

Appendix C

Laboratory Results: Summary Tables

**Overarching Remedial Action Plan
Haymarket Precinct, Darling Harbour, Sydney NSW**

Table 1
Soil Analytical Results - Comparison Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

Field ID	BH1 1.0	BH1 3.0	BH10 1.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	BH11 0.1m	BH11 0.5m	BH11 1.0m	BH12 0.5	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH13 1.0	BH13 1.5	BH13 2.5	
LocCode	BH1 1.0	BH1 3.0	BH10 1.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	BH11 0.1m	BH11 0.5m	BH11 1.0m	BH12 0.5	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH13 1.0	BH13 1.5	BH13 2.5	
Sample Depth Range																		
Sampled Date-Time	7/06/2011	7/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	1/06/2011	1/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	9/06/2011	9/06/2011	9/06/2011	
Matrix Description																		
SDG	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100639-1	SE100639-1	SE100639-1	SE100700-1								
Inorganics	Moisture	%	0.5															
Metals	Arsenic	mg/kg	2 / 3		400	3	9	4	-	8	4	-	5	<3	5	<3	6	5
	Cadmium	mg/kg	0.3 / 0.4		80	0.3	<0.3	<0.3	-	<0.3	<0.3	-	0.3	<0.3	<0.3	0.4	<0.3	<0.3
	Chromium	mg/kg	0.3 / 5		400	9	16	11	-	13	13	-	16	20	13	13	14	11
	Copper	mg/kg	0.5		4000	13	21	44	-	4.9	35	-	34	18	13	39	36	5.1
	Lead	mg/kg	1 / 5		1200	15	25	260	-	19	150	-	74	21	34	31	240	24
	Mercury	mg/kg	0.05		60	<0.05	0.05	0.13	-	<0.05	0.22	-	0.12	0.09	0.1	0.11	0.19	<0.05
	Nickel	mg/kg	0.5 / 2.5 / 5		2400	7.7	3.6	7.7	-	1.2	4.7	-	4.6	5.1	9.3	13	7.8	1
Zinc	mg/kg	0.5 / 5		28000	30	25	72	-	18	110	-	77	160	83	64	92	380	520
BTEX	Benzene	mg/kg	0.1 / 0.5	1		<0.1	<1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5		50	<0.1	<0.1	<1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1		130	<0.1	<0.1	<1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1			<1	<1	<2	<1	<1	<1	-	<0.2	<1	<1	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5			<0.5	<0.5	<1	<0.5	<0.5	<0.5	-	<0.1	<0.5	<0.1	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5		25	<0.3	<3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
TPH	C6 - C9	mg/kg	10 / 20		65	-	-	-	-	-	-	<20	<20	-	-	-	-	-
	C10 - C14	mg/kg	20 / 50			-	-	-	-	-	-	28	23	-	-	-	-	-
	C15 - C28	mg/kg	50 / 100			-	-	-	-	-	-	1200	430	-	-	-	-	-
	C29 - C36	mg/kg	50 / 100			-	-	-	-	-	-	620	260	-	-	-	-	-
	C10 - C36 (Sum of total)	mg/kg	120 / 100		1000	-	-	-	-	-	-	1848	713	-	-	-	-	-
PAH	Acenaphthene	mg/kg	0.1 / 0.5			<0.1	<0.1	7.3	-	<0.1	1	-	2.3	3.2	<0.1	0.6	0.4	<0.1
	Acenaphthylene	mg/kg	0.1 / 0.5			<0.1	<0.1	0.6	-	<0.1	<0.1	-	12	0.7	0.1	0.7	0.4	<0.1
	Anthracene	mg/kg	0.1 / 0.5			<0.1	<0.1	17	-	<0.1	2.3	-	23	6	0.2	1.3	0.5	<0.1
	Benz(a)anthracene	mg/kg	0.1 / 0.5			<0.1	<0.1	30	-	<0.1	3.2	-	55	8.5	0.8	3.9	2.3	<0.1
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	4		<0.05	<0.05	20	-	<0.05	2.1	-	47	7	0.63	3.2	1.9	<0.05
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1			<0.1	<0.1	24	-	<0.1	2.8	-	64	3	0.8	3.7	<0.1	<0.1
	Benz(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	2.5	-	-
	Benz(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-	0.8	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5			<0.1	<0.1	9.6	-	<0.1	0.9	-	25	4.6	0.3	1.7	0.9	<0.1
	Chrysene	mg/kg	0.1 / 0.5			<0.1	<0.1	17	-	<0.1	1.7	-	40	6.1	0.4	2	1.2	<0.1
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5			<0.1	<0.1	2.4	-	<0.1	0.2	-	2.7	0.8	<0.1	0.3	0.2	<0.1
	Fluoranthene	mg/kg	0.1 / 0.5			<0.1	<0.1	51	-	0.2	6	-	120	16	1.1	3.9	2.5	0.1
	Fluorene	mg/kg	0.1 / 0.5			<0.1	<0.1	9	-	<0.1	1.2	-	8.9	3.6	<0.1	0.6	0.3	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5			<0.1	<0.1	8.8	-	<0.1	0.9	-	23	3.9	0.3	1.4	0.8	<0.1
Naphthalene	mg/kg	0.1 / 0.5			<0.1	<0.1	5	-	<0.1	0.7	-	2.6	2.6	<0.1	0.4	0.3	<0.1	
Phenanthrene	mg/kg	0.1 / 0.5			<0.1	<0.1	52	-	0.1	6.7	-	84	14	0.5	3.2	1.7	<0.1	
Pyrene	mg/kg	0.1 / 0.5			<0.1	<0.1	51	-	0.1	5.6	-	120	18	1.2	6.3	3.8	0.2	
Total PAHs	mg/kg	0.8 / 1.0 / 1.75		80	<1.75	<1.75	280	-	<1.75	32	-	-	110	5.6	29	17	<1.75	<1.75
Asbestos	Asbestos	-	-		Detect	ND	ND	-	ND	ND	-	ND	ND	-	ND	ND	D	D
VOC	4-Nitrophenol	mg/kg	0.5		LOR	-	-	<LOR	-	-	<LOR	-	-	-	<LOR	-	-	-
	2-naphthylamine	mg/kg	0.5		LOR	-	-	<LOR	-	-	<LOR	-	-	-	<LOR	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	0.52	-	-	<LOR</td											

