2-Dibromo-3-chloropropane	µg/kg nc µg/kg 2140000 µg/kg nc	1				-	_			<1.0 <1.0 <50		<1.0 <1.0 <50								<1.0 <1.0 <50								<1.0 <1.0 <50						<1.0 <1.0 <50	
1,2,4-Trichlorobenzene	µg/kg nc µg/kg nc µg/kg 108000									<1.0 <1.0 <2.0		<1.0 <1.0 <2.0								<1.0 <1.0 <2.0								<1.0 <1.0 <2.0						<1.0 <1.0 <2.0	
Tentatively Identified Compounds Benzene, 1-ethenyl-3-methyl	μg/kg nc μg/kg nc									None Detected		None Detected								None Detected	1							42.0					N	Ione Detected	
Indane 2-Benzothiphene Benzofuran	<u>µg/kg nc</u> µg/kg nc µg/kg nc																																		$\square$
Benzo(B)thiophene Phenol,4Methyl Benzo(B)Thiophene	µg/kg nc µg/kg nc µa/ka nc																																		
Acenaphthene Acenaphthylene	mg/kg 84900 mg/kg 84300									<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
Azobenzene	mg/kg 525000 mg/kg nc mg/kg 90						-			<0.50 <0.50 <0.50		0.51 <0.50 1.4								<0.50 <0.50 0.8								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
Benzo[a]pyrene	mg/kg 14 mg/kg 100									<0.50 <0.50		1.5 1.7								0.7								<0.50 <0.50						<0.50 <0.50	
Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene bis(2-Chloroethoxy)methane	mg/kg 654 mg/kg 141 mg/kg nc									<0.50 <0.50 <0.50		0.57 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
bis(2-Chloroethyl)ether bis(2-Chloroisopropyl)ether	mg/kg nc mg/kg nc									<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
bis(2-Ethylhexyl)phthalate Butylbenzylphthalate Carbazole	mg/kg nc mg/kg nc mg/kg nc						_			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
Chrysene Di-n-butylphthalate	mg/kg 137 mg/kg nc mg/kg nc									<0.50 <0.50 <0.50		0.99 <0.50 <0.50								0.56 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
Dibenzo[a,h]anthracene Dibenzofuran	mg/kg nc mg/kg nc									<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
Dimethylphthalate Fluoranthene	mg/kg nc mg/kg nc mg/kg 22600									<0.50 <0.50 <0.50		<0.50 <0.50 2.3								<0.50 <0.50 1.4								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
Fluorene Hexachlorobenzene	mg/kg 63500 mg/kg 47									<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
Hexachloroethane	mg/kg nc mg/kg nc mg/kg nc						+	+		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
Indeno[1,2,3-cd]pyrene Isophorone N-Nitrosodi-n-propylamine	mg/kg 60 mg/kg nc									<0.50 <0.50 <0.50 <0.50		0.52 <0.50 <0.50								<0.50 <0.50 <0.50 <0.50								<0.50 <0.50 <0.50 <0.50						<0.50 <0.50 <0.50 <0.50	
N-Nitrosodimethylamine Naphthalene	mg/kg         nc           mg/kg         nc           mg/kg         204					-	_			<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	<u> </u>
Nitrobenzene Pentachlorophenol	mg/kg nc mg/kg 1220 mg/kg 21900									<0.50 <0.50 <0.50		<0.50 <0.50 2								<0.50 <0.50 1.4								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
Pyrene	mg/kg 3200 mg/kg 54200									<0.50 <0.50		<0.50 1.8								<0.50 1.3								<0.50 <0.50						<0.50 <0.50	
1,2-Dichlorobenzene 1,2,4-Trichlorobenzene	mg/kg 2140 mg/kg 228 mg/kg 32									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
1,4-Dichlorobenzene 2-Chloronaphthalene	mg/kg 4460 mg/kg nc					<u> </u>				<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
2-Chlorophenol 2-Methyl-4,6-dinitrophenol 2-Methylnaphthalene	mg/kg 3540 mg/kg nc mg/kg nc					-				<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
2-Methylphenol 2-Nitroaniline	mg/kg nc mg/kg nc									<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
2-Nitrophenol 2,4-Dichlorophenol 2,4-Dimethylphenol	mg/kg nc mg/kg 3470 mg/kg nc						+	+		<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
2,4-Dinitrotoluene 2,4.5-Trichlorophenol	mg/kg nc mg/kg nc									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50 <0.50								<0.50 <0.50 <0.50 <0.50						<0.50 <0.50 <0.50 <0.50	
2,4,6-Trichlorophenol 2,6-Dinitrotoluene 3-Nitroaniline	mg/kg nc mg/kg nc									<0.50 <0.50		<0.50 <0.50								<0.50 <0.50								<0.50 <0.50						<0.50 <0.50	
4-Bromophenylphenylether 4-Chloro-3-methylphenol	mg/kg nc mg/kg nc mg/kg nc									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50								<0.50 <0.50 <0.50								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50	
4-GHIOIDAIIIIIIIE	ing/kg nc				1	1	1	1	1	<0.50		<0.50						1		<0.50	1					1	i – – – –	<0.50			1	1		<0.50	I

			1											1	1	1					-					-	-							······	
Ground Investigation	1		PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011		PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011
Report Number	r		121863	121863	121863	121863	121863	121863	121863	121863	115023	115023	115023 & 122039	115023	115023	115023	115023	115023	115023	115023	115023	133346	133347	133347	133347	133346	133347	133347	133346	133347	133347	133347	133347	133347	133347
Lab Ret	f		AF60264	AF60265	AF60266	AF60267	AF60268	AF60269	AF60270	AF60271	AF54173	AF54174	AF54175 & AF64437	AF54176	AF54177	AF54178	AF54179	AF54180	AF54181	AF54182	AF54183	AF61338	AF61356	AF61357	AF61358	AF61339	AF61360	AF61361	AF61340	AF61362	AF61363	AF61364	AF61365	AF61366	AF61367
Date	9				0 10/12/2010					10/12/2010 TP2021A					Not known TT2001					Not known			04/01/2011											04/01/2011	
Exploatory hole location Zone B Location			B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	BH2004 B1	B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	BH2004 B1	B1	BH2004	BH2004 B1	BH2004 B1
Zone D Eocation			51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	ы	51	51	Di			
Location on plot/ gas holder number	r		Outside gasholder 3	Outside gasholder 3	Outside gasholder 3	Outside gasholder 3		Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Inside GH3	Between gas holder 3 and 9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9
Depth (m)	)		1m	2m	3m	4.4m	1.5m	2.5m	3.5m	4.3m	0.2m	1m	2m	3m	4m	4.5m	1.5m	1m	2.7m	4m	4.5m	1m	0.3m	2m	2m	4m		7m	7m			10m		11m	
Strata	a			Made Ground	Made Ground	01	Made Ground		Made	Made Oracid			Made	Made		Made	Made Ground	Made Ground	Made Ground		Made		Made Oracid	Made	Made Orient	Reworked	Reworked London	Reworked	Reworked	Reworked London	Reworked London Clay	Reworked	Reworked London	Reworked	
Chlorophenylphenylether	mg/kg	nc	Made Ground	Ground	Ground	Clay	Ground	Made Ground	d Ground	Made Ground <0.50	Made Ground	Made Ground <0.50	Ground	Ground	Made Ground	Ground	Ground	Ground	Ground	Made Ground <0.50	Ground	made Ground	Made Ground	Ground	Made Ground	London Clay	Clay	London Clay <0.50	London Clay	Clay	Ciay	London Clay	Clay	London Clay <0.50	Clay
Methylphenol	mg/kg	nc								<0.50		< 0.50								< 0.50								< 0.50						<0.50	1
Nitroaniline	mg/kg	nc										<0.50								<0.50								<0.50						<0.50	
hyl-methyl benzenes entatively Identified Compounds	mg/kg mg/kg	nc			-		-			Not detected		Not detected								Not detected							-	Not detected					÷	Not detected	-
enzofuran	mg/kg	nc					-			NUL UELECLEU		NUL DELECTED								NUL DELECTED								NUL DELECTED					+	NUL UELECIEU	
ohenyl	mg/kg	nc																																	1
methylnahthalene	mg/kg	nc																																	
methylnaphthalene	mg/kg ma/ka	nc							+ +																	l							/ <b></b> +		
dene benzothiophene	mg/kg mg/kg	nc	-	1	-		-		+ +							1						1											+		+
namaldehde	mg/kg	nc			1		1		1 1				1			1					1					1	1						+		+
phenyl	mg/kg	nc																																-	1
phtho[2,3-B]thiophene	mg/kg	nc					_																										,		_
CBs as Aroclor 1242 sec-Butyl-4,6-dinitrophenol	mg/kg mg/kg	nc								<1.0		<1								<1								<1.0					+	<1.0	
Chloro-3-methylphenol	mg/kg	nc			1		1		1 1				1			1					1					1	1						+		+
Chlorophenol	mg/kg	nc							1 1					1		1	1									1							· · · · · ·		1
4-Dichlorophenol	mg/kg	nc																																	
6-Dichlorophenol 4-Dimethylphenol	mg/kg ma/ka	nc							+ +				l													l							·+		
4-Dinitrophenol	mg/kg mg/kg	nc	-	-	-		-	1	+ +				1			1										1							+		-
Methyl-4,6-dinitrophenol	mg/kg	nc		1	1		1	1			1	1			1	1						1	1			1	1	1	1				/t		+
Methylphenol	mg/kg	nc																																	
Methylphenol	mg/kg	nc							+																										+
Methylphenol Nitrophenol	mg/kg mg/kg	nc		+	+		+		+ +		1				+	+										ł	+	l					+		+
Nitrophenol	mg/kg	nc		1	-		+								-	1										1	1						+		+
entachlorophenol	mg/kg	nc																																	1
nenol	mg/kg	3200																																	
3,4,5-Tetrachlorophenol 3,4,6-Tetrachlorophenol	mg/kg	nc 3900							┥──┤						+							ł		┝──┤									+		+
3,4,6-1 etrachlorophenol 3,5,6-Tetrachlorophenol	mg/kg mg/kg	3900		+	+		+		+ +		1				+	+						l		┝──┤			+						+		+
3.4-Trichlorophenol	mg/kg	nc		1	1		1	1			1	1			1	1						1	1			1	1	1	1				/t		+
3,5-Trichlorophenol	mg/kg	nc																																	
3,6-Trichlorophenol	mg/kg	nc							+																										+
4,5-Trichlorophenol 4,6-Trichlorophenol	mg/kg mg/kg	nc																															+		+
4,5-Trichlorophenol	mg/kg mg/kg	nc	-	+	+	-	+						-	-	1	1										1	+						+		+
				1	1	1	1	1					1	1		i	i				1					1	1								1
	Indicates where t	he data exceeds the s	ic in the second second second second second second second second second second second second second second se																																

			PBA 2010/	DRA 00101	DDA 0010	DRA 00101	DDA octor	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PRA 00101	DDA 00101	PBA 2010/	PPA 00101	PPA potoi	PPA control	DDA 00101	DRA 00101	DD4 00101	DPA contai	DDA 00101	PRA actor	DDA 00101	DRA 00101	PRA 00101	DDA 00101	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/ PBA 2010/
Ground Investigation			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011 133347/	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011 2011
Report Number			133347 AF61368	133347 AF61369	121863 AF60262	122111 AF68443	122209 AF68336	122210 AF68366	122209 AF68337	133347 AF61376	133347 AF61377	133347 AF61378	133346 AF61343	133347 AF61379	133347 AF61380	133346 AF61344	122039 AF61381/	133347 AF61382	133346 AF61345	133347 AF61383	133347 AF61384	133347 AF61385	133344 AF61323	133344 AF61318	133344 AF61319	133344 AF61320	133344 AF61321	133344 AF61322	121783 AF57622	122211 AF68428	122209 AF68289	122209 AF68290	122210 122211 AF68354 AF68429
Date			04/01/2011	04/01/2011	10/12/2010	07/02/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011		04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	10/12/2010	07/02/2011	25/01/2011	25/01/2011	25/01/2011 07/02/2011
Exploatory hole location Zone B Location			BH2004 B1	BH2004 B1	TP2020 B1	TP2026 B1	TP2026 B1	TP2026 B1	TP2026 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2015 B1	BH2015 B1	BH2015 B1	BH2015 B1	BH2015 B1	BH2015 B1	TP2019 B1	TP2014 B1	TP2014 B1	TP2014 B1	TP2014 B1	TP2014 B1	TP2002 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 BH2016 B3 B3
Location on plot/ gas holder number			Inside GH9	Inside GH9	GHB (edge)	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders		Gas holder B (edge)	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Inside GH9	Inside GH9	Inside GH9	Inside GH9 Inside GH9
Depth (m) Strata			13m Reworked	15m	1m Made	1m	1m	1m	2m	0.35m	1m	2m	2m Made	3m Reworked Weathered		5m Weathered	0.3m Made	1m Made	2m Made	3m	4m Weathered	5m Weathered	0.1m - 0.8m Made	0.6m	1m Made	2m Made	2m	3m Made	0.3m	0.3m	1m	2m	2m 3m Made Made
		Screening Criteria		London Clay		Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Ground	London Clay			Ground	Ground	Ground	Made Ground	London Clay	London Clay	Ground	Topsoil	Ground		Made Ground		Made Ground	Made Ground	Made Ground	Made Ground	Ground Ground
Metals	Units ma/ka	Commercial 640		19	15		21		25	3.8	12				8.7			9.5			7.8		15	9.7		7.8		25			38	13	
Cadmium	mg/kg mg/kg mg/kg	230.0		0.17 10	<0.10		0.19 <5.0 61			0.14	0.12				<0.10			9.5 0.16 11			<0.10			0.2		<0.10		0.53			0.3 11	<0.10 23	
Copper Lead	mg/kg mg/kg	71700 7300		72 360 0.15	31 180		260		44 330	21 30 <0.10	74 140				15 19 16 <0.10			28 160 0.41			20 21 16 <0.10		41 460	16 24 59 0.13		13 19 26		<5.0 21 33 <0.10			130 170 0.32	27 62 0.14	
Nickel	mg/kg mg/kg mg/kg	1800		47			1.2 19			<0.10	0.23 16				29			16			<0.10			31		<0.10 26		<0.10 6.5			27	0.14 36	
Selenium Zinc	mg/kg mg/kg	13000		2.7 140	< 0.20 57		<0.20 160		<0.20 120	<0.20 63	<0.20 90				0.3 50			<0.20 75			<0.20 54		<0.20 220			0.35 47		<0.20 63			<0.20 320	<0.20 74	
	mg/kg			84						3.5 <0.50	4.5 <0.50				<0.50 <0.50			0.5 <0.50			<0.50 <0.50		1.6	13 <0.50		3.3 <0.50		0.5 <0.50					
Thiocyanate	mg/kg mg/kg mg/kg	nc			< 5.0					<5.0	<5.0				<5.0			<5.0			< 5.0			<5.0		<5.0		<5.0					
Total organic carbon	% pH Units	nc		8.9	7.9		9	7.5 9.2	9.3	10.8	10.8		1.5 8.7		8.1	0.59 8.1		10.5	17 8.5		8.1		8.9	5.8		8.2		8.3			10.1	8.2	0.78 8.4
	%	nc										Not detected					Amosite 0.01								Not detected				Not detected	Not detected			Not detected
Phenol Sulphur (free)	mg/kg	3200 nc		<0.3	< 0.3		<0.3		<0.3	<0.3	<0.3				<0.3			<0.3			<0.3		<0.3	<0.3		<0.3		<0.3			<0.3	<0.3	
Total Sulphate	mg/kg % as SO4 mg/kg	nc																															
Phenol (monohydric) SOM 1% Total sulphate	mg/kg mg/kg	nc nc																													1.1	0.29	
Sulphate (2:1 water soluble) as SO4 Organic matter	g/l %	nc nc		0.19	2.9		1.3 15		1.8 14	0.33	1.1 1.2		10.0		1.3 0.52	15.0		0.51	17.6		1.5 0.81			1.5 2.1		1.4 1.6		0.99 0.84			1.6	1.4	05.0
	% mol/kg %	nc	18.4	18.2	20.8		14.9	14.3 0.134 5.56	14.6	2.84	11.4		13.6 0.011 5.21	19.6	17	15.6 0.016 4.85		11.3	0.01	24.3	22.2		2.48	27.5		26.3	26	22.1			13.2	27.5	25.9 0.083 5.54
Stones content > 50mm BTEX	%	nc	<0.02	<0.02				0.00		<0.02	<0.02		<0.02	<0.02	<0.02	<0.02		<0.02	<0.02	<0.02	<0.02		<0.02	<0.02		<0.02	<0.02	<0.02					<0.02
Toluene	µg/kg µg/kg	870000.00		320 270	<1			<1 <1 <1		40 7.6	20 5.5		<1		1.2	1.5		2.5	<1 <1 <1		2.4		<1 <1 <1	4.3 2.8		9.4 1.5		150 1.8					9.6
m- & p-Xylene	μg/kg μg/kg μg/kg	575000		380 78 180	<1 <1 <1			<1 <1 <1		6 6.2 3.3	1.9 2.8 1.1		<1 <1 <1		<1 <1 <1	<1 <1		<1 <1 <1	<1 <1		2.3 < 1 < 1		< 1	2.5 1.5 1.5		3.4 3.7 <1		24 14 9.1					<1 <1 <1
Total BTEX Methyl tert-butyl ether	μg/kg μg/kg	nc	<1.0					<0.005					<0.005	<1.0		<0.005			<0.005	<1.0							<1.0						0.0071
Hydrocarbons Aliphatic C5-C6 Aliphatic >C6-C8	mg/kg mg/kg		< 0.1 < 0.1											< 0.1 < 0.1						< 0.1 < 0.1							< 0.1 < 0.1						
Aliphatic >C8-C10	mg/kg mg/kg	2130	< 0.1											< 0.1						< 0.1							< 0.1						
Aliphatic >C12-C16 Aliphatic >C16-C21	mg/kg mg/kg	60800 673000	< 0.1											< 0.1						< 0.1							< 0.1						
Aliphatic >C35-C44	mg/kg mg/kg mg/kg	673000	< 0.1 < 0.1 < 0.1											< 0.1 < 0.1 < 0.1						< 0.1 < 0.1 < 0.1							< 0.1 < 0.1 < 0.1						
Aromatic >C7-C8 Aromatic >C8-C10	mg/kg mg/kg	59000 3670	< 0.1 < 0.1											< 0.1 < 0.1						< 0.1 < 0.1							< 0.1 < 0.1						
Aromatic >C12-C16	mg/kg mg/kg mg/kg	36200	< 0.1 0.13 0.64											< 0.1 < 0.1 < 0.1						< 0.1 3.1 15							< 0.1 < 0.1 < 0.1						
Aromatic >C21-C35 Aromatic >C35-C44	mg/kg mg/kg	28400	0.74											< 0.1						19 < 0.1							< 0.1						
	mg/kg mg/kg	nc	<2	42	< 10		180		110	44	32			- 2	< 10			110		37	< 10		- 10	15		< 10	<2	< 10			< 10	32	
	mg/kg mg/kg	nc	<2	42	< 10		180	130	110	44	32		< 10	<2	< 10	< 10		110	470	31	< 10		< 10	13		< 10	<2	< 10			< 10	32	< 10
Gasoline Range Organics by GC (GRO)	mg/kg mg/kg	2130 2130																															
TPH (SUM DRO + GRO) TPH (Mineral Oil/ Hydrocarbon oil) TPH (Aromatic hydrocarbons)	mg/kg mg/kg mg/kg	2130																															
TPH (Solvent Extracted) TPH	mg/kg mg/kg	2130 2130																															
Acenanhthene	mg/kg mg/kg mg/kg	84900		0.32	< 0.1		0.59	0.4 <0.1	< 0.1	< 0.1	0.85		<0.1 0.2		< 0.1 < 0.1			0.57	3 4.3		0.11											0.33	
Anunacene	mg/kg	90.0		0.37 0.68	< 0.1 0.46		2.7 7	1.1 3.5	0.71 3.7	0.22 0.29	0.95		0.3		< 0.1 < 0.1	<0.1 <0.1		1.4	13 35		< 0.1 0.14										0.65	0.25 < 0.1	0.3 0.3
Benzo(a)pyrene Benzo(b)fluoranthene	mg/kg mg/kg	14.00 100.0		< 0.1	0.35 0.38 0.18		11 9.3 6.1	6.3 5.3 4.2	6.3 5.5 4.1	< 0.1 0.19 < 0.1	1.8 2 0.95		0.6 0.6 0.4		< 0.1 < 0.1 < 0.1	<0.1 <0.1 <0.1		2 2.4 1.7	30 29 19		< 0.1 < 0.1 < 0.1										1.8 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	0.2 0.5 0.1
Benzo(g,h,i)perylene	mg/kg mg/kg mg/kg	654		< 0.1 < 0.1 0.54	0.24		8.3	4.2 5.3 4	5.5	< 0.1	0.95 1 2.2		0.4 0.8 0.8		< 0.1	<0.1 <0.1 <0.1		1./ 1.9 2.7	19 16 36		< 0.1 < 0.1 0.17										< 0.1 0.79 1.4	< 0.1 < 0.1 < 0.1	0.2
Dibenzo(a,h)anthracene Fluoranthene	mg/kg mg/kg	13.00 22600		0.11	< 0.1 0.7		1.9 13	5.9		< 0.1	0.41 4.2		0.9		< 0.1 < 0.1	<0.1 <0.1		0.42 5.1	15 67		< 0.1 0.14										0.12	< 0.1	0.1 0.8
Indeno(1,2,3-c,d)pyrene	mg/kg mg/kg mg/kg	60.0		0.17 0.16 10			0.68 8.4 2.8	0.3 1.4 1.5	5.5	0.1 0.11 0.2	0.3 1.5 0.13		<0.1 <0.1 0.6		< 0.1 < 0.1 < 0.1	<0.1 <0.1 <0.1		0.72 1.9 0.29	4.4 1.5 4.1		< 0.1 < 0.1 < 0.1										< 0.1 0.99 2.6	< 0.1 < 0.1 < 0.1	0.2 <0.1 2.4
Phenanthrene Pyrene	mg/kg mg/kg	21900 54200		0.42	0.33			3.9 4.6			3.2 3.6		0.6		< 0.1	<0.1 <0.1		2.9 4.3	42 53		< 0.1										1.7 1.9	0.47	1 0.7
Coronene PAH (Sum of 16 - excluding coronene)	mg/kg mg/kg	nc nc		15	4		100	<0.1 53	53	3.2	25		<0.1 8.6		< 2	<0.1		31	<0.1 370		< 2		<2	10		19		3.1			14	<2	<0.1
PCB	mg/kg mg/kg							<0.1					<0.1			<2			<0.1														<0.1
PCB 52 PCB 101	mg/kg mg/kg	nc nc						<0.1 <0.1					<0.1 <0.1			<0.1 <0.1			<0.1 <0.1														<0.1 <0.1
PCB 138	mg/kg mg/kg mg/kg	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														<0.1 <0.1 <0.1
PCB 180 Total PCBs (7 congeners)	mg/kg mg/kg mg/kg	nc nc						<0.1 <0.1 <1					<0.1 <0.1 <1			<0.1 <0.1 <1			<0.1 <0.1 <1														<0.1 <0.1 <1
VOCs Dichlorodifluoromethane	μg/kg	nc	<1.0											<1.0						<1.0							<1.0						
Vinyl chloride	µg/kg µg/kg µg/kg	nc	<1.0 <1.0 <20											<1.0 <1.0 <20						<1.0 <1.0 <20							<1.0 <1.0 <20						
Trichlorofluoromethane	μg/kg μg/kg	nc nc	<2.0 <1.0											<2.0 <1.0						<2.0 <1.0							<20 <2.0 <1.0						
Dichloromethane	μg/kg μg/kg	nc nc	<1.0 ne											<1.0 ne						<1.0 ne							<1.0 ne						
trans-1,2-Dichloroethene 1,1-Dichloroethane	µg/kg µg/kg	nc	<1.0 <1.0											<1.0 <1.0						<1.0 <1.0							<1.0 <1.0						

Ground Investigation	PBA 2010/ 2011	PBA 2010/ PBA 2010/ 2011 2011	2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011 133347/	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011
Report Number	133347	133347 121863	-	122209	122210	122209	133347	133347	133347	133346	133347	133347	133346	122039 AF61381/	133347	133346	133347	133347		133344	133344	133344	133344	133344	133344	121783	122211	122209	122209	122210	122211
Lab Ref Date	AF61368 04/01/2011	AF61369 AF60262 04/01/2011 10/12/2010		AF68336 25/01/2011	AF68366 25/01/2011	AF68337 25/01/2011	AF61376 04/01/2011	AF61377 04/01/2011	AF61378 04/01/2011	AF61343 04/01/2011	AF61379 04/01/2011	AF61380 04/01/2011		AF64444		AF61345 04/01/2011	AF61383 04/01/2011	AF61384 04/01/2011		AF61323 04/01/2011	AF61318 04/01/2011	AF61319 04/01/2011	AF61320 04/01/2011	AF61321 04/01/2011	AF61322 04/01/2011	AF57622 10/12/2010	AF68428 07/02/2011	AF68289 25/01/2011	AF68290 25/01/2011		AF68429 07/02/2011
Exploatory hole location Zone B Location	BH2004 B1	BH2004 TP2020 B1 B1	TP2026 B1	TP2026 B1	TP2026 B1	TP2026 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2009 B1	BH2015 B1	BH2015 B1	BH2015 B1	BH2015 B1	BH2015 B1	BH2015 B1	TP2019 B1	TP2014 B1	TP2014 B1	TP2014 B1	TP2014 B1	TP2014 B1	TP2002 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3
																											20	20	50	50	
Location on plot/ gas holder number	Inside GH9	Inside GH9 GHB (edge	e) Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders		Outside gasholders			Outside gasholders	Outside gasholders		Outside gasholders			Outside gasholders	Outside gasholders	Outside gasholders			Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9
Depth (m)	13m	15m 1m	1m	1m	1m	2m	0.35m	1m	2m	2m	3m Reworked	4m	5m	0.3m	1m	2m	3m	4m	5m	0.1m - 0.8m	0.6m	1m	2m	2m	3m	0.3m	0.3m	1m	2m	2m	3m
Strata	Reworked London Clay	Made London Clay Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Weathered	Weathered London Clay	Weathered London Clay	Made Ground	Made Ground	Made Ground	Made Ground	Weathered London Clay	Weathered London Clay	Made Ground	Topsoil	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground
cis-1,2-Dichloroethene μg/kg nc Bromochloromethane μg/kg nc	<1.0 <1.0										<1.0 <1.0						<1.0 <1.0							<1.0 <1.0							
Trichloromethane         μg/kg         107000           1,1,1-Trichloroethane         μg/kg         700000           Tetrachloromethane         μg/kg         3000	<1.0 <1.0										<1.0 <1.0 <1.0						<1.0 <1.0 <1.0							<1.0 <1.0 <1.0							
Tetrachloromethane         µg/kg         3000           1,1-Dichloropropene         µg/kg         nc           Benzene         µg/kg         28000           4 0 Dichloroptic         270	<1.0 <1.0 2.3										<1.0 <1.0 <1.0						<1.0							<1.0							
1,2-Dichloroethane         µg/kg         700           Trichloroethane         µg/kg         12000           1,2-Dichloroptopane         µg/kg         nc	<2.0 <1.0										<2.0 <1.0						1.6 <2.0 <1.0							22 <2.0 <1.0							
Dibromomethane ua/ka nc	<1.0 <10										<1.0 <10						<1.0 <10							<1.0 <10							
Bromodichloromethane µg/kg nc cis-1,3-Dichloropropene µg/kg nc Toluene µg/kg 870000	<5.0 <10 <1.0										<5.0 <10 <1.0						<5.0 <10 1.4							<5.0 <10 1.1							
trans-1,3-Dichloropropene µg/kg nc 1,1,2-Trichloroethane µg/kg nc	<10 <10										<10 <10						<10 <10							<10 <10							
Tetrachloroethene         μg/kg         131000           1,3-Dichloropropane         μg/kg         nc	<1.0 <2.0										<1.0 <2.0						<1.0 <2.0							<1.0 <2.0							
1,3-Dichloropropane         µg/kg         nc           Dibromochloromethane         µg/kg         nc           1,2-Dibromoethane         µg/kg         nc           Chlorobenzene         µg/kg         59000	<10 <5.0 <1.0										<10 <5.0 <1.0						<10 <5.0 <1.0							<10 <5.0 <1.0							
μg/kg         15000           1,1,2,2-Tetrachloroethane         μg/kg         115000           Ethylbenzene         μg/kg         581000	<2.0 <1.0										<2.0 <1.0						<2.0							<2.0							
m- & p-Xylene μg/kg 575000 o-Xylene μg/kg 480000	<1.0 <1.0										<1.0 <1.0						<1.0 <1.0							2.6 <1.0							
Styrene µg/kg nc Tribromomethane µg/kg nc Isoprovilenzane welke pc	<1.0 <10										<1.0 <10						<1.0 <10							<1.0 <10							
Isopropylbenzene         µg/kg         nc           Bromobenzene         µg/kg         nc           1,2,3-Tirchloropropane         µg/kg         nc	<1.0 <1.0 <50			1							<1.0 <1.0 <50						<1.0 <1.0 <50							1.3 <1.0 <50							
n-Propylbenzene μg/kg nc 2-Chlorotoluene μg/kg nc	<1.0 <1.0										<1.0 <1.0						<1.0 <1.0							<1.0 <1.0							
1,2,4-Trimethylbenzene         μg/kg         nc           4-Chlorotoluene         μg/kg         nc	<1.0 <1.0										<1.0 <1.0						<1.0 <1.0							<1.0 <1.0							
tert-Butylbenzene         μg/kg         nc           1,3,5-Trimethylbenzene         μg/kg         nc           sec-Butylbenzene         μg/kg         nc	<1.0 <1.0 <1.0										<1.0 <1.0 <1.0						<1.0 <1.0 <1.0							<1.0 2 <1.0							
μg/kg         nc           1,3-Dichlorobenzene         μg/kg         nc           4-Isopropyltoluene         μg/kg         nc	<1.0 <1.0 <1.0										<1.0 <1.0						<1.0							<1.0 <1.0 <1.0							
1,4-Dichlorobenzene μg/kg nc n-Butylbenzene μg/kg nc	<1.0 <1.0										<1.0 <1.0						<1.0 <1.0							<1.0 <1.0							
1.2-Dichlorobenzene <u>µg/kg</u> 2140000 1.2-Dibromo-3-chloropropane <u>µg/kg</u> nc 1.2.4-Trichlorobenzene <u>µg/kg</u> nc	<1.0 <50 <1.0										<1.0 <1.0 <50 <1.0						<1.0 <50 <1.0							<1.0 <50 <1.0							
Hexachlorobutadiene µg/kg nc 1.2,3-Trichlorobenzene µg/kg 108000	<1.0 <1.0 <2.0										<1.0 <2.0						<1.0 <1.0 <2.0							<1.0 <1.0 <2.0							
Tentatively Identified Compounds         μg/kg         nc           Benzene, 1-ethenyl-3-methyl         μg/kg         nc	None Detected										None Detected						None Detected							None Detected							
Indane yg/kg nc 2-Benzothiphene yg/kg nc Benzofuran yg/kg nc																															
Benzo(B)thiophene μg/kg nc Phenol,4Methyl μg/kg nc																															
Benzo(B)Thiophene µg/kg nc Acenaphthene mg/kg 84900	<0.50										<0.50						<0.50							<0.50							
Accenaphthylene         mg/kg         84300           Anthracene         mg/kg         525000           Azobenzene         mg/kg         nc	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
Benzofa,h.ilpervlene ma/ka 654	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Benzolk/Ituoranthene mg/kg 141 bis(2-Chloroethy)methane mg/kg nc bis(2-Chloroethy)lether mg/kg nc	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
bis(2-Chloroisopropyl)ether mg/kg nc bis(2-Ethylhexyl)phthalate mg/kg nc	<0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Butylbenzylphthalate mg/kg nc Carbazole mg/kg nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Di-n-butylphthalate mg/kg nc	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
Dibenzo[a,h]anthracene         mg/kg         nc           Dibenzofuran         mg/kg         nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Diethylphthalate mg/kg nc Dimethylphthalate mg/kg nc	<0.50 <0.50		+								<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Fluoranthene         mg/kg         22600           Fluorene         mg/kg         63500           Hexachlorobenzene         mg/kg         47	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							0.53 <0.50 <0.50							
Hexachlorobutadiene mg/kg nc Hexachlorocyclopentadiene mg/kg nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Hexachloroethane         mg/kg         nc           Indeno[1,2,3-cd]pyrene         mg/kg         60	<0.50 <0.50		+								<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Isophorone mg/kg nc N-Nitrosodin-propylamine mg/kg nc N-Nitrosodimethylamine mg/kg nc	<0.50 <0.50 <0.50		1								<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
Naphthalene mg/kg 204 Nitrobenzene mg/kg nc	<0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
Pentachlorophenol mg/kg 1220 Phenanthrene mg/kg 21900	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
Pyrene mg/kg 54200	<0.50 <0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
1,2,4-Trichlorobenzene         mg/kg         228           1,3-Dichlorobenzene         mg/kg         32	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
1,4-Dichlorobenzene mg/kg 4460 2-Chloronaphthalene mg/kg nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
2-Chlorophenol mg/kg 3540 2-Methyl-4,6-dinitrophenol mg/kg nc	<0.50 <0.50 <0.50		1	<u> </u>							<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
2-Methylphenol ma/ka nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
2-Nitrophenol mg/kg nc 2,4-Dichlorophenol mg/kg 3470	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
2,4-Dimethylphenol mg/kg nc 2,4-Dinitrotoluene mg/kg nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							
2.4,5-Trichlorophenol         mg/kg         nc           2.4,6-Trichlorophenol         mg/kg         3880           2.6-Diritotoluene         mg/kg         nc	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
3-Nitroaniline mg/kg nc 4-Bromophenylphenylether mg/kg nc	<0.50 <0.50 <0.50										<0.50 <0.50 <0.50						<0.50 <0.50 <0.50							<0.50 <0.50 <0.50							
4-Chloro-3-methylphenol mg/kg nc	<0.50 <0.50										<0.50 <0.50						<0.50 <0.50							<0.50 <0.50							

					1														-		-	-												
Ground Investigation	n		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/
	-		2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Report Number	r		133347	133347	121863	122111	122209	122210	122209	133347	133347	133347	133346	133347	133347	133346	133347/	133347	133346	133347	133347	133347	133344	133344	133344	133344	133344	133344	121783	122211	122209	122209	122210	122211
																	122000																<u> </u>	4
Lab Re	f		AF61368	AF61369	AF60262	AF68443	AF68336	AF68366	AF68337	AF61376	AF61377	AF61378	AF61343	AF61379	AF61380	AF61344	AF61381/ AF64444	AF61382	AF61345	AF61383	AF61384	AF61385	AF61323	AF61318	AF61319	AF61320	AF61321	AF61322	AF57622	AF68428	AF68289	AF68290	AF68354	AF68429
Date	e		04/01/2011	04/01/2011	10/12/2010	07/02/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011		04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	10/12/2010	07/02/2011	25/01/2011	25/01/2011	25/01/2011	07/02/2011
Exploatory hole location	n													BH2009																				
Zone B Location	n		B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1	B3	B3	B3	B3	B3	B3
	-																												-		-	-	<u> </u>	<u> </u>
						Outside	Outside	Outoida	Outsida	Outsida	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outsida	Outside	Outside	Can halder D	Outoida	Outside	Outside	Outside	Outoida	Outside				4	
Location on plot/ gas holder number	r		Inside GH9	Inside GH9	GHB (edge)	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside	Outside	Outside gasholders	Outside	Outside	Outside	Outside	Outside gasholders	Outside gasholders	Outside		Gas holder B (edge)		Outside gasholders	Outside	Outside gasholders	Outside gasholders	Outside gasholders	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9
						guoriolacio	guonolocio	guonoidoro	guoriolaoro	guorioluoro	guoriolocio	guoriolaoro	guonoicoro	guoriolocio	guonolocio	guorioidoro	guonoidoro	guonoidoro	guonolocio	guoriolidoro	guonoidoro	guonoidoro	(ougo)	guonolocio	gaonoloolo	guoriolaoro	guonolocio	guonolaolo	gaonolaolo				4	1
Depth (m	0		13m	15m	1m	1m	1m	1m	2m	0.35m	1m	2m	2m	3m	4m	5m	0.3m	1m	2m	3m	4m	5m	0.1m - 0.8m	0.6m	1m	2m	2m	3m	0.3m	0.3m	1m	2m	2m	3m
														Reworked																				
Strata	a		Reworked		Made								Made	Weathered	Weathered	Weathered	Made	Made	Made		Weathered		Made		Made	Made		Made					Made	Made
4-Chlorophenylphenylether	malka	nc	London Clay <0.50	London Clay	/ Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Ground	London Clay <0.50	London Clay	London Clay	Ground	Ground	Ground	Made Ground <0.50	London Clay	/ London Clay	Ground	Topsoil	Ground	Ground	Made Ground <0.50	Ground	Made Ground	Made Ground	Made Ground	Made Ground	Ground	Ground
4-Chlorophenylphenylether 4-Methylphenol	mg/kg mg/kg	nc	<0.50	-	1	1		1	1					<0.50					1	< 0.50		+					<0.50						+	1
4-Nitroaniline	mg/kg	nc	<0.50			1		İ	1					<0.50						< 0.50							<0.50							
ethyl-methyl benzenes	mg/kg	nc																																
Tentatively Identified Compounds Benzofuran	mg/kg	nc	Not detected											Not detected						Not detected							Not detected							
biphenyl	mg/kg mg/kg	nc	-																														+	+
1-methylnahthalene	mg/kg	nc																																
1-methylnaphthalene	mg/kg	nc																																
Indene 2-benzothiophene	mg/kg	nc																																-
Cinnamaldehde	mg/kg mg/kg	nc																																+
Biphenyl	mg/kg	nc																																
naphtho[2,3-B]thiophene	mg/kg	nc																																
PCBs as Aroclor 1242 2-sec-Butyl-4,6-dinitrophenol	mg/kg mg/kg	nc	<1.0											<1.0						<1.0							<1.0							
4-Chloro-3-methylphenol	mg/kg	nc		1	1														1		1	1	1					1					+	
2-Chlorophenol	mg/kg	nc							İ				1						1		1	1	l .	1										
2,4-Dichlorophenol	mg/kg	nc																																
2,6-Dichlorophenol 2,4-Dimethylphenol	mg/kg mg/kg	nc																																4
2,4-Dinitrophenol	mg/kg	nc																	1														+	1
2-Methyl-4.6-dinitrophenol	mg/kg	nc																																1
2-Methylphenol	mg/kg	nc		L									L								<u> </u>	<u> </u>		<b>↓</b>									<b></b>	+
3-Methylphenol 4-Methylphenol	mg/kg mg/kg	nc			-			1	1				-						1														+	+
2-Nitrophenol	mg/kg	nc				i	i		i	i .									1	i .									i .		i .	i .		
4-Nitrophenol	mg/kg	nc																																
Pentachlorophenol	mg/kg	nc		L									L								<u> </u>	<u> </u>		<b>↓</b>									<b></b>	+
Phenol 2,3,4,5-Tetrachlorophenol	mg/kg mg/kg	3200		-	+	1		1	1										+		+	+											+	+
2,3,4,6-Tetrachlorophenol	mg/kg	3900		1	1	1	1	1	1	1									1		1	1							1		1	1	1	1
2,3,5,6-Tetrachlorophenol	mg/kg	nc																																
2,3,4-Trichlorophenol	mg/kg	nc																	+			+											+	+
2,3,5-Trichlorophenol 2,3,6-Trichlorophenol	mg/kg mg/kg	nc		-	+	1		1	1										+		+	+											+	+
2,4,5-Trichlorophenol	mg/kg	nc		1	1	1	1	1	1	1									1		1	1							1		1	1	1	1
2,4,6-Trichlorophenol	mg/kg	nc																																
3,4,5-Trichlorophenol	mg/kg	nc																															<b></b>	
	Indicates where I	the data exceeds the s											-									+											+	+
	maluates millie	and odia exceeds IIIB S	4			1																												ــــــــــــــــــــــــــــــــــــــ

