

Appendix C – Historical BGS Boreholes

Norwest Holst Soil Engineering Ltd.						Borehole No. 8	
Contract No. <u>F5563</u>		BOREHOLE LOG		Sheet <u>1</u> of <u>2</u>			
Location <u>Stage 3 Interceptor Sewer - Bury</u>				Chainage <u> </u>			
Client <u>Metropolitan Borough of Bury</u>				Ground Level <u>108.27</u> m.A.O.D.			
Method of Boring <u>Percussion</u>				Date <u>4/5/83</u>			
Diameter of Borehole <u>200 mm</u>				SD 71 SE 61			
Description of Strata	Legend	Depth Below G.L. (m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/R.Q.D. %	Daily Progress
MADE GROUND: Firm grey-brown mottled sandy gravelly clay with some ash, brick fragments and cobbles.					1.00	6	
					2.00	3	
					3.00	8	
					4.00	6	
					5.00	9	
		6.20	102.07				
MADE GROUND: Soft brown silty sandy clay with some gravel.					6.50		
					7.00	8	
		7.00	101.27				
Soft grey sandy gravelly CLAY with sandstone fragments and cobbles (probable made ground).					8.00	1	
		8.00	100.27				
Soft grey-brown silty organic CLAY (peat).					8.80	19	
		8.70	99.57				
Medium dense SAND and GRAVEL.					9.30		
		9.30	98.97				
Dark grey, silty moderately/ slightly weathered silty MUDSTONE, weak.							

Type of Sample	Remarks (Observations of Ground Water etc.)
Is S.P.T. ☐ Undisturbed Ic C.P.T. ☐ Vane O Jar ☐ Water ● Bulk ☐ Piezometer	Water struck at 8.70 m, moderate inflow, casing at 8.50 m. Standing water level at 7.70 m. Sealed at 9.50 m.

Norwest Holst Soil Engineering Ltd.						Borehole No. 9	
Contract No. F5563		BOREHOLE LOG		Sheet 1 of 2		Chainage 102.21 m.A.O.D.	
Location Stage 3 Interceptor Sewer - Bury		Client Metropolitan Borough of Bury		Method of Boring Percussion/Rotary		Date 4/5/83 - 6/5/83	
Diameter of Borehole 200 to 3.50 m, 140 mm to 11.10 m.		SD 71SE 62		Ground Level 102.21 m.A.O.D.		Date 4/5/83 - 6/5/83	
Description of Strata	Legend	Depth Below G.L. (m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/R.O.D. %	Daily Progress
MADE GROUND: Loose ash with some sandy clay.	[Cross-hatch pattern]	1.60	100.61		0.50	4	
Soft grey-brown mottled sandy CLAY with some gravel.	[Dotted pattern]	2.90	99.31	200mm to 3.50m	1.50	4	
Dark grey silty moderately to slightly weathered, silty MUDSTONE. Weak becoming moderately weak.	[Horizontal lines]	4.00	98.21		2.50		
	[Horizontal lines]				3.50	96	4/5
	[Horizontal lines]			TCR	4.00		6/5
	[Horizontal lines]			100%	4.90	0%	
	[Horizontal lines]			100%		0%	
	[Horizontal lines]				6.30		
	[Horizontal lines]			95%		0%	
	[Horizontal lines]			100%	8.30	0%	

Type of Sample

Is S.P.T. [Solid black] Undisturbed

Ic. C.P.T. [X] Vane

O Jar [Triangle] Water

● Bulk [Cross-hatch] Piezometer

Remarks (Observations of Ground Water etc.)

Water struck at 3.00 m, moderate inflow. Casing at 3.50 m.

Norwest Holst Soil Engineering Ltd.						Borehole No. 7	
Contract No. F5563		BOREHOLE LOG		Sheet 1 of 1		Chainage	
Location Stage 3 Interceptor Sewer - Bury		Client Metropolitan Borough of Bury		Ground Level 107.36 m.A.O.D.		Date 5/5/83	
Method of Boring Percussion		Diameter of Borehole 200 mm		SD71SE 60			
Description of Strata	Legend	Depth Below G.L.(m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/R.Q.D.%	Daily Progress
MADE GROUND: Loose to medium dense ash, silt, sand and gravel size with some clayey ash.					1.00	19	
					2.00	12	
					3.00	7	
		4.40	102.96		4.00	8	
MADE GROUND: Grey-brown sandy very gravelly clay with sandstone fragments		5.40	101.96		5.00	18	

Type of Sample

Is S.P.T. ☐ Undisturbed

Ic. C.P.T. ☐ Vane

O Jar ☐ Water

● Bulk ☐ Piezometer

Remarks (Observations of Ground Water etc.)

Borehole dry during boring.