Table 1
Soil Analytical Results - Comparisn Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

Table 1
Soil Analytical Results - Comparison Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
6/06/2011	6/06/2011	6/06/2011	6/06/2011	14/06/2011	14/06/2011	14/06/2011	9/06/2011	9/06/2011	6/06/2011	9/06/2011	14/06/2011	15/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	
SE100639-1	SE100639-1	SE100639-1	SE100639-1	SE100735-1	SE100735-1	SE100700-1	SE100700-1	SE100639-1	SE100700-1	SE100735-1	SE100735-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	

Chem. Group	ChemName	Units	LOR	BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
Inorganics	Moisture	%	0.5	-	-	15	14	15	18	23	21	21	-	18	8.1	9	-	20	17	18	13
Metals	Arsenic	mg/kg	2 / 3	-	-	14	<3	4	-	6	3	8	-	25	5	4	-	13	6	8	9
	Cadmium	mg/kg	0.3 / 0.4	-	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	0.6	0.8	0.3	-	0.5	<0.3	<0.3	0.3
	Chromium	mg/kg	0.3 / 5	-	-	12	12	9.8	-	11	13	6.4	-	13	12	-	-	29	15	13	9.7
	Copper	mg/kg	0.5	-	-	42	1.2	26	-	14	16	9.3	-	1.2	39	30	-	98	30	15	320
	Lead	mg/kg	1 / 5	-	-	110	7	57	-	37	12	15	-	12	130	66	-	540	75	31	190
	Mercury	mg/kg	0.05	-	-	0.64	<0.05	0.24	-	0.23	<0.05	0.41	-	<0.05	0.27	0.12	-	1.2	0.22	0.05	0.64
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	10	1.2	13	-	5.7	13	1.2	-	1.3	7.2	19	-	26	6.5	1.9	13
	Zinc	mg/kg	0.5 / 5	-	-	110	2.5	96	-	25	22	12	-	7.9	190	93	-	460	89	22	270
BTEX	Benzene	mg/kg	0.1 / 0.5	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1	-	-	<0.2	<1	<1	-	<0.2	<1	<1	-	<0.2	<1	<1	-	<0.2	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	-	-	<0.1	<0.5	<0.5	-	<0.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.1	<0.1	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	-	-	<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
TPH	C6 - C9	mg/kg	10 / 20	-	-	<20	<20	<20	-	<20	-	-	-	<20	<20	-	<20	<20	<20	<20	
	C10 - C14	mg/kg	20 / 50	-	-	<20	<20	<20	-	<20	-	-	-	<20	<20	-	130	<20	<20	<20	
	C15 - C28	mg/kg	50 / 100	-	-	380	<50	<50	-	<50	-	-	-	-	89	54	-	4300	290	310	170
	C29 - C36	mg/kg	50 / 100	-	-	110	<50	<50	-	<50	-	-	-	-	76	53	-	1900	150	140	130
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	-	500	<120	<120	-	<120	-	-	-	-	175	117	-	6330	450	460	310
PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	35	1.6	2.4	0.2
	Acenaphthylene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	0.5	0.2	-	1.1	<0.1	<0.1	0.4
	Anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.1	-	<0.1	<0.1	<0.1	-	<0.1	0.7	0.2	-	69	3.2	<0.1	1
	Benz(a)anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.2	-	<0.1	<0.1	<0.1	-	<0.1	1.6	0.8	-	160	8.7	<0.1	4
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	-	-	<0.5	-	0.24	-	<0.05	<0.05	<0.05	-	<0.05	1.5	0.92	-	74	4.3	<0.05	3.2
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	-	-	<1	-	0.4	-	<0.1	<0.1	<0.1	-	<0.1	0.9	0.5	-	-	<0.1	1.2	
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	6.6	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	1.3	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.1	-	<0.1	<0.1	<0.1	-	<0.1	1	0.7	-	38	2.3	<0.1	1.9
	Chrysene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.2	-	<0.1	<0.1	<0.1	-	<0.1	1.4	0.7	-	98	4.5	<0.1	1.9
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-								