																												PBA PBA	PBA		PBA	
Ground Investigation			PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011		PBA 2010/ 2011		PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011		PBA 2010/ 2011	2011	2011	-	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011		PBA 2010/ 2011	PBA 2010/ 2011	2010/ 2010/ 2011 2011	2011	PBA 2010/ 2011	2011	PBA 2010/ 2011
Report Number			122209	122209	122211 AF68430	122210 AF68355	122209	122209	122211 AF68431	122209	122210	122209 AF68296	122210	122209 AF68297	122209 AF68298	122209	133344	133344		133344	133344 AF61288	133343	133344	133343	133344	133344	133344	133344 133344			133344 AF61301	121783
Lab Ref					07/02/2011	25/01/2011			07/02/2011			25/01/2011		25/01/2011	25/01/2011		AF61285 04/01/2011		04/01/2011		04/01/2011	AF61270 04/01/2011 BH2001			AF61290 04/01/2011		04/01/2011	01/01/201101/20	104/01/2011	04/01/2011	04/01/2011 1	10/12/2010
Exploatory hole location Zone B Location			BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2016 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2001 BH2001 B3 B3	BH2001 B3	BH2001 B3	BH2001 B3	BH2003 B3
																												Inside Inside	Inside		Inside	Outside
Location on plot/ gas holder number			Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH12	Inside GH12	Inside GH12 II	nside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	GH12 GH12	GH12	Inside GH12		gasholders
Depth (m)			4m	6m	6m		7m	8m	8m	9m	9m	10m	11m	12m	13m	15m	0.3m	1m	2m		3m	4m	5m	6m	7m	8m		10m 12m		14m		
Strata		Screening Criteria		Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Made Ground Ground	Made Ground	Made Ground	London Clay	Made Ground
Metals	Units	Commercial	10	10			15	40		10					10	10				7.0					10			7 50				
Cadmium	mg/kg mg/kg mg/kg	230.0	<0.10 8	<0.10 7			0.1	<0.10 9.8		<0.10 <5.0		14 <0.10 11		<0.10 6.8	<0.10 21	0.24 13		0.16		0.17 8.9					10 <0.10 17			7 5.9 <0.10 <0.10 15 11	0.39		6.6 0.25 15	9 0.11 24
Copper Lead	mg/kg mg/kg	71700 7300	20 67	21 88			27 99	43 400		39 230		100 820 0.41		150 4100	24 890	27 25		23 110 0.29		19 95 0.21					12 19			7.7 6.9 22 15	26 330		25 19	27 140
Nickel	mg/kg mg/kg mg/kg	1800	0.27	0.19 21			0.12 32	0.58 26		0.24 25		26		0.35 22	<0.10 24	<0.10 33		18		13					<0.10 11			<0.10 0.27 12 11	41		0.11 27	13
Selenium	mg/kg mg/kg	13000	<0.20 52	<0.20 65			<0.20 92	<0.20 72		<0.20 66		<0.20 120		<0.20 230	<0.20 83	0.46 68		<0.20 71		<0.20 71					<0.20 22			<0.20 <0.20 26 28			1 78	< 0.20 60
Total Cyanide	mg/kg mg/kg	nc 78.00																<0.50 <0.50		4.6 <0.50					4 <0.50			3.1 88 <0.50 <0.50			4.8 <0.50	2.2 < 0.5
Thiocyanate Boron	mg/kg mg/kg	nc 192000									1.6							<5.0		<5.0					<5.0			<5.0 18	16		<5.0	< 5.0
	% pH Units	nc	9	8.9		8.8	8.5	9.2		8.9	9.3	9	9.5	8.9	10.4	9		9.7	9.8	10.9		11.3		10.5	11			11.5 11.9	11.7		9.4	8.3
	%				Not detected				Not detected							0.4	Not detected			0.7			Not detected				Not detected	0.8 1.1			0.0	
Sulphur (free)	mg/kg mg/kg	3200 nc nc	<0.3	<0.3			<0.3	<0.3		<0.3		<0.3		<0.3	<0.3	0.4		<0.3		0.7					1			0.8 1.1	2.3		0.3	<0.2
Total Sulphate Sulphur (elemental)	% as SO4 mg/kg mg/kg	nc																														
Total sulphate	mg/kg mg/kg g/l %	nc	0.28	0.22			0.76	0.66		0.37		0.47		0.98	0.09	0.08		1.1		1.2					1.2			0.78 0.27			0.25	0.3
Moisture	% % mol/kg	nc	1.2 18.9	1.1 15.4		19.9 0.026	0.9 20.8	3.1 20.5		2.6 22.3	24.1 0.04	3.1 25.8	22.7 0.048	1.7 16.9	0.5 5.23	1.1 19.2		2.2 13.6	14.1 0.062	2.6 14.6	14.8	11.8 0.119		16.2 0.115	1.3 13.7	14.2		0.84 < 0.40 11.2 6.54	1.2 13.1	12	1.1 20.5	2.6 19
Loss on ignition Stones content > 50mm	%	nc				3.09					4.14 <0.02		23.7 <0.02						3.2	<0.02	<0.02	1.69 <0.02		3.33	<0.02	<0.02		<0.02 <0.02	<0.02	<0.02	<0.02	
BTEX Benzene Toluene	μg/kg μg/kg					1.5					3.3 3.6		13					2.8	1.7	5.9 4		7.6		5.1 5.3	7.8			2.8 28	7400		35 19	<1
Ethylbenzene m- & p-Xylene	μg/kg μg/kg	581000 575000				<1					< 1 2.6		<1 <1					2.7 4.4	<1 <1	4 5		5.7 8.6		4.7	6.5			4.6 41 5.6 43	18000		12	
Total BTEX	μg/kg μg/kg μg/kg	nc				< 1 <0.005	<1.0	<1.0			< 1 0.0072	<1.0	< 1 0.0097		<1.0	<1.0		7.6	< 1 <0.005	3.4	<1.0	5.6 0.03		6.9 0.027	4.2	<1.0		2.7 22	7100	<1.0	6.3	<1
Hydrocarbons Aliphatic C5-C6	mg/kg	3380					< 0.1	< 0.1				< 0.1			< 0.1	< 0.1					< 0.1					< 0.1				< 0.1		
Aliphatic >C8-C10	mg/kg mg/kg mg/kg		-				< 0.1 < 0.1 < 0.1	< 0.1 1.1 6.7				< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1					< 0.1 < 0.1 < 0.1					< 0.1 < 0.1 < 0.1				< 0.1 < 0.1 19		
Aliphatic >C12-C16 Aliphatic >C16-C21	mg/kg mg/kg	673000					< 0.1 < 0.1	27 25				< 0.1 < 0.1			< 0.1 < 0.1	< 0.1 < 0.1					< 0.1 < 0.1					< 0.1 < 0.1				21 160		
Aliphatic >C35-C44	mg/kg mg/kg mg/kg	673000	-				< 0.1 < 0.1 < 0.1	13 < 0.1 < 0.1				< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1					< 0.1 < 0.1 < 0.1					< 0.1 < 0.1 < 0.1				540 < 0.1 < 0.1		
Aromatic >C7-C8 Aromatic >C8-C10	mg/kg mg/kg mg/kg	59000 3670					< 0.1 < 0.1 < 0.1	< 0.1 0.35 4.2				< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1					< 0.1 < 0.1 5.9					< 0.1 < 0.1 0.61				< 0.1 < 0.1 390		
Aromatic >C12-C16	mg/kg mg/kg	36200					1.5	< 0.1 9.3				1.4			0.74						11 35					3.3 10				24 19		
Aromatic >C21-C35 Aromatic >C35-C44 Aliphatic C5-C35	mg/kg mg/kg mg/kg	28400 28400 nc	-				3.7 < 0.1	13 < 0.1				1.3 < 0.1			0.9 < 0.1	1.6 < 0.1					45 < 0.1					10 < 0.1				1.7 < 0.1		
Aromatic C5-C35 Total hydrocarbons (alihpatics and aromatics)	mg/kg mg/kg	nc 2130	< 10	< 10			8	99		< 10		4		63	3	3		22		350	97				44	24		86 180	3900	1200	12	21
TEM	mg/kg mg/kg mg/kg	nc				< 10					520		< 10						190			76		150							-	
Gasoline Range Organics by GC (GRO) TPH (SUM DRO + GRO)	mg/kg mg/kg	2130 2130																														
TPH (Mineral Oil/ Hydrocarbon oil) TPH (Aromatic hydrocarbons) TPH (Solvent Extracted)	mg/kg mg/kg mg/kg	2130 2130 2130																														
TPH EPH DRO (C10 - C40)	mg/kg mg/kg	2130 2130	0.50	0.94		0.0	0.57	.01		0.00	0.0	.01	0.1	0.01	0.00	11			1			0.7		11								0.01
Acenaphthylene Anthracene	mg/kg mg/kg mg/kg	84300 525000	0.23	0.24 0.44		0.2	0.57 0.24 0.58 1.1	< 0.1		0.92 0.36 0.81	0.2 0.2 0.6	< 0.1	<0.1	0.32	0.39 0.22 0.46 0.38	0.58			0.4			0.1		0.3								0.21 < 0.1 0.29
Benzo(a)pyrene	mg/kg mg/kg mg/kg	14.00	0.14	0.46 0.47 < 0.1		0.3	1.1 1.3 < 0.1	0.3		0.61 0.41 < 0.1	0.5 0.3 0.4	0.2	0.5 0.6 0.6	0.29	0.47	< 0.1			5.9 5.1 6.2			0.9 0.3 0.2		2.1 1.8 0.6								1.2 1.4 1.8
Benzo(k)fluoranthene Benzo(g,h,i)perylene	mg/kg mg/kg	141.0 654	< 0.1	< 0.1		0.1	< 0.1	< 0.1		< 0.1 < 0.1	0.1	< 0.1	0.4 0.3	< 0.1	< 0.1 < 0.1	< 0.1 < 0.1			4.4 3.4			0.2		0.3								0.46 0.96
Dibenzo(a,h)anthracene	mg/kg mg/kg mg/kg	13.00		0.56 < 0.1 < 0.1		0.3	1.2 < 0.1 < 0.1	0.42 0.15 < 0.1		0.93 0.22 < 0.1	0.6 0.3 1.7		0.5 0.3 0.9	< 0.1		< 0.1			6.3 3.8 11			0.6 0.4 1.5		2.3 1.2 5.3								1.2 0.16 2.4
Fluorene Indeno(1,2,3-c,d)pyrene	mg/kg mg/kg	63500 60.0	< 0.1	< 0.1 0.29		0.4	< 0.1 0.75	< 0.1 0.2		< 0.1 < 0.1	0.4	< 0.1 < 0.1	0.1 <0.1	< 0.1	< 0.1 < 0.1	< 0.1 < 0.1			0.7			<0.1 <0.1		0.7								0.2
Phenanthrene	mg/kg mg/kg mg/kg	21900	0.89	0.75 1.6 0.9		2.2	1.3 2 1.9	< 0.1 1.9 0.85		< 0.1 1.7 1.1	2.1	< 0.1 1.1 0.56	0.7	1.6	1.8				0.3 6.1 11			0.9 1.2 0.8		0.7 5.2 4.2								0.52 1.6 2.1
Coronene PAH (Sum of 16 - excluding coronene)	mg/kg mg/kg	nc nc		7		<0.1	12			7.1	0.6	3.3	<0.1	5.6		3.8		38		48		<0.1		<0.1	160			11 4.3	84		<2	
PCB	mg/kg mg/kg					13 <0.1					14 <0.1		<0.1						<0.1			<0.1		30 <0.1								
PCB 52 PCB 101	mg/kg mg/kg	nc				<0.1					<0.1		<0.1 <0.1						<0.1 <0.1			<0.1		<0.1								
PCB 153	mg/kg mg/kg mg/kg	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			<0.1 <0.1 <0.1		<0.1 <0.1 <0.1								
PCB 180	mg/kg mg/kg	nc				<0.1 <1					<0.1 <1		<0.1 <1						<0.1 <1			<0.1 <1		<0.1 <1								
Dichlorodifluoromethane Chloromethane	μg/kg μg/kg	nc					<1.0 <1.0	<1.0 <1.0				<1.0 <1.0			<1.0 <1.0	<1.0 <1.0					<1.0 <1.0					<1.0 <1.0				<1.0 <1.0		
Vinyl chloride Bromomethane	μg/kg μg/kg	nc nc					<20	<1.0 <20 <2.0				<1.0 <20 <2.0			<1.0 <20 <2.0	<20					<1.0 <20 <2.0					<1.0 <20 <2.0				<1.0 <20 <2.0		
Trichlorofluoromethane 1,1-Dichloroethene	µg/kg µg/kg µg/kg	nc					<1.0 <1.0	<1.0 <1.0				<1.0 <1.0			<1.0 <1.0	<1.0 <1.0					<1.0 <1.0					<1.0 <1.0				<1.0 <1.0		
Dichloromethane trans-1.2-Dichloroethene	μg/kg μg/kg	nc					ne <1.0	ne <1.0				ne <1.0 <1.0			ne <1.0	ne <1.0					ne <1.0					ne <1.0				ne <1.0		
1,1-Dichloroethane	µg/kg	nc		1	1	1	<1.0	<1.0				<1.0			<1.0	<1.0					<1.0					<1.0	I	1	1	<1.0		

unit         L <thl< th="">         L        <thl< th=""> <thl< th=""></thl<></thl<></thl<>															221	-													PBA PBA	PBA		РВА
100         500        500        500        500        500        500        500        500        500        500        500        500        500        500       500       500       500 </th <th>Ground Investigation</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1 2011</th> <th>2011</th> <th>2011</th> <th></th> <th>2011</th> <th></th> <th></th> <th></th> <th>2011</th> <th>2011</th> <th></th> <th></th> <th></th> <th>2011</th> <th>2011</th> <th></th> <th>2011</th> <th>2011</th> <th>2011</th> <th>2011</th> <th></th> <th>2011</th> <th>2011 2011</th> <th>2011</th> <th></th> <th></th>	Ground Investigation						1 2011	2011	2011		2011				2011	2011				2011	2011		2011	2011	2011	2011		2011	2011 2011	2011		
No. 200 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>																																
b         b        b         b         b        b    <	Date			25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/201104/01/20	1104/01/2011	04/01/2011	04/01/2011 10/12/2010
bit         bit <th></th> <th></th> <th></th> <th></th> <th>1</th> <th></th> <th>1 1</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1 1</th> <th></th> <th></th> <th>1</th> <th></th> <th></th> <th></th> <th>1 1</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>-</th> <th></th> <th></th>					1		1 1									1 1			1				1 1							-		
b         b																													GH12 GH12	GH12	Inside GH12	GH12 gasholders
							Made														Made							Made	Made Made	Made		London Made
				Made Ground	Made Ground	Made Ground	Ground	<1.0	<1.0	Made Ground	Made Ground	Made Ground	<1.0	Made Ground	Made Ground	<1.0	<1.0	Made Ground	Made Ground	Made Ground	Ground	<1.0	Made Ground	Made Ground	Made Ground	Made Ground	<1.0	Ground	Ground Ground	Ground	<1.0	Clay Ground
	Trichloromethane	μg/kg μg/kg	107000 700000					<1.0 <1.0	<1.0 <1.0				<1.0 <1.0			<1.0 <1.0	<1.0 <1.0					<1.0					<1.0 <1.0				<1.0 <1.0	
	1,1-Dichloropropene	µg/kg	nc					<1.0	<1.0				<1.0			<1.0	<1.0					<1.0					<1.0				<1.0	
	1,2-Dichloroethane	μg/kg μg/kg	12000					<1.0	<1.0				<1.0			<1.0	<1.0					<1.0					<1.0				<1.0	
	Dibromomethane Bromodichloromethane	μg/kg μg/kg	nc nc					<10 <5.0	<10 <5.0				<10 <5.0			<10 <5.0	<10 <5.0					<10 <5.0					<10 <5.0				<10 <5.0	
	Toluene	µg/kg	870000					2	6.3				1.6			51	1300					9.2					4.9			-	69000	
	1,1,2-Trichloroethane Tetrachloroethene	μg/kg μg/kg						<1.0	<1.0				<1.0			<1.0	<1.0					<1.0					<1.0				<1.0	
	Dibromochloromethane 1,2-Dibromoethane	µg/kg	nc					<10 <5.0	<10 <5.0				<10 <5.0			<10 <5.0	<10 <5.0					<10 <5.0					<10 <5.0				<10 <5.0	
	1,1,1,2-Tetrachloroethane	µg/kg	115000					<2.0	<2.0				<2.0			<2.0	<2.0					<1.0 <2.0 7.5					<2.0				<2.0	
	m- & p-Xylene o-Xylene	μg/kg μg/kg	575000 480000					2.3 <1.0	1.1 3.2				<1.0 <1.0			95 32	270 190					8.8 5.8					13 4.8				54000 26000	
NAME         NAME        NAME        NAME	Tribromomethane	µg/kg	nc					<10	<10				<10			<10	<10					<10					<10				<10	
Norm         Norm        Norm        Norm         N	1,2,3-Trichloropropane	μg/kg μg/kg	nc nc					<50	<50				<50			<50	<50					<50					<50				<50	
	2-Chlorotoluene 1,2,4-Trimethylbenzene	μg/kg μg/kg	nc nc					<1.0 <1.0	<1.0 11				<1.0 <1.0			<1.0 71	<1.0 8.4					<1.0 2.4					<1.0 2.2				<1.0 24000	
	tert-Butylbenzene 1.3.5-Trimethylbenzene	µg/kg	nc					<1.0	1				<1.0			<1.0	<1.0					<1.0					<1.0				<1.0	
	sec-Butylbenzene 1,3-Dichlorobenzene	μg/kg μg/kg	nc nc					<1.0 <1.0	<1.0 <1.0				<1.0 <1.0			<1.0 <1.0	<1.0 <1.0					<1.0 <1.0					<1.0 <1.0				<1.0 <1.0	
	1,4-Dichlorobenzene n-Butylbenzene	µg/kg	nc					<1.0	<1.0				<1.0			<1.0	<1.0					<1.0 <1.0					<1.0 <1.0				<1.0	
	1,2-Dichlorobenzene 1,2-Dibromo-3-chloropropane 1,2-4-Trichlorobenzene	µg/kg						<50	<50				<50			<50	<50					<50					<50				<50	
	Hexachlorobutadiene 1,2,3-Trichlorobenzene	μg/kg μg/kg	108000					<2.0	<1.0 <2.0				<1.0 <2.0			<1.0 <2.0	<2.0					<1.0 <2.0					<1.0 <2.0				<2.0	
bit         bit <th>Benzene, 1-ethenyl-3-methyl</th> <th>µg/kg</th> <th>nc</th> <th></th> <th></th> <th></th> <th></th> <th>None Detected</th> <th>None Detected</th> <th></th> <th></th> <th></th> <th>None Detected</th> <th></th> <th></th> <th>None Detected</th> <th>Detected</th> <th></th> <th></th> <th></th> <th></th> <th>None Detected</th> <th></th> <th></th> <th></th> <th></th> <th>None Detected</th> <th></th> <th></th> <th></th> <th>None Detected</th> <th></th>	Benzene, 1-ethenyl-3-methyl	µg/kg	nc					None Detected	None Detected				None Detected			None Detected	Detected					None Detected					None Detected				None Detected	
Name         Name </th <th>Benzofuran</th> <th>µg/kg</th> <th></th>	Benzofuran	µg/kg																														
	Phenol,4Methyl Benzo(B)Thiophene	µg/kg µg/kg	nc					0.50	0.50				0.50			0.50	0.50										0.50				0.50	
MA         MA        MA        MA         MA </th <th>Acenaphthylene Anthracene</th> <th>mg/kg mg/kg</th> <th>84300 525000</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt; 0.50</th> <th></th> <th></th> <th>&lt; 0.50</th> <th>&lt; 0.50</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 1</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt;0.50</th> <th></th>	Acenaphthylene Anthracene	mg/kg mg/kg	84300 525000					<0.50 <0.50	<0.50 <0.50				< 0.50			< 0.50	< 0.50					<0.50 1					<0.50 <0.50				<0.50	
nm         nm	Benzo[a]anthracene																															
bit         bit </th <th>Benzo[g,h,i]perylene</th> <th>mg/kg</th> <th>654</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50</th> <th>0.54</th> <th></th> <th></th> <th></th> <th>&lt; 0.50</th> <th></th> <th></th> <th>&lt; 0.50</th> <th>&lt; 0.50</th> <th></th> <th></th> <th></th> <th></th> <th>0.64</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt; 0.50</th> <th></th>	Benzo[g,h,i]perylene	mg/kg	654					<0.50	0.54				< 0.50			< 0.50	< 0.50					0.64					<0.50				< 0.50	
bit         bit <th>bis(2-Chloroethoxy)methane bis(2-Chloroethyl)ether</th> <th>mg/kg mg/kg</th> <th>nc nc</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt; 0.50</th> <th></th> <th></th> <th>&lt;0.50</th> <th>&lt; 0.50</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th>	bis(2-Chloroethoxy)methane bis(2-Chloroethyl)ether	mg/kg mg/kg	nc nc					<0.50 <0.50	<0.50 <0.50				< 0.50			<0.50	< 0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
mail         mail <th< th=""><th>bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate</th><th>mg/kg mg/kg mg/kg</th><th>nc nc nc</th><th></th><th></th><th></th><th></th><th>&lt;0.50</th><th>&lt; 0.50</th><th></th><th></th><th></th><th>&lt; 0.50</th><th></th><th></th><th>&lt; 0.50</th><th>&lt; 0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50</th><th></th><th></th><th></th><th>&lt; 0.50</th><th></th></th<>	bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate	mg/kg mg/kg mg/kg	nc nc nc					<0.50	< 0.50				< 0.50			< 0.50	< 0.50					<0.50					<0.50				< 0.50	
Nome         No         o        No         No	Carbazole	mg/kg mg/kg	137					<0.50	0.92				< 0.50			< 0.50	< 0.50					1.3					<0.50				< 0.50	
shift         shift <t< th=""><th>Dibenzo[a,h]anthracene</th><th>mg/kg mg/kg</th><th>nc</th><th></th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th></t<>	Dibenzo[a,h]anthracene	mg/kg mg/kg	nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
name         nb	Diethylphthalate	mg/kg	nc					<0.50	< 0.50				<0.50			<0.50	<0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
Max         Math         Math <th< th=""><th>Fluoranthene Fluorene</th><th>mg/kg</th><th>63500</th><th></th><th></th><th></th><th></th><th>&lt; 0.50</th><th>&lt; 0.50</th><th></th><th></th><th></th><th>&lt; 0.50</th><th></th><th></th><th>&lt; 0.50</th><th>&lt; 0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50</th><th></th><th></th><th></th><th>&lt;0.50</th><th></th></th<>	Fluoranthene Fluorene	mg/kg	63500					< 0.50	< 0.50				< 0.50			< 0.50	< 0.50					<0.50					<0.50				<0.50	
Name         Name </th <th>Hexachlorobutadiene</th> <th>mg/kg mg/kg</th> <th>nc</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th> <th></th> <th></th> <th>&lt;0.50 &lt;0.50</th> <th></th>	Hexachlorobutadiene	mg/kg mg/kg	nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
Indication programme         Indicatio	Indeno[1,2,3-cd]pyrene	mg/kg	60					< 0.50	< 0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					0.58					<0.50 <0.50				< 0.50	
Network       No	N-Nitrosodi-n-propylamine N-Nitrosodimethylamine	mg/kg mg/kg	nc nc					<0.50	< 0.50				<0.50			<0.50	<0.50					<0.50					<0.50				<0.50	
Interfant         Ind         I	Nitrobenzene	mg/kg mg/kg	nc 1220					<0.50 <0.50	<0.50 <0.50				< 0.50			<0.50	<0.50					< 0.50					<0.50 <0.50				<0.50 <0.50	
12.4.1.6.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	Pyrene	mg/kg	3200 54200					<0.50 1.1	<0.50 1.7				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 3.1					<0.50				<0.50	
1.4 belichtorberzeie       mglg       4460       4.60       4.60       4.50 <th< th=""><th>1,2-Dichlorobenzene</th><th>mg/kg mg/kg</th><th>2140 228</th><th></th><th></th><th></th><th></th><th>&lt; 0.50</th><th>&lt; 0.50</th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th><th></th><th></th><th>&lt;0.50 &lt;0.50</th><th></th></th<>	1,2-Dichlorobenzene	mg/kg mg/kg	2140 228					< 0.50	< 0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
And built         And         A	1,4-Dichlorobenzene 2-Chloronaphthalene	mg/kg mg/kg	4460 nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
ngkg       ngkg	2-Methyl-4,6-dinitrophenol 2-Methylnaphthalene	mg/kg mg/kg	nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 1.6	
24-Dintroluene       mg/kg       nc       -0.50	2-Methylphenol 2-Nitroaniline	mg/kg mg/kg	nc nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50	< 0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
24-Dintroluene       mg/kg       nc       -0.50	2,4-Dichlorophenol 2,4-Dimethylphenol	mg/kg mg/kg	3470 nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
2.6-Dhirrobluene         mg/kg         nc         -0.50	2,4-Dinitrotoluene 2,4,5-Trichlorophenol	mg/kg	nc					<0.50	< 0.50				< 0.50			< 0.50	<0.50					<0.50					<0.50				<0.50	
$\frac{1}{4 - Char c^2} = 0 + \frac{1}{2} +$	2,6-Dinitrotoluene 3-Nitroaniline	mg/kg mg/kg	nc					<0.50 <0.50	<0.50 <0.50				<0.50 <0.50			<0.50 <0.50	<0.50 <0.50					<0.50 <0.50					<0.50 <0.50				<0.50 <0.50	
4-Chioraniline mg/kg nc 0 0 0.50 0.50 0.50 0.50 0 0.50 0 0.50 0 0 0.50 0 0 0.50 0 0 0.50 0 0 0	4-Chloro-3-methylphenol 4-Chloroaniline		nc			1		< 0.50	< 0.50				<0.50 <0.50 <0.50			< 0.50	< 0.50															

Ground Investigation																																	
			PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011		PBA 2010/ 2011	PBA 2010/ 2011 PBA		PBA 2010/ I 2011	PBA 2010/ 2011						
Report Number			122209	122209	122211	122210	122209	122209	122211	122209	122210	122209	122210	122209	122209	122209	133344	133344	133343	133344	133344	133343	133344	133343	133344	133344	133344	133344	133344	133344	33344 1	133344	121783
Lab Ref			AF68291	AF68292	AF68430	AF68355	AF68293	AF68294	AF68431	AF68295	AF68356	AF68296	AF68357	AF68297	AF68298	AF68299	AF61285	AF61286	AF61269	AF61287	AF61288	AF61270	AF61289	AF61271	AF61290	AF61291	AF61292	AF61293 A	AF61296	AF61298 A	F61299 AF	F61301	AF57621
Date			25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/201104	4/01/20110	4/01/2011 04	01/2011 04/	/01/2011	10/12/2010
Exploatory hole location			BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2016	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001	BH2001 B	BH2001	BH2001 I	H2001 B	3H2001	BH2003
Zone B Location			B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3
Location on plot/ gas holder number			Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH9	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12	Inside GH12			Inside GH12 Ins		Inside GH12 g	Outside gasholders
Depth (m)			4m	6m	6m	6m	7m	8m	8m	9m	9m	10m	11m	12m	13m	15m	0.3m	1m	2m	3m	3m	4m	5m	6m	7m	8m	9m	10m	12m	14m	14m	16m	0.3m
Strata			Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Clav	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground		Made Ground	Made Ground Ma		London	Made Ground
-Chlorophenylphenylether	mg/kg	nc	Widde Crodina	Made cround	Made cround	Citouria	<0.50	<0.50	Migde Cround	Made Ground	Made cround	<0.50	Made cround	Migde Ground	<0.50	<0.50	Made cround	Made Ground	Made cround	Ground	<0.50	Made Ground	Made cround	Made Ground	Made cround	<0.50	Ground	Cirodila	Circuita		<0.50	Oldy	Ground
-Methylphenol	mg/kg	nc					<0.50	<0.50				<0.50			<0.50	<0.50					<0.50					<0.50					<0.50		
	mg/kg	nc				<b>↓</b>															<0.50					<0.50					<0.50		
	mg/kg mg/kg	nc																			Not detected					Not detected				No	detected		
	mg/kg	nc				1 1															Not detected					Not detected				140	detected		
piphenvl	mg/kg	nc																															
	mg/kg	nc																															
	mg/kg mg/kg	nc																															
	mg/kg	nc				1 1													1														
Cinnamaldehde	mg/kg	nc				1 1																1											
	mg/kg	nc																															
	mg/kg mg/kg	nc				+ +	<1	<1				<1			<1	<1					<1.0					<1.0					<1.0		
	mg/kg	nc				1 1		~'								~			1		\$1.0					<1.0					\$1.0		< 0.2
-Chloro-3-methylphenol	mg/kg	nc																															< 0.2
2-Chlorophenol	mg/kg	nc																															< 0.2
	mg/kg mg/kg	nc																															< 0.2 < 0.2
	mg/kg	nc	-																														< 0.2
,4-Dinitrophenol	mg/kg	nc				1 1																											< 0.2
	mg/kg	nc																															< 0.2
	mg/kg mg/kg	nc				+ +																											< 0.2
	mg/kg	nc				1 1																											< 0.2
2-Nitrophenol	mg/kg	nc																															< 0.2
	mg/kg	nc				<u> </u>																											< 0.2
	mg/kg mg/kg	nc 3200				+ +																											< 0.2
	mg/kg	nc		1	1	1 1													1													-	< 0.2
3,4,6-Tetrachlorophenol	mg/kg	3900																															< 0.2
3,5,6-Tetrachlorophenol	mg/kg	nc																												_			< 0.2
	mg/kg mg/kg	nc				+ +																											< 0.2
2,3,6-Trichlorophenol	mg/kg	nc		1	1	1 1													1													-	< 0.2 < 0.2
2,4,5-Trichlorophenol	mg/kg	nc																															< 0.2
4,6-Trichlorophenol	mg/kg	nc																															< 0.2
3,4,5-Trichlorophenol	mg/kg	nc				+ +																											< 0.2
b	Indicates where the	he data exceeds the s	4			1 1													-														

						-	-																					-						
Ground Investigation			PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 1 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011
Report Number			121783	121783	122209	122211	122209	122209	122210	122209	122211	122209	133344	133344	133344	133344	133344	133344	122209	122211	122209	122209	122209	122209	122211	122209	122210	122209	122209	133344	133344	122209	122210	122211
Lab Ref			AF57623	AF57624	AF68302	AF68433	AF68305	AF68306	AF68358	AF68307	AF68734	AF68308	AF61330	AF61331	AF61332	AF61333	AF61334	AF61335	AF68303	AF68432	AF68304	AF68300	AF68301	AF68279	AF68426	AF68280	AF68350	AF68281	AF68282	AF61303	AF61304	AF68309	AF68359	AF68435
Exploatory hole location			TP2002												TP2025			TP2025									BH2002		BH2002	TP2006 Immediately	TP2006 Immediately			
Zone B Location			B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	north of B3	north of B3	B5	B5	B5
Location on plot/ gas holder number			Outside gasholders	Outside gasholders	Outside gasholders	-	gasholders	Outside gasholders	-	-	-	gaariolocia			GH9 (edge) 2m		GH9 (edge)	GH9 (edge)				Outside gasholders	Outside gasholders	Outside gasholders 0.3m	Outside gasholders 1m	Outside gasholders 2m	Outside gasholders 3m	Outside gasholders 4m	Outside gasholders 6m	Outside gasholders 0.3m	Outside gasholders	gasholders	Outside gasholders 1.2m	Outside gasholders 2m
Strata		Screening Criter	Made Ground	Possible MG/		Made Ground	Made	Made Ground	Made Ground	411 Made Ground	Made Ground	Made			Made Ground		Made Ground		Made	Made Ground	Made	Made Ground				Made Ground				Made Ground		Made	Made	Aade Ground
Determinants Metals	Units	Commercial																																
Arsenic Cadmium Chromium Copper Lead	mg/kg mg/kg	640 230.0 30400	15 0.18 38		15 <0.10 32		15 0.18	22 <0.10 <5.0		14 <0.10 12		14 <0.10 <5.0		9.5 0.19 12		8.4 <0.10 11		9.1 0.18	9.1 <0.10 7.2		12 <0.10 19	16 0.11 16	16 <0.10 25	16 <0.1 17		18 0.16 34		17 <0.10 18	11 0.19 19	11 <0.10 14	13 0.13 21	30 0.16 <5.0		
Copper Lead	mg/kg mg/kg mg/kg	71700 7300	46		30		69	<5.0 150 760		54 270		<5.0 74 330		39		23 210		23 160	16		25 83	27	23 28 25	27 84		34 33 48		22	25 18	33 180	20	<0.0 400 1000		
Mercury Nickel Molybdenum Selenium Zinc	mg/kg mg/kg	3600 1800	0.41 39		<0.10 49		3.4 26	3.5 17		1.9 20		5.2 15		0.51 23		0.41 18		0.52 17	0.1 24		0.4 31	0.31 25	<0.10 47	0.32 17		<0.10 51		<0.10 34	<0.10 37	0.51 16	<0.10 42	4.7 25		
Molybdenum Selenium	mg/kg mg/kg		< 0.20		0.21			<0.20 120		<0.20 69		<0.20 73		0.27 140		<0.20 74		<0.20 85	<0.20		<0.20 67	<0.20 80	<0.20	<0.20 44		<0.20 79		<0.20	<0.20 67	0.31 54	0.37	<0.20 190		
Miscellaneous Total Cyanide	mg/kg mg/kg	nc	1.2		01		100	120		00		75		0.5		<0.50		<0.50	-1/		07	00	13			13		00	07	1.2	0.7	130		
Free Cyanide Thiocyanate	mg/kg mg/kg	78.00 nc	< 0.5 < 5.0											<0.50 <5.0		<0.50 <5.0		<0.50 <5.0												<0.50 <5.0	<0.50 <5.0			
Boron Total organic carbon pH	mg/kg % pH Units	nc	8.4		8		8.1	8.3	5.6 8.8	8		8.2		8.6		8.5		8.9	7.8		8.2	8.2	8.1	11.4		8.3	6.8 7.9	8.1	8.2	7.8	8	8.1	0.85	
Asbestos identfication		nc				Not detected	d				Not detected		Not detected							Chrysotile					Not detected								1	Not detected
Asbestos Concentration Phenol Sulphur (free)	% mg/kg	3200	<0.2		<0.3		<0.3	<0.3		<0.3		<0.3		<0.3		<0.3		<0.3	<0.3	0.005	<0.3	<0.3	<0.3	<0.3		<0.3		<0.3	<0.3	<0.3	<0.3	<0.3		
Sulphur (free) Sulphide Total Sulphate	mg/kg % as SO4	nc nc nc																																
Sulphur (elemental) Phenol (monohydric) SOM 1%	mg/kg mg/kg	nc																																
Total sulphate Sulphate (2:1 water soluble) as SO4	mg/kg g/l %	nc nc nc	0.15		0.27			1.1		1.2		0.43		0.19		0.28			0.29		0.35		0.13	1.2 2.8		0.53		1.7	1.5	0.29	0.08	1.3 3.8		
Organic matter Moisture Acid Neutralisation Capacity	% mol/kg	nc	25.6	19.9	21.9		29	10 19.2	17.9 0.091	39.4		24.4		18	23.5	23.7	20.9	13.5	15.4		26.7	21.4	0.55	11.7		22.9	17.8 0.028	0.97 28.4	0.67 23.5	21.1	18.5	14	24.2 0.033	
Loss on ignition Stones content > 50mm	%	nc							5.94 <0.02					<0.02	<0.02	<0.02	<0.02	<0.02									12.9 <0.02			<0.02	<0.02		4.31 <0.02	
BTEX Benzene Toluene	µg/kg µg/kg	28000.00	<1	15 1.5					<1					3.4 < 1		<1 <1		<1									<1 <1			<1	<1 <1		<1	
Ethylbenzene m- & p-Xylene	μg/kg μg/kg μg/kg	581000	<1	6.7					<1					<1		<1		<1									<1			<1	<1		<1	
o-Xylene Total BTEX	μg/kg μg/kg	480000 nc	<1	8					< 1 <0.005					<1		<1		< 1									< 1 <0.005			<1	< 1		< 1 <0.005	
Methyl tert-butyl ether Hydrocarbons Aliphatic C5-C6	μg/kg mg/kg	nc 3380		< 1.0											< 0.1		< 0.1																	
Aliphatic >C6-C8 Aliphatic >C8-C10	mg/kg mg/kg	8250 2130		< 0.1											< 0.1		< 0.1																	
Aliphatic >C10-C12 Aliphatic >C12-C16 Aliphatic >C16-C21	mg/kg mg/kg	10300 60800 673000		< 0.1 < 0.1 < 0.1											< 0.1 < 0.1 < 0.1		< 0.1 < 0.1 < 0.1																	
Aliphatic >C16-C21 Aliphatic >C21-C35 Aliphatic >C35-C44	mg/kg mg/kg mg/kg			< 0.1											< 0.1 < 0.1 < 0.1		< 0.1 < 0.1																	
Aromatic >C5-C7 Aromatic >C7-C8	mg/kg mg/kg	27700 59000		< 0.1 < 0.1											< 0.1 < 0.1		< 0.1 < 0.1																	
Aromatic >C8-C10 Aromatic >C10-C12 Aromatic >C12-C16	mg/kg mg/kg mg/kg			< 0.1 < 0.1 1.4											< 0.1 < 0.1 < 0.1		< 0.1 < 0.1 < 0.1																	
Aromatic >C16-C21	mg/kg mg/kg			4.4	-	-	-								< 0.1		< 0.1																	
Aromatic >C21-C35 Aromatic >C35-C44 Aliphatic C5-C35	mg/kg mg/kg	nc		< 0.1											< 0.1		< 0.1																	
Aromatic C5-C35 Total hydrocarbons (alihpatics and aromatics) TPH Total WAC	mg/kg mg/kg mg/kg		< 10	16	< 10		31	71	44	41		29		15	< 2	220	<2	< 10	< 10		< 10	< 10	< 10	40		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
TEM Diesel range organics (DRO) Gasoline Range Organics by GC (GRO)	ma/ka	nc																																
TPH (SUM DRO + GRO)	mg/kg	2130																																
TPH (Mineral Oil/ Hydrocarbon oil) TPH (Aromatic hydrocarbons) TPH (Solvent Extracted)	mg/kg mg/kg mg/kg	2130 2130																																
EPH DRO (C10 - C40)	mg/kg mg/kg	2130 2130					0.75	0.45		<u>.</u>		0.46							0.01								100							
Acenaphthene Acenaphthylene Anthracene	mg/kg mg/kg mg/kg		0.14 < 0.1 0.1		< 0.1 < 0.1 < 0.1	1	0.45 0.47 0.94 2.8	0.48 0.45 0.94	0.2	< 0.1 < 0.1 0.4		0.12 0.16 0.25							0.21 0.15 0.17		0.43	0.47	0.19 0.21 0.11	0.3 < 0.1 0.6		0.12 < 0.1 < 0.1	120 230 460	0.2 0.1 < 0.1	< 0.1			0.2 0.28 0.38		
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene	mg/kg mg/kg	90.0 14.00	0.29 0.43		< 0.1 < 0.1		2.5	4.2	3.8	0.56		0.17 0.17							0.27 0.23		0.26 0.31	0.63	< 0.1 < 0.1	0.95 0.87		< 0.1 < 0.1	330 270	< 0.1 < 0.1	< 0.1 < 0.1			0.67 0.81	0.3	
Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene	mg/kg mg/kg	141.0	0.41 0.26 0.24		< 0.1 < 0.1 < 0.1		< 0.1	< 0.1	2.8	< 0.1		< 0.1 < 0.1 < 0.1							< 0.1 < 0.1 0.16		< 0.1		< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 0.11		< 0.1 < 0.1 < 0.1	250 190 140	< 0.1 < 0.1 < 0.1				< 0.1 < 0.1 0.54	0.3	
Chrysene Dibenzo(a,h)anthracene	mg/kg mg/kg mg/kg	137.0	0.24		< 0.1		2.7	3.2	2.9	< 0.1 0.53 < 0.1		0.18							0.29		0.2	0.65	< 0.1 < 0.1	1.2		< 0.1 < 0.1	340 140	< 0.1 < 0.1	< 0.1 < 0.1 < 0.1			0.79	0.3	
Fluoranthene Fluorene	mg/kg mg/kg	22600 63500	0.72		< 0.1		< 0.1	< 0.1 < 0.1	0.2	< 0.1		< 0.1 < 0.1							< 0.1 < 0.1		< 0.1	< 0.1	< 0.1 < 0.1			< 0.1 < 0.1	880 350	< 0.1 < 0.1	< 0.1			< 0.1 < 0.1	0.1	
Indeno(1,2,3-c,d)pyrene Naphthalene Phenanthrene Pyrene Coronene	mg/kg mg/kg mg/kg	60.0 204.0 21900	0.27 0.8 0.58		< 0.1 < 0.1 < 0.1		1.3 5.7	2.7	0.5	< 0.1 < 0.1 0.94		< 0.1 < 0.1 0.53							0.11 < 0.1 0.92		0.17 < 0.1 2.5	< 0.1	< 0.1 < 0.1 0.61	0.24 0.9 2.4		< 0.1 < 0.1 0.25	11 4600 1400	< 0.1 < 0.1 0.28	< 0.1 < 0.1 < 0.1			0.48 < 0.1 1.1	<0.1 0.7 0.4	
Pyrene Coronene	mg/kg mg/kg	54200	0.74		< 0.1		3.5	2.7	2.8 <0.1	0.6		0.17							0.52				< 0.1	1.8		0.11	660 15	< 0.1	< 0.1			0.74	0.2	
PAH (Sum of 16 - excluding coronene) PAH (Sum of 17 - including coronene)	mg/kg mg/kg	nc	5.3		<2		26	27	32	3.5		<2		38		5.1		11	3		6.5	8.9	< 2	9.5		< 2	10000	<2	< 2	7.9	<2	6	3.8	
PCB 28 PCB 52	mg/kg mg/kg				1	1	1		<0.1 <0.1																		<0.1 <0.1						<0.1 <0.1	
PCB 101 PCB 118	mg/kg mg/kg	nc nc							<0.1 <0.1																		<0.1 <0.1						<0.1 <0.1	
PCB 138 PCB 153 PCB 180	mg/kg mg/kg	nc							<0.1 <0.1 <0.1																		<0.1 <0.1 <0.1						<0.1 <0.1 <0.1	
Total PCBs (7 congeners) VOCs	mg/kg mg/kg	nc			1	-			<0.1 <1																		<0.1 <1						<0.1 <1	
Dichlorodifluoromethane Chloromethane	µg/kg µg/kg	nc		< 1.0 < 1.0											<1.0 <1.0		<1.0 <1.0																	
Vinyl chloride Bromomethane	μg/kg μg/kg	nc		< 1.0 < 20 < 2.0											<1.0 <20 <2.0		<1.0 <20 <2.0															[		
Chloroethane Trichlorofluoromethane 1,1-Dichloroethene	μg/kg μg/kg μg/kg	nc		< 1.0		-									<1.0 <1.0		<1.0 <1.0																	
Dichloromethane trans-1,2-Dichloroethene	μg/kg μg/kg	nc		ne < 1.0											ne <1.0		ne <1.0																	
1,1-Dichloroethane	µg/kg	nc		< 1.1											<1.0		<1.0																	