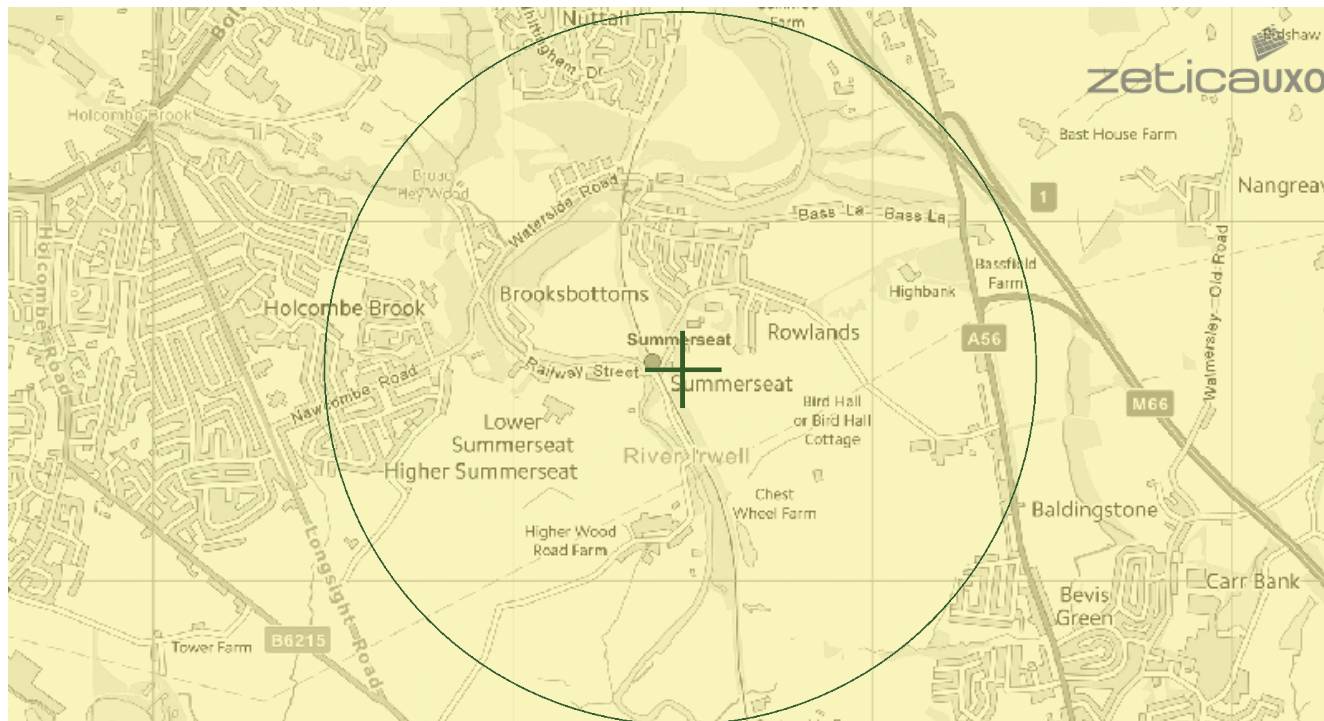
Appendix D – Zetica UXO Unexploded Bomb Risk Map

UNEXPLODED BOMB RISK MAP



SITE LOCATION

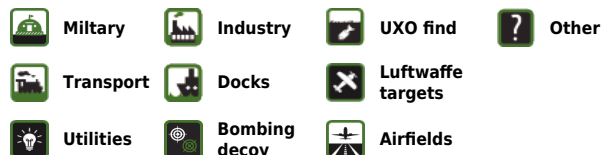
Location: BL9 5QY,
Map Centre: 379437,414597



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.



How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density. Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then [additional detailed research](#) is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our [pre-desk study assessments \(PDSA\)](#) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: [+44 \(0\) 1993 886682](tel:+44201993886682) email: uxo@zetica.com web: www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the [accompanying notes on our website](#).

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgement. The copyright remains with Zetica Ltd.