Table 1
Soil Analytical Results - Comparisn Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	24/04/2012	24/04/2012	24/04/2012	18/04/2012	18/04/2012	18/04/2012	24/04/2012	27/04/2012	27/04/2012	27/04/2012
SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE107686-1	SE107686-1	SE107686-1	SE107335-1	SE107335-1	SE107335-1	SE107686-1	SE107819-1	SE107819-1	SE107819-1

Chem_Group	ChemName	Units	LOR													
Inorganics	Moisture	%	0.5	17	-	10	15	9.1	18	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	7	-	13	6	5	-	3	5	8	4	12	12	6
	Cadmium	mg/kg	0.3 / 0.4	<0.3	-	<0.3	<0.3	<0.3	-	0.3	0.3	<0.3	<0.3	0.4	0.3	0.3
	Chromium	mg/kg	0.3 / 5	13	-	18	9.5	15	-	5.1	7.9	5.6	7.3	9.9	21	6.9
	Copper	mg/kg	0.5	18	-	110	7.3	12	-	51	580	5.8	23	41	63	98
	Lead	mg/kg	1 / 5	32	-	310	23	31	-	220	92	14	13	93	91	2.3
	Mercury	mg/kg	0.05	1	-	0.68	<0.05	0.07	-	0.89	1.3	0.07	0.07	0.26	0.18	0.13
	Nickel	mg/kg	0.5 / 2.5 / 5	3.5	-	11	1.3	4.6	-	12	7.3	1.6	5	16	4.8	11
	Zinc	mg/kg	0.5 / 5	32	-	190	12	17	-	310	110	6	33	100	95	210
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1	<1	-	<1	<1	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Xylene Total	mg/kg	0.3 / 1.5	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
TPH	C6 - C9	mg/kg	10 / 20	<20	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C14	mg/kg	20 / 50	<20	-	<20	<20	<20	<20	<20	<20	<20	<20	30	<20	<20
	C15 - C28	mg/kg	50 / 100	<50	-	320	<50	<50	<50	<50	<50	<50	190	<50	450	<50
	C29 - C36	mg/kg	50 / 100	<50	-	190	<50	<50	<50	<50	<50	<50	55	<50	420	<50
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<120	-	520	<120	<120	<120	<120	<120	<120	255	<120	900	<120
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.1	-	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	3	<0.1
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.1	-	1.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.1	1.4	<0.1
	Anthracene	mg/kg	0.1 / 0.5	0.3	-	2.3	<0.1	0.2	<0.1	0.1	<0.1	<0.1	1.2	0.3	3.8	<0.1
	Benzo(a)anthracene	mg/kg	0.1 / 0.5	0.4	-	6.4	0.3	0.4	<0.1	0.3	0.2	<0.1	2.2	0.6	4.8	<0.1
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.35	-	3.9	0.15	0.25	<0.05	0.3	0.1	<0.1	1.6	0.5	4.4	<0.1
	Benzo(b)fluoranthene	mg/kg	0.1 / 1	0.1	-	1.5	<0.1	0.1	<0.1	-	-	-	-	-	-	-
	Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	0.4	0.2	<0.1	<0.1	1.9	0.6	5.9	<0.1
	Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	0.2	<0.1	<0.1	<0.1	0.7	0.3	2	<0.1
	Benzo(q,h,i)perylene	mg/kg	0.1 / 0.5	0.2	-	2.1	<0.1	0.2	<0.1	0.2	<0.1	<0.1	0.8	0.3	3.2	<0.1
	Chrysene	mg/kg	0.1 / 0.5	0.3	-	3.2	0.1	0.2	<0.1	0.3	0.2	<0.1	1.4	0.4	3.6	<0.1
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.1	-	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<1	<0.1
	Fluoranthene	mg/kg	0.1 / 0.5	0.8	-	9.1	0.4	0.7	<0.1	0.5	0.2	<0.1	3.9	1	15	<0.1
	Fluorene	mg/kg	0.1 / 0.5	0.1	-	1.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.1	<1	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	0.2	-	2.2	<0.1	0.1	<0.1	0.1	<0.1	<0.1	0.7	0.2	2.3	<0.1
	Naphthalene	mg/kg	0.1 / 0.5	<0.1	-	0.7	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.2	<0.1	1.2	<0.1
	Phenanthrene	mg/kg	0.1 / 0.5	0.6	-	7.9	0.3	0.6	<0.1	0.5	0.2	<0.1	3.1	0.8	8.2	<0.1
	Pyrene	mg/kg	0.1 / 0.5	0.8	-	8.8	0.3	0.7	<0.1	0.5	0.2	<0.1	3.7	1	14	<0.1
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	4.7	-	58	<1.75	3.8	<1.75	3.3	1.4	<0.8	23	6	73	<0.8
Asbestos	Asbestos</td															