			DBA 0010/		DDA 0010	0	DDA 0010	DDA 0010/	DDA 2010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	PBA 2010/	DDA 0010/		DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/		BBA 0010/			DDA 0010/	PDA 0010/	DDA 0010/	DDA 0010/	DDA 0010/
Ground Investigation			PBA 2010/ 2011	PBA 2010/ 20	11 2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	PBA 2010/ 201	1 2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011		PBA 2010/ 2011		2011	PBA 2010/ 2011	2011	2011	2011
Report Number			121783 AF57623	121783 AF57624		122211		122209 AF68306			122211			133344 AF61331	+	133344 AF61333	133344 AF61334		122209 AF68303			122209	122209 AF68301	122209 AF68279	122211 AF68426	122209 AF68280	122210 AF68350	122209 AF68281	122209 AF68282	133344 AF61303	133344 AF61304	122209 AF68309	122210	122211 AF68435
Date			10/12/2010	10/12/2010	25/01/201	11 07/02/201	1 25/01/201	1 25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	25/01/2011	25/01/2011	07/02/2011
Exploatory hole location Zone B Location			TP2002 B3	TP2002 B3	TP2003 B3		TP2005 B3	TP2005 B3	TP2005 B3	TP2005 B3	TP2007 B3	TP2007 B3	TP2025 B3	TP2025 B3	TP2025 B3	TP2025 B3	TP2025 B3	TP2025 B3	TP2004 B3	TP2004 B3		TP2003 B3	TP2003 B3	BH2002 B3	BH2002 B3	BH2002 B3	BH2002 B3	BH2002 B3	BH2002 B3	TP2006 Immediately north of B3	TP2006 Immediately north of B3	TP2008 B5	TP2008 B5	TP2008 B5
Location on plot/ gas holder number			Outside gasholders	-													GH9 (edge)						Outside gasholders		-			Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	gasholders	gasholders	
Depth (m) Strata				Possible MG Reworked Cla	a/ ay Clay	Made	Made	Made	Made Ground	Made		Made			d Made Ground	Made Ground	Made Ground	Made Ground	Made	Made	Made					2m Made Ground			6m London Clay			Made	Made	Made Ground
cis-1,2-Dichloroethene Bromochloromethane Trichloromethane	μg/kg μg/kg μg/kg	nc		< 1.2 < 1.3 < 1.4		_									<1.0 <1.0 <1.0		<1.0 <1.0 <1.0																	
Trichloromethane 1,1,1-Trichloroethane Tetrachloromethane	μg/kg μg/kg	700000 3000		< 1.5 < 1.6											<1.0 <1.0		<1.0 <1.0																	
1,1-Dichloropropene Benzene 1,2-Dichloroethane	μg/kg μg/kg μg/kg	nc 28000 700		< 1.7 12 < 2.0											<1.0 <1.0 <2.0		<1.0 <1.0 <2.0																	
Trichloroethene 1,2-Dichloropropane	μg/kg μg/kg	12000 nc		< 1.0 < 1.0											<1.0 <1.0		<1.0 <1.0																	
Dibromomethane Bromodichloromethane cis-1,3-Dichloropropene	μg/kg μg/kg μg/kg	nc		< 10 < 5.0 < 10											<10 <5.0 <10		<10 <5.0 <10										-							
Toluene trans-1,3-Dichloropropene	μg/kg μg/kg	870000 nc		1.2 < 10											<1.0 <10		<1.0 <10																	
1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane	μg/kg μg/kg	131000		< 10 < 1.0 < 2.0											<10 <1.0 <2.0		<10 <1.0 <2.0										-							
Dibromochloromethane 1,2-Dibromoethane	μg/kg μg/kg μg/kg	nc		< 10 < 5.0											<10 <5.0		<10 <5.0																	
Chlorobenzene 1,1,1,2-Tetrachloroethane Ethylbenzene	μg/kg μg/kg μg/kg	115000		< 1.0 < 2.0 5.4											<1.0 <2.0 <1.0		<1.0 <2.0 <1.0																	
m- & p-Xylene o-Xylene	μg/kg μg/kg μg/kg	575000		5.5 3.6											<1.0 <1.0 <1.0		<1.0 <1.0 <1.0																	
Styrene Tribromomethane Isopropylbenzene	μg/kg μg/kg	nc		< 1.0 < 10 6.4											<1.0 <1.0 <1.0		<1.0 <10 <1.0																	
Bromobenzene 1.2.3-Trichloropropane	μg/kg μg/kg μg/kg	nc		< 1.0 < 50		-									<1.0 <1.0 <50 <1.0		<1.0 <1.0 <50																	
n-Propylbenzene 2-Chlorotoluene 1,2,4-Trimethylbenzene	μg/kg μg/kg	nc		< 1.0 < 1.0 6.4		_									<1.0 <1.0 <1.0		<1.0 <1.0 <1.0																	
4-Chlorotoluene tert-Butylbenzene	μg/kg μg/kg μg/kg	nc		< 1.0		-									<1.0 <1.0 <1.0		<1.0 <1.0 <1.0																	
1,3,5-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene	μg/kg μg/kg	nc		2.5 < 1.0											<1.0 <1.0 <1.0		<1.0 <1.0 <1.0																	
4-Isopropyltoluene 1,4-Dichlorobenzene	μg/kg μg/kg μg/kg	nc		< 1.0 < 1.0 < 1.0											<1.0 <1.0 <1.0		<1.0 <1.0 <1.0																	
n-Butylbenzene 1.2-Dichlorobenzene	μg/kg μg/kg	nc 2140000		< 1.0 < 1.0											<1.0 <1.0		<1.0 <1.0																	
1,2-Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Hexachlorobutadiene	μg/kg μg/kg μg/kg	nc		< 50 < 1.0 < 1.0											<50 <1.0 <1.0		<50 <1.0 <1.0																	
1,2,3-Trichlorobenzene Tentatively Identified Compounds	μg/kg μg/kg	108000 nc		< 2.0 None Detecte											<2.0		<2.0 None Detected	ł																
Benzene, 1-ethenyl-3-methyl Indane 2-Benzothiphene	μg/kg μg/kg μg/kg	nc													-																			
Benzofuran Benzo(B)thiophene	μg/kg μg/kg	nc nc																																
Phenol,4Methyl Benzo(B)Thiophene Acenaphthene	μg/kg μg/kg mg/kg	nc		< 0.50											<0.50		<0.50																	
Acenaphthylene Anthracene	mg/kg mg/kg	84300 525000		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
Azobenzene Benzo[a]anthracene Benzo[a]pyrene	mg/kg mg/kg mg/kg	90 14		< 0.50 < 0.50	_	-									<0.50 <0.50		<0.50 <0.50																	
Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene	mg/kg mg/kg	654		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
bis(2-Chloroethoxy)methane bis(2-Chloroethoxy)methane bis(2-Chloroethyl)ether bis(2-Chloroisopropyl)ether	mg/kg mg/kg mg/kg	nc		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate Butylbenzylphthalate	mg/kg mg/kg	nc		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
Carbazole	mg/kg mg/kg mg/kg	nc		< 0.50 < 0.50	-	-		-							<0.50 <0.50		<0.50 <0.50										-							
Di-n-butylphthalate Di-n-octylphthalate Dibenzo[a,h]anthracene	mg/kg mg/kg	nc		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
Dibenzofuran Diethylphthalate	mg/kg mg/kg mg/kg	nc		< 0.50 < 0.50			1	1							<0.50 <0.50		<0.50 <0.50																	
Dimethylphthalate Fluoranthene Fluorene	mg/kg mg/kg mg/kg	22600		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 0.5 <0.50																	
Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachlorocyclopentadiene	mg/kg mg/kg	47 nc		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
Hexachlorocyclopentadiene Hexachloroethane Indeno[1,2,3-cd]pyrene	mg/kg mg/kg mg/kg	nc		< 0.50 < 0.50 < 0.50		-									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
Isophorone N-Nitrosodi-n-propylamine N-Nitrosodimethylamine	mg/kg mg/kg	nc		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
	mg/kg mg/kg mg/kg	nc 204		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
Nitrobenzene Pentachlorophenol Phenanthrene Phenol	mg/kg mg/kg	1220 21900		< 0.50											<0.50 <0.50		<0.50 <0.50																	
Phenol Pyrene 1,2-Dichlorobenzene	mg/kg mg/kg	3200 54200		< 0.50 < 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
1,2,4-Trichlorobenzene 1,3-Dichlorobenzene	mg/kg mg/kg mg/kg	228 32		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
1,4-Dichlorobenzene 2-Chloronaphthalene 2-Chloronaphenol	mg/kg mg/kg	4460 nc		< 0.50 < 0.50 < 0.50		+									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
2-Methylnaphthalene	mg/kg mg/kg mg/kg	nc nc		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
2-Methylphenol 2-Nitroaniline	mg/kg mg/kg	nc		< 0.50 < 0.50											<0.50 <0.50 <0.50		<0.50 <0.50 <0.50																	
2-Nitrophenol 2,4-Dichlorophenol 2,4-Dimethylphenol	mg/kg mg/kg mg/kg	3470		< 0.50 < 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
2,4-Dinitrotoluene 2,4,5-Trichlorophenol	mg/kg mg/kg	nc nc		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
2,4,6-Trichlorophenol 2,6-Dinitrotoluene 3-Nitroaniline	mg/kg mg/kg mg/kg			< 0.50 < 0.50 < 0.50		+	1	-							<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			<u> </u>														
4-Bromophenylphenylether	mg/kg mg/kg mg/kg	nc		< 0.50 < 0.50											<0.50 <0.50		<0.50 <0.50																	
4-Chloroaniline	mg/kg	nc		< 0.50		1	1	1	I	<u> </u>		1	I	1	<0.50	I	<0.50	1	1	I	1	I	I			I		I	1	1	<u>I T</u>	Ī	T	

	-					-		-						-						-														
Ground Investigation			PBA 2010/		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/		PBA 2010/			PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/
			2011	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	2011	2011	2011	2011	2011
Report Number			121783	121783	122209	122211	122209	122209	122210	122209	122211	122209	133344	133344	133344	133344	133344	133344	122209	122211	122209	122209	122209	122209	122211	122209	122210	122209	122209	133344	133344	122209	122210	122211
Lab Ref			AF57623	AF57624	AF68302	AF68433	AE69205	AF68306	AF68358	AF68307	AF68734	AF68308	AF61330	AF61331	AF61332	AF61333	AF61334	AF61335	AF68303	AF68432	AF68304	AF68300	AF68301	AF68279	AF68426	AF68280	AF68350	AF68281	AF68282	AF61303	AF61304	AF68309	AF68359	AF68435
Date			10/12/2010	10/12/2010				25/01/2011									04/01/2011			07/02/2011			25/01/2011			25/01/2011		25/01/2011		04/01/2011		25/01/2011		07/02/2011
Exploatory hole location	1		TP2002													TP2025							TP2003		BH2002	BH2002	BH2002	BH2002		TP2006			TP2008	
Zone B Location	1		B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3	Immediately north of B3	Immediately north of B3	B5	B5	B5
																1														HOILII OI BS	HOILIT OF BS			
			Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside										Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside
Location on plot/ gas holder number			gasholders	gasholders				gasholders					GH9 (edge)	GH9 (edge)	GH9 (edge)	GH9 (edge)	GH9 (edge)	GH9 (edge)	Inside GH9	Inside GH9	Inside GH9	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders			gasholders	
Depth (m)			1m	2m	2m	0.3m	1m	2m	2m	4m	1.8m	1.8m	0.3m	1m	2m	2m	3m	4m	1m	1m	3m	0.3m	1m	0.3m	1m	2m	3m	4m	6m	0.3m	1m	1m	1.2m	2m
Strata	1			Possible MG/		Made	Made	Made	Made	Made		Made							Made	Made	Made											Made	Made	
			Made Ground	Reworked Clay	Clay	Ground	Ground	Ground	Ground	Ground	Made Ground	Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Ground	Ground	Ground	Made Ground	Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	London Clay	Made Ground	Head Deposits	Ground	Ground I	Made Ground
4-Chlorophenylphenylether 4-Methylphenol	mg/kg mg/kg	nc		< 0.50											<0.50 <0.50		<0.50 <0.50																	
4-Nitroaniline	mg/kg	nc	-	< 0.50				-							<0.50		<0.50																	
ethyl-methyl benzenes	mg/kg								1 1						20.00		20.00		1 1															
Tentatively Identified Compounds	mg/kg			Not detected				1							Not detected		Not detected																	
Benzofuran	mg/kg	nc																																
biphenyl	mg/kg																																	
1-methylnahthalene	mg/kg																																	
1-methylnaphthalene	mg/kg		_																															
Indene 2-benzothiophene	mg/kg mg/kg																																	
Cinnamaldehde	mg/kg		-	-																														
Biphenyl	mg/kg														1																			
naphtho[2,3-B]thiophene	mg/kg																																	
PCBs as Aroclor 1242	mg/kg			<1											<1.0		<1.0																	
2-sec-Butyl-4,6-dinitrophenol	mg/kg	nc	< 0.2																															,
4-Chloro-3-methylphenol	mg/kg	nc	< 0.2																															
2-Chlorophenol	mg/kg		< 0.2																															
2,4-Dichlorophenol 2,6-Dichlorophenol	mg/kg mg/kg		< 0.2																															
2,4-Dimethylphenol	mg/kg		< 0.2			-																												
2,4-Dinitrophenol	mg/kg	nc	< 0.2															1																
2-Methyl-4,6-dinitrophenol	mg/kg	nc	< 0.2	1	1	1		1							1	1		i							1			1					t	
2-Methylphenol 3-Methylphenol	mg/kg	nc	< 0.2																															
3-Methylphenol	mg/kg	nc	< 0.2																															
4-Methylphenol	mg/kg	nc	< 0.2						I																									
2-Nitrophenol	mg/kg		< 0.2					1																										I
4-Nitrophenol	mg/kg mg/kg	nc	< 0.2	1	+	1		1								1		l							1			+					+	
Pentachlorophenol Phenol	mg/kg	3200	< 0.2	1	1	1		1							1	1		1		-					1			1						
2,3,4,5-Tetrachlorophenol	mg/kg		< 0.2	1	1										1	1	1	i i							1			1				1		
2,3,4,6-Tetrachlorophenol	mg/kg		< 0.2		1															1														
2,3,5,6-Tetrachlorophenol	mg/kg	nc	< 0.2																															
2,3,4-Trichlorophenol	mg/kg		< 0.2																															
2,3,5-Trichlorophenol	mg/kg		< 0.2																															
2,3,6-Trichlorophenol	mg/kg		< 0.2		ł											I		l	┥ ┥		L				l	<b> </b>								
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	mg/kg mg/kg	nc	< 0.2	1	+			1										l							ł								+	<u> </u>
3.4.5-Trichlorophenol	mg/kg	nc	< 0.2	1	1			1							1	1		1		-					1			1						
	mgmg		10.2		1			1																									+	
	Indicates wh	here the data exceeds the s	d	1	İ	1		1	i 1					l l	İ	İ	İ	i	i l		i i	İ			1		İ	1	1			1		
					•	•		•	• • • •		-		-	•			-	•	· · · · ·			•											b	

Ground Investigation			_		1 PBA 2010/ 201	-	PBA 2010/ 2011	PBA 2010/ 2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	2011	PBA 2010/ 2011	2011	2011	2011	2011	2011		1 20	11	2011 2	A 2010/ PBA 2010 2011 2011	2011	2011	PBA 2010/ 2011	2011	PBA 2010/ PBA 2010/ 2011 2011	
Report Number Lab Ref			122209 AF68310	122209 AF68311	122209 AF68312	122209 AF68313	122209 AF68314	122210 AF68360	122209 AF68315	122209 AF68316	133344 AF61305	133343 AF61272	133344 AF61306	133343 AF61273	133344 AF61308	133344 AF61310	133343 AF61274	133344 AF61316	122211 AF68436	122209 AF68317	122210 AF68361				209 122 319 AF6			22209 122211 68322 AF68438	122210 AF68363	122209 AF68323	122209 AF68324		122209 122209 AF68325 AF68326	_
Date			25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	07/02/2011	25/01/2011	25/01/2011	07/02/2011 25	/01/2011 2	5/01/2011 25/01	2011 25/01	/2011 25	5/01/2011 25/0	01/2011 07/02/201	25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011 25/01/2011	1
Exploatory hole location Zone B Location			TP2008 B5	TP2010 B5	TP2010 B5	TP2010 B5	B5	B5	B5	B5	BH2010 B5	BH2010 B5	BH2010 B5	BH2010 B5	BH2010 B5	BH2010 B5	BH2010 B5	BH2010 B5	B5	B5	B5		B6	B6 E				B6 B6 B6	B6	B6	B6	B6	TP2016-A TP2016-A B6 B6	-
			Outside	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside (	Dutside	Outside Out	ide Out	side (	Outside O	utside Outside	Outside	Outside	Outside	Outside	Outside Outside	
Location on plot/ gas holder number				(condensers and scrubbers)	d (condensers	(condensers) and scrubbers)	(condensers	(condensers		(condensers and scrubbers)			gasholders		gasholders	gasholders		gasholders	gasholders	gasholders	gasholders	gasholders ga	sholders g	asholders gash	Iders gash	olders ga		holders gasholder			gasholders		gasholders gasholders	
Depth (m)			3m	0.3m	1m	1.5m	2m	2m	2.8 - 2.9m			1m			4m	5m	1	9m	0.6m			0.3					0.7 - 1.0m			3.5m - 3.9m				-
Strata		Screening Criteria	Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Possible MG/ Clay	Made Ground	Made Ground	Made Ground	Made Ground	Clay	Clay & Head deposits	Weathered London Clay	London Clay	Made Ground	Made Ground	Made Ground		Made Ground	Made Ground Cl	Ma ay Gro	und Mad		Made Made round Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Made Ground Ground	4
Metals	Units	Commercial																																
Cadmium	mg/kg mg/kg mg/kg	230.0 30400	19 <0.10 16	50 0.68 53	67 1.3 6.4	320 1.7 18	140 3 30			13 <0.10 21			8.9 0.11 18		<0.10	8.5 <0.10 18				24 0.13 29			79 0.39 8	<0	9 3 10 0. 3 1	-		140 0.73 11		54 0.2 <5.0	0.44 6.8		41 39 0.88 1.6 10 8.1	
Copper Lead	mg/kg mg/kg	71700 7300	51 140 0.71	99 1000	81 1000	94 7900	180 3400		44 610	27 30			21 32 <0.10		24 25	22 19				33 140			340 1300	5	0 10 5 4	50		70 840		57	84 490 2.1		68 44 1900 520	
Nickel	mg/kg mg/kg mg/kg	3600 1800 nc	0.71	1.3 55	2.2 25	3.3 36	50 35			0.56 36			<0.10 30		<0.10 36	<0.10 34				0.46 41			0.91 27		8 1			5.4 32		11 25			33 2.9 21 26	
Selenium Zinc	mg/kg mg/kg	13000	<0.20 68		<0.20 420	1.5 320	0.97 1800		<0.20 350	<0.20 69			<0.20 50		<0.20 57	0.37 61				<0.20 71			<0.20 320		20 <0 5 21		<	:0.20 350		0.59 150	<0.20 240		<0.20 <0.20 1600 280	_
	mg/kg mg/kg	nc 78.00											<0.50 <0.50		1.6 <0.50	<0.50 <0.50							_			_								4
Thiocyanate Boron	mg/kg mg/kg	nc 192000											<5.0		<5.0	<5.0																		_
	% pH Units	nc	7.6	8.2	8.4	7.3	7.6	13 7.9	8.1	8.2		8.6	8.1	8	8.1	8	8				0.63 8.4		8.9	15 10.1	10	0.9		8	9.9 8.2	7.8	9		9.1 8.4	_
	%										Not detected								Not detected			Not detected						Not detecte	d			Chrysotile 0.007		_
Sulphur (free)	mg/kg mg/kg	3200 nc nc	<0.3	<0.3	<0.3	260	0.8		<0.3	0.5			<0.3		<0.3	<0.3				<0.3			<0.3	<	.3 <0	0.3		<0.3		<0.3	<0.3		<0.3 <0.3	_
Total Sulphate Sulphur (elemental)	% as SO4 mg/kg	nc																																_
Total sulphate	mg/kg mg/kg g/l	nc	0.62	0.14	0.36	1.6	1.8		0.97	0.24			0.16		0.14	0.26				0.22			0.16	0	i6 0.	57		1.4		11	0.7		0.65 0.63	_
Organic matter Moisture	%	nc nc	8.4 25.9	17	11 19.5	60	26	24.7	6.4	1.4		22.9	0.47	25	0.41	< 0.40	21.4	19.7		1.4			33	16.2 20	2 4	1		21 21.8		31 19.8	10		5 5.5 20.1 25.9	
Loss on ignition	mol/kg %	nc			-	-		0.019 17.1 <0.02				0.04 4.82		0.012 5.89 <0.02	<0.02	<0.02	0.008 4.47 <0.02	<0.02			0.044 4.4 <0.02			0.154 15.9 <0.02					0.07 9.31 <0.02				<u> </u>	4
BTEX Benzene	μg/kg	28000.00						190				<1	< 1	<1	3.5	1.3	< 1	<0.02			< 1			<1					< 1					_
Ethylbenzene	µg/kg µg/kg µg/kg	581000			1			82 310 1500				<1	<1	<1 <1 <1	3 2.8 2.8	<1 1.3 <1	<1 <1 <1				<1 <1 <1			<1 <1 <1					<1 <1 <1					_
o-Xylene Total BTEX	μg/kg μg/kg	480000						730				<1 <0.005	<1	<1 <0.005	<1	<1	< 1 <0.005				< 1			< 1 <0.005					< 1					_
Hydrocarbons	μg/kg mg/kg					<1.0	< 0.1		<1.0	< 0.1								< 0.1									< 0.1							_
Aliphatic >C6-C8 Aliphatic >C8-C10	mg/kg mg/kg	8250 2130				< 0.1	< 0.1 9.3		< 0.1 2.6	< 0.1 < 0.1								< 0.1 < 0.1									< 0.1 < 0.1							-
Aliphatic >C12-C16	mg/kg mg/kg mg/kg	60800				31 93 57	22 24 16		6.7 16 10	< 0.1 < 0.1 < 0.1								52 52 200									2.5 18 29							4
Aliphatic >C21-C35 Aliphatic >C35-C44	mg/kg mg/kg	673000 673000				35 < 0.1	44 < 0.1		8.2 < 0.1	< 0.1 < 0.1								400 < 0.1									25 < 0.1							_
Aromatic >C7-C8	mg/kg mg/kg mg/kg	59000				68 120 1000	< 0.1 7.8 360		< 0.1 7.2 66	< 0.1								< 0.1 < 0.1 < 0.1					_				< 0.1 < 0.1 0.32							_
Aromatic >C10-C12 Aromatic >C12-C16	mg/kg mg/kg mg/kg	36200				4500 12000			520									190 55									0.32 12 120							Ξ
Aromatic >C21-C35	mg/kg mg/kg mg/kg					14000 5200 < 0.1			530 200 < 0.1	5								32 < 0.1 < 0.1									720 830 < 0.1							4
Aliphatic C5-C35 Aromatic C5-C35	mg/kg mg/kg	nc	10		460	36000			1800				10		10	40		000		< 10					0 1	10	1800	1100		660	400		36 920	3
TEM	mg/kg	nc	< 10	230	460	36000		52000		14		< 10	< 10	< 10	< 10	< 10	< 10	990			99		60	200	0 1	10	1800	1100	2000		400		36 920	-
Gasoline Range Organics by GC (GRO)	mg/kg mg/kg	2130 2130 2130																																3
TPH (Mineral Oil/ Hydrocarbon oil) TPH (Aromatic hydrocarbons)	mg/kg mg/kg mg/kg	2130																																_
TPH	mg/kg mg/kg mg/kg	2130																																4
Acenaphthene Acenaphthylene	mg/kg mg/kg	84900 84300		0.46		110 720	94		15	0.52		0.3 0.1		0.2 0.3			0.1 <0.1		l .	0.15 0.14	<0.1		0.71	0.4 0. 0.3 0.	1 0	.8		11 7.6		1.3 2.9			0.1 1.6 0.33 1.4	
Benzo(a)anthracene	mg/kg mg/kg mg/kg	90.0	0.19 < 0.1 < 0.1	6.8	25	1200 1000 870	380	370	65	1.7		0.2 <0.1 <0.1		0.2 <0.1 <0.1			<0.1 <0.1			0.27 0.23 0.11	0.2		16	0.9 0. 4.4 0. 7.6 0.	7 1	2		26 69 90	72	8.4 29 35	15		0.66 5.2 2.4 28 3 50	
Benzo(b)fluoranthene Benzo(k)fluoranthene	mg/kg mg/kg	100.0 141.0	< 0.1	< 0.1			180		< 0.1	< 0.1		<0.1 <0.1		<0.1 <0.1			<0.1 <0.1 <0.1			0.11 0.22 0.11	0.1		12	7.6         0.           5.9         0.           4.7         0.	87 8	.1		85 49	66 52	35 27 14	22 13		3 42 2.1 32	
Chrysene	mg/kg mg/kg mg/kg	137.0	< 0.1 < 0.1 < 0.1			500 1000 140	400	370	69	1.6		<0.1 <0.1 <0.1		<0.1 <0.1 <0.1			<0.1 <0.1 <0.1			0.14 0.25 < 0.1	0.2		17	5.6 0. 5.1 0. 6.5 0.	i5 1	2		56 72 15	75	21 30 6.7	16		2.1 36 3 29 0.56 12	
Fluoranthene Fluorene	mg/kg mg/kg	22600 63500	< 0.1	< 0.1 < 0.1	< 0.1		250		< 0.1	< 0.1		<0.1 0.5 <0.1		<0.1 <0.1 0.3			<0.1 <0.1 0.2			0.53	0.4 <0.1		1.2	6.5 0. 5.8 0 0.2 0.	6 2	.7		15 < 0.1 12	8.8	6.7 49 2.1	0.88		4.4 27 0.18 1.3	
Naphthalene	mg/kg mg/kg mg/kg	204.0	< 0.1 < 0.1 0.35	4.8	21 11 48	550 1000 4000	650	19 6300 1600	210	< 0.1		<0.1 0.4 0.2		<0.1 0.8 0.3			<0.1 0.4 <0.1			0.16 0.61 1.1	0.5		6.9	1.6 0. 2.2 1 4 1	1 2	.3		59 16 86	5.3	23 7 27	2.2		2 39 1.4 3.8 2.5 11	
Pyrene Coronene	mg/kg mg/kg	54200 nc	< 0.1	12	46	2100	810	1600 730 28	120	2.7		0.2 0.3 <0.1	_	<0.1 <0.1		<2	<0.1 <0.1			0.45 4.8	0.2 <0.1		17	4 1 5.5 0. 0.2 9	68 2	3		86 < 0.1 650	110 7	27 44 330			2.5 11 4 24 32 340	
	mg/kg mg/kg		<2	64	250	18000	6800	13000	910	17		2	<2	2.2	<2	<2	<2			4.8	3.2			61		50		650	870		180		32 340	_
PCB 28 PCB 52	mg/kg mg/kg	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				<0.1 <0.1 <0.1			<0.1 <0.1 <0.1					<0.1 <0.1 <0.1				<u> </u>	1
PCB 118	mg/kg mg/kg mg/kg	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				<0.1 <0.1 <0.1			<0.1 <0.1 <0.1					<0.1 <0.1 <0.1					4
PCB 153 PCB 180	mg/kg mg/kg	nc nc						<0.1 <0.1				<0.1 <0.1		<0.1 <0.1			<0.1 <0.1 <1				<0.1 <0.1			<0.1 <0.1 <1					<0.1 <0.1					1
VOCs Dichlorodifluoromethane	mg/kg μg/kg					<1.0	<1.0	<1	<1.0	<1.0		<1		<1			<1	<1.0			<1			<1			<1.0		<1					1
Chloromethane Vinyl chloride	μg/kg μg/kg	nc				<1.0 <1.0	<1.0 <1.0		<1.0 <1.0	<1.0 <1.0								<1.0 <1.0									<1.0 <1.0							_
Chloroethane Trichlorofluoromethane	µg/kg µg/kg µg/kg	nc				<20 <2.0 <1.0	<20 <2.0 <1.0		<20 <2.0 <1.0	<1.0								<20 <2.0 <1.0								_	<20 <2.0 <1.0							1
1,1-Dichloroethene Dichloromethane	μg/kg μg/kg	nc nc				<1.0 ne	<1.0 ne		<1.0 ne	<1.0 ne								<1.0 ne									<1.0 ne							1
trans-1,2-Dichloroethene 1,1-Dichloroethane	μg/kg μg/kg	nc		1		<1.0 <1.0	<1.0 <1.0		<1.0 <1.0	<1.0 <1.0								<1.0 <1.0									<1.0 <1.0							Е