Appendix E – Relevant Previous Information

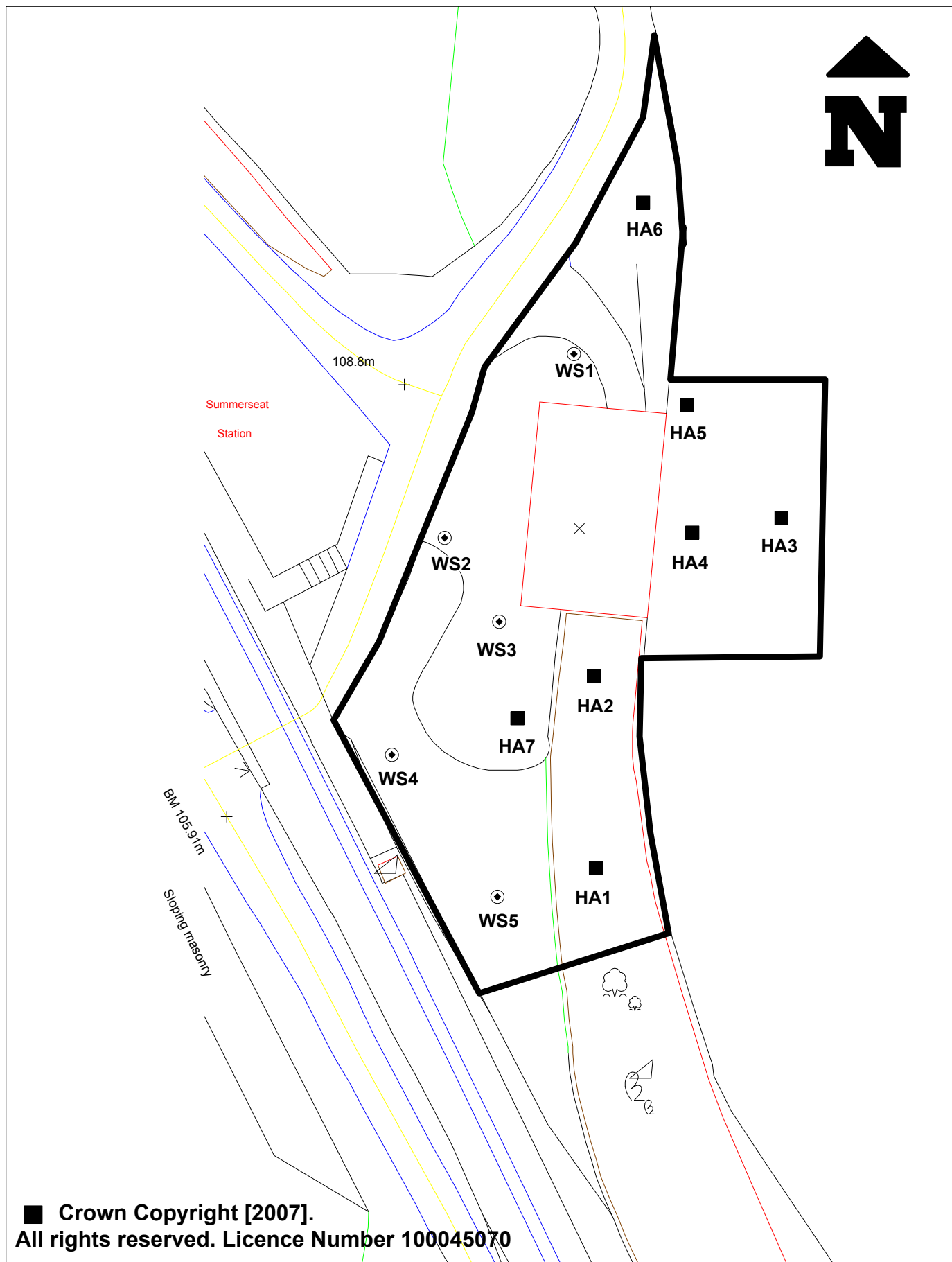


Figure 3-1: Sampling Location Plan, Summerseat Goods Yard, Bury

Drawn: October 2007

Landfill Gas Monitoring on 23rd October 2007

Weather: cloudy Surface ground conditions: dry

Monitoring Equipment: GA2000

Ambient concentrations (% Volume) CH4: 0%, CO2: 0%, O2: 20.2%.

Barometric pressure: Start of visit 1010mb, end of visit 1010mb.

ID	DATE	CH4 %	CO2 %	O2 %	BALANCE %	CH4 %LEL %	PEAKCH4 %	BARO mb	REL.PRESSURE mb	INTERNAL FLOW l/h	CO ppm	H2S ppm	CH4/CO2 %	Res Nitrogen %	Dipmeter	
1186WS1	23/10/2007 13:23	0	2.6	16.4	81	0	0	1010	-0.05			0	0	0	19.01	Dry
1186WS3	23/10/2007 13:49	0	2.1	16.2	81.7	0	0	1010	0.01		0	0	0	0	20.46	2.8
1186WS4	23/10/2007 13:54	0	0.6	20.1	79.3	0	0	1010	0.06		0	0	0	0	3.32	Dry
1186WS5	23/10/2007 14:04	0	4.2	14.7	81.1	0	0	1010	0.06		0	0	0	0	25.53	2.4

Landfill Gas Monitoring on 30th October 2007

Weather: cloudy Surface ground conditions: dry

Monitoring Equipment: GA2000

Ambient concentrations (% Volume) CH₄: 0%, CO₂: 0%, O₂: 20.2%.

Barometric pressure: Start of visit 1006mb, end of visit 1005mb.

[illegible]

Landfill Gas Monitoring on 5th November 2007

Weather: cloudy Surface ground conditions: dry

Monitoring Equipment: GA2000

Ambient concentrations (% Volume) CH4: 0%, CO2: 0%, O2: 20.2%.

Barometric pressure: Start of visit 1006mb, end of visit 1006mb.

ID	DATE	CH4 %	CO2 %	O2 %	BALANCE %	CH4 %LEL %	PEAKCH4 %	BARO mb	REL.PRESSURE mb	INTERNAL FLOW l/h	CO ppm	H2S ppm	CH4/CO2 %	Res Nitrogen %	Dipmeter
WS1	05/11/2007 14:14	0	2.1	14.9	83	0	0	1006	-0.09	0	0	0	0	26.68	3.2
WS3	05/11/2007 14:22	0	1.7	18.2	80.1	0	0	1006	-0.02	0	0	0	0	11.3	0.9
WS4	05/11/2007 14:29	0	0.6	20.2	79.2	0	0	1006	-0.06	0.2	0	0	0	2.84	Dry
WS5	05/11/2007 14:34	0	0	20.7	79.3	0	0	1006	-0.12	0	0	0	0	1.05	2.4

Landfill Gas Monitoring on 20th November 2007

Weather: cloudy Surface ground conditions: dry

Monitoring Equipment: GA2000

Ambient concentrations (% Volume) CH4: 0%, CO2: 0%, O2: 20.2%.

Barometric pressure: Start of visit 988mb, end of visit 987mb.

ID	DATE	CH4 %	CO2 %	O2 %	BALANCE %	CH4 %LEL %	PEAKCH4 %	BARO mb	REL.PRESSURE mb	INTERNAL FLOW l/h	CO ppm	H2S ppm	CH4/CO2 %	Res Nitrogen %	Dipmeter	
BH1	20/11/2007 15:13	0	2.6	15.3	82.1	0	0	988		0		0	0	0	24.27	2.15
BH3	20/11/2007 15:22	0	1.6	17.2	81.2	0	0	988	0.03		0	0	0	0	16.18	1.1
BH4	20/11/2007 15:31	0	0.4	20.1	79.5	0	0	988	0.06		0.1	0	0	0	3.52	Dry
BH5	20/11/2007 15:37	0	3.4	16.2	80.4	0	0	987	0.07		0	0	0	0	19.16	2.35

Landfill Gas Monitoring on 4th December 2007

Weather: cloudy Surface ground conditions: dry

Monitoring Equipment: GA2000

Ambient concentrations (% Volume) CH4: 0%, CO2: 0%, O2: 20.2%.

Barometric pressure: Start of visit 992mb, end of visit 991mb.