Table 1
Soil Analytical Results - Comparisn Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
17/04/2012	17/04/2012	17/04/2012	27/04/2012	27/04/2012	27/04/2012	27/04/2012	24/04/2012	24/04/2012	24/04/2012	24/04/2012	12/12/2012	12/12/2012
SE107335-1	SE107335-1	SE107335-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107686-1	SE107686-1	SE107686-1	SE107686-1	103789-90	103789-90

Chem_Group	ChemName	Units	LOR	BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	<3	4	3	<3	4	<3	9	<3	-	<3	16	4.6	<2
	Cadmium	mg/kg	0.3 / 0.4	0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	22	8.9	4.7	11	11	9.7	260	4.9	-	7.6	12	5.6	7
	Copper	mg/kg	0.5	80	83	5.5	35	8.7	4.7	33	5.4	-	8.5	3.4	17	23
	Lead	mg/kg	1 / 5	24	230	6	51	18	27	19	11	-	16	14	58	44
	Mercury	mg/kg	0.05	0.3	2.1	<0.05	0.28	0.08	0.08	<0.05	<0.05	-	<0.05	<0.05	0.06	0.07
	Nickel	mg/kg	0.5 / 2.5 / 5	38	9.6	<0.5	31	3.2	2.1	25	3.6	-	6.2	4.1	11	7.3
	Zinc	mg/kg	0.5 / 5	71	310	3.5	89	23	32	9.4	22	-	33	9.9	250	280
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	<0.1	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	1.1	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	<0.1	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	1.4	<0.3	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<20	<20	<20	<20	<20	<20	<20	<20	-	21	<20	<10	<10
	C10 - C14	mg/kg	20 / 50	20	<20	<20	<20	<20	<20	<20	<20	-	62	<20	<50	<50
	C15 - C28	mg/kg	50 / 100	2500	840	<50	<50	<50	<50	<50	<50	-	2400	<50	<100	<100
	C29 - C36	mg/kg	50 / 100	1700	380	<50	<50	<50	<50	<50	<50	-	1100	<50	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	4220	1230	<120	<120	<120	<120	<120	<120	-	3562	<120	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	0.2	2.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	-	13	<0.1	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	0.1	4.7	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	-	<1	<0.1	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	0.7	13	0.2	0.7	<0.1	0.3	<0.1	<0.1	-	23	0.1	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.8	26	0.2	1.2	<0.1	0.5	<0.1	<0.1	-	50	0.3	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.5	16	0.1	1	<0.1	0.6	<0.1	<0.1	-	30	0.2	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	-	-	-	-	-	-	-	-	-	-	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	0.7	21	0.2	1.1	<0.1	<0.1	<0.1	<0.1	-	28	0.2	-	-
	Benz(k)fluoranthene	mg/kg	0.1	0.4	5.6	0.1	0.6	<0.1	0.4	<0.1	<0.1	-	10	0.1	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	0.5	9.3	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	-	15	0.1	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	0.8	14	0.2	0.9	<0.1	0.4	<0.1	<0.1	-	42	0.3	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.1	2.5	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	-	3.1	<0.1	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1.5	53	0.5	2.6	<0.1	1.2	<0.1	<0.1	-	79	0.4	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	0.3	5.5	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	-	12	<0.1	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	0.3	8.1	<0.1	0.5	<0.1	0.4	<0.1	<0.1	-	11	<0.1	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	0.1	2.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<1	<0.1	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	3.2	69	0.6	2	<0.1	0.8	<0.1	<0.1	-	120	0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	1.3	51	0.5	2.4	<0.1	1.2	<0.1	<0.1	-	110	0.6	<0.5	<0.5
	Total PAHs	mg/kg	0.8 /													

Table 1
Soil Analytical Results - Comparision Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012
103789-90	103789-90	103789-90	103789-90	103789-90	103787-103788		103787-103788		103787-103788	103787-103788

Table 1
Soil Analytical Results - Comparision Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