			PBA 2010/			PBA 2010/	PBA 2010/	DD4 0040/	PBA 2010/	PBA 2010/	PBA 2010/		004 00404	PBA 2010/	224 00101	PBA 2010/	PBA 2010/	004 0040/	DD4 00404	DD1 00404	DD4 0040/	DD4 00401		DD4 costor	DD1 0040/	DDA 0040/	PBA 2010/	DDA 00404			PBA 2010/	DD4 0010/		DDA 0040/	PDA 00101
Ground Investigation Report Number			2011 122209	PBA 2010/ 20	011 PBA 2010/ 20 122209	11 2011	2011 122209	2011 122210	2011 122209	2011 122209	2011 133344	2011 133343		2011 133343		2011 133344	2011 133343	2011 133344			2011 122210	2011	2011 122209	2011	2011	2011	2011 122209	2011 122209	2011	2011 122210		2011 122209	2011	2011 122209	
Lab Ref			AF68310	AF68311		-	AF68314	AF68360	AF68315	AF68316	AF61305	AF61272		AF61273	AF61308	AF61310	AF61274	AF61316	AF68436	AF68317	AF68361	AF68437	AF68318				AF68321	AF68322		AF68363	AF68323	AF68324		AF68325	
Date				25/01/201	1 25/01/2011	25/01/2011 TP2010	25/01/2011	25/01/2011	25/01/2011	25/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011	07/02/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011
Exploatory hole location Zone B Location			B5	B5	B5	B5	B5	B5	B5	B5	B12010	Bh2010 B5	B12010	Bh2010 B5	B5	B12010	B5	B12010	B5	B5	B5	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6
			Outside	Outside gasholders		Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside
Location on plot/ gas holder number			Ť	(condensers scrubbers	and (condenser and scrubber	s (condensers s) and scrubbers)	(condensers and scrubbers)	(condensers and scrubbers)		(condensers and scrubbers)	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders	gasholders		gasholders	gasholders	gasholders
Depth (m)			3m	0.3m	1m	1.5m	2m	2m	2.8 - 2.9m	4m Possible MG/	0.3m	1m Made	2m Made	3m Made			7m Weathered	9m	0.6m	1m Made	1m Made	0.3 Made	1m Made	1m Made	3m	0.3m Made	0.7 - 1.0m	2m Made	2m Made	2m Made	3.5m - 3.9m	1m Made	1m Made	3 - 3.5m Made	4m Made
Strata cis-1,2-Dichloroethene	µg/kg	nc	Clay	Made Grou	nd Made Groun	1.2	Made Ground <1.0	Made Ground	Made Ground <1.0	Clay <1.0	Made Ground	Ground	Ground	Ground	Clay	Clay & Head deposits	London Clay	<1.0	Made Ground	Ground	Ground	Ground	Ground	Ground	Clay	Ground	Made Ground <1.0		Ground	Ground	Made Ground	Ground	Ground	Ground	Ground
Bromochloromethane Trichloromethane 1,1,1-Trichloroethane	µg/kg µg/kg µg/kg	nc 107000 700000				<1.0 <1.0 <1.0	<1.0 <1.0 <1.0		<1.0 <1.0 <1.0	<1.0 <1.0 <1.0								<1.0 <1.0 <1.0									<1.0 <1.0 <1.0								
	µg/kg µg/kg	3000 nc				<1.0 5.4	<1.0 <1.0		<1.0 <1.0	<1.0 <1.0								<1.0 <1.0									<1.0 <1.0								
1,2-Dichloroethane	µg/kg µg/kg µg/kg	28000 700 12000				3100 <2.0 <1.0	10000 <2.0 <1.0		580 <2.0 <1.0	87 <2.0 <1.0								4200 <2.0 <1.0									<1.0 <2.0 <1.0								
1,2-Dichloropropane	μg/kg μg/kg μg/kg	nc				<1.0 <10	<1.0 <10		<1.0 <10	<1.0 <10								<1.0 <10									<1.0 <10								
Dibromomethane Bromodichloromethane cis-1,3-Dichloropropene Toluene	µg/kg µg/kg µg/kg	nc nc 870000				<5.0 <10 2200	<5.0 <10 6400		<5.0 <10 450	<5.0 <10 4.9								<5.0 <10 5700									<5.0 <10 <1.0								
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	μg/kg μg/kg	nc nc				<10 150	<10 <10		<10 <10	<10 <10								<10 <10									<10 <10								
Dibromochloromethane	µg/kg µg/kg µg/kg	131000 nc nc				<1.0 <2.0 <10	<1.0 <2.0 <10		<1.0 <2.0 <10	<1.0 <2.0 <10								<1.0 <2.0 <10									<1.0 35 <10								
1,2-Dibromoethane	µg/kg µg/kg	nc 59000				<5.0 <1.0 <2.0	<5.0 <1.0 <2.0		<5.0 <1.0 <2.0	<5.0 <1.0 <2.0								<5.0 <1.0 <2.0									<5.0 <1.0 <2.0								
Ethylbenzene m- & p-Xylene	µg/kg µg/kg µg/kg	115000 581000 575000				62 1200	6200 53000		410 2700	13 39								10000 11000									<1.0 <1.0								
o-Xylene Styrene	μg/kg μg/kg	nc				560 <1.0 <10	24000 <1.0		1600 <1.0	<1.0								4800 <1.0 <10									<1.0 <1.0								
Isopropylbenzene Bromobenzene	µg/kg µg/kg µg/kg	nc nc nc				13 <1.0	<10 220 <1.0		<10 62 <1.0	<10 2 <1.0								610 <1.0									<10 <1.0 <1.0								
n-Propylbenzene	µg/kg µg/kg µg/kg	nc nc nc				<50 18 <1.0	<50 230 <1.0		<50 30 <1.0	<50 2.5 <1.0								<50 260 <1.0									<50 <1.0 <1.0								
1,2,4-Trimethylbenzene 4-Chlorotoluene	µg/kg	nc				310 <1.0	19000 <1.0		2400 <1.0	52 <1.0								7100 <1.0									6.1 <1.0								
tert-Butylbenzene 1,3,5-Trimethylbenzene sec-Butylbenzene	μg/kg μg/kg μg/kg	nc				<1.0 150 <1.0	<1.0 8800 <1.0		190 1300 <1.0	<1.0 30 <1.0								<1.0 2500 <1.0									<1.0 6.4 <1.0								
1,3-Dichlorobenzene 4-Isopropyltoluene	μg/kg μg/kg	nc				<1.0 <1.0	<1.0 <1.0		<1.0 <1.0	<1.0 <1.0								<1.0 180									<1.0 <1.0								
1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene	µg/kg µg/kg µg/kg	nc nc 2140000				<1.0 <1.0 <1.0	<1.0 <1.0 <1.0		<1.0 <1.0 <1.0	<1.0 <1.0 <1.0								<1.0 <1.0 <1.0									<1.0 <1.0 <1.0								
1,2-Dibromo-3-chloropropane 1,2,4-Trichlorobenzene	μg/kg μg/kg	nc				<50 <1.0 <1.0	<50 <1.0		<50 <1.0 <1.0	<50 <1.0								<50 <1.0 <1.0									<50 <1.0 <1.0								
Hexachlorobutadiene 1,2,3-Trichlorobenzene Tentatively Identified Compounds Benzene, 1-ethenyl-3-methyl	µg/kg µg/kg µg/kg	nc 108000 nc				<2.0	<1.0 <2.0 Detected		<2.0 Detected	<1.0 <2.0 None Detected								<2.0 Detected									<1.0 <2.0 None Detected								FFFF
Benzene, 1-ethenyl-3-methyl Indane 2-Benzothiphene	μg/kg μg/kg	nc nc nc					2200																												
Benzofuran Benzo(B)thiophene	µg/kg µg/kg µg/kg	nc				2400 4300	2200		590																										
Benzo(B)Thiophene	µg/kg µg/kg mg/kg	nc nc 84900				260	80		8.8	0.6								<0.50									23								
Acenaphthylene Anthracene	mg/kg mg/kg	84300				1700 2400	160 440		22 55	3 3.2								<0.50 <0.50									6.7 61								
Azobenzene Benzo[a]anthracene Benzo[a]pyrene	mg/kg mg/kg mg/kg	90 14				<0.50 1800 1700	<0.50 390 380		<0.50 32 29	<0.50 3.3 3.1								<0.50 <0.50 <0.50									0.54 100 120								
Benzo[g,h,i]perylene	mg/kg mg/kg	654				1900 890 560	470 220		29 10 11	3.1 2.7 1								<0.50 <0.50 <0.50									140 68								
bis(2-Chloroethoxy)methane bis(2-Chloroethyl)ether	mg/kg mg/kg mg/kg	141 nc nc				<0.50 <0.50	130 <0.50 <0.50		<0.50 <0.50									<0.50 <0.50 <0.50									48 <0.50 <0.50								FFFF
bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate	mg/kg mg/kg	nc				<0.50 <0.50 <0.50	<0.50 <0.50 <0.50		<0.50 7.3 1.1	<0.50 <0.50 <0.50								<0.50 <0.50 <0.50									<0.50 <0.50 <0.50								
Chrysene	mg/kg mg/kg mg/kg	nc nc 137				910 1500	170 310		23 23	1.3 2.2								<0.50 <0.50 <0.50									19 88								FFFF
Di-n-butylphthalate Di-n-octylphthalate Dibenzo[a,h]anthracene	mg/kg mg/kg mg/kg	nc nc nc				<0.50 <0.50 210	<0.50 <0.50 44		<0.50 1.8 4.2	<0.50 <0.50 <0.50								<0.50 <0.50 <0.50									<0.50 <0.50 19								
Dibenzofuran	mg/kg mg/kg	nc				1500 <0.50	300 <0.50		34 <0.50	2.4 <0.50								<0.50 <0.50									23 <0.50								
Fluoranthene	mg/kg mg/kg	nc				<0.50 5100 1400	<0.50 950 260		<0.50 67 43	<0.50 5.9 2.9								<0.50 <0.50 <0.50									<0.50 200 32								
Hexachlorobenzene Hexachlorobutadiene	mg/kg mg/kg mg/kg	47 nc				<0.50 <0.50	<0.50 <0.50		<0.50 <0.50	<0.50 <0.50								<0.50 <0.50									32 <0.50 <0.50								
Hexachloroethane	mg/kg mg/kg mg/kg	nc nc 60			-	<0.50 710	170		<0.50 <0.50 11	< 0.50								<0.50 <0.50 <0.50									<0.50 <0.50 58								
Isophorone N-Nitrosodi-n-propylamine	mg/kg mg/kg mg/kg	nc				<0.50 <0.50	<0.50 <0.50		<0.50 <0.50									<0.50 <0.50									<0.50 <0.50								
N-Nitrosodimethylamine Naphthalene Nitrobenzene	mg/kg mg/kg mg/kg	nc 204 nc					<0.50 6700 <0.50		<0.50 200 <0.50	8.4								<0.50 27 <0.50									<0.50 14 <0.50								
Pentachlorophenol Phenanthrene	mg/kg mg/kg mg/kg	1220 21900				<0.50 7500 140	<0.50 1400 <0.50		<0.50 110 <0.50	<0.50 9.8								<0.50 0.54 <0.50									<0.50 180 <0.50								
Pyrene 1,2-Dichlorobenzene	mg/kg mg/kg	54200				4000 <0.50	750 <0.50		49 <0.50	3.8 <0.50								<0.50 <0.50 <0.50									<0.50 170 <0.50								$\square$
	mg/kg mg/kg mg/kg					<0.50 <0.50 <0.50	< 0.50		<0.50 <0.50 <0.50	<0.50 <0.50 <0.50								<0.50 <0.50 <0.50									<0.50 <0.50 <0.50								
2-Chloronaphthalene 2-Chlorophenol	mg/kg mg/kg	nc 3540				< 0.50	<0.50 <0.50 <0.50		<0.50 <0.50	<0.50 <0.50								<0.50 <0.50									<0.50 <0.50								
2-Methyl-4,6-dinitrophenol 2-Methylnaphthalene	mg/kg mg/kg mg/kg	nc nc nc				110 1400 60	110 390 <0.50		<0.50 65 <0.50	<0.50 0.76 <0.50								<0.50 2.8 <0.50									<0.50 9 <0.50								
2-Nitroaniline 2-Nitrophenol	mg/kg mg/kg	nc				<0.50 <0.50	<0.50 <0.50		<0.50 <0.50	<0.50 <0.50								<0.50 <0.50									<0.50 <0.50								
	mg/kg mg/kg mg/kg	nc				<0.50 43 <0.50	<0.50 <0.50 <0.50		<0.50 <0.50 <0.50									<0.50 <0.50 <0.50									<0.50 <0.50 <0.50								
2,4,5-1 richlorophenol 2,4,6-Trichlorophenol	mg/kg mg/kg	nc 3880				<0.50 <0.50	<0.50 <0.50		<0.50 <0.50	<0.50 <0.50								<0.50 <0.50									<0.50 <0.50								
2,6-Dinitrotoluene 3-Nitroaniline	mg/kg mg/kg mg/kg					<0.50 <0.50 <0.50	<0.50 <0.50 <0.50		<0.50 <0.50 <0.50	<0.50 <0.50 <0.50								<0.50 <0.50 <0.50									<0.50 <0.50 <0.50								
4-Chloro-3-methylphenol	mg/kg mg/kg	nc				< 0.50	<0.50 <0.50 <0.50		< 0.50	<0.50 <0.50 <0.50								<0.50 <0.50 <0.50									<0.50 <0.50 <0.50								
											_		_								_					_		_						_	

			1					1																											
Ground Investigatio	on		PBA 2010/			PBA 2010/             /		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/				PBA 2010/		PBA 2010/								
	_		-		1 PBA 2010/ 2011	-	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011		2011		2011	2011	2011	2011	2011	2011	2011	2011		2011	2011
Report Number	ber		122209	122209	122209	122209	122209	122210	122209	122209	133344	133343	133344	133343	133344	133344	133343	133344	122211	122209	122210	122211	122209	122210	122209	122209	122209	122209	122211	122210	122209	122209	122211	122209	122209
Lab Re	Ref		AF68310	AF68311	AF68312	AF68313	AF68314	AF68360	AF68315	AF68316	AF61305	AF61272	AF61306	AF61273	AF61308	AF61310	AF61274	AF61316	AF68436	AF68317	AF68361	AF68437	AF68318	AF68362	AF68319	AF68320	AF68321	AF68322	AF68438	AF68363	AF68323	AF68324	AF68439	AF68325	AF68326
Dat	ate				25/01/2011																														
Exploatory hole locatio				TP2010			TP2010																												
Zone B Locatio	on		B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6	B6
			Outside	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside	Outside
Location on plot/ gas holder number	ber			(condensers an		(condensers	(condensers		(condensers and	(condensers							gasholders	gasholders							gasholders	gasholders	gasholders				gasholders				
			-	scrubbers)	and scrubbers)	) and scrubbers)	) and scrubbers)	and scrubbers)	scrubbers)	and scrubbers)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	( )	ſ I	í I
Depth (n	m)		3m	0.3m	1m	1.5m	2m	2m	2.8 - 2.9m	4m	0.3m	1m	2m	3m	4m	5m	7m	9m	0.6m	1m	1m	0.3	1m	1m	3m	0.3m	0.7 - 1.0m	2m	2m	2m	3.5m - 3.9m	1m	1m	3 - 3.5m	4m
0										Possible MG/		Made	Mada	Made		Claur 8 Lianad	Weethered			Mada	Mada	Made	Mada	Mada		Made		Made	Made	Mada		Made	Maria	Maria	Mada
Strat	ata		Clav	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground		Made Ground	Ground	Made Ground	Ground	Possible MG/ Clav	Clay & Head deposits	London Clav	London Clav	Made Ground	Made Ground	Made Ground	Ground	Made Ground	Made Ground	Clay	Ground	Made Ground	Ground	Ground	Made Ground	Made Ground	Ground	Made Ground	Made Ground	Made Ground
4-Chlorophenylphenylether	mg/kg	nc		June	June 2. June	< 0.50	< 0.50		< 0.50	<0.50								< 0.50									<0.50								
4-Methylphenol	mg/kg	nc				<0.50	<0.50		<0.50	<0.50								<0.50									<0.50						<u>`                                    </u>		,
4-Nitroaniline ethyl-methyl benzenes	mg/kg mg/kg		-		-													<0.50															<u>ا ا ا ا</u>	ļļ	
Tentatively Identified Compounds	mg/kg	nc																Not detected		1								-					بـــــــــــــــــــــــــــــــــــــ	<del>ب</del> ــــــــــــــــــــــــــــــــــــ	
Benzofuran	mg/kg	nc					1		2.1									1401 06160160	1														,		
biphenyl 1-methylnahthalene	mg/kg					460	110			0.85																	3.9						$\square$		
1-methylnahthalene	mg/kg						290																										'		·
1-methylnaphthalene	mg/kg					760			17																								<b>└───┘</b>		
Indene 2-benzothiophene	mg/kg	nc			-	270			1.7																								<u>ا</u>	ļļ	
Cinnamaldehde	mg/kg mg/kg					210	1		1.4										1														,		
Biphenyl	mg/kg						1		12										1														,	$ \longrightarrow $	
naphtho[2,3-B]thiophene	mg/kg					520																											$\square$		,
PCBs as Aroclor 1242	mg/kg		_		_	<1	<1		<1	<1								<1.0									<1						—	<b>ل</b> ــــــــــا	
2-sec-Butyl-4,6-dinitrophenol 4-Chloro-3-methylphenol	mg/kg mg/kg	nc																															<i>_</i>	<del>ب</del>	
2-Chlorophenol	mg/kg	nc																															,		
2,4-Dichlorophenol	mg/kg	nc																															$\square$		
2,6-Dichlorophenol	mg/kg																																<u> </u>		,
2,4-Dimethylphenol	mg/kg	nc			_																							L					┢────┘	┙	r
2,4-Dinitrophenol 2-Methyl-4,6-dinitrophenol	mg/kg mg/kg	nc		1		+	1	1																									<u>ل</u> ــــــا	<del>ب</del> ــــــــــــــــــــــــــــــــــــ	
2-Methylphenol	mg/kg			1	1	1	1	1				1					1			1 1													,	$\rightarrow$	
3-Methylphenol	mg/kg																			1															(
4-Methylphenol	mg/kg	nc			_																												<b>└──</b> ′		
2-Nitrophenol 4-Nitrophenol	mg/kg ma/ka	nc	-		-	+	1																										<b>└───┘</b>	<b>ب</b> ــــــــــــــــــــــــــــــــــــ	I
4-Nitrophenol Pentachlorophenol	mg/kg			1	-	+	1	1																									<u>ب</u>	<del>ب</del> ــــــــــــــــــــــــــــــــــــ	
Phenol	mg/kg			1																													,	<del> </del>	
2,3,4,5-Tetrachlorophenol	mg/kg	nc																																	
2,3,4,6-Tetrachlorophenol	mg/kg																																'		
2,3,5,6-Tetrachlorophenol	mg/kg	nc																		<b>├</b> ──┤				$\vdash$									┢────┘	<b>ا</b> لـــــــــــا	
2,3,4-Trichlorophenol 2,3,5-Trichlorophenol	mg/kg mg/kg	nc		1		1	1	1																									<u>ب</u>	<del>ا ــــــــــ</del>	
2.3.6-Trichlorophenol	mg/kg			1																													,	<del> </del>	
2,4,5-Trichlorophenol	mg/kg	nc																		i															
2,4,6-Trichlorophenol	mg/kg	nc																																	
3,4,5-Trichlorophenol	mg/kg	nc																		<b>├</b> ──┤				$\vdash$									┢────┘	<b>ا</b> لــــــــــا	
	Indicator	where the data exceeds th				+	1																										<b>ل</b> ـــــــــــا	لبسسم	I
	muicates	more are usia exceeds (if	1.04																	1													<u> </u>	,)	,

Ground Investigation	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	2011	2011		2011	2011	2011	2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011		PBA 2010/ 2011		PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	2011	2011		2011
Report Number	122209	133346			115023	115023 AF54166	115023	115023	115023	115023 AF54170	115023	115023		122209	122211	122209	122211	122209	122209	122210	122209	122209	121783 AF57626	121783	121863	121863	121864	121863	121863	121863		115023	115023
	AF68327 25/01/2011		04/01/2011	Not known	Not known	Not known				Not known				25/01/2011									10/12/2010				10/12/2010	10/12/2010	10/12/2010	10/12/2010	Not known N	Not known	tot innomi
Exploatory hole location Zone B Location	TP2016-A B6	Pancras Square	Pancras	Pancras Square	Pancras	Pancras	Pancras		Pancras Square	Pancras Square	BH2011 Pancras Square	Pancras Square	Pancras	Pancras Square	Pancras Square	Pancras Square	Pancras Square	TP2017 Pancras Square	TP2017 Pancras Square	TP2017 Pancras Square	Pancras Square	Pancras Square	Pancras Square	TP2018 Pancras Square	TP2015 Pancras Square	Pancras Square	Pancras Square	Pancras Square	Pancras Square	TP2015 Pancras Square	Pancras		Pancras Square
Location on plot/ gas holder number	Outside gasholders	-	-							Outside gasholders	gasholders	-	gasholders	-	Outside gasholders	Ť	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Č.	Outside gasholders	Outside gasholders	-	Outside gasholders	Outside gasholders	Outside gasholders	gastioiders	asholder 3 ga and A	asholder 3 ga and A	and A
Depth (m) Strata Strata Screening Criteria	4m Made Ground	0.3m Made Ground	5m Made Ground	0.3m Made Ground	3m Made Ground	6m Made Ground	8m Made Ground		London Clay	1m Made Ground	2m Made Ground	6m Made Ground	1m Made Ground	0.3m Made Ground	0.3m Made Ground	1m Clay	1m Made Ground	2m Clay	2m Clay	2m Clay	3m Clay	4m Clay	0.5m Made Ground		0.3m Made Ground	1m Made Ground			Made	4m/ 4.5 - 5? Made Ground	Made	1.5m Made Ground	0.5m Made Ground
Determinants Units Commercial Metals																							**										
Arsenic         mg/kg         640           Cadmium         mg/kg         230.0           Chromium         mg/kg         30400				0.18	11 0.24 13	<0.10		9.7 <0.10 16			15 <0.10 25	12 0.1 24	0.4	0.24		13 <0.10 17		18 <0.10 19			18 <0.10 21	12 <0.10 14	44			16 0.38 16			20 <0.10 21		25 0.21 17	0.28	11 0.24 17
Copper         mg/kg         71700           Lead         mg/kg         7300				250	13 21 100 0.21	13		55 140 0.19			25 29 160 0.3	24 25 18	29 71 560 0.47	370		17 29 78 0.56		19 25 200 0.59			31 110 0.9	26 37 0.3	39 440 0.45			55 330 1.9			21 100 1700 1.3		17 60 1000 2.1	170	
Nickel mg/kg 1800 Molybdenum mg/kg nc				17	11	13		13	47		30	33	20	22		18		24			34	29	34			25			26		20	14	14
Selenium         mg/kg         13000           Zinc         mg/kg         662000           Miscellaneous					<0.20 96			<0.20 400	1 90		0.32 63	0.24 96	<0.20 550	<0.20 210		<0.20 57		<0.20 53			<0.20 62	<0.20 57	0.2 130			< 0.20 170			< 0.20 1200		0.55 450		<0.20 210
Total Cyanide         mg/kg         nc           Free Cyanide         mg/kg         78.00																							7.6 < 0.5			1.9 < 0.5			35 9.5				
Thicoyanate         mg/kg         nc           Boron         mg/kg         192000           Total organic carbon         %         nc			1.6																	17			< 5.0			< 5.0	1.7		< 5.0				
pH pH Units nc		9.6	8.5	10.7	11.5	12.4	Net detected	11.9	8.8		8.8	8.1	10.5	10.3	Not detected	8.2	Not detected	8.2		8.1	8.2	8.1	8.3		Not detected	8.1	8.7		7.9		7.8	8.6	10.5
Asbestos identification % nc Asbestos Concentration % nc Phenol mg/kg 3200				<0.3	<0.3	<0.3	Not detected	<0.3	<0.3		<0.3	<0.3	<0.3	<0.3	Not detected	<0.3	Not detected	<0.3			<0.3	<0.3	<0.2		Not detected	< 0.3			< 0.3		<0.3	<0.3	<0.3
Sulphur (free)         nc           Sulphide         mg/kg         nc           Total Sulphate         % as SO4         nc																																	
Sulphur (elemental)         mg/kg         nc           Phenol (monohydric) SOM 1%         mg/kg         nc																																	
Total sulphate         mg/kg         nc           Sulphate (2:1 water soluble) as SO4         g/l         nc           Organic matter         %         nc				1 4.1	1.1	0.19		0.27	0.47		0.18 3.3	1 0.83	1.2 15	1.4		0.37		0.27 7.8			0.36	0.45	0.16 15			<0.01			1		0.61	0.24	1.1 2.6
Moisture         %         nc           Acid Neutralisation Capacity         mol/kg         nc	23.8	10.8 0.079	17.5 0.01	10.6	12.1	10.9	0	11.2		13.9	27.1	23.2				21.4		22.9	22.9	26.1 0.05	24.5	24.4		23.1			28.4 0.027	22.5	22.4	25.8			8.49
Loss on ignition         %         nc           Stones content > 50mm         %         nc           BTEX         %         nc			5.91 <0.02																	12.5 <0.02							5.89 <0.02						
Benzene         μg/kg         28000.00           Toluene         μg/kg         870000.00           Ethuisnesse         504000		3.8 1.7	15 2.1																	6.2 5.5			51 10	73 3.1		1.9	320 13		670				
Ethylbenzene µg/kg 581000 m·& p-Xylene µg/kg 575000 o-Xylene µg/kg 480000		2.9 1.8	1.7																	3.5 <1 <1			< 1 7.1 5	4.4 5.9 4.9		<1 <1 <1	170 57 54		44 30				
Тоtal BTEX μg/kg nc Methyl tert-butyl ether μg/kg nc Hydrocarbons /	<1.0	0.0091	0.015				<1.0			<1.0									<1.0	0.011	<1.0			< 1.0			0.44	<1.0		<1.0			
Aliphatic C5-C6         mg/kg         3380           Aliphatic >C6-C8         mg/kg         8250	< 0.1 < 0.1						< 0.1 < 0.1			< 0.1 < 0.1									< 0.1 < 0.1		< 0.1 < 0.1			< 0.1 < 0.1				< 0.1 < 0.1		< 0.1 < 0.1			
Aliphatic >C8-C10         mg/kg         2130           Aliphatic >C10-C12         mg/kg         10300           Aliphatic >C12-C16         mg/kg         60800	7.4 37 200						86 120 92			< 0.1 < 0.1 < 0.1									< 0.1 < 0.1 < 0.1		< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1				< 0.1 2.6 7		< 0.1 < 0.1 < 0.1			
Aliphatic >C16-C21         mg/kg         673000           Aliphatic >C21-C35         mg/kg         673000	430 100 < 0.1						1700 3100 < 0.1			< 0.1 < 0.1 < 0.1									< 0.1 < 0.1 < 0.1		< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1				5 11 < 0.1		< 0.1 < 0.1 < 0.1			
Aromatic >C5-C7         mg/kg         27700           Aromatic >C7-C8         mg/kg         59000	< 0.1 < 0.1						< 0.1 < 0.1			< 0.1 < 0.1									< 0.1 < 0.1		< 0.1 < 0.1			< 0.1 < 0.1 < 0.1				4.5 0.98		< 0.1 < 0.1 < 0.1			
Aromatic >C8-C10         mg/kg         3670           Aromatic >C10-C12         mg/kg         16900           Aromatic >C12-C16         mg/kg         36200	1.7 47 190						160 260 60			< 0.1 0.14 1.8									< 0.1 10 16		< 0.1 1.4 3.1			< 0.1 < 0.1 1.2				12 79 66		< 0.1 7.4 11			
Aromatic >C16-C21         mg/kg         26700           Aromatic >C21-C35         mg/kg         28400	340 110						570 910			18 40									100 190		20 77			1.6 2.1				110 110		23 16			
Aromatic >C35-C44         mg/kg         28400           Aliphatic C5-C35         mg/kg         nc           Aromatic C5-C35         mg/kg         nc	< 0.1						< 0.1			< 0.1									< 0.1		< 0.1			< 0.1				7.5		< 0.1			
Total hydrocarbons (alihpatics and aromatics)         mg/kg         2130           TPH Total WAC         mg/kg         nc	1500	49	46		1300	54	7100	1200	< 10	60	230	< 10	280	56		< 10		700	320	350	100	< 10	120	5		77	80	420	220	58	650	31	< 10
TEM         mg/kg         nc           Diesel range organics (DRO)         mg/kg         2130           Gasoline Range Organics by GC (GRO)         mg/kg         2130           TPH (SUM DRO + GRO)         mg/kg         2130																																	
TPH (SUM DRO + GRO)         mg/kg         2130           TPH (Mineral Oil/ Hydrocarbon oil)         mg/kg         2130           TPH (Aromatic hydrocarbons)         mg/kg         2130																																	
TPH (Solvent Extracted)         mg/kg         2130           TPH         mg/kg         2130																																	
Acenaphthene mg/kg 84900 Acenaphthylene mg/kg 84300		0.9	<0.1 <0.1	< 0.1	< 0.1	< 0.1			< 0.1			< 0.1	0.64 0.41	0.82		0.11 < 0.1		0.93 1			0.11		1.5			0.19 0.12	0.2		0.41 0.45		7.4 3.5	1	< 0.1
Anthracene         mg/kg         525000           Benzo(a)anthracene         mg/kg         90.0           Benzo(a)pyrene         mg/kg         14.00		1.2 3.7 5.1	<0.1 0.6 0.6 0.4	0.16	< 0.1 0.26 0.31	< 0.1		< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1		4.3 7 6.8	< 0.1 < 0.1	2.3 8 10 10	1.7 5.4 8.1		0.18 0.62 0.76		3.6 14 17 15		11 46 65	0.65 2 1.8	< 0.1	9.8 21 23			0.23 0.66 0.71	0.3 1.4 1.9		1.2 5.1 5.5		5.1 5.3 6.3	11	1.1
Benzo(b)fluoranthene mg/kg 100.0 Benzo(k)fluoranthene mg/kg 141.0		3.1	0.3	0.76	0.19	< 0.1		< 0.1	< 0.1		4.7	< 0.1	7.6	4.4		0.76 0.71 0.38		7.1		46 52	1.8 1.3	< 0.1	9.3			0.74 0.62	1.4		4.2 3.8		6.3 6.2 3.7	8.2	0.55
Benzo(g, h,i)pervlene         mg/kg         654           Chrysene         mg/kg         137.0           Dibenzo(a,h)anthracene         mg/kg         13.00		3.8 3.9 4.7	<0.1 0.6 0.5 1.1	0.77	0.2	< 0.1 < 0.1 < 0.1			< 0.1 < 0.1 < 0.1		3.7 7.9 0.8	< 0.1 0.12 < 0.1	8.2 9.7 2.9 14	6.8 5.9 1.7		0.3 0.64 0.15		9 15 3.3		42 49 45	1.8 0.25	0.11	2.4			0.55 0.73 0.11	1.4		4 6 1.5		1.8 4.8 0.91 10	14	1.3
Fluoranthene         mg/kg         22600           Fluorene         mg/kg         63500		0.2	1.1 <0.1 <0.1	0.1	< 0.1	< 0.1		0.46 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1		13 4.1 3.9	< 0.1	14 0.49 9	0.53		0.96 0.14 0.46		24 2.3 10		71 9.4 16	4.1 0.63	0.25				1.2 0.17 0.55			8.6 1.2 4.4		10 19 2.4	1.5	< 0.1
Naphthalene mg/kg 204.0 Phenanthrene mg/kg 21900		1.1	0.3	< 0.1	< 0.1	< 0.1		< 0.1 0.18	< 0.1 < 0.1		2.9	< 0.1	0.92	2.7		0.83		7.7		16	1.5 2.3	< 0.1 0.52	6.1			0.44 0.72	<0.1 1.1		7.9 6.1		220	3.3	0.19
Pyrene         mg/kg         54200           Coronene         mg/kg         nc           PAH (Sum of 16 - excluding coronene)         mg/kg         nc		4.7 <0.1	0.7 0.7 <0.1	1.9	0.62	< 0.1		0.49 < 2	< 0.1				8.6 11 100			0.82		16		43 55 3.9	2.8	0.25	26 34 250			0.84	1.5 <0.1		5.2 66		140 9.2 450		
PAH (Sum of 17 - including coronene) mg/kg nc PCB		49	5.9		0.0	~~		~ ~	~ 5		JE	12	100					100		580	67	~	200			0.0	16						
PCB 28         mg/kg         nc           PCB 52         mg/kg         nc           PCB 101         mg/kg         nc			<0.1 <0.1 <0.1																	<0.1 <0.1 <0.1							<0.1 <0.1 <0.1						
PCB 118         mg/kg         nc           PCB 138         mg/kg         nc		<0.1 <0.1	<0.1 <0.1																	<0.1 <0.1							<0.1 <0.1						
PCB 153         mg/kg         nc           PCB 180         mg/kg         nc           Total PCBs (7 congeners)         mg/kg         nc		<0.1 <0.1 <1	<0.1 <0.1 <1																	<0.1 <0.1 <1							<0.1 <0.1 <1						
VOCs Dichlorodifluoromethane µg/kg nc	<1.0 <1.0						<1.0 <1.0			<1.0									<1.0 <1.0		<1.0 <1.0			< 1.0 < 1.0				<1.0 <1.0		<1.0			
Chloromethane         μg/kg         nc           Vinyl chloride         μg/kg         nc           Bromomethane         μg/kg         nc	<1.0 <20						<1.0 <1.0 <20 <2.0			<1.0									<1.0 <1.0 <20 <2.0		<1.0 <1.0 <20 <2.0			< 1.0 < 20				<1.0 <1.0 <20 <2.0		<1.0			
Chloroethane         µg/kg         nc           Trichlorofluoromethane         µg/kg         nc	<2.0 <1.0						<1.0			<2.0 <1.0									<1.0		<1.0			< 2.0				<2.0 <1.0 <1.0		<2.0 <1.0 <1.0			
Dichloromethane µg/kg nc trans-1.2-Dichloroethene µg/kg nc	<1.0 ne <1.0						<1.0 ne <1.0			<1.0 ne <1.0									<1.0 ne <1.0		<1.0 ne <1.0			< 1.0 ne < 1.0				ne <1.0		ne <1.0			
1,1-Dichloroethane µg/kg nc	<1.0					1	<1.0			<1.0									<1.0		<1.0			< 1.0				<1.0		<1.0			