ID	DATE	CH4 %	CO2 %	O2 %	BALANCE %	CH4 %LEL %	PEAKCH4 %	BARO mb	REL.PRESSURE mb	INTERNAL FLOW l/h	CO ppm	H2S ppm	CH4/CO2 %	Res Nitrogen %
WS1	04/12/2007 15:46	0	1.4	18.9	79.7	0	0	992	-23.3	0	0	0	0	8.26
WS3	04/12/2007 15:54	0	1.6	18.1	80.3	0	0	992	0.02	-0.2	0	0	0	11.88
WS4	04/12/2007 16:02	0	0.2	20.4	79.4	0	0	991	0.04	0	0	0	0	2.29
WS5	04/12/2007 16:08	0	1.9	17.2	80.9	0	0	991	0.05	0	0	0	0	15.88

Landfill Gas Monitoring on 11th December 2007

Weather: cloudy Surface ground conditions: dry

Monitoring Equipment: GA2000

Ambient concentrations (% Volume) CH4: 0%, CO2: 0%, O2: 20.2%.

Barometric pressure: Start of visit 1014mb, end of visit 1014mb.

ID	DATE	CH4 %	CO2 %	O2 %	BALANCE %	CH4 %LEL %	PEAKCH4 %	BARO mb	REL.PRESSURE mb	INTERNAL FLOW l/h	CO ppm	H2S ppm	CH4/CO2 %	Res Nitrogen %	Dipmeter	
WS1	11/12/2007 15:57	0	1.6	18.7	79.7	0	0	1014	-9.62		0	0	0	0	9.01	2.35
WS3	11/12/2007 16:06	0	1.6	18	80.4	0	0	1014	-0.17		0	0	0	0	12.36	1.2
WS4	11/12/2007 16:10	0	0.4	20.3	79.3	0	0	1014	-0.14		0	0	0	0	2.57	Dry
WS5	11/12/2007 16:16	0	2.1	18.1	79.8	0	0	1014	-0.12		0	0	0	0	11.38	

Leyden Kirby Associates
Unit 25 Bury Business Centre - CL1186
Kay Street
Bury, Lancashire
BL9 6BU

LABORATORY TEST REPORT

Chemtest

Report Date
17 October 2007

Results of analysis of 13 samples
received 08 October 2007

FAO M Pickford

Summerseat

Login Batch No

Chemtest LIMS ID

Sample ID

Sample No

Depth

Matrix

					36401							
					AC39393	AC39394	AC39395	AC39396	AC39397	AC39398	AC39399	AC39400
					HA1	HA2	HA3	HA4	HA5	HA6	HA7	WS1
					0.6	0.4	0.5	0.8	0.8	0.6	0.4	0.3
					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2030	Moisture		%	n/a	28.6	23	14.5	22.5	15.7	25.8	22.3	20.2
	Stone content (as received)		%	n/a	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2300	Cyanide (total)	57125	mg kg ⁻¹	M	0.6	< 0.5	< 0.5	< 0.5	< 0.5	0.5	< 0.5	< 0.5
2310	Cyanide (free)	57125	mg kg ⁻¹	M	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2610	Loss on ignition		%	N	17.4	6.74	5.7	7.98	8.49	10.6	19	7.93
2120	Boron (hot water soluble)	7440428	mg kg ⁻¹	U	0.5	1	1	0.8	1.3	0.9	2.1	0.6
2210	Sulfate (2:1 water soluble)	14808798	g l ⁻¹	M	0.01	0.03	<0.01	0.01	<0.01	<0.01	0.02	<0.01
2450	Arsenic	7440382	mg kg ⁻¹	M	23	3.9	4.7	8.2	13	9.1	37	2.4
	Vanadium	7440622	mg kg ⁻¹	M	22	14	16	17	25	17	67	19
	Cadmium	7440439	mg kg ⁻¹	M	0.62	<0.1	<0.1	<0.1	0.38	0.27	0.64	0.27
	Chromium	7440473	mg kg ⁻¹	U	15	16	18	19	22	17	25	28
	Copper	7440508	mg kg ⁻¹	M	66	20	13	25	39	28	170	18
	Mercury	7439976	mg kg ⁻¹	M	0.22	<0.1	<0.1	<0.1	0.32	<0.1	0.48	<0.1
	Nickel	7440020	mg kg ⁻¹	M	18	13	18	15	34	24	53	38
	Lead	7439921	mg kg ⁻¹	M	120	29	18	40	100	74	160	24
	Selenium	7782492	mg kg ⁻¹	U	1.1	0.60	0.53	0.67	0.67	0.44	0.87	0.51
	Zinc	7440666	mg kg ⁻¹	M	50	41	47	38	100	77	180	66
2490	Chromium (hexavalent)	18540299	mg kg ⁻¹	N	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2675	TPH aliphatic >C5-C6		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C6-C8		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C8-C10		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C10-C12		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C12-C16		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C16-C21		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C21-C35		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C5-C7		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C7-C8		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C8-C10		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C10-C12		mg kg ⁻¹	N	4.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C12-C16		mg kg ⁻¹	N	51	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

All tests undertaken between 11-Oct-2007 and 17-Oct-2007

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 1

Report page 1 of 3

Report sample ID range AC39393 to AC39408

Leyden Kirby Associates
Unit 25 Bury Business Centre - CL1186
Kay Street
Bury, Lancashire
BL9 6BU