Chem_Group	ChemName	Units	LOR	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	34	-	4	6.1	-	-	-	-	-	-	-	8.7	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	-	<0.4	<0.4	-	-	-	-	-	-	<0.4	-	-
	Chromium	mg/kg	0.3 / 5	35	-	110	6.7	-	-	-	-	-	-	42	-	-
	Copper	mg/kg	0.5	96	-	43	51	-	-	-	-	-	-	130	-	-
	Lead	mg/kg	1 / 5	530	-	6.2	250	-	-	-	-	-	-	79	-	-
	Mercury	mg/kg	0.05	4.9	-	<0.05	0.57	-	-	-	-	-	-	0.41	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	35	-	120	<5	-	-	-	-	-	-	51	-	-
Zinc	mg/kg	0.5 / 5	220	-	79	190	-	-	-	-	-	-	-	120	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TPH	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	<100	160	390	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	<100	160	390	<100	<100	<100	<100	<100	<100
	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.7	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	8.9	<0.5	<0.5	<0.5	<0.5	1.1	1.2	<0.5	<0.5
	Benzo(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	5.6	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.4	3.9	8.7	<0.5	<0.5	0.7	0.8	<0.5	<0.5
	Benzo(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	2.2	7.1	15	<1	<1	1.4	<1	<1	<1
	Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1	2	4.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	4.8	9.6	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.9	12	27	<0.5	<0.5	2	2.3	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.8	1.8	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.1	9.1	31	<0.5	<0.5	1.2	1.2	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.1	10	23	<0.5	<0.5	1.7	2	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	13	67	140	<1	<1	8.9	7.5	<1	<1
Asbestos	Asbestos	-	-	-	-	ND	-	ND	-	-	-	-	-	ND	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	<LOR	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	<LOR	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	<LOR	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	<LOR	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	<LOR	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH121A_ (0.5-0.6m)	BH121A_ (1.0-1.1m) A	BH121A_ (1.0-1.1m)	BH121A_ (1.5-1.6m)	BH121A_ (2.5-2.6m)	BH122_ (0.5-0.6m)	BH122_ (1.5-1.6m)	BH122A_ (0.5-0.6m)	BH122A_ (1.0-1.1M)	BH122A_ (1.5-1.6m) A	BH122A_ (1.5-1.6m)
BH121A_ (0.5-0.6m)	BH121A_ (1.0-1.1m) A	BH121A_ (1.0-1.1m)	BH121A_ (1.5-1.6m)	BH121A_ (2.5-2.6m)	BH122_ (0.5-0.6m)	BH122_ (1.5-1.6m)	BH122A_ (0.5-0.6m)	BH122A_ (1.0-1.1m)	BH122A_ (1.5-1.6m) A	BH122A_ (1.5-1.6m)
18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
103797-99	103797-99	103797-99	103797-99	103797-99	103789-90	103789-90	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR	BH121A_ (0.5-0.6m)	BH121A_ (1.0-1.1m) A	BH121A_ (1.0-1.1m)	BH121A_ (1.5-1.6m)	BH121A_ (2.5-2.6m)	BH122_ (0.5-0.6m)	BH122_ (1.5-1.6m)	BH122A_ (0.5-0.6m)	BH122A_ (1.0-1.1M)	BH122A_ (1.5-1.6m) A	BH122A_ (1.5-1.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	14	-	-	14	-	2.1	-	2.8	-	5.2	4.5
	Cadmium	mg/kg	0.3 / 0.4	<0.4	-	-	<0.4	-	<0.4	-	<0.4	-	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	11	-	-	27	-	11	-	7.5	-	11	11
	Copper	mg/kg	0.5	93	-	-	350	-	20	-	29	-	26	26
	Lead	mg/kg	1 / 5	160	-	-	2700	-	35	-	47	-	56	52
	Mercury	mg/kg	0.05	0.59	-	-	3.4	-	0.06	-	0.06	-	0.12	0.16
	Nickel	mg/kg	0.5 / 2.5 / 5	14	-	-	62	-	8	-	<5	-	<5	<5
	Zinc	mg/kg	0.5 / 5	150	-	-	310	-	60	-	55	-	63	56
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	1300	520	350	<100	<100	<100	<100	-	<100	180
	C29 - C36	mg/kg	50 / 100	<100	810	270	270	<100	<100	<100	<100	-	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	2135	790	620	<100	<100	<100	<100	-	<100	180
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<5	<5	1.4	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	7.9	14	3.6	<0.5	<0.5	<0.5	<0.5	-	<0.5	0.7
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.7	31	18	10	<0.5	<0.5	1.3	<0.5	-	1.3	2.2
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.5	22	13	7.8	<0.5	<0.5	1.3	<0.5	-	1.2	2.1
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	1.1	39	21	13	<1	<1	2	<1	-	2.1	3.5
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	11	6.6	3.8	<0.5	<0.5	0.7	<0.5	-	0.7	1.1
	Chrysene	mg/kg	0.1 / 0.5	0.6	23	14	8	<0.5	<0.5	1.1	<0.5	-	1.1	2
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	0.9	55	30	18	0.8	0.9	2.4	<0.5	-	2.4	4.2
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<5	<5	1.2	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	9.8	<5	3.5	<0.5	<0.5	0.6	<0.5	-	0.6	1