Ground Investigation	n		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010	/ PBA 2010/	/ PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/
Report Number			2011	2011	2011	2011	2011	2011	2011	2011 115023	2011	2011	2011	2011	2011 115023	2011	2011	2011 122209	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Lab Re	ər >f		AF68327	AF61341		AF54164	+			AF54168	AF54169	AF54170	AF54171		AF54163	AF68328	AF68440	AF68329	AF68441	AF68330	AF68331	AF68364	AF68332	AF68333		AF57627	AF60256	AF60257	AF60285	AF60259	AF60260	AF60261	AF54184	AF54185	
Date	e		25/01/2011	04/01/2011	04/01/2011	Not known	n Not known	Not known	Not known	Not known	Not known	Not known	Not known	Not known	Not known	25/01/2011	07/02/2011	25/01/2011	07/02/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	25/01/2011	10/12/2010	10/12/2010	10/12/2010	10/12/2010	10/12/2010	10/12/2010	10/12/2010	10/12/2010	Not known	Not known	Not known
Exploatory hole location Zone B Location			TP2016-A B6		Pancras	Pancras	BH2007 Pancras Square	Pancras	Pancras					Pancras	BH2005 Pancras Square		TP2017 Pancras Square	TP2017 Pancras Square	TP2017 Pancras Square	Denerge	TP2017 Pancras Square	Deperso	TP2017 Pancras Square	Deperso	TP2018 Pancras Square	TP2018 Pancras Square	TP2015 Pancras Square	TP2015 Pancras Square	TP2015 Pancras Square	TP2015 Pancras Square	TP2015 Pancras Square	TP2015 Pancras Square	Pancras		TT2003A Pancras Square
			Outside														Outside				Outside		Outsida			Outside							Between	Between	Between
Location on plot/ gas holder number			Outside gasholders 4m				or GH3 interior						gasholders	gasholders	Outside gasholders 1m	gasholders		Outside gasholders 1m	Outside gasholders 1m	Outside gasholders 2m	Outside gasholders 2m	Outside gasholders 2m	Outside gasholders 3m	-	gasholders	gasholders	Outside gasholders 0.3m	-	-	Outside gasholders 2.5m	gasholders			gasholder 3 and A	gasholder 3 and A
Strata			Made Ground	Made	Made Ground	Made	Made	Made	Made Ground	Made	London Clay		Made	Made Ground	Made Ground	Made	Made Ground	Clay	Made Ground	Clay	Clay	Clay	Clay	Clay		Made Ground					Made	Made Ground	Made Ground	Made Ground	Made Ground
cis-1,2-Dichloroethene Bromochloromethane	μg/kg μg/kg	nc	<1.0 <1.0	Ground	Giodila	Giouria	Giodila	Gibund	<1.0 <1.0			<1.0 <1.0	Giouna	Gibunu	Ground	Ground	Made Ground		Made Ground		<1.0 <1.0		<1.0 <1.0	-	Made Ground	< 1.0 < 1.0	Made Ground	Made Ground	Made Ground	<1.0 <1.0		<1.0 <1.0	Ground	Giodila	Giodila
Trichloromethane 1,1,1-Trichloroethane	μg/kg μg/kg	107000 700000	<1.0 <1.0						<1.0 <1.0			<1.0 <1.0									<1.0 <1.0		<1.0 <1.0			< 1.0 < 1.0				<1.0 <1.0		<1.0 <1.0			
Tetrachloromethane 1,1-Dichloropropene	μg/kg μg/kg	3000 nc 28000	<1.0 <1.0 7.8						<1.0 <1.0 10000			<1.0 <1.0 14									<1.0 <1.0		<1.0 <1.0			< 1.0 < 1.0				<1.0 <1.0		<1.0 <1.0 1100			
Benzene 1,2-Dichloroethane Trichloroethene	µg/kg µg/kg µg/kg	700 12000	<2.0						<2.0			<2.0 <1.0									120 <2.0 <1.0		2.2 <2.0 <1.0			56 < 2.0 < 1.0				2000 <2.0 <1.0		<2.0			
1,2-Dichloropropane Dibromomethane	μg/kg μg/kg	nc nc	<1.0 <10						<1.0 <10			<1.0 <10									<1.0 <10		<1.0 <10			< 1.0 < 10				<1.0 <10		<1.0 <10			
Bromodichloromethane cis-1,3-Dichloropropene Toluene	μg/kg μg/kg		<5.0 <10 <1.0						<5.0 <10 13000			<5.0 <10 3.9									<5.0 <10		<5.0 <10 <1.0			< 5.0 < 10 2.4				<5.0 <10		<5.0 <10			
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	µg/kg µg/kg µg/kg	nc	<10				-		<10			<10 <10									<10 <10		<10 <10			< 10				<10 <10		<10 <10			
Tetrachloroethene 1,3-Dichloropropane	μg/kg μg/kg	131000	<1.0 <2.0						<1.0 <2.0			<1.0 <2.0									<1.0 <2.0		<1.0 <2.0			< 10 < 2.0				<1.0 <2.0		<1.0 <2.0		$\square$	
Dibromochloromethane 1,2-Dibromoethane Chlorobenzene	μg/kg μg/kg μα/ka	nc nc 59000	<10 <5.0					1	<10 <5.0 <1.0			<10 <5.0 <1.0									<10 <5.0 <1.0		<10 <5.0 <1.0	<u> </u>		< 10 < 5.0 < 1.0				<10 <5.0 <10		<10 <5.0 <10			
1,1,1,2-Tetrachloroethane Ethylbenzene	µg/kg µg/kg µg/kg	115000	<1.0 <2.0 <1.0						<1.0 <2.0 24000			<1.0 <2.0 2.1									<2.0 91		<1.0 <2.0 <1.0			< 1.0 < 2.0 3.4				<10 <2.0 250		<10 <2.0 77			E
m- & p-Xylene o-Xylene	μg/kg μg/kg	575000 480000	<1.0 <1.0						23000 10000			4.2									31		<1.0 <1.0			2.5 3.8				95 70		37 37			
Styrene Tribromomethane	μg/kg μg/kg	nc nc	<1.0 <10						<1.0 <10			<1.0 <10									<1.0 <10		<1.0 <10			< 1.0 < 1.1				<1.0 <10		<1.0 <10 1.7		Ē	
Isopropylbenzene Bromobenzene 1,2,3-Trichloropropane	µg/kg µg/kg µg/kg		<1.0 <1.0 <50				-	1	1400 <1.0 <50			<1.0 <1.0 <50									8 <1.0 <50		<1.0 <1.0 <50	1		2.2 < 1.0 < 50				<1.0 <1.0 <50		1.7 <1.0 <50		$\square$	<b> </b>
n-Propylbenzene 2-Chlorotoluene	μg/kg μg/kg	nc	<1.0 <1.0						770 <1.0			1.6 <1.0									<1.0 <1.0		<1.0 <1.0			< 1.0 < 1.0				1.8 <1.0		<1.0 <1.0			
1,2,4-Trimethylbenzene 4-Chlorotoluene	μg/kg μg/kg	nc	<1.0 <1.0						13000 <1.0			5.3 <1.0									<1.0 <1.0		<1.0 <1.0			2.2 < 1.0				85 <1.0		39 <1.0			
tert-Butylbenzene 1,3,5-Trimethylbenzene sec-Butylbenzene	µg/kg µg/kg µg/kg	nc	<1.0 <1.0 <1.0				-		<1.0 4800 240			<1.0 4.5 <1.0									<1.0 <1.0 <1.0		<1.0 <1.0 <1.0			< 1.0 < 1.0 < 1.0				<1.0 42 <1.0		<1.0 10 <1.0			
1,3-Dichlorobenzene 4-Isopropyltoluene	μg/kg μg/kg	nc	<1.0				-		<1.0 440			<1.0 <1.0 <1.0									<1.0		<1.0 <1.0 <1.0			< 1.0 < 1.0 < 1.0				<1.0 <1.0 2.9		<1.0 <1.0 <1.0			
1,4-Dichlorobenzene n-Butylbenzene	μg/kg μg/kg	nc	<1.0 <1.0						<1.0 <1.0			<1.0 <1.0									<1.0 <1.0		<1.0 <1.0			< 1.0 < 1.0				<1.0 <1.0		<1.0 <1.0			
1,2-Dichlorobenzene 1,2-Dibromo-3-chloropropane	μg/kg μg/kg		<1.0 <50 <1.0						<1.0 <50			<1.0 <50 <1.0									<1.0 <50 <1.0		<1.0 <50 <1.0			< 1.0 < 50 < 1.0				<1.0 <50 <1.0		<1.0 <50 <1.0			
1,2,4-Trichlorobenzene Hexachlorobutadiene 1,2,3-Trichlorobenzene	µg/kg µg/kg µg/kg	nc	<1.0 <1.0 <2.0						<1.0 <1.0 <2.0			<1.0 <1.0 <2.0									<1.0 <1.0 <2.0		<1.0 <1.0 <2.0			< 1.0 < 1.0 < 2.0				<1.0 <1.0 <2.0		<1.0 <1.0 <2.0			
Tentatively Identified Compounds Benzene, 1-ethenyl-3-methyl	μg/kg μg/kg	nc	None Detected						Detected 3700			None Detected									None Detected		None Detected			None Detected				None Detected	1	None Detected			
Indane 2-Benzothiphene	μg/kg μg/kg	nc																																	
Benzofuran Benzo(B)thiophene Phenol,4Methyl	µg/kg µg/kg µg/kg	nc nc																																	
Benzo(B)Thiophene Acenaphthene	μg/kg mg/kg	nc 84900	1.2						0.71			<0.50									<0.50		<0.50			< 0.50				1		<0.50			
Acenaphthylene Anthracene	mg/kg mg/kg		4.3 6.2						<0.50 <0.50			<0.50 1.1									1.6		1.2 0.94			< 0.50 0.67				1.8 2.1		1 2.5			
Azobenzene Benzo[a]anthracene Benzo[a]ovrene	mg/kg mg/kg mg/kg	90 14	<0.50 22 30						<0.50 <0.50 <0.50			<0.50 4.4 5.6									<0.50 3.8 5.3		<0.50 2.2 2.3			< 0.50 4.1 7.5				<0.50 <0.50 <0.50		<0.50 2.3 2.2			
Benzo[b]fluoranthene Benzo[b,fluoranthene Benzo[k]fluoranthene bis[2-Chloroethoxy]methane	mg/kg mg/kg	100 654	33 17						<0.50 <0.50			5.9 2.8									5.1 2.7		2.8 1.2			8.5 3.8				<0.50 <0.50		2 0.73			
Benzo[k]fluoranthene bis(2-Chloroethoxy)methane	mg/kg mg/kg	nc	11 <0.50						<0.50 <0.50			1.7 <0.50 <0.50									2.1 <0.50 <0.50		0.81 <0.50 <0.50			2.2				<0.50 <0.50		0.9 <0.50			
bis(2-Chloroethyl)ether bis(2-Chloroisopropyl)ether bis(2-Ethylhexyl)phthalate	mg/kg mg/kg mg/kg		<0.50 <0.50 <0.50						<0.50 <0.50 <0.50			<0.50 <0.50 <0.50									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			< 0.50 < 0.50 < 0.50				<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			
Butylbenzylphthalate Carbazole	mg/kg mg/kg	nc	<0.50						<0.50			<0.50 <0.50									<0.50 0.81		<0.50 <0.50			< 0.50				<0.50		<0.50			
Di-n-butylphthalate	mg/kg mg/kg	137 nc	18 <0.50						<0.50 <0.50			2.8 <0.50									3.1 <0.50		1.9 <0.50			4.5 < 0.50				<0.50 <0.50		1.7 <0.50		$\square$	
Di-n-octylphthalate Dibenzo[a,h]anthracene Dibenzofuran	mg/kg mg/kg mg/kg	nc	<0.50 5.5					1	<0.50 <0.50 0.8			<0.50 0.72 <0.50									<0.50 1 <0.50		<0.50 <0.50 <0.50	<u> </u>		< 0.50 1 < 0.50				<0.50 <0.50 3.6		<0.50 <0.50 1.9			
Diethylphthalate Dimethylphthalate	mg/kg mg/kg mg/kg	nc	<0.50 <0.50						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50		<0.50 <0.50 <0.50 3.5			< 0.50 < 0.50 < 0.50 7.5				<0.50 <0.50 6.5		<0.50 <0.50			
Fluoranthene Fluorene	mg/kg mg/kg	22600 63500	22 2.1						<0.50 0.71			6.2 <0.50				-					4.5		<0.50			< 0.50				3.8		4.7 2.4			Ē
Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane	mg/kg mg/kg		<0.50 <0.50 <0.50					-	<0.50 <0.50 <0.50			<0.50 <0.50 <0.50									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			< 0.50 < 0.50 < 0.50				<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			
Indeno[1,2,3-cd]pyrene	mg/kg mg/kg mg/kg	nc	<0.50 15						<0.50 <0.50			<0.50 2.6									<0.50 2.4		<0.50 1			< 0.50 3.7				<0.50 <0.50		<0.50 0.59			
Isophorae N-Nitrosodi-n-propylamine N-Nitrosodimethylamine Naphthalene	mg/kg mg/kg	nc	<0.50 <0.50						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50		<0.50 <0.50			< 0.50 < 0.50				<0.50 <0.50		<0.50 <0.50			$\square$
N-Nitrosodimethylamine Naphthalene	mg/kg mg/kg		<0.50 2.6 <0.50						<0.50			<0.50 <0.50 <0.50									<0.50 2.1 <0.50		<0.50 <0.50 <0.50			< 0.50				<0.50 33 <0.50		<0.50 13 <0.50			
Nitrobenzene Pentachlorophenol	mg/kg mg/kg mg/kg	1220	<0.50 <0.50 3.6					-	<0.50 <0.50 <0.50			<0.50 <0.50 3.5									<0.50 <0.50 3.3		<0.50 <0.50 0.94	-		< 0.50 < 0.50 2.6				<0.50 <0.50 9.7		<0.50 <0.50 6.3			$\models = 1$
Phenanthrene Phenol Pyrene	mg/kg mg/kg	3200 54200	<0.50 21						<0.50 <0.50			<0.50 5.8									<0.50 3.4		<0.50 2.6			< 0.50 6.5				<0.50 4.9		<0.50 3.7			
1,2-Dichlorobenzene 1,2,4-Trichlorobenzene	mg/kg mg/kg	228	<0.50 <0.50						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50		<0.50 <0.50			< 0.50 < 0.50				<0.50		<0.50 <0.50		$\square$	
1,3-Dichlorobenzene 1,4-Dichlorobenzene 2-Chloronaphthalene	mg/kg mg/kg mg/kg		<0.50 <0.50 <0.50					1	<0.50 <0.50 <0.50			<0.50 <0.50 <0.50									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50	<u> </u>	ļ	< 0.50 < 0.50 < 0.50				<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		$\square$	$\models = \downarrow$
2-Chloronaphthalene 2-Chlorophenol 2-Methyl-4,6-dinitrophenol	mg/kg mg/kg mg/kg	nc	<0.50 0.58						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50 <0.50		<0.50 2.3			< 0.50 < 0.50				<0.50 <0.50		<0.50 <0.50			
2-Methylnaphthalene 2-Methylphenol	mg/kg mg/kg	nc	<0.50 <0.50						11 <0.50			<0.50 <0.50				-					<0.50 <0.50		<0.50 <0.50			< 0.50 < 0.50				0.85 <0.50		0.61 <0.50			Ē
2-Nitrophenol	mg/kg mg/kg	nc	<0.50 <0.50 <0.50						<0.50 <0.50 <0.50			<0.50 <0.50 <0.50									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50		<u> </u>	< 0.50 < 0.50 < 0.50				<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			
2,4-Dichlorophenol 2,4-Dimethylphenol 2,4-Dinitrotoluene	mg/kg mg/kg mg/kg	nc	<0.50 <0.50 <0.50					-	<0.50 <0.50 <0.50			<0.50 <0.50 <0.50									<0.50 <0.50 <0.50		<0.50 <0.50 <0.50	-		< 0.50 < 0.50 < 0.50				<0.50 <0.50 <0.50		<0.50 <0.50 <0.50			$\models = 1$
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	mg/kg mg/kg	nc	<0.50 <0.50						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50		<0.50 <0.50			< 0.50 < 0.50				<0.50 <0.50		<0.50 <0.50			
2,6-Dinitrotoluene 3-Nitroaniline 4-Bromophenylphenylether	mg/kg mg/kg	nc	<0.50 <0.50						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50		<0.50 <0.50			< 0.50 < 0.50				<0.50 <0.50		<0.50 <0.50			
4-Chloro-3-methylphenol	mg/kg mg/kg	nc	<0.50 <0.50						<0.50 <0.50			<0.50 <0.50									<0.50 <0.50		<0.50 <0.50			< 0.50 < 0.50				<0.50 <0.50		<0.50 <0.50			
4-Chloroaniline	mg/kg	nc	<0.50	I	1	1	1	1	<0.50	I		<0.50			I			I		1	<0.50	1	<0.50	1	1	< 0.50	1	1	1	<0.50	1	<0.50	1		I

	-		_	-	-	-	-	-																									1		
Ground Investigation	1		PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/					PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/		PBA 2010/             010/	PBA 2010/										
			2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	PBA 2010/ 2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Report Number	r		122209	133346	133346	115023	115023	115023	115023	115023	115023	115023	115023	115023	115023	122209	122211	122209	122211	122209	122209	122210	122209	122209	121783	121783	121863	121863	121864	121863	121863	121863	115023	115023	115023
Let De			AF68327	AF61341	4504040	AF54164	AF54165	4554400	AF54167	1554400	AF54169	AF54170	AF54171	4554470	AF54163	1500000	AF68440	AF68329	AF68441	AF68330	AF68331	AF68364	AF68332	AF68333	AF57626	AF57627	4500050	4500057	AF60285	AF60259	AF60260	AF60261	AF54184	AF54185	AF54187
Lab Re	r																										AF60256	AF60257				AF60261	AF54184	AF54185	AF54187
Date	e																				25/01/2011		25/01/2011 TP2017							10/12/2010		10/12/2010			
Exploatory hole location	1		B6	Pancras					Pancras					Pancras		Pancras		Pancras	Pancras	Descurre				Pancras               as	Pancras										
Zone B Location	ו		Вб	Square	Square		Square	Square	Square	Square		Square	Square	Square	Square	Square	Square	Square	Square	Square	Pancras Square	Square	Pancras Square	Square	Square	Square	Square	Square	Square	Square	Square	Square	Square	Square	Square
																																	Between	Between	Between
Location on plot/ gas holder number	r		Outside gasholders	Outside	Outside gasholders		GH3 interior	GH3 interior	GH3 interior	GH3 interior	GH3 interior	Outside	Outside			Outside			Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	Outside gasholders	gasholder 3	gasholder 3	gasholder 3
			gasiloideis	gasnoiuers	gasnoiders							gastioluers	gastioluers	gasiloideis	gasiloideis	yasholders	gastioluers	gasiloideis	gastioluers	gastioluers	gasiloideis	gasilolueis	gasiloideis	gasilolueis	gasiloiders	gastiolders	gastioluers	gasnoiders	gasnoiders	gastiolders	gasiloideis	gastioluers	and A	and A	and A
Depth (m)	)		4m	0.3m	5m	0.3m	3m	6m	8m	9m	11m	1m	2m	6m	1m	0.3m	0.3m	1m	1m	2m	2m	2m	3m	4m	0.5m	1.2m	0.3m	1m	1.5m	2.5m	3.5m	4m/ 4.5 - 5?	1m	1.5m	0.5m
				Made	Marti	Made	Made	Marti	Mark	Mada	Landar Of		Made	Made	Made			01		01	0	01	01	01							Mada		14.4		Mark
Strata	a		Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	London Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Clay	Made Ground	Clay	Clay	Clay	Clay	Clay	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground	Made Ground					
4-Chlorophenylphenylether	mg/kg		< 0.50						<0.50			< 0.50									<0.50		<0.50			< 0.50				<0.50		<0.50			
4-Methylphenol	mg/kg		<0.50						< 0.50			< 0.50									<0.50		<0.50			< 0.50				<0.50		<0.50		<u>ا</u> ــــــــــــــــــــــــــــــــــــ	<u> </u>
4-Nitroaniline ethyl-methyl benzenes	mg/kg								<0.50 900			<0.50																						┥────┤	t
Tentatively Identified Compounds	mg/kg mg/kg		None Detected		1	-	1	1	900			Not detected									None Detected	1 1	None Detected			Not detected				Not detected		Not detected		i−−−−−−]	<u> </u>
Benzofuran	mg/kg		None Detected	-	1	-						NOT DETECTED									None Detected		None Detected			NOT DETECTED				NOT DETECTED		Not detected		<b>┌───</b> †	
biphenyl	mg/kg								1 1								1					1 1												$\square$	
1-methylnahthalene	mg/kg	nc																																	
1-methylnaphthalene	mg/kg																																		<b>↓</b>
Indene	mg/kg																																	<b>↓</b>	<b>↓</b>
2-benzothiophene Cinnamaldehde	mg/kg mg/kg	nc																																┢────┤	t
Biphenyl	mg/kg				1	-	1	1	<del>   </del>																									i−−−−−−]	ii
naphtho[2,3-B]thiophene	mg/kg																																		
PCBs as Aroclor 1242	mg/kg	nc	<1						<1			<1						1			<1	1 1	<1			<1				<1.0		<1.0		$\square$	
2-sec-Butyl-4,6-dinitrophenol	mg/kg	nc																							< 0.2										í l
4-Chloro-3-methylphenol	mg/kg	nc																							< 0.2										L
2-Chlorophenol	mg/kg																								< 0.2									┥────┤	t
2,4-Dichlorophenol 2,6-Dichlorophenol	mg/kg mg/kg				-																				< 0.2									++	t
2,4-Dimethylphenol	mg/kg																								< 0.2									<b>├───</b>	
2,4-Dinitrophenol	mg/kg	nc							1 1													1 1			< 0.2									+	
2-Methyl-4.6-dinitrophenol	mg/kg																								< 0.2										
2-Methylphenol	mg/kg	nc																							< 0.2										
2-Methylphenol 3-Methylphenol 4-Methylphenol	mg/kg								<u> </u>																< 0.2										
4-Methylphenol	mg/kg			l	+		l	I	<b>├</b> ──┤													<b>↓</b>			< 0.2								l	┥────┤	←───┤
2-Nitrophenol	mg/kg mg/kg	nc							<b>├</b> ──-																< 0.2									<del>ا</del> ــــــــــــــــــــــــــــــــــــ	<u> </u>
4-Nitrophenol Pentachlorophenol	mg/kg mg/kg			+	+	+	1	l	<del>  − −  </del>								l				l				< 0.2									<del>ا ا ا</del>	<u>—</u>
Phenol	mg/kg			1	1	1	1	1									1				1				< 0.2		1						1	$ \longrightarrow $	
2,3,4,5-Tetrachlorophenol	mg/kg			i	1	1	İ	i –	i i						1		i	i i		İ	i	1 1		i i	< 0.2		İ		i i				1	-	
2,3,4,6-Tetrachlorophenol	mg/kg	3900																							< 0.2										
2,3,5,6-Tetrachlorophenol	mg/kg																								< 0.2										
2,3,4-Trichlorophenol	mg/kg																								< 0.2										
2,3,5-Trichlorophenol	mg/kg			l	+		l	I	<b>├</b> ──┤													<b>↓</b>			< 0.2								l	┥────┤	<b>⊢</b>
2,3,6-Trichlorophenol 2,4,5-Trichlorophenol	mg/kg mg/kg								<b>├</b> ──-																< 0.2									<del>ا</del> ــــــــــــــــــــــــــــــــــــ	<u> </u>
2,4,5-Trichlorophenol	mg/kg mg/kg			+	+	+	1	l	<del>  − −  </del>								l				l				< 0.2									<del>ا ا ا</del>	<u>—</u>
	mg/kg	nc		1	1																				< 0.2									$\longrightarrow$	
		110		1	1	1	1	1									l I	1		l	1	1 1												(	
	Indicates w	here the data exceeds the	e sc	1																		1											1	$\square$	

**Groundwater Screening Tables D3** 

REP002 | Issue 4 | 13 July 2011

J/2/16000/216066 KXC B3 REMEDIATION SERVICES/4 INTERNAL PROJECT DATA(4-03 ARUP REPORTS)/02 B3 ERP/03 ISSUE 4IISSUE4 REP002 ZONE B ERP B3 AMENDMENT REPORT 13JUL11.DOCX

King's Cross Central Zones B and E Earthworks & Remediation Plan

er	Concentration e	exceeds the as	sessment criteria															
nc = no criteria																		
Ground Investigation				Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	Oscar Faber	White Young Green
Lab Ref																		
Date samples collected				W06903	W06904	W06905	W06913	W08081	W07495	W08080	W06906	W06907	W06908	W06909	W06910	W06911	W06912	WYG11814
Exploratory Hole Location				18.03.91 Not known	18.03.91 Not known	18.03.91 Not known	19.03.91 TP20	18.03.91 TP12	18.03.91 BH4A	18.03.91 BH2	18.03.91 Not known	18.03.91 Not known	18/03/1991 Not known	19/03/1991 Not known	19/03/1991 Not known	19/03/1991 Not known	18/03/1991 TP2	16/07/1999 BH106
Depth (m)				Surface	4.5	7.0	1120	8.0	2.5	9.0	Surface	4.5	8.0	Surface	7.0	14.0	3.3	0.9
Location				Inside gasholder 3	Inside gasholder 3	Inside gasholder 3	B3 (inside GH9)	On B1 and B3 boundary (inside GH9)	B3 (inside GH9)	Pancras Square	Gas holder 8	Gas holder 8	Gas holder 8	Gas holder 10	Gas holder 10	Gas holder 10	B5	Inside GH1 B1
																		51
	Screening Criteria	Units	Standard	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data
Inorganics																		
Arsenic	10	ug/l	UK DWS	< 5	< 5	9	150	66	1350	< 5	< 5	< 5	< 5	< 5	< 5	< 5	157	0.026
Cadmium	5	ug/l	UK DWS	1	< 1	1	2	< 2	510	2	< 1	< 1	2	< 1	< 1	< 1	< 1	< 0.001
Chromium Copper	50 2000	ug/l ug/l	UK DWS UK DWS	-														< 0.01 < 0.005
Lead	2000	ug/l	UK DWS	530	690	920	3300	238	830000	150	550	770	< 20	< 20	< 20	< 20	1200	< 0.005
Mercury	1	ug/l	UK DWS	23	1.4	0.8	14	4	210	4.3	0.8	0.5	< 0.5	< 0.5	< 0.5	0.9	8	< 0.00005
Nickel	50	ug/l	UK DWS															< 0.005
Selenium	10	ug/l	UK DWS															0.014
Zinc	5000	ug/l	UK DWS	-														< 0.005
Miscellaneous Alkalinity	nc	mg CaCO3 I-1	nc															
Chloride	nc	mg/l	nc	13	14	14		15	80	277	9	14	10	20	20	20	29	
Sulphate as SO4	250	mg/l	UK DWS	6	2	1	307	195	104	1504	5	6	1	4	3	3	354	280
Cyanide total	0.5	mg/l	UK DWS	0.6	1.9	1.4	0.1	3.6	5	< 0.5	1.2	0.9	0.9	0.3	0.3	0.2	6.4	3
Cyanide free	0.001	mg/l	FEQS															
Thiocyanate	0.17	mg/l	DIV	< 1	<1	<1	< 1	< 1	4.4	13.6	< 1	< 1	< 1	< 1	< 1	< 1	3.1	
Hardness	nc 0.39	mg/l	UK DWS	2	3.4	3.4	3.3	0.24	32	0.65	2.9	3.8	4.1	6.5	7	12	51	
Ammoniacal Nitrogen as N Phenol	0.03	mg/l	UK DWS	2	3.4	3.4	3.3	0.24	32	0.05	2.9	3.0	4.1	0.0	/	12	51	
Total Organic Carbon	nc																	23
pH	nc	pH units	nc	7	7.6	7.7	8.6	7.4	7.4	7.1	7.5	7.6	7.6	7.8	7.6	7.6	9.4	8.3
Electrical conductivity	nc	μS cm-1	nc	425	495	500	1000	748	1358	3510	380	290	470	375	380	380	930	1000
Total phenol	0.0005	mg/l	UK DWS	0.1	0.07	0.08	< 0.05	< 0.5	< 0.5	15.2	< 0.05	< 0.05	0.2	0.08	< 0.05	0.07	0.6	ND
Sulphide (H2S)	0.00025	mg/l	FEQS	0.2	0.2	0.2	0.4	< 0.05	23	< 0.05	0.2	0.8	1	0.2	0.2	0.2	0.2	
PAH Acenaphthene	2.57	ma/l	DIV															0.003
Acenaphthene	4.01	mg/l	DIV	-														<0.003
Anthracene	0.00002	mg/l	FEQS					1			1					1		0.001
Benzo(a)anthracene	0.001	mg/l	DIV															<0.001
Benzo(a)pyrene	0.00001	mg/l	UK DWS															<0.001
Benzo(b)fluoranthene	0.017	mg/l	DIV															< 0.001
Benzo(k)fluoranthene	0.00036	mg/l	DIV															< 0.001
Benzo(g,h,i)perylene Chrysene	0.00018	mg/l mg/l	DIV	-				+			+					+		<0.001 <0.001
Dibenzo(a,h)anthracene	0.00012	mg/l	DIV															<0.001
Fluoranthene	0.000002	mg/l	FEQS															0.002
Fluorene	nc	mg/l	nc															0.002
Indeno(1,2,3-c,d)pyrene	0.0000036	mg/l	DIV															<0.001
Naphthalene	0.01	mg/l	FEQS															0.13
Phenanthrene Burene	0.03	mg/l	DIV															0.006
Pyrene Total of 16 PAH	0.106 nc	mg/l mg/l	DIV nc															0.001 0.145
Coal tars	nc	mg/l	nc	11	< 10	< 10	27	< 10	9030	< 10	< 10	< 10	< 10	< 10	< 10	< 10	17	0.140
Mineral oils	nc	mg/l	nc	< 10	< 10	< 10	< 10	15	1010	31	< 10	12	13	21	13	18	< 10	1
Hydrocarbon oils	nc	mg/l	nc															<0.1
Toluene extractable matter	nc	mg/l	nc	18	12	12	34	24	11150	58	< 10	15	14	23	14	20	21	

	Concentration			1	1	1	1	1		1	
er	Concentration e	exceeds the as	sessment criteria								
nc = no criteria											
Ground Investigation				White Young Green	White Young Green	White Young Green	White Young Green	White Young Green	White Young Green	White Young Green	Whit G
Lab Ref				WYG11815	WYG11809	WYG1181	WYG118110	WYG118111	WYG11808	WYG118113	WYC
Date samples collected				16/07/1999	16/07/1999	20/07/1999	20/07/1999	20/07/1999	20/07/1999	20/07/1999	20/0
Exploratory Hole Location				BH107	BH102	BH104	BH102C	BH103	BH101	BH105A	SA
				2.4	0.9	1.0	2.03	2.5	0.79	0.52	- SA
Depth (m)				Inside GHB	Outside gasholders	Inside GH9	Outside gasholders	Outside gasholders	Outside gasholders	Inside GHA	O
Location				B1	B1	B3	B5	Between B5 and B6	Pancras Square	Pancras Square	Pancra
	Screening Criteria	Units	Standard	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Historical data	Histo
Inorganics											
Arsenic	10	ug/l	UK DWS	0.026	0.023	0.028	0.0031	0.032	0.014	0.037	0
Cadmium	5	ug/l	UK DWS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<0.001	< 0.001	<
Chromium	50	ug/l	UK DWS	0.027	< 0.01	< 0.01	0.03	0.037	< 0.01	<0.01	
Copper	2000	ug/l	UK DWS		< 0.005	< 0.005	0.005	< 0.005	< 0.005	0.005	0
Lead	25	ug/l	UK DWS	< 0.01	< 0.01	< 0.01	<0.01	0.013	<0.01	<0.01	<
Mercury	1	ug/l	UK DWS	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	<0.00005	< 0.00005	< 0
Nickel	50	ug/l	UK DWS	0.006	< 0.005	< 0.005	0.013	0.011	<0.005	0.012	<
Selenium	10	ug/l	UK DWS	< 0.01	< 0.01	< 0.01	<0.01	<0.01	<0.01	<0.01	<
Zinc	5000	ug/l	UK DWS	< 0.005	< 0.005	< 0.005	0.007	0.015	0.006	< 0.005	<
Miscellaneous											
Alkalinity	nc	mg CaCO3 I-1	nc								
Chloride	nc	mg/l	nc								
Sulphate as SO4	250	mg/l	UK DWS	1500	250	290	2100	2900	270	420	1
Cyanide total	0.5	mg/l	UK DWS	0.19	0.27	1.4	0.68	65	0.44	2	
Cyanide free	0.001	mg/l	FEQS								
Thiocyanate	0.17	mg/l	DIV								
Hardness	nc										
Ammoniacal Nitrogen as N	0.39	mg/l	UK DWS								
Phenol	0.03	Ĭ									
Total Organic Carbon	nc			12	17	28	20	54	10	26	1
Hq	nc	pH units	nc	7.2	7.9	7.2	6.6	7.2	7.5	7.3	
Electrical conductivity	nc	µS cm-1	nc	2500	1200	1500	3400	4900	1200	980	1
Total phenol	0.0005	mg/l	UK DWS	0.18	ND	0.032	0.315	103.74	0.106	15.704	
Sulphide (H2S)	0.00025	mg/l	FEQS								1
РАН		g,:									
Acenaphthene	2.57	mg/l	DIV	0.003	0.001	< 0.001	0.002	0.05	0.002	0.02	0
Acenaphthylene	4.01	mg/l	DIV	0.003	<0.001	<0.001	< 0.001	0.3	<0.001	0.02	0
Anthracene	0.00002	mg/l	FEQS	0.008	<0.001	<0.001	0.005	0.15	0.003	0.031	0
Benzo(a)anthracene	0.001	mg/l	DIV	< 0.001	<0.001	0.002	< 0.001	0.021	<0.001	< 0.001	<
Benzo(a)pyrene	0.00001	mg/l	UK DWS	< 0.001	<0.001	<0.001	<0.001	0.059	<0.001	0.014	<
Benzo(b)fluoranthene	0.017	mg/l	DIV	<0.001	<0.001	<0.001	< 0.001	0.046	<0.001	0.011	<
Benzo(k)fluoranthene	0.00036	mg/l	DIV	< 0.001	<0.001	<0.001	<0.001	0.032	<0.001	0.007	<
Benzo(g,h,i)perylene	0.00018	mg/l	DIV	< 0.001	<0.001	< 0.001	< 0.001	0.03	<0.001	0.008	<
Chrysene	0.0012	mg/l	DIV	<0.001	<0.001	<0.001	< 0.001	0.067	<0.001	0.016	<
Dibenzo(a,h)anthracene	0.00083	mg/l	DIV	< 0.001	<0.001	<0.001	< 0.001	0.007	<0.001	0.002	<
Fluoranthene	0.000002	mg/l	FEQS	0.008	<0.001	< 0.001	0.004	0.2	0.004	0.055	0
Fluorene	nc	mg/l	nc	0.011	< 0.001	< 0.001	0.008	0.15	0.004	0.045	0
Indeno(1,2,3-c,d)pyrene	0.0000036	mg/l	DIV	< 0.001	< 0.001	< 0.001	< 0.001	0.035	< 0.001	0.008	<
Naphthalene	0.01	mg/l	FEQS	0.021	0.003	0.014	0.039	21.5	0.001	1.25	0
Phenanthrene	0.03	mg/l	DIV	0.014	< 0.001	< 0.001	0.012	0.39	0.004	0.096	0
Pyrene	0.106	mg/l	DIV	0.005	< 0.001	< 0.001	0.002	0.15	0.002	0.039	0
Total of 16 PAH	nc	mg/l	nc	0.073	0.004	0.016	0.004	23.23	0.02	1.64	0
Coal tars	nc	mg/l	nc					-	-	-	1
Mineral oils	nc	mg/l	nc							1	1
Hydrocarbon oils	nc	mg/l	nc	7.2	0.5	0.4	4.5	110	4.3	0.8	1
Toluene extractable matter	nc	mg/l	nc								1
					•	•	•	•	•	•	+

Ove Arup & Partners Ltd

Vhite Young Green
VYG118116
20/07/1999
SA7322A
1 02
Outside
gasholders
ncras Square
istorical data
0.000
0.026
< 0.001
0.27
0.006
< 0.01
< 0.00005
< 0.005
< 0.01
<0.005
4500
1500
0.19
10
10
6.9
1400 ND
ND
0.003
0.003
0.003
< 0.000
<0.001
<0.001
< 0.001
<0.001
<0.001
<0.001
0.008
0.011
< 0.001
0.021
0.014
0.005
0.073
3.8
3.8

	Concontration	overade the	assessment criteria	1	1		1	1							1	1		
nc = no criteria	Concentration	exceeds the a	assessment criteria															
Ground Investigation				PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/
				2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Report Number				103364	103364	103364	103364	103364	103364	103364	103364	103364	103364	103364	103364	103364	103364	103364
Lab Ref				AF79816	AF79817	AF79818	AF79819	AF79823	AF79824	AF79825	AF79827	AF79826	AF79813	AF79821	AF79815	AF79814	AF79820	AF79822
Date samples collected																		
				23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011	23/02/2011
Date analysis completed Exploratory Hole Location				08/03/2011 BH2004	08/03/2011 BH2004	08/03/2011 BH2005C	08/03/2011 BH2006	08/03/2011 BH2012	08/03/2011 BH2014	08/03/2011 BH2015	08/03/2011 BH2016	08/03/2011 BH2016	08/03/2011 BH2001	08/03/2011 BH2010	08/03/2011 BH2003	08/03/2011 BH2002	08/03/2011 BH2007	08/03/2011 BH2011
Depth (m)				1.92	1.91	1.23	4.03	4.08	4.28	2.95	3.38	3.39	2.09	2.56	2.03	2.75	4.31	1.13
Standpipe				Deep Inside GH9	Shallow Inside GH9	Outside GHs	Deep Inside GH1	Inside GH3	Inside GH3	Outside GHs	Shallow Inside GH9	Deep Inside GH9	Inside GH12	Outside GHs	Outside GHs	Outside GHs	Inside GH3	Outside GHs
Location				B1	B1		B1								B3	Between B3 &	Pancras	Pancras
				ы	ы	B1	ы	B1	B1	B1	B3	B3	B3	B5	БЗ	B5	Square	Square
	Screening Criteria	Units	Standard	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4	Round 4
Inorganics																		
Arsenic	10	ug/l	UK DWS	7.6	11	1.3	6.9	11	7.7	5.5	8.1	4.2	6.4	8.6	2.9	3.7	11	7.9
Cadmium Chromium	5 50	ug/l ug/l	UK DWS UK DWS	< 0.08	0.083	< 0.08	0.089	< 0.08	0.083 6.5	< 0.08 9.5	< 0.08	< 0.08	< 0.08	0.08	< 0.08	< 0.08	< 0.08 4.5	0.13
Copper	2000	ug/l	UK DWS	2.1	5.5	2.4	3.2	9.1	11	12	9.2	4.8	3	5.6	14	6.8	1.5	3.5
Lead	25 1	ug/l ug/l	UK DWS UK DWS	7.1	19 0.67	< 1 0.31	2.9 0.29	4.1 0.4	1.1 0.37	7.5 0.38	16 < 0.1	13	2.2 0.12	3.1 < 0.1	< 1 0.18	< 1 0.19	< 1 0.46	< 1 0.27
Mercury Nickel	50	ug/i ug/l	UK DWS	7.3	7.9	5.2	7	0.4	7.7	7.5	< 0.1 9.6	8.1	11	< 0.1	8.6	11	13	13
Selenium	10	ug/l	UK DWS	4.5	4.4	6.3	4.7	3.8	13	9.1	2.9	5	5.3	31	13	9.8	4.3	12
Zinc Miscellaneous	5000	ug/l	UK DWS	58	78	15	48	25	56	55	27	27	30	34	54	36	20	50
Alkalinity	nc	mg CaCO3 I-1	nc	190	200	220	130	68	82	270	220	120	97	180	430	270	140	150
Chloride	nc	mg/l	nc	56	49	54	94	55	300	490	70	110	77	250	120	430	54	160
Sulphate as SO4 Cyanide total	250 0.5	mg/l mg/l	UK DWS UK DWS	1200 0.19	1200 0.1	410 < 0.05	1100 0.49	360 2.1	1200 2.9	670 0.21	480 < 0.05	580 < 0.05	700	720	1200 0.06	660 0.26	340 3	1100 2.2
Cyanide free	0.001	mg/l	FEQS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thiocyanate	0.17	mg/l	DIV	< 0.5	< 0.5	< 0.5	< 0.5	0.6	6.2	< 0.5	< 0.5	< 0.5	< 0.5	4.9	< 0.5	3.2	1	5.2
Ammoniacal Nitrogen as N	0.39 nc	mg/l pH units	UK DWS nc	2 7.4	0.78	2.3 7.6	3.3 7.6	3	<u>55</u> 9.3	7.7	3.3 8	4.2 8.1	5.9 9.1	8.6 8.4	0.4	3.9 7.5	3.1 11.6	13 8.1
Electrical conductivity	nc	μS cm-1	nc	2300	2400	1200	2400	1600	3000	3000	1500	1600	1500	2300	3000	2900	1900	2700
PAH							1.0						1.0					1.0
Acenaphthene Acenaphthylene	2570 4010	ug/l ug/l	DIV	< 0.1	< 0.1	< 0.1	1.3 0.1	1.4	6.9 36	< 0.1	< 0.1	< 0.1	1.6 0.2	0.2	< 0.1	< 0.1	2.1	4.3 6.1
Anthracene	0.1	ug/l	FEQS	< 0.1	< 0.1	< 0.1	0.1	0.2	14	< 0.1	< 0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1	0.5	0.4
Benzo(a)anthracene	1	ug/l	DIV	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.9	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene Benzo(b)fluoranthene	0.01	ug/l ug/l	UK DWS DIV	< 0.1	< 0.1	< 0.1	< 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(k)fluoranthene	0.36	ug/l	DIV	< 0.1	< 0.1	< 0.1	< 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(g,h,i)perylene	0.18	ug/l	DIV	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1 0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1 0.1	< 0.1	< 0.1	< 0.1	< 0.1 < 0.1
Chrysene Dibenzo(a,h)anthracene	0.83	ug/l ug/l	DIV	< 0.1	< 0.1	< 0.1	< 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	0.1	ug/l	FEQS	< 0.1	0.3	< 0.1	0.7	0.1	1.8	< 0.1	< 0.1	< 0.1	0.4	0.4	< 0.1	< 0.1	0.2	1.8
Fluorene Indeno(1,2,3-c,d)pyrene	nc 0.0036	ug/l ug/l	nc DIV	< 0.1	< 0.1	< 0.1	0.7	0.2	31 < 0.1	< 0.1	< 0.1	< 0.1	0.8	0.3	< 0.1	< 0.1	0.8	9.2 < 0.1
Naphthalene	2.4	ug/l	FEQS	< 0.1	< 0.1	< 0.1	< 0.1	0.5	4000	< 0.1	< 0.1	< 0.1	820	< 0.1	< 0.1	< 0.1	98	0.5
Phenanthrene	30	ug/l	DIV	< 0.1	< 0.1	< 0.1	0.1	0.8	26	< 0.1	< 0.1	0.1	1.6	0.1	< 0.1	< 0.1	1.7	0.5
Pyrene Total of 16 PAH	106 nc	ug/l ug/l	DIV	< 0.1	0.7	< 0.1	0.2	0.3	9.9 4100	< 0.1	< 0.1	0.1	0.3 820	0.3	< 0.1	< 0.1	0.7	0.6 23
Coronene	nc	ug/l	nc															
Phenol	20			-														
Phenol (total) TPH	nc	ug/l	nc															
ТРН	10	ug/l	UK DWS	65	< 10	< 10	150	220	44000	< 10	< 10	< 10	2600	< 10	< 10	<10	1400	530
BTEX Benzene	1	ug/l	UK DWS	<0.1	<0.1	<0.1	<0.1	0.5	21000	<0.1	<0.1	<0.1	25	<0.1	<0.1	<0.1	300	0.6
Ethylbenzene	20	ug/l	FEQS	<0.1	<0.1	<0.1	<0.1	0.5	37	<0.1	<0.1	<0.1	0.7	<0.1	<0.1	<0.1	0.9	2.1
Toluene	50	ug/l	FEQS	<0.1	<0.1	<0.1	<0.1	0.4	230	<0.1	<0.1	<0.1	1.8	<0.1	<0.1	<0.1	5.6	2.6
m- & p-Xylene o-Xylene	nc	ug/l ug/l	nc	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	0.5	200 3100	<0.1 <0.1	<0.1 <0.1	<0.1	0.7	<0.1	<0.1 <0.1	<0.1	7.1 27	1.6 <0.1
VOC																		
2-sec-Butyl-4,6-dinitrophenol	nc	ug/l	nc nc	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002 < 0.0002
4-chloro-3-methylphenol 2-chlorophenol	nc nc	ug/l ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,4-Dichlorophenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,6-Dichlorophenol	nc	ug/l	nc	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002
2,4-Dimethylphenol 2,4-Dinitrophenol	nc	ug/l ug/l	nc nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2-Methyl-4,6-dinitrophenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2-Methylphenol 3-Methylphenol	nc	ug/l ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002
4-Methylphenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2-Nitrophenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
4-Nitrophenol Pentrachlorophenol	nc nc	ug/l ug/l	nc	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002
Phenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,3,4,5-Tetrachlorophenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,3,4,6-Tetrachlorophenol 2,3,5,6-Tetrachlorophenol	nc	ug/l ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002	< 0.0002 < 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002 < 0.0002
		ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,3,4-Trichlorophenol	nc										1	0.0000	0.0000	0.0000	0.0000			0.0000
2,3,4-Trichlorophenol 2,3,5-Trichlorophenol	nc	ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,3,4-Trichlorophenol 2,3,5-Trichlorophenol 2,3,6-Trichlorophenol	nc nc	ug/l ug/l	nc	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
2,3,4-Trichlorophenol 2,3,5-Trichlorophenol	nc	ug/l																