LABORATORY TEST REPORT

Chemtest

Report Date
17 October 2007

Results of analysis of 13 samples
received 08 October 2007

FAO M Pickford

Summerseat

Login Batch No

Chemtest LIMS ID

Sample ID

Sample No

Depth

Matrix

SOP↓ Determinand↓

CAS No↓

Units↓

					36401				
					AC39403	AC39405	AC39406	AC39407	AC39408
					WS2	WS3	WS3	WS4	WS5
					0.3	0.7	1.4	0.4	0.3
					SOIL	SOIL	SOIL	SOIL	SOIL
2030	Moisture		%	n/a	21.6	20.9	25	21.6	13.4
	Stone content (as received)		%	n/a	<0.02	<0.02	<0.02	<0.02	<0.02
2300	Cyanide (total)	57125	mg kg ⁻¹	M	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2310	Cyanide (free)	57125	mg kg ⁻¹	M	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2610	Loss on ignition		%	N	42.8	64.6	6.05	26	19.2
2120	Boron (hot water soluble)	7440428	mg kg ⁻¹	U	0.6	0.4	<0.4	0.4	0.5
2210	Sulfate (2:1 water soluble)	14808798	g l ⁻¹	M	<0.01	<0.01	0.01	<0.01	0.06
2450	Arsenic	7440382	mg kg ⁻¹	M	48	65	8.3	31	15
	Vanadium	7440622	mg kg ⁻¹	M	42	12	20	46	18
	Cadmium	7440439	mg kg ⁻¹	M	0.84	0.17	0.14	0.35	0.91
	Chromium	7440473	mg kg ⁻¹	U	18	4.6	19	21	22
	Copper	7440508	mg kg ⁻¹	M	160	39	14	140	62
	Mercury	7439976	mg kg ⁻¹	M	0.42	0.22	<0.1	0.23	0.18
	Nickel	7440020	mg kg ⁻¹	M	55	23	19	76	30
	Lead	7439921	mg kg ⁻¹	M	220	130	43	110	520
	Selenium	7782492	mg kg ⁻¹	U	1.5	1.3	0.30	0.99	0.44
	Zinc	7440666	mg kg ⁻¹	M	140	40	45	140	280
2490	Chromium (hexavalent)	18540299	mg kg ⁻¹	N	< 5	< 5	< 5	< 5	< 5
2675	TPH aliphatic >C5-C6		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C6-C8		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C8-C10		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C10-C12		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C12-C16		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C16-C21		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aliphatic >C21-C35		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C5-C7		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C7-C8		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C8-C10		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C10-C12		mg kg ⁻¹	N	<0.1	<0.1	<0.1	<0.1	<0.1
	TPH aromatic >C12-C16		mg kg ⁻¹	N	<0.1	<0.1	0.6	<0.1	<0.1

All tests undertaken between 11-Oct-2007 and 17-Oct-2007

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 2

Report page 1 of 3

Report sample ID range AC39393 to AC39408

LABORATORY TEST REPORT

Results of analysis of 13 samples
received 08 October 2007

Report Date
17 October 2007

FAO M Pickford

Summerseat

				36401							
				AC39393	AC39394	AC39395	AC39396	AC39397	AC39398	AC39399	AC39400
				HA1	HA2	HA3	HA4	HA5	HA6	HA7	WS1
				0.6	0.4	0.5	0.8	0.8	0.6	0.4	0.3
				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
2675	TPH aromatic >C16-C21	mg kg ⁻¹	N	92	1.6	<0.1	1.0	1.1	1.0	3.9	2.1
	TPH aromatic >C21-C35	mg kg ⁻¹	N	110	7.6	12	7.6	12	9.0	20	17
	Total Petroleum Hydrocarbons	mg kg ⁻¹	N	260	<20	<20	<20	<20	<20	24	<20
2700	Naphthalene	91203 mg kg ⁻¹	M	8.1	<0.1	<0.1	<0.1	0.1	<0.1	2.5	<0.1
	Acenaphthylene	208968 mg kg ⁻¹	M	5.1	<0.1	<0.1	<0.1	0.2	<0.1	5.3	0.2
	Acenaphthene	83329 mg kg ⁻¹	M	12	<0.1	<0.1	<0.1	0.3	<0.1	1.9	0.4
	Fluorene	86737 mg kg ⁻¹	M	9.2	<0.1	<0.1	<0.1	0.1	<0.1	3.7	<0.1
	Phenanthrene	85018 mg kg ⁻¹	M	64	0.6	<0.1	0.1	0.7	0.3	4.4	0.2
	Anthracene	120127 mg kg ⁻¹	M	15	<0.1	<0.1	<0.1	<0.1	<0.1	1.4	<0.1
	Fluoranthene	206440 mg kg ⁻¹	M	63	0.9	0.4	0.4	0.8	0.5	4	0.1
	Pyrene	129000 mg kg ⁻¹	M	52	0.4	0.1	0.2	0.6	0.2	3.5	6.6
	Benzo[a]anthracene	56553 mg kg ⁻¹	M	30	0.5	<0.1	<0.1	0.5	0.3	1.9	11
	Chrysene	218019 mg kg ⁻¹	M	31	0.6	0.6	0.6	0.6	0.4	2.3	2.8
	Benzo[b]fluoranthene	205992 mg kg ⁻¹	M	33	0.8	0.3	0.6	0.7	0.6	3.2	0.2
	Benzo[k]fluoranthene	207089 mg kg ⁻¹	M	18	0.5	0.3	0.5	0.7	0.5	1.7	0.2
	Benzo[a]pyrene	50328 mg kg ⁻¹	M	27	0.4	1.6	0.2	0.3	0.4	3	0.4
	Dibenzo[a,h]anthracene	53703 mg kg ⁻¹	M	9.7	<0.1	1.3	1.8	2.5	3.4	1.4	5.3
	Indeno[1,2,3-cd]pyrene	193395 mg kg ⁻¹	M	32	<0.1	1.1	1.4	1.5	3.1	1.3	2.2
	Benzo[g,h,i]perylene	191242 mg kg ⁻¹	M	21	<0.1	0.6	1.2	1.7	2.6	1.7	0.8
	Total (of 16) PAHs	mg kg ⁻¹	M	430	4.8	6.2	6.9	11	12	43	30
2760	Benzene	71432 µg kg ⁻¹	M	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	108883 µg kg ⁻¹	M	2.2	<1	<1	<1	<1	<1	<1	<1
	Ethyl benzene	100414 µg kg ⁻¹	M	<1	<1	<1	<1	<1	<1	<1	<1
	m- & p-Xylene	1330207 µg kg ⁻¹	M	2.1	<1	<1	<1	<1	<1	<1	<1
	o-Xylene	95476 µg kg ⁻¹	M	<1	<1	<1	<1	<1	<1	<1	<1
	Methyl tert-butyl ether	1634044 µg kg ⁻¹	N	<1	<1	<1	<1	<1	<1	<1	<1
2810	PCBs as Aroclor 1242	53469219 mg kg ⁻¹									
2920	Phenols (total)	mg kg ⁻¹	M	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
2010	pH	-	M	4.7	4.1	4.2	4.0	4.7	4.5	6.3	6.3
2140	Soil colour		n/a	brown	brown	brown	brown	brown	brown	brown	brown
	Soil texture		n/a	sand	clay	sand	sand	sand	sand	sand	sand