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	1	0.6	0.8	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	28	14	14	<0.5	<0.5	0.6	1.4	<0.5	-	1.4
	Pyrene	mg/kg	0.1 / 0.5	1	53	31	17	0.8	0.9	2.3	<0.5	-	2.2	4
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	4.8	280	160	100	1.6	2.4	13	<1	-	13	24
Asbestos	Asbestos	-	-	ND	-	-	ND	-	ND	ND	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH122A_ (2.0-2.1m)	BH122A_ (3.0-3.1m)	BH122A_ (3.4-3.5m)	BH123_ (0.08-0.18m)	BH123_ (0.5-0.6m)	BH123_ (1.5-1.6m) A	BH123_ (1.5-1.6m)	BH123A_ (0.5-0.6m)	BH123A_ (1.0-1.1m) A	BH123A_ (1.0-1.1m)	BH123A_ (2.0-2.1m)
BH122A_ (2.0-2.1m)	BH122A_ (3.0-3.1m)	BH122A_ (3.4-3.5m)	BH123_ (0.08-0.18m)	BH123_ (0.5-0.6m)	BH123_ (1.5-1.6m) A	BH123_ (1.5-1.6m)	BH123A_ (0.5-0.6m)	BH123A_ (1.0-1.1m) A	BH123A_ (1.0-1.1m)	BH123A_ (2.0-2.1m)
13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
103791-93	103791-93	103791-93	103789-90	103789-90	103789-90	103789-90	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR							
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	5	<2	-	-	-	7.6	6.1
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	-	-	0.4	<0.4
	Chromium	mg/kg	0.3 / 5	11	7.6	-	-	-	10	<5
	Copper	mg/kg	0.5	48	6.9	-	-	-	50	26
	Lead	mg/kg	1 / 5	140	9.3	-	-	-	69	36
	Mercury	mg/kg	0.05	0.35	0.11	-	-	-	0.12	0.1
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	<5	-	-	-	11	<5
BTEX	Zinc	mg/kg	0.5 / 5	81	<5	-	-	-	110	51
	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TPH	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	810	380	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	220	100	<100
PAH	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	1055	505	<100
	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.6	0.8	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	5.3	4.8	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	6	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	34	13	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.7	30	14
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	1.2	46	20
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	13	6.7	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	27	8.8	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	4	1.6	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1	58	28
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	6.2	3.9	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	5.6	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	3	2.7	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	0.8	<0.5	<0.5	<0.5	44	19	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.1	55	25
Asbestos	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	5.2	350	160
	Asbestos	-	-	-	-	-	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-1.1M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
13/12/2012	13/12/2012	13/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012
103791-93	103791-93		103791-93	103791-93	103791-93	103791-93	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR	BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	6.9	2.5	-	13	13	6.8	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	1	0.6	0.4	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	12	<5	-	12	11	8.5	-	-	-	-	-
	Copper	mg/kg	0.5	9.4	<5	-	92	140	59	-	-	-	-	-
	Lead	mg/kg	1 / 5	<5	<5	-	180	120	64	-	-	-	-	-
	Mercury	mg/kg	0.05	0.07	<0.05	-	0.22	0.26	0.23	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	<5	-	16	12	20	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	13	<5	-	240	170	94	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	-	<50	<50	<50	110	620	630	<50	630
	C15 - C28	mg/kg	50 / 100	<100	<100	-	<100	<100	<100	1300	3800	2700	<100	3200
	C29 - C36	mg/kg	50 / 100	<100	<100	-	<100	<100	<100	220	350	220	160	320
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	-	<100	<100	<100	1630	4770	3550	160	4150
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	-	<1	<1	<1	-	-	-	-	-
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	0.9	1.4	<0.5	1.2
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1	<0.5	<0.5	-	1.3	<0.5	<0.5	1.9
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	-	4.1	<1	-	-	-	-	-	-
Asbestos	Asbestos	-	-	-	-	ND	ND	-	-	-	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR
	2-naphthylamine	mg/kg	0.5	-	-	-	-	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	0.7
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	1.3
	Other VOC	mg/kg	-	-	-	-	-	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR
Other SVOC	SVOC	mg/kg	-	-	-	-	-	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR	<LOR