### Ove Arup & Partners Ltd

	Concentration	avcoods the a	assessment criteria	T	1	[	1			1	1		1	1		·,
nc = no criteria	CONCENTRATION		Coologine in Cillend						<u> </u>							┝───┤
Ground Investigation				PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011	PBA 2010/ 2011
Report Number				122478	122478	122478	122478	122478	122478	122478	122478	122478	122478	122478	122478	122478
Lab Ref				AF75878	AF75879	AF75880	AF75884	AF75885	AF75886	AF75875	AF75877	AF75876	AF75882	AF75881	AF75883	AF75887
Date samples collected				10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011	10/02/2011
Date analysis completed				24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011	24/02/2011
Exploratory Hole Location				BH2004	BH2004	BH2006	BH2012	BH2014	BH2015	BH2001	BH2003	BH2002	BH2010	BH2007	BH2011	BH2005C
Depth (m)				2.04	2.11	4.07	4.11	4.25	2.97	2.09	3.35	3.10	2.88	4.32	1.20	2.14
Standpipe									0.1.1.011			0.1.1.011			0.1.1.011	
Location				Inside GH9 B1	Inside GH9 B1	Inside GH1 B1	Inside GH3 B1	Inside GH3 B1	Outside GHs B1	Inside GH12 B3	Outside GHs B3	Outside GHs B3	Outside GHs B5	Inside GH3 Pancras Square	Outside GHs Pancras Square	Outside GHs Pancras Square
	Screening Criteria	Units	Standard	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3	Round 3
Inorganics																
Arsenic	10	ug/l	UK DWS	5.2	10	7.9	8.4	7	6.8	6.7	2.9	6.6	7.9	9.1	13	2.6
Cadmium Chromium	5 50	ug/l	UK DWS UK DWS	0.11	0.09	0.095 <1.0	<0.080 <1.0	<0.080 3.2	<0.080	0.14	<0.080	0.15	<0.080 6.9	<0.080 <1.0	0.22 2.6	0.11 3.2
Copper	2000	ug/l ug/l	UK DWS	1.8	9.7	4.3	1.6	<u>3.2</u> 9.4	19	<1.0 6.4	11	13	16	1.9	4.5	5.5
Lead	25	ug/l	UK DWS	120	65	1.1	<1.0	<1.0	26	17	<1.0	2.3	44	<1.0	2.7	12
Mercury	1	ug/l	UK DWS	<0.50	<0.50	<0.50	1.5	0.93	0.95	<0.50	<0.50	<0.50	1.2	0.51	1.8	<0.50
Nickel	50	ug/l	UK DWS	8.5	7.9	5.1	11	7.2	6.7	12	6.3	26	13	12	11	8.7
Selenium	10	ug/l	UK DWS	3.6	2.7	5.5	4.3	19	9.5	5.5	9.4	13	16	4.4	18	4.2
Zinc	5000	ug/l	UK DWS	130	120	67	15	58	61	57	84	140	62	18	48	36
Miscellaneous		mg CaCO3 I-1		140	150	82	82	87	230	53	370	700	440	110	130	300
Alkalinity Chloride	nc	mg/l	nc	54	53	94	50	330	510	70	82	730 1100	250	110 53	130	300
Sulphate as SO4	250	mg/l	UK DWS	1300	1300	1100	350	1300	690	640	1400	1500	670	360	1100	640
Cyanide total	0.5	mg/l	UK DWS	0.37	0.2	0.59	2.7	1.9	< 0.05	1.8	0.06	0.06	0.17	2.7	3.6	< 0.05
Cyanide free	0.001	mg/l	FEQS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thiocyanate	0.17	mg/l	DIV	< 0.5	< 0.5	< 0.5	1.1	6.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	15	< 0.5
Ammoniacal Nitrogen as N	0.39	mg/l	UK DWS	2.1	0.65	3.4	6.1	64	2.3	6.8	0.39	6	4.3	3.5	19	3.7
pH	nc	pH units	nc	7.4 2500	7.5 2500	7.8 2400	11.7 1900	8.5	7.6 3100	9.3 1600	7.3 2900	7 5900	7.4 2700	11.7 2000	7.6 2800	7.5 1700
Electrical conductivity PAH	nc	µS cm-1	nc					3400								
Acenaphthene	2570	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	7.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	4.3	<0.1
Acenaphthylene	4010	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	36	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	23	<0.1
Anthracene	0.1	ug/l	FEQS DIV	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	7.4 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	0.4 <0.1	<0.1 <0.1
Benzo(a)anthracene Benzo(a)pyrene	0.01	ug/l ug/l	UK DWS	<0.1	<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	17	ug/l	DIV	<0.1	<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(k)fluoranthene	0.36	ug/l	DIV	<0.1	<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(g,h,i)perylene	0.18	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	1.2	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	0.83	ug/l	DIV	<0.1	<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 Fluorene	0.1 nc	ug/l ug/l	FEQS nc	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	2.3 27	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	0.9 18	<0.1 <0.1
Indeno(1,2,3-c,d)pyrene	0.0036	ug/l	DIV	<0.1	<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	2.4	ug/l	FEQS	200	<0.1	<0.1	220	3800	0.6	860	<0.1	<0.1	<0.1	90	1200	1.5
Phenanthrene	30	ug/l	DIV	<0.1	<0.1	<0.1	0.8	26	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	21	<0.1
Pyrene	106	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total of 16 PAH	nc	ug/l	nc	200	<2	<2	220	3900	<2	860	<2	<2	<2	90	1300	<2
Coronene Phenol	nc	ug/l	nc	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Phenol (total)	nc	ug/l	nc	< 0.03	< 0.03	< 0.03	0.09	0.42	< 0.03	0.2	< 0.03	< 0.03	< 0.03	0.14	0.05	< 0.03
TPH	10	115.0		400	.10	.10	1100	42000	.10	0100	.10	.10	.10	710	2200	.10
TPH	10	ug/l	UK DWS	490	<10	<10	1100	43000	<10	2100	<10	<10	<10	710	3300	<10
BTEX Benzene	1	ug/l	UK DWS	< 1	< 1	< 1	360	24000	< 1	170	< 1	<1	<1	460	160	< 1
Ethylbenzene	20	ug/i ug/l	FEQS	<1	<1	< 1	2.1	110	< 1	33	<1	<1	<1	2.5	< 1	<1
Toluene	50	ug/l	FEQS	<1	<1	<1	61	4300	<1	110	<1	<1	<1	51	26	<1
m- & p-Xylene	nc	ug/l	nc	<1	<1	< 1	11	500	< 1	33	<1	<1	<1	6.8	8.4	<1
o-Xylene	nc	ug/l	nc	< 1	< 1	< 1	13	270	< 1	20	< 1	< 1	< 1	12	9.3	< 1
																·

,																		
no – no critoria	Concentrat	tion exceeds the	ne assessment criteria															
nc = no criteria				PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/
Ground Investigation				2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Report Number				122318	122318	122318	122318	122318	122318	122318	122318	122318	122318	122318	122318	122318	122318	122318
Lab Ref				AF71315	AF71316	AF71325	AF71317	AF71320	AF71319	AF71323	AF71324	AF71326	AF71327	AF71313	AF71314	AF71318	AF71321	AF71322
Date samples collected				02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011
Date analysis completed				14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011
Exploratory Hole Location Depth (m)				BH2004 2.0	BH2004 2.0	BH2006 4.0	BH2012 4.0	BH2014 4.1	BH2015 3.0	BH2016 2.80	BH2016 2.78	BH2003 1.4	BH2001 2.1	BH2002 3.0	BH2010 2.7	BH2011 1.2	BH2007 4.2	BH2005C 1.3
Standpipe				Deep	Shallow	Deep				Deep	Shallow							
Location				Inside GH9	Inside GH9	Inside GH1	Inside GH3	Inside GH3	Outside GHs	Inside GH9	Inside GH9	Outside GHs	Inside GH12	Outside GHs	Outside GHs	Outside GHs	Inside GH3	Outside GHs
				B1	B1	B1	B1	B1	B1	B3	B3	B3	B3	B3	B5	Pancras Square	Pancras Square	Pancras Square
	Screening Criteria	Units	Standard	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2
Inorganics															-			
Arsenic Cadmium	10 5	ug/l ug/l	UK DWS UK DWS	7 0.12	10 0.11	6.9 0.19	15 0.11	12 0.14	7 0.081	6.9 0.089	9.3 0.13	3.6 0.1	8.6 0.14	8.1 0.13	5 0.08	20 0.31	33 0.13	2.3 0.084
Chromium	50	ug/l	UK DWS	3.3	3.8	2.2	4.8	10	5.9	2	2.6	4	2.4	18	5.9	4.4	2.6	3.1
Copper	2000	ug/l	UK DWS	10	8.9	6.3	3.8	17	11	6	17	15	13	13	11	9	1.4	4.8
Lead Mercury	25 1	ug/l ug/l	UK DWS UK DWS	110 <0.50	76 <0.50	10 <0.50	4 0.76	4.4	6.3 0.91	18 <0.50	33 <0.50	<1.0 <0.50	17 <0.50	1.5 <0.50	17 <0.50	2.8 <0.50	2.5 3.2	4.4 <0.50
Nickel	50	ug/l	UK DWS	6.3	7.5	8.3	14	8.4	4	5.2	8.9	7.6	18	28	8.4	11	13	5.5
Selenium	10	ug/l	UK DWS	5.4	5.1	6.7	4	38	9.6	9.2	3.5	8.9	7.4	15	11	17	4.1	11
Zinc Miscellaneous	5000	ug/l	UK DWS	130	160	120	41	100	59	41	41	87	78	140	58	84	51	41
Alkalinity	nc	mg CaCO3 I-1	nc	170	180	120	420	160	210	110	200	580	170	940	500	180	240	220
Chloride	nc 250	mg/l		69	55	110	63	500	350	97	66	66	68	1100	170	170	89	86
Sulphate as SO4 Cyanide total	250 0.5	mg/l mg/l	UK DWS UK DWS	1400 0.49	1300 0.23	1300 0.73	360 15	1400 2.2	470 0.08	620 0.18	510 0.03	1300 0.08	680 3.6	1500 < 0.05	650 0.08	1400 3.1	540 3.9	560 0.13
Cyanide free	0.001	mg/l	FEQS	< 0.05	< 0.05	< 0.05	0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thiocyanate	0.17	mg/l	DIV UK DWS	< 0.5	< 0.5	< 0.5	1.2	7.3	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	< 0.5	13 14	1.4 5.1	< 0.5
Ammoniacal Nitrogen as N pH	0.39 nc	mg/l pH units	nc	3.4 7.4	0.61	3.9 7.8	2.3 11.6	47 9.5	0.67	3 9.1	3.3 8	0.16 9.1	6.1 9.3	5.9 7.2	3.1 7.6	14 8	5.1	1.6 8.7
Electrical conductivity	nc	μS cm-1	nc	2500	2400	2600	1900	3900	2200	1600	1400	1700	1600	6100	2000	3200	2000	1600
PAH	0570																	
Acenaphthene Acenaphthylene	2570 4010	ug/l ug/l	DIV	1.8 0.4	<0.1 <0.1	0.2	2.2 <0.1	6.2 27	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	1.9 0.5	<0.1 <0.1	<0.1 <0.1	7.3 25	0.8	<0.1 <0.1
Anthracene	0.1	ug/l	FEQS	0.1	<0.1	0.2	0.3	4.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3	0.2	<0.1
Benzo(a)anthracene	1	ug/l	DIV	<0.1	<0.1	<0.1	<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)pyrene Benzo(b)fluoranthene	0.01	ug/l ug/l	UK DWS DIV	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<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(k)fluoranthene	0.36	ug/l	DIV	<0.1	<0.1	<0.1	<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(g,h,i)perylene Chrysene	0.18	ug/l ug/l	DIV	<0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1
Dibenzo(a,h)anthracene	0.83	ug/l	DIV	<0.1	<0.1	<0.1	<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	0.1	ug/l	FEQS	0.6	<0.1	<0.1	<0.1	2.3	<0.1	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	4.4	<0.1	<0.1
Fluorene Indeno(1,2,3-c,d)pyrene	nc 0.0036	ug/l ug/l	nc DIV	0.7	<0.1	0.4	1 <0.1	16 <0.1	<0.1	<0.1 <0.1	<0.1	<0.1 <0.1	1 <0.1	<0.1	<0.1 <0.1	19 <0.1	1.1	<0.1 <0.1
Naphthalene	2.4	ug/l	FEQS	3400	0.9	380	510	3000	<0.1	<0.1	<0.1	<0.1	3600	<0.1	0.5	1200	900	<0.1
Phenanthrene	30	ug/l	DIV	1.1	<0.1	1.5	2.2	16	<0.1	<0.1	<0.1	<0.1	2.7	<0.1	<0.1	21	1.5	<0.1
Pyrene Total of 16 PAH	106 nc	ug/l ug/l	DIV	0.6 3400	<0.1	<0.1 380	<0.1 520	1 3100	<0.1 <2	<0.1 <2	<0.1 <2	<0.1 <2	0.4 3600	<0.1 <2	<0.1 <2	2.6 1300	<0.1 900	<0.1 <2
Coronene	nc	ug/l	nc															
PCB				<1.0	1.0	10	10	<1.0	<1.0	<1.0	<1.0	10	<1.0	.1.0	10	1.0	.1.0	<1.0
PCBs as Aroclor 1242 TPH	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ТРН	10	ug/l	UK DWS	11000	<10	2800	3400	36000	<10	90	<10	<10	13000	<10	<10	4000	6500	<10
Total Aliphatic Hydrocarbons	nc	ug/l	nc	710	<5 <5	<5 2800	<5 3400	<5 36000	<5 <5	<5 90	<5 <5	<5 <5	550 12500	<5 <5	<5 <5	<5 4000	<5 6500	<5 <5
Total Aromatic Hydrocarbons TPH aliphatic >C10-C12	nc	ug/l ug/l	nc	23	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	12500	<0.1	<0.1	<0.1	<0.1	<0.1
TPH aliphatic >C12-C16	nc	ug/l	nc	40	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	30	<0.1	<0.1	<0.1	<0.1	<0.1
TPH aliphatic >C16-C21 TPH aliphatic >C21-C35	nc	ug/l ug/l	nc nc	330 320	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	150 360	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
TPH aliphatic >C35-C44	nc	ug/i ug/i	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	<0.1	<0.1	<0.1
TPH aliphatic >C5-C6	nc	ug/l	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	<0.1	<0.1	<0.1
TPH aliphatic >C6-C8 TPH aliphatic >C8-C10	nc	ug/l ug/l	nc 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	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
TPH aromatic >C10-C12	nc	ug/l	nc	8800	<0.1	1100	1400	11000	<0.1	28	<0.1	<0.1	9100	<0.1	<0.1	2500	2200	<0.1
TPH aromatic >C12-C16	nc	ug/l	nc	220	<0.1	79	140	730	<0.1	21	<0.1	<0.1	180	<0.1	<0.1	320	110	<0.1
TPH aromatic >C16-C21 TPH aromatic >C21-C35	nc nc	ug/l ug/l	nc	27 <0.1	<0.1	<0.1 <0.1	41 <0.1	120 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	17 <0.1	<0.1 <0.1	<0.1 <0.1	130 12	20 <0.1	<0.1 <0.1
TPH aromatic >C35-C44	nc	ug/l	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	<0.1	<0.1	<0.1
TPH aromatic >C5-C7	nc	ug/l	nc	47	<0.1	600	430	7100	<0.1	<0.1	<0.1	<0.1	250	<0.1	<0.1	290	2000	<0.1
TPH aromatic >C7-C8 TPH aromatic >C8-C10	nc	ug/l ug/l	nc nc	130 1000	<0.1	290 760	330 1100	7900 9200	<0.1 <0.1	<0.1 41	<0.1 <0.1	<0.1 <0.1	630 2400	<0.1 <0.1	<0.1 <0.1	160 630	440 1700	<0.1 <0.1
BTEX	no	uyn	ne	1000	<v.1< th=""><th>/00</th><th>1100</th><th>5200</th><th><v.1< th=""><th>41</th><th><v.1< th=""><th><u.1< th=""><th>2400</th><th>&lt;0.1</th><th>&lt;0.1</th><th>030</th><th>1700</th><th><v.1< th=""></v.1<></th></u.1<></th></v.1<></th></v.1<></th></v.1<>	/00	1100	5200	<v.1< th=""><th>41</th><th><v.1< th=""><th><u.1< th=""><th>2400</th><th>&lt;0.1</th><th>&lt;0.1</th><th>030</th><th>1700</th><th><v.1< th=""></v.1<></th></u.1<></th></v.1<></th></v.1<>	41	<v.1< th=""><th><u.1< th=""><th>2400</th><th>&lt;0.1</th><th>&lt;0.1</th><th>030</th><th>1700</th><th><v.1< th=""></v.1<></th></u.1<></th></v.1<>	<u.1< th=""><th>2400</th><th>&lt;0.1</th><th>&lt;0.1</th><th>030</th><th>1700</th><th><v.1< th=""></v.1<></th></u.1<>	2400	<0.1	<0.1	030	1700	<v.1< th=""></v.1<>
Benzene	1	ug/l	UK DWS	22	<1.0	510	630	6200	<1.0	<1.0	<1.0	<1.0	320	<1.0	<1.0	200	3000	<1.0
Ethylbenzene Toluene	20 50	ug/l ug/l	FEQS FEQS	<1.0 <1.0	<1.0	21 75	36 100	68 3600	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	27 130	<1.0 <1.0	<1.0 <1.0	<1.0 25	75 230	<1.0 <1.0
m- & p-Xylene	nc	ug/l	nc	1.1	<1.0	16	25	780	<1.0	<1.0	<1.0	<1.0	21	<1.0	<1.0	9.7	75	<1.0
o-Xylene	nc	ug/l	nc	<1.0	<1.0	13	19	380	<1.0	1.2	<1.0	<1.0	10	<1.0	<1.0	8.4	52	<1.0
Methyl tert-butylether		ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
· · ·	nc	ug/i					1	1	1									
VOC Dichlorodifluoromethane	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
VOC Dichlorodifluoromethane Chloromethane	nc nc	ug/l ug/l	nc nc	<1.0 <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
VOC Dichlorodifluoromethane Chloromethane Vinyl chloride	nc nc nc	ug/l ug/l ug/l	nc nc nc	<1.0 <1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0
VOC Dichlorodifluoromethane Chloromethane	nc nc	ug/l ug/l	nc nc	<1.0 <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Ove Arup &	Partners Ltd
------------	--------------

Ground Investigation				PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/	PBA 2010/
Report Number				2011	2011	2011 122318	2011	2011 122318	2011	2011	2011 122318	2011 122318	2011 122318	2011	2011 122318	2011 122318	2011 122318	2011 122318
Lab Ref				AF71315	AF71316	AF71325	AF71317	AF71320	AF71319	AF71323	AF71324	AF71326	AF71327	AF71313	AF71314	AF71318	AF71321	AF71322
Date samples collected				02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011	02/02/2011
Date analysis completed				14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011	14/02/2011
Exploratory Hole Location Depth (m)				BH2004 2.0	BH2004 2.0	BH2006 4.0	BH2012 4.0	BH2014 4.1	BH2015 3.0	BH2016 2.80	BH2016 2.78	BH2003 1.4	BH2001 2.1	BH2002 3.0	BH2010 2.7	BH2011 1.2	BH2007 4.2	BH2005C 1.3
Standpipe				Deep Inside GH9	Shallow Inside GH9	Deep Inside GH1	Inside GH3	Inside GH3	Outside GHs	Deep Inside GH9	Shallow Inside GH9	Outside GHs	Inside GH12	Outside GHs	Outside GHs	Outside GHs	Inside GH3	Outside GHs
Location				B1	B1	B1	B1	B1	B1	B3	B3	B3	B3	B3	B5	Pancras Square	Pancras Square	Pancras Square
	Screening									-			-					
Styrene	Criteria	Units ug/l	Standard	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2	Round 2 <1.0
Tribromomethane	nc	ug/l	nc	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Isopropylbenzene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	1.4	<1.0
Bromobenzene 1,2,3-Trichloropropane	nc nc	ug/l ug/l	nc	<1.0	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50	<1.0 <50
n-Propylbenzene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chlorotoluene 1,2,4-Trimethylbenzene	nc nc	ug/l ug/l	nc	<1.0	<1.0 <1.0	<1.0 <1.0	<1.0 2.4	<1.0 50	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 2.4	<1.0 <1.0	<1.0 <1.0	<1.0	<1.0 7.9	<1.0 <1.0
4-Chlorotoluene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	nc	ug/l	nc	<1.0	<1.0 1.3	<1.0	<1.0	<1.0 34	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0	<1.0	<1.0 <1.0
1,3,5-Trimethylbenzene sec-Butylbenzene	nc nc	ug/l ug/l	nc nc	<1.0	<1.0	<1.0 <1.0	1.2 <1.0	34 <1.0	<1.0	<1.0	<1.0	<1.0 <1.0	4.8 <1.0	<1.0 <1.0	<1.0	1.5 <1.0	2.8 <1.0	<1.0
1,3-Dichlorobenzene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-Isopropyltoluene 1,4-Dichlorobenzene	nc nc	ug/l ug/l	nc	<1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0
n-Butylbenzene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane 1,2,4-Trichlorobenzene	nc nc	ug/l ug/l	nc nc	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0	<50 <1.0
Hexachlorobutadiene	nc	ug/l	nc	<1.0	<1.0	<1.0	<1.0	<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-Trichlorobenzene Tentatively Identified Compounds	nc nc	ug/l ug/l	nc	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected	<2.0 None Detected
Azobenzene	nc	ug/l	nc	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	<0.50
bis(2-Chloroethoxy)methane	nc	ug/l	nc	< 0.50	<0.50	<0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bis(2-Chloroethyl)ether bis(2-Chloroisopropyl)ether	nc nc	ug/l ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
bis(2-Ethylhexyl)phthalate	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50
Butylbenzylphthalate Carbazole	nc nc	ug/l ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 1.3	<0.50 53	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 1.5	<0.50 <0.50	<0.50 <0.50	<0.50 23	<0.50 1.5	<0.50 <0.50
Di-n-butylphthalate	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	<0.50	< 0.50	<0.50	<0.50
Di-n-octylphthalate	nc	ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50	<0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50	<0.50 <0.50	<0.50 <0.50	<0.50 23	<0.50	<0.50 <0.50
Dibenzofuran Diethylphthalate	nc nc	ug/l ug/l	nc nc	<0.50	<0.50	<0.50	<0.50	18 <0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dimethylphthalate	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobenzene Hexachlorobutadiene	nc nc	ug/l ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
Hexachlorocyclopentadiene	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachloroethane Indeno[1,2,3-cd]pyrene	nc nc	ug/l ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
Isophorone	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50
N-Nitrosodi-n-propylamine	nc	ug/l	nc	<0.50	<0.50	<0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50
N-Nitrosodimethylamine Nitrobenzene	nc nc	ug/l ug/l	nc nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
Pentachlorophenol	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Phenanthrene Phenol	nc nc	ug/l ug/l	nc	1.1	<0.50 <0.50	1.5 <0.50	2.2 <0.50	16 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	2.7 <0.50	<0.50 <0.50	<0.50 <0.50	21 0.9	1.5 <0.50	<0.50 <0.50
1,2-Dichlorobenzene	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene 1,3-Dichlorobenzene	nc nc	ug/l ug/l	nc nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
1,4-Dichlorobenzene	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-Chloronaphthalene	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-Chlorophenol 2-Methyl-4,6-dinitrophenol	nc nc	ug/l ug/l	nc nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
2-Methylnaphthalene	nc	ug/l	nc	63	<0.50	13	19	160	<0.50	<0.50	<0.50	<0.50	52	<0.50	<0.50	44	29	<0.50
2-Methylphenol 2-Nitroaniline	nc nc	ug/l ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	1.8 <0.50	<0.50 <0.50	<0.50 <0.50
2-Nitrophenol	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,4-Dichlorophenol	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50
2,4-Dimethylphenol 2,4-Dinitrophenol	nc nc	ug/l ug/l	nc nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
2,4,5-Trichlorophenol	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2,4,6-Trichlorophenol 2,6-Dinitrotoluene	nc nc	ug/l ug/l	nc nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
3-Nitroaniline	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
4-Bromophenylphenylether	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	< 0.50
4-Chloro-3-methylphenol 4-Chloroaniline	nc nc	ug/l ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
4-Chlorophenylphenylether	nc	ug/l	nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
4-Methylphenol 4-Nitroaniline	nc	ug/l	nc	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50
4-Nitrophenol	nc nc	ug/l ug/l	nc nc	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-benzothiophene	nc	ug/l	nc			10		190					74			67		[ <b></b> ]
benzofuran indene	nc nc	ug/l ug/l	nc	270		25 180	19 210	740 2100					69 420			60 170	56 320	+
Tentatively Identified Compounds	nc	ug/l	nc		Not detected				Not detected	Not detected	Not detected	Not detected		Not detected	Not detected	1		Not detected

	Concentrat	tion overede th	a accompant oritoria						1			1		
nc = no criteria	Concentrat		ne assessment criteria											
Ground Investigation				PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011	PBA 2011
Report Number				122024	122024	122024	122024	122024	122024	122024	122024	122024	122024	122024
Lab Ref				AF64184	AF64188	AF64183	AF64182	AF64189	AF64180	AF64186	AF64181	AF64185	AF64187	AF64190
Date				13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011
Exploratory Hole Location				BH2006	BH2012	BH2004	BH2004	BH2015	BH2001	BH2010	BH2003	BH2007	BH2011	W1
Depth (mbgl)				5.0	4.6	2.5	3.0	3.2	2.5	3.0	1.8	8.0	5.0	2.5
				Inside GH1	Inside GH3	Inside GH9	Inside GH9	Outside GHs	Inside GH12	Outside GHs	Outside GH's	Inside GH3	Outside GHs	
Location				B1	B1	B1	B1	B1	B3	B5	Pancras Square	Pancras Square	Pancras Square	
	Screening Criteria	Units	Standard	Round 1	Round 1	Round 1	Round 1	Round 1	Round 1	Round 1	Round 1	Round 1	Round 1	Round 1
Inorganics														
Arsenic	10	ug/l	UK DWS	4.4	28	6.1	4.9	5.5	10	3.3	2.8	7.3	1.9	2.6
Cadmium	5	ug/l	UK DWS	0.1	0.16	0.14	0.11	<0.080	0.14	<0.080	<0.080	<0.080	<0.080	0.2
Chromium	50	ug/l	UK DWS	<1.0	6.5	<1.0	2	6.4	<1.0	13	<1.0	1.2	2.9	23
Copper	2000	ug/l	UK DWS	5.2	7.2	3.6	5.9	17	28	5.4	13	20	3.9	<1.0
Lead	25	ug/l	UK DWS	8.4	8	16	40	16	11	<1.0	<1.0	8.4	<1.0	<1.0
Mercury	1	ug/l	UK DWS	<0.50	1.2	0.57	<0.50	<0.50	<0.50	<0.50	<0.50	0.64	<0.50	<0.50
Nickel	50	ug/l	UK DWS	6.8	<1.0	7.6	6.9	8.1	23	7.6	7.3	9.1	11	400
Selenium	10	ug/l	UK DWS	6.2	14	26	3.3	12	8.2	7.7	9.4	7.4	4.7	7
Zinc	5000	ug/l	UK DWS	77	32	82	100	67	46	32	80	62	63	7400
Miscellaneous														
Alkalinity	nc	mg CaCO3 I-1	nc	89	500	200	180	230	120	87	440	160	400	160
Chloride	nc	mg/l	nc	120	280	200	160	520	110	95	130	130	59	64
Sulphate as SO4	250	mg/l	UK DWS	1200	380	1300	1500	740	490	580	1400	680	1000	3100
Cyanide total	0.5	mg/l	UK DWS	0.78	320	0.71	0.65	0.35	8	0.11	0.1	3.6	0.07	0.21
Cyanide free	0.001	mg/l	FEQS	< 0.05	0.34	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Thiocyanate	0.17	mg/l	DIV	< 0.5	7.5	< 0.5	< 0.5	< 0.5	1.6	< 0.5	< 0.5	2.2	< 0.5	0.91
Ammoniacal Nitrogen as N	0.39	mg/l	UK DWS	6.6	46	5.3	2.9	0.27	17	0.93	0.16	16	4.4	< 0.01
pH	nc	pH units	nc	7.7	11.4	7.5	7.6	7.6	8.8	8.9	7.6	11.8	8	5.8
Electrical conductivity PAH	nc	µS cm-1	nc	2800	2400	3400	3500	3600	1700	1900	3100	2400	2600	4100
Acenaphthene	2570	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.6	0.9	54
Acenaphthylene	4010	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	27
Anthracene	0.1	ug/l	FEQS	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	22
Benzo(a)anthracene	1	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	4.9
Benzo(a)pyrene	0.01	ug/l	UK DWS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.9
Benzo(b)fluoranthene	17	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3
Benzo(k)fluoranthene	0.36	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.9
Benzo(g,h,i)perylene	0.18	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	1.2	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3.1
Dibenzo(a,h)anthracene	0.83	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	0.1	ug/l	FEQS	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	27
Fluorene	nc	ug/l	nc	<0.1	0.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1	<0.1	65
Indeno(1,2,3-c,d)pyrene	0.0036	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	2.4	ug/l	FEQS	37	2800	730	5500	1.4	76	<0.1	<0.1	1200	1	8400
Phenanthrene	30	ug/l	DIV	<0.1	2.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.9	<0.1	120
Pyrene	106	ug/l	DIV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	18
Total of 16 PAH	nc	ug/l	nc	37	2800	730	5500	<2	76	<2	<2	1200	<2	8700
Coronene	nc	ug/l	nc	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB				<u> </u>										<u> </u>
PCBs as Aroclor 1242 TPH	nc	ug/l	nc	<u> </u>										<u> </u>
ТРН	10	ug/l	UK DWS	1300	3900	2800	310000	<10	1000	<10	<10	5700	170	490000
BTEX	10	ug/i		1300	2900	2000	310000	<10	1000	<10	<10	5700	170	490000
Benzene	1	ug/l	UK DWS	910	2500	1500	440	< 1	440	< 1	< 1	3700	< 1	
Ethylbenzene	20	ug/l	FEQS	65	510	57	3.8	<1	29	<1	<1	380	<1	
Toluene	50	ug/l	FEQS	110	970	300	190	<1	140	<1	<1	620	<1	
m- & p-Xylene	nc	ug/l	nc	35	360	79	240	<1	28	<1	<1	450	<1	
o-Xylene	nc	ug/l		38	230	39	110	<1	20	<1	<1	240	<1	
0-Aylene	TIC	ug/i	nc	30	230	09			20		< 1	240	< 1	

**Gas Monitoring Data D4** 

REP002 | Issue 4 | 13 July 2011

J/218000/216066 KXC B3 REMEDIATION SERVICES/4 INTERNAL PROJECT DATA(4-03 ARUP REPORTS)02 B3 ERP-03 ISSUE 4/ISSUE4 REP002 ZONE B ERP B3 AMENDMENT REPORT 13JUL11.DOCX

King's Cross Central Zones B and E Earthworks & Remediation Plan

Location	Date	Atmospheric pressure (mbar)	Methane (%)	Carbon dioxide (%)	Gas flow (l/hr)
Oscar Faber			1		
BH3 located inside GH9 on B1 B3 boundary (initial reading)	10/04/91	Not reported	4	0.04	Not reported
BH3 (dissipated reading)	10/04/91	Not reported	0.5	0.04	Not reported
BH5 (GH1, initial reading)	10/04/91	Not reported	1.3	0.05	Not reported
BH5 (GH1, dissipate reading	10/04/91	Not reported	0.5	0.05	Not reported
White Young	Green	-			-
BH104	21/07/99	1009	0.1	0.1	-1.0
located inside GH9	10/08/99	1008	0.0	0.1	-1.5
on B1 plot	07/09/99	1008	0.1	0.0	0.1
BH106	21/07/99	1009	0.1	0.2	0.05
located inside GH1	10/08/99	1009	0.1	0.3	3.4
on B1 plot	07/09/99	1010	0.0	1.2	0.5
BH107	21/07/99	1009	1.0	0.2	0.03
located inside GHB	10/08/99	1006	>150	5.0	0.0
on B1 plot	07/09/99	1009	47.6	1.0	0.2
BH102	21/07/99	1010	5.0	0.0	0.05
located outside	10/08/99	1007	49.6	0.2	>4.8
gasholders on B1 plot	07/09/99	1010	16	0.1	0.02
BH102C	21/07/99	1009	0.0	0.0	-0.3
located outside gasholders	10/08/99	1008	0.0	9.2	0.56
on B5 plot	07/09/99	1009	0.0	9.7	0.1

Location	Date	Atmospheric pressure (mbar)	Methane (%)	Carbon dioxide (%)	Gas flow (l/hr)
BH103	21/07/99	1009	0.0	0.7	-0.9
located outside	10/08/99	1008	0.0	2.2	-0.16
gasholders between B5 and B6 plots	07/09/99	1010	0.0	2.3	0.1
BH101	21/07/99	1009	0.0	0.6	-1.8
located outside	10/08/99	1009	0.0	0.1	-0.4
gasholders in Pancras Square	07/09/99	1010	0.0	0.0	0.0
BH105A	21/07/99	1009	0.2	0.0	-1.0
located inside	10/08/99	1009	0.3	0.6	-24.0
gasholder A in Pancras Square	07/09/99	1009	0.3	0.5	0.2
Peter Brett A	ssociates (monitor	ring undertaken b	y Norwest Holst)		
BH1007	25/09/2008	1026	<0.1	0.0	<0.1
located outside	01/10/2008	999	<0.1	0.0	<0.1
gasholders	09/10/2008	1028	<0.1	0.0	<0.1
in plot B6	16/10/2008	1010	<0.1	0.0	<0.1
	23/10/2008	1019	<0.1	0.0	<0.1
	29/10/2008	1009	<0.1	0.0	<0.1
BH1010	25/09/2008	1026	<0.1	0.0	<0.1
located outside	01/10/2008	999	<0.1	0.0	<0.1
gasholders in Pancras	09/10/2008	1028	<0.1	0.0	<0.1
Square	16/10/2008	1010	<0.1	0.0	<0.1
	23/10/2008	1019	<0.1	0.0	<0.1
	29/10/2008	1009	<0.1	0.0	<0.1
BH1019	25/09/2008	1026	<0.1	0.0	<0.1
located outside	01/10/2008	999	<0.1	0.0	<0.1
gasholders	09/10/2008	1028	<0.1	0.0	<0.1
in plot B2	16/10/2008	1010	<0.1	0.0	<0.1
	23/10/2008	1019	<0.1	0.0	<0.1
	30/10/2008	996	<0.1	0.0	<0.1

Historical Gas Monitoring Data Zone B

## Historical Gas Monitoring Data Zone B

Location	Date	Atmospheric pressure (mbar)	Methane (%)	Carbon dioxide (%)	Gas flow (l/hr)	Characteristic situation
BH2005C	09/12/10	1029	0.1	< 0.01	< 0.01	CS1
located outside the	14/12/10	1032	0.1	0.0	< 0.01	CS1
gasholders	16/12/10	1004	0.1	0.0	< 0.01	CS1
on B1 plot	06/01/11	997	0.0	0.0	< 0.01	CS1
	11/01/11	1002	0.0	0.2	< 0.01	CS1
	25/01/11	1016	0.0	0.0	0.0	CS1
	09/02/11	1016	0.1	0.0	0.0	CS1
	24/02/11	1020	0.0	0.1	0.0	CS1
	10/03/11	1009	0.0	0.2	0.0	CS1
	24/03/11	1034	0.0	0.0	0.1	CS1
BH2004	14/12/10	1032	0.1	0.0	<0.01	CS1
shallow standpipe	16/12/10	1004	0.1	0.0	<0.01	CS1
located	06/01/11	997	0.0	0.0	<0.01	CS1
inside GH9 on B1 plot	11/01/11	1003	0.1	0.2	<0.01	CS1
Ĩ	02/02/11	1006	0.0	0.1	0.0	CS1
	09/02/11	1016	0.0	0.0	0.0	CS1
	24/02/11	1018	0.0	0.3	0.0	CS1
	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1034	0.0	0.0	0.0	CS1
BH2004	14/12/10	1032	0.2	0.0	<0.01	CS1
deep standpipe	16/12/10	1004	0.1	0.0	<0.01	CS1
located	06/01/11	997	0.0	0.0	<0.01	CS1
inside GH9 on B1 plot	11/01/11	1003	0.0	0.1	<0.01	CS1
-	02/02/11	1006	0.0	0.0	0.0	CS1
	09/02/11	1016	0.0	0.0	0.0	CS1
	24/02/11	1018	0.0	0.2	0.0	CS1
	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1032	0.0	0.0	0.0	CS1
BH2006	14/12/10	1033	0.1	0.0	< 0.01	CS1
shallow standpipe	16/12/10	999	0.1	0.1	< 0.01	CS1
located	07/01/11	998	0.0	0.1	< 0.01	CS1
inside gasholder 1	11/01/11	1003	0.0	0.1	< 0.01	CS1
on B1 plot	02/02/11	1006	0.0	0.0	0.0	CS1
	09/02/11	1016	0.0	0.0	0.2	CS1
	24/02/11	1018	0.0	0.0	0.0	CS1

Location	Date	Atmospheric pressure (mbar)	Methane (%)	Carbon dioxide (%)	Gas flow (l/hr)	Characteristic situation
	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1032	0.0	0.0	0.0	CS1
BH2006	14/12/10	1033	0.1	0.0	< 0.01	CS1
deep standpipe	16/12/10	999	0.1	0.1	< 0.01	CS1
located	07/01/11	998	0.0	0.1	< 0.01	CS1
inside gasholder 1	11/01/11	1003	0.0	0.0	< 0.01	CS1
on B1 plot	02/02/11	1006	0.0	0.0	0.0	CS1
	09/02/11	1016	0.0	0.0	0.0	CS1
	24/02/11	1018	0.0	0.0	0.0	CS1
	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1034	0.0	0.0	0.0	CS1
BH2012	16/12/10	1006	0.1	0.0	< 0.01	CS1
located inside	06/01/11	998	0.0	0.0	< 0.01	CS1
gasholder 3	11/01/11	1000	0.0	0.0	< 0.01	CS1
on B1 plot	24/01/11	1029	0.0	0.0	0.0	CS1
	09/02/11	1016	0.0	0.0	0.0	CS1
	24/02/11	1020	0.0	0.0	0.0	CS1
	10/03/11	1009	0.0	0.0	0.0	CS1
	24/03/11	1034	0.0	0.0	0.0	CS1
BH2014	24/01/11	1029	0.0	0.0	0.0	CS1
located inside	09/02/11	1016	0.7	0.0	-0.5	CS1
gasholder 3	24/02/11	1020	0.0	0.0	0.0	CS1
on B1 plot	10/03/11	1009	0.0	0.0	0.0	CS1
	24/03/11	1034	0.0	0.0	0.0	CS1
BH2009	11/01/11	1001	0.1	0.1	< 0.01	CS1
located outside	26/01/11	1006	0.0	0.0	0.0	CS1
gasholders	09/02/11	1016	0.0	0.0	0.0	CS1
on B1plot	24/02/11	1020	0.0	0.2	0.0	CS1
	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1034	0.0	0.0	0.0	CS1
BH2001	16/12/10	999	0.1	0.1	<0.01	CS1
located inside GH12	07/01/11	998	0.0	0.1	<0.01	CS1
on B3 plot	11/01/11	1003	0.2	0.0	<0.01	CS1
	25/01/11	1016	0.0	0.0	<0.01	CS1
	09/02/11	1013	0.0	0.0	<0.01	CS1