All tests undertaken between 11-Oct-2007 and 17-Oct-2007

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 1

Report page 2 of 3

Report sample ID range AC39393 to AC39408

LABORATORY TEST REPORT

Report Date
17 October 2007

Results of analysis of 13 samples
received 08 October 2007

FAO M Pickford

Summerseat

					36401				
					AC39403	AC39405	AC39406	AC39407	AC39408
					WS2	WS3	WS3	WS4	WS5
					0.3	0.7	1.4	0.4	0.3
					SOIL	SOIL	SOIL	SOIL	SOIL
2675	TPH aromatic >C16-C21		mg kg ⁻¹	N	100	7.2	30	1.4	3.7
	TPH aromatic >C21-C35		mg kg ⁻¹	N	160	41	75	93	21
	Total Petroleum Hydrocarbons		mg kg ⁻¹	N	260	48	110	94	25
2700	Naphthalene	91203	mg kg ⁻¹	M	10	38	<0.1	3	0.6
	Acenaphthylene	208968	mg kg ⁻¹	M	13	36	0.6	4.3	5.4
	Acenaphthene	83329	mg kg ⁻¹	M	5.2	12	0.3	2.7	1.9
	Fluorene	86737	mg kg ⁻¹	M	9.1	24	0.6	1.3	3.7
	Phenanthrene	85018	mg kg ⁻¹	M	17	22	1.1	10	2.9
	Anthracene	120127	mg kg ⁻¹	M	4.1	5	1.2	3.3	0.9
	Fluoranthene	206440	mg kg ⁻¹	M	21	9.4	1	14	2.3
	Pyrene	129000	mg kg ⁻¹	M	20	7.1	0.8	14	1.9
	Benzo[a]anthracene	56553	mg kg ⁻¹	M	13	4.9	0.6	19	1.4
	Chrysene	218019	mg kg ⁻¹	M	14	6.5	0.7	20	1.4
	Benzo[b]fluoranthene	205992	mg kg ⁻¹	M	14	5.6	0.8	35	2.1
	Benzo[k]fluoranthene	207089	mg kg ⁻¹	M	8	2.3	0.4	16	1.1
	Benzo[a]pyrene	50328	mg kg ⁻¹	M	12	3.5	0.4	35	1.1
	Dibenzo[a,h]anthracene	53703	mg kg ⁻¹	M	2.8	3.2	0.5	16	1.3
	Indeno[1,2,3-cd]pyrene	193395	mg kg ⁻¹	M	12	3.3	0.9	51	1.5
	Benzo[g,h,i]perylene	191242	mg kg ⁻¹	M	6.6	1.4	0.7	39	1.4
	Total (of 16) PAHs		mg kg ⁻¹	M	180	180	11	280	31
2760	Benzene	71432	µg kg ⁻¹	M	1.2	1.2	<1	<1	<1
	Toluene	108883	µg kg ⁻¹	M	2.2	1.7	<1	<1	<1
	Ethyl benzene	100414	µg kg ⁻¹	M	<1	<1	<1	<1	<1
	m- & p-Xylene	1330207	µg kg ⁻¹	M	1.5	<1	<1	1.1	<1
	o-Xylene	95476	µg kg ⁻¹	M	<1	<1	<1	<1	<1
	Methyl tert-butyl ether	1634044	µg kg ⁻¹	N	<1	<1	<1	<1	<1
2810	PCBs as Aroclor 1242	53469219	mg kg ⁻¹		<1			<1	
2920	Phenols (total)		mg kg ⁻¹	M	<0.3	<0.3	<0.3	<0.3	<0.3
2010	pH		-	M	6.6	7.2	7.4	7.2	7.8
2140	Soil colour			n/a	black	black	brown	brown	brown
	Soil texture			n/a	sand	sand	clay	sand	sand

All tests undertaken between 11-Oct-2007 and 17-Oct-2007

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 2

Report page 2 of 3

Report sample ID range AC39393 to AC39408

Leyden Kirby Associates
Unit 25 Bury Business Centre - CL1186
Kay Street
Bury, Lancashire
BL9 6BU

FAO M Pickford

LABORATORY TEST REPORT



Report Date
17 October 2007

Results of analysis of 13 samples
received 08 October 2007

Summerseat

					36401							
					AC39393	AC39394	AC39395	AC39396	AC39397	AC39398	AC39399	AC39400
					HA1	HA2	HA3	HA4	HA5	HA6	HA7	WS1
					0.6	0.4	0.5	0.8	0.8	0.6	0.4	0.3
					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
2140	Other material			n/a	stones	roots	none	roots	stones	stones	stones	stones
2186	Asbestos (presence/absence)		-	N	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected

Leyden Kirby Associates
Unit 25 Bury Business Centre - CL1186
Kay Street
Bury, Lancashire
BL9 6BU

LABORATORY TEST REPORT

Chemtest

Report Date
17 October 2007

Results of analysis of 13 samples
received 08 October 2007

FAO M Pickford

Summerseat

36401									
AC39403					AC39405	AC39406	AC39407	AC39408	
WS2					WS3	WS3	WS4	WS5	
0.3					0.7	1.4	0.4	0.3	
SOIL					SOIL	SOIL	SOIL	SOIL	
2140	Other material			n/a	stones	none	none	stones	stones
2186	Asbestos (presence/absence)		-	N	not detected	not detected	not detected	not detected	not detected

Leyden Kirby Associates
Unit 25 Bury Business Centre
Kay Street
Bury, Lancashire
BL9 6BU

LABORATORY TEST REPORT

Chemtest

Report Date
02 November 2007

FAO M.Pickford

Results of analysis of 1 sample
received 25 October 2007

CL1186 - Summerseat

Login Batch No

Chemtest LIMS ID

Sample ID

Sample No

Depth

Matrix

SOP↓	Determinand↓	CAS No↓	Units↓	*	
1010	pH	PH	-	U	7.3
1300	Cyanide (total)	57125	mg l ⁻¹	N	< 0.05
1310	Cyanide (free)	57125	mg l ⁻¹	N	< 0.05
1120	Sulfate	14808798	mg l ⁻¹	U	110
1450	Arsenic	7440382	µg l ⁻¹	U	<1
	Boron	7440428	µg l ⁻¹	U	130
	Cadmium	7440439	µg l ⁻¹	U	<0.5
	Chromium	7440473	µg l ⁻¹	U	4.2
	Copper	7440508	µg l ⁻¹	U	<1
	Lead	7439921	µg l ⁻¹	U	<1
	Mercury	7439976	µg l ⁻¹	U	<0.5
	Nickel	7440020	µg l ⁻¹	U	5.5
	Selenium	7782492	µg l ⁻¹	U	<1
	Zinc	7440666	µg l ⁻¹	U	18
1490	Chromium (hexavalent)	18540299	µg l ⁻¹	N	<50
1675	TPH aliphatic >C5-C6		µg l ⁻¹	N	<0.1
	TPH aliphatic >C6-C8		µg l ⁻¹	N	<0.1
	TPH aliphatic >C8-C10		µg l ⁻¹	N	<0.1
	TPH aliphatic >C10-C12		µg l ⁻¹	N	<0.1
	TPH aliphatic >C12-C16		µg l ⁻¹	N	<0.1
	TPH aliphatic >C16-C21		µg l ⁻¹	N	<0.1
	TPH aliphatic >C21-C35		µg l ⁻¹	N	<0.1
	TPH aromatic >C6-C7		µg l ⁻¹	N	<0.1
	TPH aromatic >C7-C8		µg l ⁻¹	N	<0.1
	TPH aromatic >C8-C10		µg l ⁻¹	N	<0.1
	TPH aromatic >C10-C12		µg l ⁻¹	N	<0.1
	TPH aromatic >C12-C16		µg l ⁻¹	N	<0.1
	TPH aromatic >C16-C21		µg l ⁻¹	N	<0.1
	TPH aromatic >C21-C35		µg l ⁻¹	N	<0.1
	Total Petroleum Hydrocarbons		µg l ⁻¹	N	<10

All tests undertaken between 31-Oct-2007 and 2-Nov-2007

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 1

Report page 1 of 2

Report sample ID range AC44438 to AC44438

LABORATORY TEST REPORT

Report Date
02 November 2007

Results of analysis of 1 sample
received 25 October 2007

FAO M.Pickford

CL1186 - Summerseat

					45597
					AC44438
					WS5
					WATER
1700	Naphthalene	91203	µg l ⁻¹	N	<0.01
	Acenaphthylene	208968	µg l ⁻¹	N	<0.01
	Acenaphthene	83329	µg l ⁻¹	N	<0.01
	Fluorene	86737	µg l ⁻¹	N	<0.01
	Phenanthrene	85018	µg l ⁻¹	N	<0.01
	Anthracene	120127	µg l ⁻¹	N	<0.01
	Fluoranthene	206440	µg l ⁻¹	N	<0.01
	Pyrene	129000	µg l ⁻¹	N	<0.01
	Benzo[a]anthracene	56553	µg l ⁻¹	N	<0.01
	Chrysene	218019	µg l ⁻¹	N	<0.01
	Benzo[b]fluoranthene	205992	µg l ⁻¹	N	<0.01
	Benzo[k]fluoranthene	207089	µg l ⁻¹	N	<0.01
	Benzo[a]pyrene	50328	µg l ⁻¹	N	<0.01
	Dibenzo[a,h]anthracene	53703	µg l ⁻¹	N	<0.01
	Indeno[1,2,3-cd]pyrene	193395	µg l ⁻¹	N	<0.01
	Benzo[g,h,i]perylene	191242	µg l ⁻¹	N	<0.01
	Total (of 16) PAHs		µg l ⁻¹	N	<0.2
1760	Benzene	71432	µg l ⁻¹	U	<1
	Toluene	108883	µg l ⁻¹	U	<1
	Ethyl benzene	100414	µg l ⁻¹	U	<1
	m- & p-Xylene	1330207	µg l ⁻¹	U	<1
	o-Xylene	95476	µg l ⁻¹	U	<1
	Methyl tert-butyl ether	1634044	µg l ⁻¹	U	<1
1920	Phenols (total)		mg l ⁻¹	N	<0.03