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

	BH124 (4.6-4.8m)	BH125 (0.23-0.33m) A	BH125 (0.23-0.33m)	BH125 (1.0-1.1m) A	BH125A (0.5-0.6M) A	BH125A (0.5-0.6M)	BH125A (1.4-1.5M)	BH125A (2.0-2.1M) A	BH125A (2.0-2.1M)	BH125A (3.0-3.1M)	BH126 (0.31-0.41m)
	BH124 (4.6-4.8m)	BH125 (0.23-0.33m) A	BH125 (0.23-0.33m)	BH125 (1.0-1.1m) A	BH125A (0.5-0.6M) A	BH125A (0.5-0.6M)	BH125A (1.4-1.5M)	BH125A (2.0-2.1M) A	BH125A (2.0-2.1M)	BH125A (3.0-3.1M)	BH126 (0.31-0.41m)
	14/12/2012	11/12/2012	11/12/2012	11/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	12/12/2012
	103791-93	103786	103786	103786	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103787-103788

Chem. Group	ChemName	Units	LOR								
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	2.9	3.6	5.1	-	<2	16	-
	Cadmium	mg/kg	0.3 / 0.4	-	<0.4	<0.4	<0.4	-	<0.4	-	<0.4
	Chromium	mg/kg	0.3 / 5	-	<5	<5	18	-	<5	15	<5
	Copper	mg/kg	0.5	-	26	39	43	-	5.8	19	15
	Lead	mg/kg	1 / 5	-	99	84	110	-	13	57	33
	Mercury	mg/kg	0.05	-	0.21	0.24	0.34	-	<0.05	0.62	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	<5	<5	5.3	-	<5	9.1	<5
BTEX	Zinc	mg/kg	0.5 / 5	-	93	74	77	-	12	220	-
	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TPH	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	660	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	2600	940	740	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	310	530	470	<100	<100	<100	<100	<100
PAH	C10 - C36 (Sum of total)	mg/kg	120 / 100	3600	1500	1235	<100	<100	<100	<100	<100
	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	2.1	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	18	13	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	18	13	0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	27	31	1	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	20	25	0.7	<0.5	<0.5	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	-	33	39	1.4	<1	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	7.8	12	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	18	24	0.9	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	1.8	3.1	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	66	65	1.9	<0.5	<0.5	<0.5	<0.5
Asbestos	Fluorene	mg/kg	0.1 / 0.5	1.1	15	4.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	7.4	9.8	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	18	3.7	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	1.6	87	65	1.4	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	54	64	1.9	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	-	390	370	9.7	<1	<1	<1	<1
	Asbestos	-	-	-	-	-	-	ND	ND	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	<LOR	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	0.8	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	0.9	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	<LOR	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	<LOR	-	-	-	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
12/12/2012	12/12/2012	12/12/2012	12/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012
103787-103788	103787-103788	103787-103788	103787-103788	103784-103785	103784-103785	103786	103786	103786	103786	103786

Chem. Group	ChemName	Units	LOR	BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	3.7	<2	3.5	25	<2	<2	3.6	5.2	4.4	<2	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	-
	Chromium	mg/kg	0.3 / 5	<5	<5	7.4	<5	<5	6.3	9.3	7.6	5.5	<5	-
	Copper	mg/kg	0.5	20	41	560	<5	64	55	28	43	42	<5	-
	Lead	mg/kg	1 / 5	68	95	710	9.7	11	6.8	85	190	160	<5	-
	Mercury	mg/kg	0.05	0.36	0.47	5.7	<0.05	<0.05	<0.05	0.17	0.55	0.55	<0.05	-
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	5.7	7.4	<5	130	120	15	14	15	<5	-
	Zinc	mg/kg	0.5 / 5	95	100	140	<5	71	67	93	140	140	<5	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	250	<100	<100	250	350	190	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	550	860	730	260	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	250	<100	<100	800	1235	945	260	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	3.7	2.3	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	0.7	1.3	<0.5	<0.5	<0.5	0.5	6.7	3.6	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	1.3	4.1	<0.5	<0.5	<0.5	0.8	15	7.4	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	0.9	3.1	<0.5	<0.5	<0.5	0.8	12	5.9	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	1.6	5.9	<1	<1	<1	1.3	20	9.7	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	4.9	2.6	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	1.1	3.1	<0.5	<0.5	<0.5	0.7	11	5.1	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	31	16	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	2.8	7.3	<0.5	<0.5	<0.5	1.9	31	16	<0.5	0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.1	1.8	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	4.4	2.2	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	2.2	3.7	<0.5	<0.5	<0.5	1.2	21	13	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	2.5	5.9	<0.5	<0.5	<0.5	1.9	28	14	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	13	38	<1	<1	<1	9.1	160	84	<1	<1
Asbestos	Asbestos	-	-	-	ND	-	-	-	ND	ND	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	2-naphthylamine	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	g-BHC (Lindane)	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	Other VOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
Other SVOC	SVOC	mg/kg	-	-	-	&								

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	10/12/2012	10/12/2012	11/12/2012
103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103784-103785	103784-103785	103787-103788