BAM Ritchie Gas Monitoring Data 2010/2011

## BAM Ritchie Gas Monitoring Data 2010/2011

Location	Date	Atmospheric pressure (mbar)	Methane (%)	Carbon dioxide (%)	Gas flow (l/hr)	Characteristic situation
	24/02/11	1018	0.0	0.0	<0.01	CS1
	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1032	0.0	0.1	0.0	CS1
BH2003	14/12/10	1033	0.1	0.1	<0.01	CS1
located outside the	16/12/10	999	0.1	0.1	<0.01	CS1
gasholders	07/01/11	998	0.0	0.1	<0.01	CS1
on B3 plot	11/01/11	1003	0.2	0.0	<0.01	CS1
	24/01/11	1029	0.0	0.0	<0.01	CS1
	09/02/11	1013	0.7	0.7	<0.01	CS1
	24/02/11	1018	0.0	0.0	<0.01	CS1
	10/03/11	1006	0.0	0.1	0.0	CS1
	24/03/11	1032	0.0	0.0	0.0	CS1
BH2002	26/01/11	1006	0.0	0.0	0.0	CS1
located outside the	09/02/11	1013	0.0	0.9	0.0	CS1
gasholders	24/02/11	1020	0.0	0.1	0.0	CS1
on B3 plot	10/03/11	1006	0.0	0.0	0.0	CS1
	24/03/11	1032	0.0	0.0	0.0	CS1
BH2016	02/02/11	1006	0.0	0.4	0.0	CS1
shallow standpipe	24/02/11	1018	0.0	0.0	0.0	CS1
located outside the	10/03/11	1006	0.0	0.2	0.0	CS1
gasholders on B3 plot	24/03/11	1032	0.0	0.5	0.1	CS1
BH2016 deep	02/02/11	1006	0.0	0.0	0.0	CS1
standpipe located	24/02/11	1018	0.0	0.3	0.0	CS1
outside the gasholders	10/03/11	1006	-0.3	0.0	0.0	CS1
on B3 plot	24/03/11	1032	0.0	0.0	0.0	CS1

### BAM Ritchie Gas Monitoring Data 2010/2011

# **APPENDIX B**

**Archaeological Specification & Written Scheme of Investigation for Zones B/E** dated February 2010

IHCM Ltd 45 crescent Lane, London SW4 9PT Tel +44 (0)20 7636 1531 Fax +44 (0)20 7755 2121 www.arup.com

## Argent (King's Cross) Ltd

### King's Cross Central -Southern Area

Archaeological Specification for Development Zones B and E

February 2010

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

It 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

King's Cross Central - Southern Area Archaeological Specification for Development Zones B and E

### Contents

1	Introdu	ction	Page 1
	1.1	Objective of this Specification	1
	1.2	Outline Planning Conditions	1
	1.3	Summary History of King's Cross Central	2
	1.4	Background History of Plot B and E	2
	1.4.1	Summary	2
	1.4.2	General Gas Industry Site History	3
	1.4.3	Immediate Archaeological Features Associated with Gasholder No. 8	4
	1.4.4	Other Gas Industry Facilities Associated with the Gasholder No. 8 in Devel Zones B	opment 4
	1.4.5	Urban History and Other Heritage Resources within Blocks B and E	5
	1.5	Potential Archaeological Resources South of Regent's Canal	6
	1.6	Previous Archaeological Works	6
	1.7	The General Character of the Engineering Construction Works in the S Area	outhern 10
	1.8	Archaeological Watching Brief Process	10
2	Details	of Enabling Works	12
	2.1	Trial Pitting and Borehole Investigations	12
	2.2	Site Preparation and Removal of Old Foundations and Obstructions	12
	2.3	Construction of Temporary Works	12
	2.4	Cut and Fill Earthworks and Including the Treatment and Removal Contamination	of Soil 12
	2.5	Excavation of Basements, Sumps, Pits and other Small 'Area' Excavation Buildings	s within 13
	2.6	Piling, including forming of Pile Caps and Ground Beams	13
	2.7	External Shallow and Deep Buried Services	13
	2.8	Hard and Soft Landscaping	13
3	Archae	ological Objectives of the Watching Brief	14
	3.1	Definitions	14
	3.1.1	Archaeological Watching Brief	14
4	Archae	ological Programme of Works	15
	4.1	General Archaeological Watching Brief Objectives at King's Cross Central	15
	4.2	General Archaeological Objectives Prior to Construction	15
	4.3	Archaeology During Constuction	15
	4.4	Other General Archaeological Undertakings	16
	4.5	Specific Archaeological Research Objectives Related to Blocks B and E	16
5		by the Archaeological Contractor Prior to and During the Development Proc h Zone	ramme 17

6	Salvage		18		
<ul> <li>Provisions to be Made by the Archaeological Contractor after the Site Works on Each Zone</li> <li>19</li> </ul>					
8		ns by the Principal Engineering Contractors and Developer in Support of logical Site Works on Each Plot	the 20		
	8.1	General Developer Provisions	20		
	8.2	General Contractor Provisions	20		
	8.3	Technical Contractor Provisions	20		
9	The Arch	naeological Contractor Nominated for the Watching Brief on Each Plot	22		
10	Reference	ces	23		

### Figures

3

- General Location Plan showing Development Zones and Plots 1 2

Zone B Site Superimposed on the Ordnance Survey Plan of 1896 Test pit locations for previous PBA archaeological investigations

#### 1 Introduction

#### **Objective of this Specification** 1.1

Enabling and construction works in the ground are being brought forward as part of the development of Development Zones B and E, which lie in the southern area of the King's Cross Central (KXC) site. Zone B is broken down into 6 separate plots referred to as B1, B2, B3, B4, B5 and B6, which sit around a new piece of principal public realm referred to as Pancras Square. Zone E includes one new building, E1, which will wrap around the existing Grade II listed Stanley Building South. The buildings in Zone B will share a common basement. The basement for Building E1, although separate to the shared Zone B basement, will be accessed via the same. Details of these works will be submitted as reserved matters pursuant to conditions attached to the KXC outline planning permission dated 22 December 2006 (ref: 2004/2307/P), (the 'Outline Planning Permission'). Figure 1 shows the location of the Development Zones and plots.

This Archaeological Specification relates to archaeological mitigation works for Development Zones B and E. The mitigation proposed for these zones is consistent with that proposed for all of the plots south and north of Regent's Canal, in order to achieve a holistic approach and ensure the implementation of consistent sets of archaeologicxal investigation objectives and methods, with combined post-site documentation outputs.

The other KXC Development Zones will be separately addressed as buildings in these zones are brought forward for Reserved Matters Approval.

The KXC Environmental Statement submitted with the outline planning application characterizes the Southern Area prior to first phase urban development and then through the many episodes of change and adaptation during the 19th and first half of the 20th centuries - as a dynamic hub of activity between King's Cross and St Pancras Stations, and economic and social decline in the latter decades of the 20th century.

Heritage documentation and mitigation objectives related to the existing Gasholder No. 8 guide frame, are addressed in a Specification and Written Scheme of Investigation for Building Recording and Analysis for the Gasholder No.8 Guide Frame, submitted and approved (application ref. 2008/5668/L) pursuant to Condition 3 of Listed Building Consent 2004/2315/L for the dismantling of the same structure. The recording standards set out in the documents are stated to include the bell and the tank as and when works to these elements are undertaken.

A Specification and Written Scheme of Investigation for Building Recording and Analysis was also submitted and approved in relation to the now demolished Stanley Building North (application ref. 2007/0769/L) pursuant to Condition 3 of Listed Building Consent 2004/2313/L for the demolition of the same building. A separate Specification and Written Scheme of Investigation will be submitted for building recording works relating to Stanley Building South as part of any Reserved Matters submission relating to the same.

#### 1.2 **Outline Planning Conditions**

Conditions 56 of the Outline Planning Permission requires a programme of 'Archaeological Investigation and Mitigation' to be carried out during the implementation of the scheme. Condition 56 requires:

"the implementation of a programme of archaeological work in accordance with a written scheme of investigation"

For the Southern Area, an Archaeological Watching Brief process was determined to be the appropriate mitigation measure, as identified within the Environmental Statement. This specification sets out the strategy to ensure archaeological objectives are achieved to satisfy Condition 56 and implement the Environmental Statement.

In summary, the developmental history of the KXC site, including Zones B and E, is outlined below. It is to be noted that the Sites and Monuments Records and research undertaken for the KXC Environmental Statement do not allow a precise characterisation of the pre-Industrial period archaeological history:

- increasing small clearance for farming from Neolithic times onwards.
- the Fleet Valley.

- and a little light industry, with replacement with some blocks of flats.
- involving the following activities in the Northern Area of KXC:
  - horizontal ground surface.

  - the south.
- after World War II.
- 9. Early 20th century decline of the gas making industry.
- 10. Some damage in World War II as a result of German bombing.
- North and Culross Buildings and upgrading of the German Gym.
- of Pancras Way.

To assist in relating the present-day site topography to its former railway and other uses, Figure 2 is included in this Specification. It shows the site in 1896, at a time when it had reached maximum development and after which changes are relatively minor.

#### 1.4 **Background History of Development Zones B and E**

### 1.4.1 Summary

Development Zone B is substantially the former gas works.

1. Wooded landscape in prehistoric times generally used for ad hoc activities with

2. Agricultural landscape in Roman to Post-Medieval times on the eastern flanking slope of

3. 17th and 18th century shallow quarrying for weathered clayey soils for brick making.

4. Construction of the Regent's Canal in the opening decades of the 19th century.

5. Early 19th century establishment of a gas industry south of Regent's Canal.

6. Phased urban development comprising terraced housing with some areas of commerce

7. The mid 19th century creation of the Great Northern Railway Goods Depot then

In the north, the terracing back of the gentle south facing slopes to create a sub-

 In the south, the raising of the ground level with spoil from the north end of KXC, to complete the level landscape as it approaches the Regent's Canal.

Construction of an arrangement of buildings servicing the railway industry sited to

Construction of a vast network of railway tracks throughout the North Area of KXC.

8. A period of stability of railway, and urban functions from the late 19th century through to

11. Decline of the railway functions in the 1960s -1980s with phased demolition of the more major buildings in the Northern Area and removal of many areas of railway sidings.

12. A series of temporary uses in the surviving buildings and open areas. Removal in 2001-3 of all residual railway related buildings and infrastructure. Removal of Stanley Building

13. Large-scale ground disturbances associated with the construction of the Channel Tunnel Rail Link out of St Pancras Station, the LUL Northern Ticket Hall and the KXC Shared Service Yard. Removal of the Triplet Gasholder guide frame. Some remodelling The start of the industrial development of the area was initiated by the insertion of the Regent's Canal in the first quarter of the 19th century (opened 1820). This permitted the immediate development of the Pancras Works south of the canal, roughly opposite the Eastern Goods Yard. Further south, generally between King's Cross Station and St Pancras Station, mixed residential and commercial development occurred at this time. As the gas industry expanded and the great railway works were inserted so there was piecemeal changes then some major removal of the residential and light commercial urban fabric.

The gas works ceased making coal gas in 1904, with a brief revival in 1907, and its manufacturing plant was demolished in 1911. The gasholders remained in use, linked to trunk mains.

Zone E and the south west corner of Zone B formerly comprised an area of residential development. Today, only Stanley Building South and the immediate hard landscaping survives. The Stanley Buildings originally included five blocks of approximately 20 m by 12 m. They were purpose-built in 1864-5 as low-rental 'philanthropic' housing by the Improved Industrial Dwellings Co. One five-storey block remains, identified here as Stanley Building South.

Four of the former blocks have been demolished pursuant to Listed Building Consent 2004/2313/L, in order to accommodate the extension of St Pancras Station for the Channel Tunnel Rail Link terminal and for the realignment of Pancras Way.

Stanley Building South is currently unoccupied. It is listed Grade II and lies within the King's Cross St. Pancras Conservation Area.

The Stanley buildings had no basements. Consequently, earlier made ground survives here and forms part of the infill of the historic River Fleet valley.

### **1.4.2 General Gas Industry Site History**

The former gasworks within the KXC site, locally known as the Imperial Gasworks or Pancras Works, was built as the principal works of the Imperial Gas Light and Coke Company. When opened in 1824 this was the largest gasworks in the world. The works was sited alongside the Regent's Canal. It used coal initially delivered to the works by the canal and then later via a viaduct across the Regent's Canal from the Goods Yard. The gas was produced in large retort houses. This was then stored in the gasholders on the site, which acted as reservoirs so that an adequate supply of gas was always available when required. The Gas Light and Coke Co. acquired the Imperial Gas Light and Coke Company in 1876.

The consumption of gas was steadily climbing throughout the second half of the 19th century, in response to London's rising population and prosperity and falling costs in the making of gas. Proportionate increases in gas storage capacity were needed to meet peak demands at all the company's works. With connection by trunk mains to the company's huge Beckton gas works supplementing local production, several of the Pancras gasholders came to be enlarged in the 1880s. By 1900 the works occupied 11 acres (4.6 hectares), of which more than half was devoted to gas storage.

Gasholder No. 8, centrally placed in Zone B, was designed by John Clark, the engineer of the Pancras Works, and its ironwork was built by Westwood and Wrights in 1883. Both they and Clark had been responsible for the 'telescoping' of the three 'Siamese Triplet' Gasholders Nos. 10, 11, and 12, completed in 1880 and located to the north west of Zone B, where the modern canopy of St Pancras Station is now sited. The brick tank of No. 8, set deeply into in the ground, had been constructed c.1853 for a previous gasholder, and was now deepened by 2 feet to 28 feet (8.5 m), still considerably less than the exceptional 55 feet (16.8 m) depth of the tanks of the triplet group. So the new bell of No 8 was given three telescopic 'lifts', within a guide frame some 83 feet (25.3 m) tall, compared with the two lifts. within guide frames 108 feet (32.9 m) tall, of the reconstructed triplet group. With different proportions, the guide frame of No. 8 has only two tiers of columns and girders compared with the three tiers of the triplet group.

All of these guide frames were based stylistically on those of John Clark's father, Joseph, some of whose work may be seen at the Bethnal Green and Bromley-by-Bow gasholder stations.

Although No. 8 is the only gasholder guide frame still standing today on the gasworks site, it may be noted here that in 1886-7 two other gasholders were enlarged and two more were added, with a new style of guide frame in lattice girder construction (with resemblance to the wind girders of St Pancras Station trainshed). There were then no fewer than nine substantial gasholders on the site, seven of which remained until the commencement of the CTRL works in 2001. Several of the gasholder tanks are still found within the ground of Zone B, founded at various depth and backfilled. Developed piecemeal on a constricted site, the holders were smaller and more attuned to the urban setting than some other London gasholders of the period. They presented a remarkable townscape - and landmark for people approaching St Pancras Station by train.

The Pancras Works ceased to make gas in 1904, but the gasholders continued in use. storing town gas piped from other gasworks. In the 1970s town gas was replaced by natural gas brought ashore from the North Sea, although again the gasholders continued in use.

The high-pressure national gas grid established first in the 1960s for the distribution of natural gas has an inherent storage capacity and flexibility, allowing a considerable and ongoing reduction in the national stock of gasholders. However, high-pressure mains cannot be used in built-up areas, and meeting the peaks of demand in large cities remains a problem. The removal of several of the gasholders, necessitated by the alignment of the CTRL and sanctioned by the CTRL Act of 1996, required an augmentation of the regional gas supply network. With that achieved, all of the Pancras Works gasholders were decommissioned and purged of gas in 2000.

### **1.4.3** Immediate Archaeological Features Associated with Gasholder No. 8

The depth of the brick tank, recorded at 28 feet (8.5 m), is one-third of the full height of the bell, which is some 25 m. To reduce the amount of excavation, it was normal to leave the soil in the central portion of the tank in place, in the form of an inverted cone or "dumpling" to ensure stability of the soil. The bottom of the tank and the sloped sides of this 'dumpling' would be sealed with a layer of puddled clay or concrete if necessary, to prevent leakage of water out of the tank. On this site, the tank will assuredly cut into the underlying impermeable London Clay, and so these surfaces are likely to have received only a thin 'blinding' of concrete.

The wall of the tank will increase in thickness with depth, stepping out several times on the outer face to provide adequate resistance as a compressive ring against earth pressure, which would otherwise tend to force the walls inwards. Vertical piers to support the guide columns will project behind the wall, probably capped with a massive padstone. The inner face of the wall will be a uniform cylinder with vertical iron guides attached to the face. A central pillar in the tank provides support to the bell trusses when the tank is empty.

Immediately adjoining the tank on its south-west side, there is a circular brick well for the pipes that descend beneath the bottom of the tank wall to convey gas into and out of the gasholder bell. This had until 2001 a traditional hand-operated pump, with flywheel, for removing any accumulated water.

### 1.4.4 Other Gas Industry Facilities Associated with Gasholder No. 8 in **Development Zone B**

According to Ordnance Survey mapping dated 1871, Development Zone B included the following elements of the gasworks, remnants of which may still be in the ground on site and along the proposed Boulevard and the present day Goods Way:

- 1. A significant portion of one of the major Retort Houses.
- 2. Sets of Condensers and Tar Wells.
- 3. Sets of Boilers and Pumps and Hydraulic Mains.

It was accompanied by a mission hall, Culross Hall, one of three provided by the company for it's employees spiritual needs. The Culross Buildings were totally unrelated to the few remaining earlier buildings in the area, such as the German Gymnasium (1864/5) and the Stanley Buildings (1864/5), and were demolished in 2008 pursuant to Conservation Area Consent 2004/2317/C.

# 1.5 Potential Archaeological Resources in Development Zones B and E

Related to the two Development Zones are identified the following potential industrial and earlier aged remains, generally noted from north to south:

Block/Plot Reference	Potential In
B3 and B5	Foundation
B5	Gasholder
B3, B4, B5, B6	Gasholder above grou
B1, B3, B4, B5, B6	Foundation gasholders tanks and le
Mostly B5 and B6	Buildings manufactur
Whole of Zone B	Soil format may be cor
B3 and B5	Surface set
B1, B2 and B4	Basement a
Zone E and Plot B1	Foundation Stanley Bui
Generally Zones B and E	Made grou developme
Generally Zone B and E	Natural soil and genera

### 1.6 Previous Archaeological Works

Associated with the construction of the CTRL there have been some archaeological investigations. The archaeological fieldwork data resulting from these works has not been made available to IHCM for the purpose of supporting mitigation objectives in the southern development plots. It is understood that reports on these investigations have not yet been issued by the Archaeological Contractor for LCR.

There has been some archaeological works in the Southern Area for KXC, associated with the design and procurement of the Boulevard to be located to the east of Zone B and where the Pancras Works was also located, and Pancras Road to the west where Stanley Building North was once sited. Further, as part of earlier submissions to discharge Condition 3 of Listed Building Consent 2004/2313/L and Condition 3 of Conservation Area Consent 2004/2317/C, there has been phased recording of Stanley Building North and the Culross Buildings (both now demolished). All the field work was carried out by Pre Construct

- 4. Sets of Scrubbers.
- 5. Sets of Purifiers.
- 6. Store House.
- 7. Crushing House.
- 8. Gas delivery pipes and machinery.
- 9. Wells and pumps for topping up the Gasholder tanks.
- 10. Coal, clinker and coal waste holding pens.
- 11. A large variety of small cylindrical tanks
- 12. Offices/stores
- 13. Associated hard landscaping.

### 1.4.5 Urban History and Other Heritage Resources within Blocks B and E

Limited development on the southern part of the KXC site took place in the late 18th century, stimulated by 'The New Road', to the south of KXC. The development was substantially one of low quality two storey terraced housing, the layout of which responded to field and property boundaries, the somewhat ad-hoc exploitation of soils for brick/tile making, the Fleet Sewer, and the Small Pox Hospital grounds (under King's Cross Station). Today, the orientations of the German Gymnasium and Stanley Building South, and their surrounding local roads, are based on this first phase development pattern.

There was further piecemeal expansion of the King's Cross residential area in the second and third decades of the 19th century, including the areas of terraced housing bordering Suffolk Street, Cheney Street, Ashby Street, Northampton Street and Norfolk Street south of the gas works, with Upper Edmond Street to the east. These streets were generally located towards the southern end of Development Zone B. This street pattern was diagonally placed across the previous agricultural field pattern.

The housing was typified by 2 storey structures and those on Suffolk Street West possibly having half basements. The houses generally fronted the roads and had rear extension kitchens and with 'privies' set at the bottom of small yards/gardens.

The existing housing between the two stations remained for a few more years. The erection in 1864-5 of the original five blocks of Stanley Buildings, an early project of Sir Sidney Waterlow's philanthropic and profit-restricted Improved Industrial Dwellings Company, responded to existing poor local housing conditions and the imminent dispossession of sites by the Midland Railway. The German Gymnasium, part of a contemporaneous redevelopment on Pancras Road, reflected other aspects of mid-Victorian Society.

Further platforms and sidings were added to the west of King's Cross Station before 1894 including new "docks" for express milk traffic and for horses and carriages (which subsequently became a Motor rail terminal). This facility was within Zone B at the south end. To improve road traffic circulation around the station, a new bridge was built across the enlarged "throat" of the station, with a western approach along the southern edge of the gas works. This was officially named Battle Bridge Road in 1873, possibly in advance of its construction. These works, set at a lower level related to rail tracks entering from the north where joining with the main rail routes passing under the Regent's Canal. The Milk Dock displaced the remaining pocket of back-street houses so that the railway extended west as far as Cheney Street.

By 1894 most of the residential streets had been swept away leaving the Stanley Buildings to the west and the German Gymnasium at the south end of this KXC development area.

Pressure on land made it more difficult for railway workers to find decent affordable housing close to their place of work, and to that end, the Great Northern Railway in 1891-2 erected a tenement-style block of flats along the new Battle Bridge Road called the Culross Buildings.

### Industrial Remains

ns of the Gasholder No. 8 - brick wall to the north.

No. 8 foundations.

No. 8 buried infrastructure (with some connections to und features including an upstanding pump).

ns and complex Infrastructure associated with the other s, notably, wells for water used within the gasholder lots of interconnecting metal pipes.

and related artefacts associated with the gas ring process (see Section 1.4.4 above).

ations associated with the gas works, some of which intaminated.

etts and sub surface make up of Battle Bridge Road.

and foundations of Culross Buildings.

ns and surrounding infrastructure to demolished uildings.

ound soil formations predating first phase urban ent.

il formations associated with the Fleet river and valley ally of prehistoric times, back to the last glaciation.

Archaeology Ltd. The table below provides an initial summary of PCA's findings, illustrating the character of the discoveries located in the position shown on Figure 3. The findings are still being evaluated and analysed through the post-excavation programme of archaeological work.

Test Pit Reference	<b>Brief Description</b>
Trial Pit 1	A red brick wall and poss south, and was 2.64m deep and extended beyond the line
Trial Pit 2	A red brick wall and possil wall was observed at 19.54 north of the pit. The surface limits of excavation in the so
Trial Pit 3	A modern brick inspection observed in this pit. The cor
Trial Pit 4	Five, probably associated, surface were observed in t continued to a depth of 17.0 and was 0.1m deep.
Trial Pit 5	A dark brownish red brick s was 0.1m thick and extended
Trial Pit 6	Two concrete surfaces wer 19.16mOD was 0.3m deep and had dark staining from
Trial Pit 7	Was abandoned
Trial Pit 8	Two metal pipes were obse at 19.57mOD and was alig 0.45m in diameter at 19.15r
Trial Pit 9	A curved brick wall was ob on a concrete footing in the at 17.49mOD and was 1.5m
Trial Pit 10	A yellow stock brick wall v south, 0.22m east to west. diameter was observed at not possible to ascertain a scope of the excavations
Trial Pit 11	A concrete wall and its foo 17.56mOD respectively. Th found to be 2.84m deep bu least 1.0m wide and of unce
Trial Pit 12	The wall of the gasholde sandstone blocks capping 18.21mOD and was 0.2n hampered by the presence to a depth of 4.5m.
Trial Pit 13	The wall of the gasholder w 3.2m. Excavations inside th giving the wall an overall wi
Trial Pit 14	A cobbled surface was obs the pit. No other structures
Trial Pit 15	Modern reinforced concrete possibly the base of the atte
Trial Pit 16	The cobbled road surfa

sible footing was observed at 20.15mOD, aligned north to ep. This wall was only visible on the eastern excavation limit imits of excavation.

ible associated brick surface were observed in this pit. The 54mOD and extended beyond the limits of excavation in the ace was observed at 18.29mOD and extended beyond the south of the pit.

chamber and what appeared to be a concrete pad were oncrete was observed at 17.44mOD and was 0.52m thick.

red brick walls and the remnants of a paved sandstone this pit. The masonry was first observed at 19.28mOD and .68mOD. The sandstone paving was observed at 18.53mOD

surface was observed between 18.48mOD and 18.08mOD. It led beyond the limit of excavation.

ere observed in this test pit. The upper surface observed at . The lower surface observed at 18.56mOD was 0.4m deep the ground contaminants.

served in this pit. One pipe, 0.2m in diameter, was observed igned northeast southwest. The other pipe was found to be mOD and was aligned northwest southeast.

bserved at 19.29mOD. The wall was 1.8m high and located he eastern part of this pit. The concrete footing was observed im deep.

was observed at 20.17mOD and measured 1.44m north to It was of uncertain depth. A metal pipe measuring 0.30m in 18.93mOD and was aligned northwest to southeast. It was relationship between the wall and the pipe due to the limited

oting aligned east to west were observed at 20.40mOD and hese extended beyond the limits of excavation. The wall was out of uncertain thickness and the footing was found to be at certain depth.

er was observed at 18.96mOD, this was found to have the brickwork. An interior brick surface was recorded at Im deep. Further excavations inside the gasholder were e of contaminated ground water. The trial pit was excavated

was observed at 18.94mOD, this was excavated to a depth of he gasholder revealed that the brickwork stepped in by 0.8m idth of 1.42m.

served at 19.15mOD, this had been truncated in the east of were observed.

te was observed at 18.04mOD and was 0.1m thick. This is tenuation tank. No other structures were observed.

face was observed at 19.14mOD (ground level). At

King's Cross Central - Southern Area Archaeological Specification for Development Zones B and E

	16.34mOD what appeared to be a thin concrete surface extending beyond the limit of excavation was observed
Trial Pit 17	The cobbled road surface was observed at 19.04mOD (ground level). At 18.64mOD a patchy reddish brown brick surface was found to be 0.1m deep. This extended beyond the excavation limits.
Trial Pit 18	No structures were observed in this pit. Made ground deposits were observed to depth of 4.3m.
Trial Pit 19	No structures were observed in this pit. Made ground deposits were observed to depth of 3.2m
Trial Pit 20	No structures were observed in this pit. Made ground deposits were observed to depth of 1.2m.
Trial Pit 21	Modern services were observed at 17.96mOD. The trial pit was abandoned.
Trial Pit 21a	No structures were observed in this pit. Made ground deposits were observed to depth of 4.5m.
Trial Pit 22	A pipe was observed at 14.20mOD. The excavation was abandoned at a depth of 4.5m.
Trial Pit 23	A cobbled surface was observed at 15.58mOD, this extended beyond the excavation limits. No further structures were observed.
Trial Pit 24	An east-west aligned red brick wall was observed at 14.86mOD, measuring 0.5m in width, 1.04m in height. The wall extended beyond the excavation limits.
Trial Pits 25, 26	These were not excavated.
Trial Pit 27	Only modern backfill was observed. The trial pit was not surveyed due to access problems.
Trial Pit 28	No structures were observed in this pit. Made ground deposits were observed to a depth of 4.5m.
Trial Pit 29	No structures were observed in this pit. Made ground deposits were observed to a depth of 4.5m.
Trial Pit 30	No structures were observed in this pit. Made ground deposits were observed to a depth of 4.5m.
Trial Pit 31	This exposed more of the gasholder's curved wall. This was recorded with a total station due to the presence of contaminants.
Pancras Road	Brief Description
General ground reduction to road formation level for the recreation of Pancras Road - to the south and	Natural clay observed at 15.77 m OD overlain by 19th century made ground including structural remains of the foundation of the original western end of the German Gymnasium. Culvert and footings of 19th century variously found to the south and north of the Gym including of Stanley Building North. The 19th century features found heavily truncated by 20th century ground works. No

north of the German	formations found of Pre
Gymnasium.	considered to have been

### 1.7 The General Character of the Engineering Construction Works in the Southern Area

The engineering works (enabling and construction works) will be phased and submitted to the London Borough of Camden as part of the planning process. There is to be a holistic approach to the ground works in Zones B and E, basically comprising the construction of a piled retaining wall, the creation of a double-height basement and piling for each proposed structure.

undertakings will likely include:

- 1. Trial pitting to visually inspect the shallow ground conditions and establish the precise location of obstructions buried in the ground.
- 2. Sinking of bore holes to provide design data in respect of deep ground conditions and foundation designs.
- 3. Site preparation including the removal of present ground surfaces, any surviving upstanding features and obstructions in the way of proposed ground works.
- 4. Construction and forming of temporary works.
- 5. Cut and fill earthworks to new formation level including the treatment of any contaminated soils encountered.
- 6. Excavation for shallow and deep buried services.
- 7. Excavation of basements and sumps, pits and other small area excavations.
- 8. Piling including forming of pile caps and ground beams.
- 9. Hard and soft landscaping around the proposed buildings, where a large number of known and evaluated heritage features will be removed.

plans and other documents provided in the individual plot submissions.

archaeological mitigation, related to the above types of engineering works.

#### 1.8 **Archaeological Watching Brief Process**

A series of Archaeological Watching Briefs will accompany the engineering works in the two Development Zones, providing archaeological information to satisfy the aforementioned Planning Condition 56. Section 3 of this specification defines an Archaeological Watching Brief. The Archaeological Watching Briefs will occur wherever there are to be ground works, unless designed out and approved in writing with the London Borough of Camden and English Heritage.

Paragraph 10.8.1 and Table 10.8 of the KXC Environmental Statement sets out the mitigation measures proposed. It confirms that Archaeological Watching Briefs would be in place where any engineering ground works would occur which would encounter made ground from the 19th Century or earlier, or River Fleet Alluvium.

The Watching Brief will conform to standards required by the Institute of Field Archaeologists and the guidelines of the Greater London Archaeological Advisory Service of

rehistoric to 18th century date were identified and truncated.

The relevant works affecting the potential archaeological resources and mitigation

- The nature of those works most relevant to archaeology are described in greater detail in Section 2 of this Specification. This is to be read with the engineering and architectural
- It is likely that there will be design development prior to construction but not affecting the

English Heritage. The Archaeological Contractor shall be a member of the Institute of Field Archaeologists.

The archaeological officer of English Heritage for the London Borough of Camden, will be given access to monitor the archaeological site and post-site works on behalf of English Heritage and for the London Borough of Camden.

IHCM (International Heritage Conservation and Management) is the Archaeological Consultant to the Employer for this work, Argent (King's Cross) Limited.

The phasing of developments, and thus archaeological works, will allow for a process of adapting and modifying archaeological watching brief objectives.

### Note

This specification is one of a series prepared for undertaking Archaeological Watching Briefs in the King's Cross Central scheme. They have common content in regard to general requirements for site and post-site works, together with specific requirements for each development site, based on the nature of the site, the archaeological potential and the works proposed.

#### **Details of Enabling Works** 2

The design for the construction of the many buildings and associated hard/soft landscaping within the Southern Area will be detailed within submission documents for each plot scheme. The schemes will include those undertakings referred to in Section 1.7 above. The main processes are explained further below.

#### 2.1 **Trial Pitting and Borehole Investigations**

The engineering designs for the new construction requires there to be programmes of further geotechnical investigations. These aim to investigate the shallow and deep ground conditions (made-ground, alluvium and London Clay), with observation trial pits and bore holes respectively.

The location of the pits will result from further assessment of the engineering findings and of the planned insertion of temporary and permanent new works and ground obstructions. Many of the pits will be 1 to 5m deep and shored so the pit faces can be hand logged. Some deeper probing may occur, at levels unsafe for general trial pitting excavations. The engineering investigations will also address ground contamination and the need for remediation.

### 2.2 Site Preparation and Removal of Old Foundations and Obstructions

Each scheme in the Southern Area is to be built in an area of complex ground conditions resulting from more than 200 years of development and change, the latest (modern) phase of which can be presently observed and relates to completion of the CTRL scheme and early KXC works. Section 1.7 above indicates where development related ground works are likely to be located.

#### 2.3 **Construction of Temporary Works**

Given the scale and scope of the developments within the site, it is likely that the engineering contractors and sub-contractors would need to undertake temporary works. Such works may involve local excavation into the ground for:

- Connections to services.
- Fences. .
- Crane bases. •
- Foundations for huts.
- Forming hard standing for cars and construction plant.

#### 2.4 Cut and Fill Earthworks and Including the Treatment and Removal of Soil Contamination

Given the industrial and commercial history of King's Cross, it is likely that there are still localities of 'hot-spots' of soil contamination. The contamination, if it is related to 19th century industrial processes, may have a heritage interest, especially where such contamination is associated with structural remains and industrial processes and where the contamination needs treatment or disposal.

It is likely that contamination would be found during earthworks, shallow remodelling of the ground to a new formation level, and at times of excavation associated with basement and infrastructure construction.

#### 2.5 Excavation of Basements, Sumps, Pits and other Small 'Area' **Excavations within Buildings**

The development proposal includes for permanent spaces set in the ground and includes:

- A shared double-height Zone B basement and single-level basement for Building E1. The latter basement will be accessed via the Zone B basement. Some basements may be formed within a piled retaining wall and / or within temporary works. Some construction may also occur within open excavations with battered faces.
- Duct chambers.
- Lift sumps.
- Headings.

It is the excavation of basements that would provide the greatest opportunity for archaeologically investigating any surviving historic ground conditions and structural remains.

#### 2.6 **Piling, including forming of Pile Caps and Ground Beams**

The type of buildings being constructed favours piled foundations and a substructure of pile caps/pile rafts and ground beams. The piling may occur before the forming of basements and other below-ground sump structures. For archaeological objectives, piling would allow for assessing ground conditions before larger-scale ground works occur. If basements are formed first, the piling would have no archaeological interest requiring the Archaeological Contractor to monitor their construction.

#### 2.7 **External Shallow and Deep Buried Services**

The construction works may necessitate diversion of existing buried services and definitely the insertion of new ones. Shallow infrastructure works may be located above soil formations of archaeological interest. Services inserted in trenches below 0.5 m deep, and in areas where there may be physical obstructions and ground contamination, could traverse through or below archaeologically interesting ground conditions.

#### 2.8 Hard and Soft Landscaping

The formation of roads, squares and other open areas will variously replace the presentlyfound modern and surviving older surfaces, following the insertion of new services.

To achieve the new hard and soft landscaping will also require surface and shallow (0 - 0.5 m below ground level) and deep (0.5 - 2.5 m below ground level) buried archaeological remains to be locally removed.

### **Archaeological Objectives of the Watching Brief** 3

#### Definitions 3.1

3.1.1 **Archaeological Watching Brief** An Archaeological Watching Brief, as recommended by the Institute of Field Archaeologists (IFA, 1994), refers to:

> "A formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site on land or underwater where there is the possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive."

In all cases, the watching brief is intended:

"to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works."

"to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support a treatment to a satisfactory and proper standard."

existing on a site."

The Institute stresses that an Archaeological Watching Brief is not intended to reduce the requirement for excavation or preservation of known or probable deposits, and is intended only to guide, not to replace, any requirement for contingent excavation or preservation of possible deposits.

"to establish and make available information about the archaeological resource

#### 4 **Archaeological Programme of Works**

#### 4.1 General Archaeological Watching Brief Objectives at King's Cross Central

The Archaeological Watching Briefs will collect and interpret data from the many site-based engineering components of the development scheme for Zones B and E in the Southern Area of KXC.

The archaeological objectives will be related to:

- 1. Determining the character of the site and landscape prior to first-phase industrial development, including information about the rural topography with evidence of Prehistoric to Post-Medieval land use: the exploitation of soils for brick making: early commercial development as part of the rapidly expanding early to mid 19th century industrial fabric of London.
- 2. The mid 18th to early 19th century 'early' urban and commercial land uses, prior to the insertion of the great mid 19th century railway buildings and associated railway facilities.
- 3. The character of foundations and soils of mid to late 19th century, specifically related to the existing gas and railway related buildings and associated landscaping.
- 4. Adding archaeological data to that obtained for CTRL and LUL development works that have been taking place for the last few years at King's Cross and St. Pancras.
- 5. The Archaeological Watching Briefs will also provide specialist advice to the Development Manager (Argent) and the Engineer and the Principal Engineering Contractor for each plot on made-ground and historic engineering features during the site works, if and when discoveries are made. The Archaeological Watching Brief will monitor site works to reduce the chance of accidental damage occurring to retained heritage buildings.
- 6. Updating Archaeological Watching Brief objectives (project design) from time to time as plots are developed and new schemes arise, responding to findings and interpretation discussions between all concerned parties.
- 7. For Development Zones B and E, providing one or more interim reports on the findings, planned to be issued during the ground works development programme and a draft final report within six months following the completion of site works in each zone.

#### 4.2 **General Archaeological Objectives Prior to Construction**

Prior to the start of engineering site works in each zone the opportunity will be taken to investigate a set of archaeological objectives. Some works will be 'archaeologically 'driven', providing an opportunity to undertake archaeological investigation by 'excavation' and 'strip and map' techniques. These investigations will then be taken off the agenda for being undertaken as Watching Briefs during the construction phase of the scheme.

#### 4.3 **Archaeology During Constuction**

During the engineering ground works for the scheme a programme of archaeology will be undertaken. The programme will be developed related to the engineering undertakings and works.

#### **Other General Archaeological Undertakings** 4.4

It is likely that other archaeological mitigation will be required during the engineering programme of ground works but it is not possible to precisely forecast all of these. This will be subject to discussion with the London Borough of Camden and English Heritage at the time.