Leyden Kirby Associates
Unit 25 Bury Business Centre
Kay Street
Bury, Lancashire
BL9 6BU

LABORATORY TEST REPORT

Chemtest

Report Date
05 November 2007

FAO Michelle Pickford

Summerseat

Login Batch No

Chemtest LIMS ID

Sample ID

Sample No

Depth

Matrix

SOP↓	Determinand↓	CAS No↓	Units↓	*	54148	
					AC45169	AC45171
					WS 3	WS 4
					0.7m	0.4m
					LEACHATE	LEACHATE
1010	pH	PH	-	U	7.9	8.0
1300	Cyanide (total)	57125	mg l ⁻¹	N	< 0.05	< 0.05
1310	Cyanide (free)	57125	mg l ⁻¹	N	< 0.05	< 0.05
1120	Sulfate	14808798	mg l ⁻¹	U	< 10	< 10
1450	Arsenic	7440382	µg l ⁻¹	U	1.1	2.5
	Boron	7440428	µg l ⁻¹	U	26	26
	Cadmium	7440439	µg l ⁻¹	U	<0.5	<0.5
	Chromium	7440473	µg l ⁻¹	U	1.1	1.6
	Copper	7440508	µg l ⁻¹	U	<1	<1
	Lead	7439921	µg l ⁻¹	U	1.0	1.6
	Mercury	7439976	µg l ⁻¹	U	<0.5	<0.5
	Nickel	7440020	µg l ⁻¹	U	1.3	1.7
	Selenium	7782492	µg l ⁻¹	U	1.2	<1
	Zinc	7440666	µg l ⁻¹	U	<1	<1
1490	Chromium (hexavalent)	18540299	µg l ⁻¹	N	<50	<50
1675	TPH aliphatic >C5-C6		µg l ⁻¹	N	<0.1	<0.1
	TPH aliphatic >C6-C8		µg l ⁻¹	N	11	<0.1
	TPH aliphatic >C8-C10		µg l ⁻¹	N	0.5	<0.1
	TPH aliphatic >C10-C12		µg l ⁻¹	N	80	<0.1
	TPH aliphatic >C12-C16		µg l ⁻¹	N	930	<0.1
	TPH aliphatic >C16-C21		µg l ⁻¹	N	630	<0.1
	TPH aliphatic >C21-C35		µg l ⁻¹	N	56	<0.1
	TPH aromatic >C6-C7		µg l ⁻¹	N	2.5	<0.1
	TPH aromatic >C7-C8		µg l ⁻¹	N	8.4	<0.1
	TPH aromatic >C8-C10		µg l ⁻¹	N	12	<0.1
	TPH aromatic >C10-C12		µg l ⁻¹	N	23	<0.1
	TPH aromatic >C12-C16		µg l ⁻¹	N	270	<0.1
	TPH aromatic >C16-C21		µg l ⁻¹	N	100	<0.1
	TPH aromatic >C21-C35		µg l ⁻¹	N	4.5	<0.1
	Total Petroleum Hydrocarbons		µg l ⁻¹	N	2100	<10

All tests undertaken between 01-Nov-2007 and 5-Nov-2007

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Column page 1

Report page 1 of 2

Report sample ID range AC45169 to AC45171

LABORATORY TEST REPORT

Report Date
05 November 2007

Results of analysis of 2 samples
received 30 October 2007

FAO Michelle Pickford

Summerseat

					54148	
					AC45169	AC45171
					WS 3	WS 4
					0.7m	0.4m
					LEACHATE	LEACHATE
1700	Naphthalene	91203	µg l ⁻¹	N	<0.01	<0.01
	Acenaphthylene	208968	µg l ⁻¹	N	<0.01	<0.01
	Acenaphthene	83329	µg l ⁻¹	N	<0.01	<0.01
	Fluorene	86737	µg l ⁻¹	N	<0.01	<0.01
	Phenanthrene	85018	µg l ⁻¹	N	<0.01	<0.01
	Anthracene	120127	µg l ⁻¹	N	<0.01	<0.01
	Fluoranthene	206440	µg l ⁻¹	N	<0.01	<0.01
	Pyrene	129000	µg l ⁻¹	N	<0.01	<0.01
	Benzo[a]anthracene	56553	µg l ⁻¹	N	<0.01	<0.01
	Chrysene	218019	µg l ⁻¹	N	<0.01	<0.01
	Benzo[b]fluoranthene	205992	µg l ⁻¹	N	<0.01	<0.01
	Benzo[k]fluoranthene	207089	µg l ⁻¹	N	<0.01	<0.01
	Benzo[a]pyrene	50328	µg l ⁻¹	N	<0.01	<0.01
	Dibenzo[a,h]anthracene	53703	µg l ⁻¹	N	<0.01	<0.01
	Indeno[1,2,3-cd]pyrene	193395	µg l ⁻¹	N	<0.01	<0.01
	Benzo[g,h,i]perylene	191242	µg l ⁻¹	N	<0.01	<0.01
	Total (of 16) PAHs		µg l ⁻¹	N	<0.2	<0.2
1760	Benzene	71432	µg l ⁻¹	U	3.8	<1
	Toluene	108883	µg l ⁻¹	U	13	1.6
	Ethyl benzene	100414	µg l ⁻¹	U	1.4	<1
	m- & p-Xylene	1330207	µg l ⁻¹	U	5.7	1.1
	o-Xylene	95476	µg l ⁻¹	U	3.1	<1
	Methyl tert-butyl ether	1634044	µg l ⁻¹	U	<1	<1
1920	Phenols (total)		mg l ⁻¹	N	<0.03	<0.03