### 4.5 and E

The following investigation objectives have been formulated for Development Zones B and E:

- 1) Determining of the internal layout arrangements of buildings, and how these relate to map and other contemporary documentation.
- 2) Understanding and documenting construction techniques of the many former buildings on site, especially those associated with the gas production and storage. Examination of any surviving foundations related to the former Stanley buildings and Culross Buildings.
- 3) The finding of any evidence of how the gas industry buildings and structures functioned.
- 4) The detailed examination of the infrastructure.
- 5) Documenting of any surviving evidence of the hard landscape on and around the development footprint.
- 6) The understanding of site preparation of the site ready for first phase urban uses.
- 7) Identification and examination of pre-railway development made-ground and site conditions, including of the possible occupation on the east side of the Fleet valley channel. This may include soil sampling for investigation of the hisitoric environment.

temporary and permanent new ground works.

- Future engineering site investigations.
- Safety regarding access and ground contamination.
- The engineering sequence and programme of works.
- 4) Site discussions with the London Borough of Camden and English Heritage.
- 5) Evaluation of findings where the works shall occur in phases potentially spanning several years.

modified to respond to findings made during the pre-development archaeological evaluation

### Specific Archaeological Research Objectives Related to Blocks B

- It is not possible to show on a plan where the archaeologial programme of works will occur but it is assumed that it would be throughout Zones B and E, where ever there are to be
- It is not intended to investigate the whole of Development Zone B given the industrial character of the site. The locations for investigation will be determined as a result of:

### 5 Actions by the Archaeological Contractor Prior to and During the Development Programme on Each Zone

To satisfy Archaeological investigation requirements, the appointed Archaeological Contractor shall:

- 1. Provide a Written Scheme of Investigation (WSI) for IHCM, for onward submission to the London Borough of Camden and English Heritage. This shall be approved in writing prior to development work starting on site.
- 2. Provide a Health & Safety Plan under CDM Regulations and work to it.
- 3. Obtain an archaeological site code.
- 4. Be fully familiar with the heritage documentation undertaken by IHCM in the Environmental Statement produced for Argent (King's Cross) Limited - to be provided at tender.
- 5. Be familiar with archaeological site works carried out for CTRL.
- 6. Be familiar with the conditions attached to the Planning, Listed Building and Conservation Area Consents associated with the King's Cross Central development.
- 7. Coordinate the fieldwork programme with Argent, the Engineer, IHCM and the English Heritage archaeological officer representing the London Borough of Camden.
- 8. Attend, unless otherwise agreed, all works that are on and that penetrate below the present hard landscape surfaces.
- 9. Generally advise the Principal Engineering Contractor on made-ground and structural features within it, related to the site history potentially spanning Prehistoric to Modern times. Advise on archaeological value of the heritage assets, with an assumption that only remains (including building fabric) of no and low value may be penetrated/removed without the agreement of IHCM and/or Camden/English Heritage.
- 10. Observe and document, from ground level, machine excavation without shoring and hand digging undertaken by the Principal Engineering Contractor.
- 11. Descend at agreed times pits and areas less than 1.2 m deep without shoring, and deeper pits with shoring, to observe, explore, photograph and document made ground and alluvial soil formations, structural remains of the various buildings and other archaeological remains.
- 12. Provide advice to the Principal Engineering Contractor on backfilling and reinstatement, ensuring protection of archaeological features and accurate historic reinstatement respectively.
- 13. Provide within one week of the end of a watching brief episode a brief 'Initial Summary' of results of the watching Brief, indicating the suspected significance of any observed remains, together with a simplified diagram illustrating the location, depth and adjacent features. The 'Initial Summary' will be submitted by e-mail to IHCM and London Borough of Camden and English Heritage within the one week period from the end of the watching brief. As comprehensive archaeological and geotechnical reports become available from site works in nearby development plots, these will be made available as soon as possible to all relevant parties (and in any event within the timescales specified in Section 7.0), to inform evaluation and mitigation objectives and methods for the development processes being addressed in this Specification.

#### 6 Salvage

The Archaeological Contractor will identify and retain where appropriate archaeological artefacts to determine those with a potential for archaeological archiving; those for reuse within the plot scheme: materials with a potential to be reused within KXC: materials with a potential for reuse on heritage projects elsewhere; and material that can be disposed of. The Archaeological Contractor will ensure appropriate heritage documentation is complete.

IHCM will coordinate archaeological salvage particularly of Hydraulic artefacts that may have an important museum use in London and nationally.

be:

- value.
- 3. Typically lodged as part of the archaeological archive.
- considered for a disposal strategy.

No architectural salvage will be necessary within the terms of this archaeological specification, given that a programme of heritage activities related to Gasholder No. 8 has already been approved pursuant to an earlier Reserved Matters submission.

In summary, moveable artefacts found during the archaeological programme of works will

Recovered and documented by standard archaeological methods.

2. Evaluated for conservation, interest to the development objectives and for heritage

4. Considered as architectural salvage for reuse within the scheme and KXC, or,

8

### 7 Provisions to be Made by the Archaeological **Contractor after the Site Works on Each Zone**

The following requirements are to be satisfied by the Archaeological Contractor:

- 1. Provision of a factual and interpretive report on the site works in respect of made ground and alluvial soil formations, structural remains, artefacts and ecofacts. The report shall conform to methods prescribed by 'MAP2', Management of Archaeological Projects Draft 2 (English Heritage, 1991) and by English Heritage Greater London Division (English Heritage, 1998, Archaeological Guidance Papers 3 and 4). The report shall contain text, drawings and photographs as appropriate.
- 2. Provision of each agreed report in draft one month following the completion of site works, and the final reports one month after receiving comments on the drafts from IHCM.
- 3. Provision of a completed 'Online Access to the Index of Archaeological Investigation' form (OASIS form) to English Heritage.
- 4. Lodging of the site paper archive with the Museum of London. Artefacts are to be retained by the landowners or their nominated agency pending consideration of the potential for museum displays.
- 5. The documents and archive from Plot B and E shall be used with similar from the other development plots to result in an holistic analysis and publication/report on the heritage of KXC.

# **Provisions by the Principal Engineering Contractors** and Developer in Support of the Archaeological Site **Works on Each Plot**

#### 8.1 **General Developer Provisions**

- 1. Office and temporary accommodation for the Archaeological Contractor.
- 2. Male and female washing and lavatory facilities for the Archaeological Contractor.
- 3. Secure storage for the Archaeological Contractor.
- CDM Co-ordinator role for CDM Regulations. 4.
- Contract Manager. 5.

#### 8.2 **General Contractor Provisions**

- 1. Production of investigation and construction method statements that reference the integration of archaeological site works.
- attendance.
- conditions.
- 4. Site induction to ensure safe working methods by archaeologists and approved visitors.

#### 8.3 **Technical Contractor Provisions**

- 1. Allow inspection of and provide technical advice on services drawings.
- 2. With the Engineer or other client representative define all possible constraints that have to be taken into account and including those related to:
- Nearby Listed Buildings.
  - Conservation Areas.
  - Working near to active railway corridors.
  - Locations where archaeological salvage is required.
- 3. Dispose of the spoil from the agreed archaeological working areas, if and when necessary.
- interpretation programme.
- 5. Prepare and undertake break-out of 20th century structures and soils agreed with the Archaeological Consultant.
- 6. Provide all supportive works to excavations deeper than 1.2 m, where access is required and the excavation faces are not battered.
- 7. Break out all unnatural obstructions impeding archaeological works when requested by the Archaeological Contractor.
- 8. Provide, if necessary, tent covers over evaluation areas to be dug in winter conditions where very sensitive archaeological resources are encountered.

- 2. Right of legal entry to the plot and preparation of the site ready for archaeological
- 3. All electricity and lighting necessary for archaeological equipment and working

4. Provide geotechnical advice and information to aid archaeological works and

- 9. Provide labour for moving spoil away from investigation areas, pits and trenches being used for approved archaeological purposes.
- 10. Provide labour for protecting archaeological surfaces when temporary works are being set in place.
- 11. Undertake any required reinstatement of the excavation areas incorporating as necessary special protective materials over important/fragile archaeological resources (Terram and / or sand). In practice, little or no reinstatement will be required here, as the excavations will be continued down to formation level.

### The Archaeological Contractor Nominated for the 9 **Watching Brief on Each Plot**

The Archaeological Contractor proposed for the Archaeological Watching Brief is:

### Gary Brown and Helen Hawkins

Pre-Construct Archaeology Ltd Unit 54 Brockley Cross Business Centre 96 Endwell Road Brockley London SE4 2PD Tel: 020 7732 3925

Fax: 020 7732 7896

requirements.

Or, alternatively, the Watching Brief may be undertaken by IHCM to satisfy special client

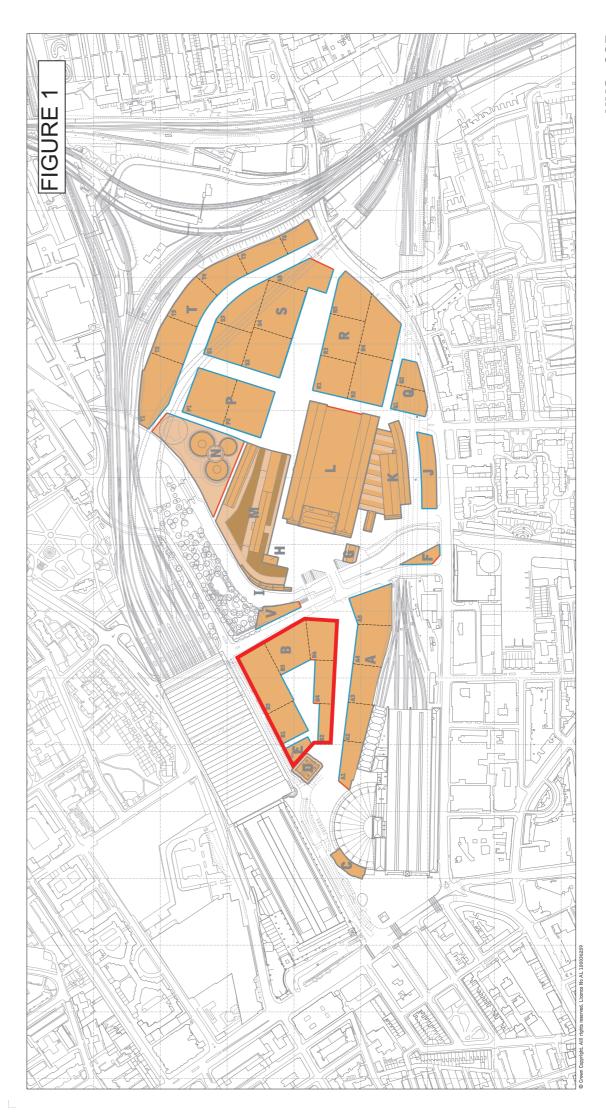
### **10 References**

English Heritage. Management of Archaeological Projects. 1991.

English Heritage. Standards and Practices in Archaeological Fieldwork in London, Archaeological Guidance Paper 3. June 1998.

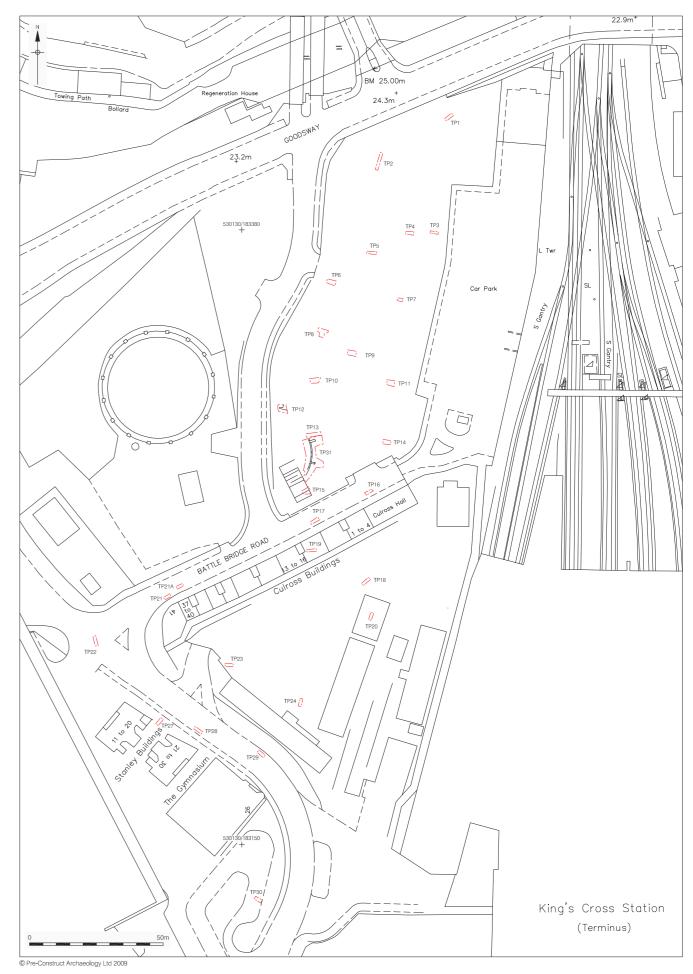
English Heritage. Archaeological Reports, Archaeological Guidance Paper 4. June 1998.

Institute of Field Archaeologists. Standards for Archaeological Watching Briefs. 1994.









### WRITTEN SCHEME OF INVESTIGATION

### FOR AN

### ARCHAEOLOGICAL WATCHING BRIEF AT DEVELOPMENT ZONES B AND E KING'S CROSS CENTRAL LONDON BOROUGH OF CAMDEN

FOR

Argent (King's Cross) Limited

Helen Hawkins

Pre-Construct Archaeology Unit 54 Brockley Cross Business Centre 96 Endwell Road Brockley London SE4 2PD

February 2010

### CONTENTS

- 1 INTRODUCTION .....
- 2 THE WATCHING BRIEF AND LOCA
- 3 GROUNDWORKS .....
- 4 RESOURCES AND PROGRAMMING
- 5 TIMETABLE.....

3	
AL EXCAVATIONS9	
G13	
14	

#### INTRODUCTION 1

#### Objective of this Written scheme of Investigation 1.1

Enabling and construction works in the ground are being brought forward as part of the development of Development Zones B and E, which lie in the southern area of the King's Cross Central ('KXC') site. Zone B is broken down into 6 separate plots referred to as B1, B2, B3, B4, B5 and B6, which sit around a new piece of principal public realm referred to as Pancras Square. Zone E includes one new building, E1, which will wrap around the existing Grade II listed Stanley Building South. The buildings in Zone B will share a common basement. The basement for building E1, although separate to the shared Zone B basement, will be accessed via the same. Details of these works will be submitted as Reserved Matters pursuant to conditions attached to the KXC outline planning permission dated 22 December 2006 (ref: 2004/2307/P), (the 'Outline Planning Permission'). Figure 1 shows the location of the Development Zones and plots.

This Written Scheme of Investigation (WSI) relates to archaeological investigation works for Development Zones B and E.

Condition 56 of the outline planning permission 2004/2307/P requires a programme of archaeological Investigation and recording be prepared and implemented. Pre-Construct Archaeology Ltd is nominated as the archaeological contractor to undertake these works.

For the Development Zones B and E, an Archaeological Watching Brief process was determined to be the appropriate mitigation measure, as identified within the Environmental Statement. This Written Scheme of Investigation sets out the strategy to ensure archaeological objectives are achieved to satisfy Condition 56 and implement the Environmental Statement.

In preparing this document full reference has been made to the Specification as prepared by International Heritage Conservation and Management Ltd. ('IHCM') which provides the strategy for archaeological investigation and mitigation of the potential effects on Development Zones B and E, as reported in the Environmental Statement. It commits to undertaking appropriate works and directs the contents of the Written Scheme of Investigation provided by the commissioned archaeological contractor. As such, the specification fulfils the requirements of Condition 56 of the Outline Planning Permission.

The 'Archaeological Watching Brief(s)' will be applied to the engineering and construction works within Development Zones B and E, for example:

- 1. Trial pitting to visually inspect the shallow ground conditions and establish the precise location of obstructions buried in the ground.
- 2. Sinking of bore holes to provide design data in respect of deep ground conditions and foundation designs.
- 3. Site preparation including the removing of present ground surfaces, the removal of any surviving upstanding features and removal of obstructions in the way of proposed ground works.
- 4. Construction and forming of temporary works.
- 5. Cut and fill earthworks to new formation level including the treatment of any contaminated soils encountered.
- 6. Excavation for shallow and deep buried services.
- 7. Excavation of basements and sumps, pits and other small area excavations.
- 8. Piling including forming of pile caps and ground beams.
- 9. Hard and soft landscaping around the proposed buildings, where a large number of known and evaluated heritage features will be removed.

The locations of the archaeological works are generally wherever there are to be ground works. Specific undertakings are defined in Section 1.8 above and other locations, but presently not yet determined, can be anticipated.

#### 1.2 Background History of Plot B and E

1.2.1 Summary

Development Zone B is substantially the former gas works.

The start of the industrial development of the area was initiated by the insertion of the Regent's Canal in the first guarter of the 19th century (opened 1820). This permitted the immediate development of the Pancras Works south of the canal, roughly opposite the Eastern Goods Yard. Further south, generally between King's Cross Station and St Pancras Station, mixed residential and commercial development occurred at this time. As the gas industry expanded and the great railway works were inserted so there were piecemeal changes then some major removal of the residential and light commercial urban fabric.

The gas works ceased making coal gas in 1904, with a brief revival in 1907, and its manufacturing plant was demolished in 1911. The gasholders remained in use, linked to trunk mains.

Zone E and the south west corner of Zone B formerly comprised an area of residential development. Today, only Stanley Building South and the immediate hard landscaping survive. The Stanley Buildings originally included five blocks of approximately 20 m by 12 m. They were purpose-built in 1864-5 as low-rental 'philanthropic' housing by the Improved Industrial Dwellings Co. One five-storey block remains, identified here as Stanley Building South.

Four of the former blocks have been demolished pursuant to Listed Building Consent 2004/2313/L in order to accommodate the extension of St. Pancras Station for the Channel Tunnel Rail Link terminal and for the realignment of Pancras Way.

Stanley Building South is currently unoccupied. It is listed Grade II and lies within the King's Cross St. Pancras Conservation Area.

The Stanley Buildings had no basements. Consequently, earlier made ground survives here and forms part of the infill of the historic River Fleet valley.

1.2.2 General Gas Industry Site History

The former gasworks within the KXC site, known as the Imperial Gasworks or Pancras Works, was built as the principal works of the Imperial Gas Light and Coke Company. When opened in 1824 this was the largest gasworks in the world. The works was sited alongside the Regent's Canal. It used coal initially delivered to the works by the canal and then later via a viaduct across the Regent's Canal from the Goods Yard. The gas was produced in large retort houses. This was then stored in the gasholders on the site, which acted as reservoirs so that an adequate supply of gas was always available when required. The Gas Light and Coke Co. acquired the Imperial Gas Light and Coke Company in 1876.

The consumption of gas was steadily climbing throughout the second half of the 19th century, in response to London's rising population and prosperity and falling costs in the making of gas. Proportionate increases in gas storage capacity were needed to meet peak demands at all the company's works. With connection by trunk mains to the company's huge Beckton gas works supplementing local production, several of the Pancras gasholders came to be enlarged in the 1880s. By 1900 the works occupied 11 acres (4.6 hectares), of which more than half was devoted to gas storage.

Gasholder No. 8, centrally placed in Zone B, was designed by John Clark, the engineer of the Pancras Works, and its ironwork was built by Westwood and Wrights in 1883. Both they and Clark had been responsible for the 'telescoping' of the three 'Siamese Triplet' gasholders Nos. 10, 11, and 12, completed in 1880 and located to the north west of Zone B, where the modern canopy of St Pancras Station is now

©Pre-Construct Archaeology Ltd, February 2010

sited. The brick tank of No. 8, set deeply into in the ground, had been constructed c.1853 for a previous gasholder, and was now deepened by 2 feet to 28 feet (8.5 m), still considerably less than the exceptional 55 feet (16.8 m) depth of the tanks of the triplet group. So the new bell of No 8 was given three telescopic 'lifts', within a guide frame some 83 feet (25.3 m) tall, compared with the two lifts, within guide frames 108 feet (32.9 m) tall, of the reconstructed triplet group. With different proportions, the guide frame of No. 8 has only two tiers of columns and girders compared with the three tiers of the triplet group.

All of these guide frames were based stylistically on those of John Clark's father, Joseph, some of whose work may be seen at the Bethnal Green and Bromley-by-Bow aasholder stations.

Although No. 8 is the only gasholder guide frame still standing today on the gasworks site, it may be noted here that in 1886-7 two other gasholders were enlarged and two more were added, with a new style of guide frame in lattice girder construction (with resemblance to the wind girders of St Pancras Station trainshed). There were then no fewer than nine substantial gasholders on the site, seven of which remained until the commencement of the CTRL works in 2001. Several of the gasholder tanks are still found within the ground of Zone B, founded at various depth and backfilled. Developed piecemeal on a constricted site, the holders were smaller and more attuned to the urban setting than some other London gasholders of the period. They presented a remarkable townscape - and landmark for people approaching St Pancras Station by train.

The Pancras Works ceased to make gas in 1904, but the gasholders continued in use, storing town gas piped from other gasworks. In the 1970s town gas was replaced by natural gas brought ashore from the North Sea, although again the gasholders continued in use.

The high-pressure national gas grid established first in the 1960s for the distribution of natural gas has an inherent storage capacity and flexibility, allowing a considerable and ongoing reduction in the national stock of gasholders. However, high-pressure mains cannot be used in built-up areas, and meeting the peaks of demand in large cities remains a problem. The removal of several of the gasholders, necessitated by the alignment of the CTRL and sanctioned by the CTRL Act of 1996, required an augmentation of the regional gas supply network. With that achieved all of the Pancras Works gasholders were decommissioned and purged of gas in 2000.

### 1.2.3 Immediate Archaeological Features Associated with Gasholder No. 8

The depth of the brick tank, recorded at 28 feet (8.5 m), is one-third of the full height of the bell, which is some 25 m. To reduce the amount of excavation, it was normal to leave the soil in the central portion of the tank in place, in the form of an inverted cone or "dumpling" to ensure stability of the soil. The bottom of the tank and the sloped sides of this 'dumpling' would be sealed with a layer of puddled clay or concrete if necessary, to prevent leakage of water out of the tank. On this site, the tank will assuredly cut into the underlying impermeable London Clay, and so these surfaces are likely to have received only a thin 'blinding' of concrete.

The wall of the tank will increase in thickness with depth, stepping out several times on the outer face to provide adequate resistance as a compressive ring against earth pressure, which would otherwise tend to force the walls inwards. Vertical piers to support the guide columns will project behind the wall, probably capped with a massive padstone. The inner face of the wall will be a uniform cylinder with vertical iron guides attached to the face. A central pillar in the tank provides support to the bell trusses when the tank is empty.

Immediately adjoining the tank on its south-west side, there is a circular brick well for the pipes that descend beneath the bottom of the tank wall to convey gas into and out of the gasholder bell. This had until 2001 a traditional hand-operated pump, with flywheel, for removing any accumulated water.

Written Scheme of Investigation for an Archaeological Watching Brief at Development Zones B and E King's Cross Central, London Borough of Camden ©Pre-Construct Archaeology Ltd, February 2010

1.2.4 Zones B.

> According to Ordnance Survey mapping dated 1871 Development Zone B included the following elements of the gasworks, remnants of which may still be in the ground on site and along the proposed Boulevard and the present day Goods Way:

- 2. Sets of Condensers and Tar Wells.
- 4. Sets of Scrubbers.
- 5. Sets of Purifiers.
- 6. Store House.
- 7. Crushing House.
- 8. Gas delivery pipes and machinery.
- 10. Coal, clinker and coal waste holding pens.
- 11. A large variety of small cylindrical tanks
- 12. Offices/stores
- 13. Associated hard landscaping.
- 1.2.5 Urban History and Other Heritage Resources within Blocks B and E

Limited development on the southern part of the KXC site took place in the late 18<sup>th</sup> century, stimulated by 'The New Road', to the south of KXC. The development was substantially one of low quality two storey terraced housing, the layout of which responded to field and property boundaries, the somewhat ad-hoc exploitation of soils for brick/tile making, the Fleet Sewer, and the Small Pox Hospital grounds (under King's Cross Station). Today, the orientations of the German Gymnasium and Stanley Building South, and their surrounding local roads, are based on this first phase development pattern.

There was further piecemeal expansion of the King's Cross residential area in the second and third decades of the 19th century, including the areas of terraced housing bordering Suffolk Street, Cheney Street, Ashby Street, Northampton Street and Norfolk Street south of the gas works, with Upper Edmond Street to the east. These streets were generally located towards the southern end of Development Zone B. This street pattern was diagonally placed across the previous agricultural field pattern.

The housing was typified by two storey structures and those on Suffolk Street West possibly having half basements. The houses generally fronted the roads and had rear extension kitchens and with 'privies' set at the bottom of small yards/gardens.

The existing housing between the two stations remained for a few more years. The erection in 1864-5 of the original five blocks of Stanley Buildings, an early project of Sir Sidney Waterlow's philanthropic and profit-restricted Improved Industrial Dwellings Company, responded to existing poor local housing conditions and the imminent dispossession of sites by the Midland Railway. The German Gymnasium, part of a contemporaneous redevelopment on Pancras Road, reflected other aspects of mid-Victorian Society.

Further platforms and sidings were added to the west of King's Cross Station before 1894 including new "docks" for express milk traffic and for horses and carriages (which subsequently became a Motor rail terminal). This facility was within Zone B at the south end. To improve road traffic circulation around the station, a new bridge

Other Gas Industry Facilities Associated with the Gasholder No. 8 in Development

A significant portion of one of the major Retort Houses.

3. Sets of Boilers and Pumps and Hydraulic Mains.

Wells and pumps for topping up the gasholder tanks.

was built across the enlarged "throat" of the station, with a western approach along the southern edge of the gas works. This was officially named Battle Bridge Road in 1873, possibly in advance of its construction. These works, set at a lower level related to rail tracks entering from the north where joining with the main rail routes passing under the Regent's Canal. The Milk Dock displaced the remaining pocket of backstreet houses so that the railway extended west as far as Cheney Street

By 1894 most of the residential streets had been swept away leaving the Stanley Buildings to the west and the German Gymnasium at the south end of this KXC development area.

Pressure on land made it more difficult for railway workers to find decent affordable housing close to their place of work, and to that end the Great Northern Railway in 1891-2 erected a tenement-style block of flats along the new Battle Bridge Road called the Culross Buildings. It was accompanied by a mission hall, Culross Hall, one of three provided by the company for its employees' spiritual needs. The Culross Buildings were totally unrelated to the few remaining earlier buildings in the area, such as the German Gymnasium (1864/5) and the Stanley Buildings (1864/5), and were demolished in 2008 pursuant to Conservation Area Consent 2004/2317/C.

#### Potential Archaeological Resources in Development Zones B and E 1.3

Potential archaeological resources related to the site are listed below:

Block/Plot Reference	Potential Industrial Remains
B3 and B5	Foundations of the Gasholder No 8 Brick wall to the north
В5	Gasholder No 8 foundations.
B3, B4, B5, B6	Gasholder No 8 buried infrastructure (with some connections to above ground features including an upstanding pump)
B1, B3, B4, B5, B6	Foundations and Infrastructure associated with the other gasholders – of particular not are wells for water used within the gasholder tanks.
Mostly B5 and B6	Buildings and related artefacts associated with the gas manufacturing process
Whole of Zone B	Soil formations associated with the gas works, some of which may be contaminated.
B3 and B5	Surface setts and sub surface make up of Battle Bridge Road
B1, B2 and B4	Basement and foundations of Culross Buildings
Zone E and Plot B1	Foundations and surrounding infrastructure to demolished Stanley Buildings
Generally Zones B and E	Made ground soil formations predating first phase urban development.

Generally Zone B and E

#### **Archaeological Objectives** 1.4

The strategy defined by IHCM (February 2010) outlines the Archaeological Watching Brief process and references a series of archaeological objectives and these are set out below:

The Archaeological Watching Briefs will collect and interpret data from the many sitebased engineering components of the redevelopment scheme. The archaeological objectives shall be related to:

- of London.
- associated railway facilities.
- at King's Cross and St. Pancras.

The watching brief/s and local excavations will follow both Institute of Field Archaeologists guidelines and the methodologies set out in English Heritage (GLAAS) Guidance Papers<sup>1</sup>. All archaeological works will be monitored by GLAAS on behalf of London Borough of Camden and by IHCM on behalf of the developers.

©Pre-Construct Archaeology Ltd, February 2010

Natural soil formations associated with the Fleet river and valley and generally of prehistoric times, back to the last glaciation.

1. Determining the character of the site and landscape prior to first-phase industrial development, including information about the rural topography with evidence of prehistoric to post-medieval land use; the exploitation of soils for brick making; early commercial development as part of the rapidly expanding early to mid 19th century industrial fabric

2. The mid 18th to early 19th century 'early' urban and commercial land uses, prior to the insertion of the mid 19th century railway buildings and

3. The character of foundations and soils of mid 19th to early 20<sup>th</sup> century.

4. Adding archaeological data to that obtained for CTRL and LUL development works that have been taking place for the last few years

5. The Archaeological Watching Briefs will also provide specialist advice to the Developer (Argent), the Engineer, and the Principal Engineering Contractor on made ground and historic engineering features during the site works, if and when discoveries are made. The Archaeological Watching Brief will monitor site works to reduce the chance of accidental damage occurring to retained heritage buildings.

6. Updating Archaeological Watching Brief and local Excavation objectives (project design) from time to time, responding to findings and interpretation discussions between all concerned parties.

7. One or more interim reports on the findings are planned to be issued during the ground works development programme and a draft final report within six months following the completion of site works.

<sup>&</sup>lt;sup>1</sup> English Heritage, Greater London Archaeology Advisory Service, "Archaeological Guidance Papers: 1 Written Schemes of Investigation: 2 Desk-Based Assessments: 3 Standards and Practices in Archaeological Fieldwork in London; 4 Archaeological Reports; 5 Evaluations", revised June 1998.

Written Scheme of Investigation for an Archaeological Watching Brief at Development Zones B and E King's Cross Central, London Borough of Camden ©Pre-Construct Archaeology Ltd, February 2010

#### 2 THE WATCHING BRIEF AND LOCAL EXCAVATIONS

All necessary site investigations and earthworks will be monitored by a suitably experienced archaeologist or archaeologists. The archaeologists will ensure that any archaeologically sensitive remains are recorded, and the relevant parties notified.

Pre-Construct Archaeology Ltd. is a Registered Archaeological Organisation with the Institute of Field Archaeologists.

The attending archaeologist will be provided with additional staff should the workload require it. The implementation of all groundworks will show due consideration for potential archaeological remains and the need to excavate/monitor them.

On completion of the fieldwork proper provision will be made for a full report on the results of the watching brief.

### GROUNDWORKS

#### Method Statement 3.1

3

Areas of groundworks will be broken out by the engineering contractor, whereupon the attending archaeologist will monitor, identify, record and retrieve (as far as possible) archaeological remains that may be uncovered during the course of the invasive works, or, archaeologically excavate them should they be proved to be of high and moderate archaeological significance. Notification of progress will be made to all relevant parties (IHCM, Argent, the London Borough of Camden and GLAAS).

All methodologies set out here are understood as being possible given the likelihood that some contamination is present. This will be confirmed by the results of existing and ongoing site investigations. Prior to commencement PCA will be provided with copies of all ground soil contamination reports and any other appropriate reports in order to determine the level of PPE to be worn.

All gold and silver will be removed to a safe place and reported to the local coroner according to the procedures relating to Treasure Act 1996. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.

If significant archaeological remains are accidentally encountered during the course of the investigations, or other groundworks, with the agreement of relevant parties, diaging will locally stop to allow the archaeological remains to be investigated and recorded by the archaeologist, if not to be preserved in situ. Further engineering excavation will then proceed until the desired formation level is achieved. Necessary horizontal and vertical trench faces will be cleaned before recording.

#### Access and Safety 3.2

Reasonable access to archaeological areas will be arranged for representatives of the London Borough of Camden and other representatives of English Heritage who wish to be satisfied, through site inspections, that the archaeological works are being conducted to proper professional standards and in accordance with the agreements made.

All relevant health and safety legislation, regulations and codes of practice will be respected. The groundworks contractor will be responsible for overall health and safety on the site.

It is assumed that there will be contaminants present at the site and therefore requiring appropriate level of PPE. The engineering contractor shall provide any additional protection for archaeological undertakings should more severe contamination be encountered. A gas monitor should also be provided. Some of the work may be located within the area of the former gasworks. Work in these areas will be undertaken wearing appropriate extra PPE as required. If the archaeologist believes the trench to be contaminated, they will not enter the trench and will seek a second opinion from PCA's health and safety officer.

If the site is considered to be 'confined space' then appropriately qualified staff must be employed as must the appropriate associated equipment.

#### **Recording Systems** 3.3

A unique-number site code system will be agreed with the Museum of London.

The recording systems adopted during the investigations will be broadly compatible with those most widely used elsewhere in the Borough. Where there is any doubt as to the appropriate recording technique the Museum of London recording manual will be used.

The site archive will be organised so as to be compatible with the other archaeological archives produced in the Borough. Individual descriptions of all archaeological strata and features excavated and exposed will be entered onto prepared pro-forma, for example, Test Pit Recording Sheets. If complex stratigraphy or structures are encountered pro-forma Single Context Recording Sheets will be

©Pre-Construct Archaeology Ltd, February 2010

used. Sample recording sheets, sample registers, findings recording sheets, accession catalogues, and the photography record cards will follow the Museum of London equivalents. This requirement for archival compatibility extends to the use of computerised databases.

A 'site location plan' indicating the site north and based on current Ordnance Survey data (reproduced with the permission of the Controller of HMSO) will be prepared. The location of the OS bench marks used and the site TBM will also be indicated.

Some record of the full extent in plan of any archaeological deposits encountered will be made; these plans will be on polyester based drawing film, will be related to the site grid and at a scale of 1:10 or 1:20. 'Single context planning' will be used on deeply stratified sites. The results will be digitised.

Sections will be drawn to scale or measured sketches will be made according to the relative safety of individual test pits.

The OD height of all principal strata and features will be calculated and indicated on the appropriate plans and sections, following transfer of information from the engineering contractor.

If the site complexity is such as to justify its use the 'Harris Matrix' stratification diagram will be used to record stratigraphic relationships. This record will be compiled and fully checked during the course of the excavations.

A photographic record of the investigations will be prepared. This will include black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological operation mounted.

#### 3.4 **Treatment of Finds**

Different sampling strategies may be employed according to the perceived importance of the deposit or feature under investigation. Close attention will be given to sampling for date and structure. Sample size will take into account the frequency with which material is likely to occur.

All finds retrieval policies of the Museum of London will be adopted and all identified finds and artefacts will be retained unless the Museum of London policy states otherwise.

All finds will be treated in a proper manner and will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the United Kingdom Institute for Conservation's 'Conservation Guidelines No.2' and the Museum of London's 'Standards for the Preparation of Finds to be Permanently Retained by the Museum of London'. All metal objects will be x-rayed and then selected for conservation.

Lodging of the site paper archive with the Museum of London. Artefacts are to be retained by the landowners or their nominated agency pending consideration of the potential for museum displays on and off site.

#### 3.5 **Reports and archives**

A report will be written up summarising the results of the archaeological watching brief on the investigation and earthworks, incorporating the data from the one or more phases of watching brief. The site and area historical, archaeological and geological background, site methodologies, results and any recommendations for further work will be set out and illustrated as appropriate. Copies of the report will be submitted via IHCM to English Heritage, the Borough's Planning Department, the Camden Local Studies Library and Argent.

The integrity of the site archive will be maintained. The finds and records will be available for public consultation. Appropriate guidance set out in the Museum and Galleries Commission's 'Standards in the Museum Care of Archaeological Collections' (1992) and the Society of Museum archaeologist's draft 'Selection and Written Scheme of Investigation for an Archaeological Watching Brief at Development Zones B and E King's Cross Central, London Borough of Camden ©Pre-Construct Archaeology Ltd, February 2010

# all circumstances.

If the finds are not to be donated to the appropriate Museum, arrangements will be made for a comprehensive record of all relevant materials (including detailed drawings, photographs and descriptions of individual finds), which can instead constitute the archaeological archive, but see 3.4.4 above.

The minimum acceptable standard for the site archive is defined in the 'Management of Archaeological Projects 5.4' and 'Appendix 3'. It will include all materials recovered, (or the comprehensive records of such materials as referred to above) and all written, drawn, and photographic records relating directly to the investigations. It will be quantified, ordered, indexed, and internally consistent before transfer to the Museum of London. It will also contain a site matrix, a site summary and brief written observations on the artefactual and environmental data.

United Kingdom Institute for Conservation guidelines for the preparation of excavation archives for long-term storage (1990) will be followed.

A short summary of the results of the work, even if negative, will be submitted to the Greater London SMR and NAR (using the appropriate archaeological report forms), and for publication in the appropriate academic journals including the 'Excavation Round-Up' of the London Archaeologist. Such publications will meet the minimum requirements set out in Appendix 7, 'Management of Archaeological Projects' 1991, and derive from a 'phase 2 review' as defined in the same document.

Retention and Dispersal of Archaeological Collections' (1992), will be followed in

Written Scheme of Investigation for an Archaeological Watching Brief at Development Zones B and E King's Cross Central, London Borough of Camden ©Pre-Construct Archaeology Ltd, February 2010

#### 4 **RESOURCES AND PROGRAMMING**

It is imperative that all soil excavation be undertaken under the supervision of an archaeologist in order not to cause unnecessary damage to identified archaeological deposits.

Accommodation, as well as welfare facilities and tool storage, will be required for the watching brief archaeologist and excavation team. It is assumed that these will be provided by the groundworks contractor at or near the site.

The site works will be inspected and monitored by Richard Hughes, IHCM, on behalf of Argent and Kim Stabler, English Heritage (GLAAS), on behalf of English Heritage and the London Borough of Camden.

The Health and Safety policies of Pre-Construct Archaeology Limited will be followed and in accordance with all statutory regulations. Full acknowledgement will be made to existing site policies and procedures.

The archaeological works will be supervised by a member of staff who has undertaken similar exercises.

Written Scheme of Investigation for an Archaeological Watching Brief at Development Zones B and E King's Cross Central, London Borough of Camden ©Pre-Construct Archaeology Ltd, February 2010

#### 5 TIMETABLE

parties prior to commencement.

### Once confirmed, IHCM will advise Pre-Construct Archaeology Ltd and other relevant



5 Albany Courtyard London W1J OHF

T +44 (0)20 7339 0400 www.kingscrosscentral.com