Chem. Group	ChemName	Units	LOR	BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	3.4	5.2	-	7.4	4.5	3.5	-	-	4.1	4.9	6.9
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	<0.4	<0.4	<0.4	-	-	<0.4	0.5	0.5
	Chromium	mg/kg	0.3 / 5	12	12	-	21	23	11	-	-	<5	16	7.1
	Copper	mg/kg	0.5	27	27	-	36	24	13	-	-	29	49	130
	Lead	mg/kg	1 / 5	89	96	-	430	200	93	-	-	52	150	410
	Mercury	mg/kg	0.05	0.18	0.27	-	1.2	1.5	0.54	-	-	0.43	0.68	4.5
	Nickel	mg/kg	0.5 / 2.5 / 5	5.6	5.8	-	12	8.2	<5	-	-	6.6	14	12
	Zinc	mg/kg	0.5 / 5	78	94	-	410	220	130	-	-	140	430	1700
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	110	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	110	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.6	4.4	1.2	0.7	1.2	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.7	2.9	1.2	0.9	1.4	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	1.1	5	2.1	1.6	2.3	<1	<1	<1	<1	1.1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	<0.5	1.6	0.9	0.7	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	0.6	3	1.2	0.8	1.2	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1.2	8.8	2	1.2	2	<0.5	<0.5	<0.5	<0.5	1	1
	Fluorene	mg/kg	0.1 / 0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	1.6	0.7	0.6	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	0.7	11	1.2	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	1.2	7.4	2	1.3	2	<0.5	<0.5	<0.5	<0.5	1	0.9
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	6.1	53	13	7.8	13	<1	<1	<1	<1	4.9	1.9
Asbestos	Asbestos	-	-	-	ND	ND	-	-	-	-	-	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	<LOR	-	1.8	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	<LOR	-	<LOR	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	<LOR	-	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	25/07/2012
103787-103788		103787-103788	103787-103788	103787-103788	103787-103788	92455-57	92455-57	92455-57	92455-57	89249-50

Chem. Group	ChemName	Units	LOR	BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	9.6	-	9.3	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	0.6	-	1.2	-	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	6.9	-	10	-	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	150	-	110	-	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	370	-	330	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	4.3	-	3	-	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	14	-	11	-	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	1700	-	2200	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	-	<100	<100	<100	<100	470	690	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	-	<100	<100	<100	<100	200	420	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	-	<100	<100	<100	<100	670	1135	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	-	1	<0.5	<0.5	<0.5	3.5	0.7	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	-	1.9	<0.5	<0.5	<0.5	8.2	12	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	-	3.4	0.8	<0.5	<0.5	16	20	<0.5	<0.5	0.6
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	-	2.9	0.7	<0.5	<0.5	10	19	<0.5	<0.5	0.6
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	<1	-	4.7	1.1	<1	<1	17	28	<1	<1	1.1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	-	1.4	<0.5	<0.5	<0.5	5.1	11	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	-	3.7	0.7	<0.5	<0.5	9.2	13	<0.5	<0.5	0.6
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1	-	11	1.5	<0.5	<0.5	37	50	0.6	<0.5	1.2
	Fluorene	mg/kg	0.1 / 0.5	<0.5	-	0.7	<0.5	<0.5	<0.5	1.9	5.1	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	-	1.2	<0.5	<0.5	<0.5	4.2	8.6	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	0.6	3.8	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	-	9.9	0.7	<0.5	<0.5	32	42	0.7	<0.5	0.7
	Pyrene	mg/kg	0.1 / 0.5	0.9	-	9.2	1.4	<0.5	<0.5	31	43	<0.5	<0.5	1.2
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	1.9	-	51	6.9	<1	<1	180	260	1.3	<1	6
Asbestos	Asbestos	-	-	ND	ND	-	-	-	-	ND	-	-	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)
	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)
	26/07/2012	26/07/2012	26/07/2012	25/07/2012	25/07/2012	25/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012	25/07/2012
	92458-59	92458-59	92458-59	89249-50	89249-50	89249-50	92458-59	92458-59	92458-59	92458-59	89249-50

Chem. Group	ChemName	Units	LOR	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)	
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-	-	-	-	-	
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-	-	-	-	-	
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Copper	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-	-	-	-	-	
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-	-	-	-	-	
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
	C15 - C28	mg/kg	50 / 100	540	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
	C29 - C36	mg/kg	50 / 100	280	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
	C10 - C36 (Sum of total)	mg/kg	120 / 100	820	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
PAH	Acenaphthene	mg/kg	0.1 / 0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Acenaphthylene	mg/kg	0.1 / 0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Anthracene	mg/kg	0.1 / 0.5	5.1	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benz(a)anthracene	mg/kg	0.1 / 0.5	11	1.8	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	0.8	<0.5	1	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	7.5	1.1	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	0.9	<0.5	0.9	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	13	2	<1	<1	<1	1.4	<1	1.4	<1	1.4	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	3.2	0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	6.7	1.3	<0.5	<0.5	<0.5	0.8	<0.5	0.7	<0.5	0.9	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	18	3.5	<0.5	<0.5	<0.5	1.8	<0.5	1.6	<0.5	2.1	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	2.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	16	3.2	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	1.1	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	18	3.7	<0.5	<0.5	<0.5	1.7	<0.5	1.7	<0.5	2	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	110	19	<1	<1	<1	9.2	<1	7.6	<1	9.4	<1	<1
Asbestos	Asbestos	-	-	ND	ND	-	ND	ND	-	ND	ND	-	-	-	
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
25/07/2012	25/07/2012	25/07/2012	25/07/2012	24/07/2012	24/07/2012	24/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012
89249-50	89249-50	89249-50	89249-50	89247-48	89247-48	89247-48	92458-59	92458-59	92458-59	89247-48

Chem. Group	ChemName	Units	LOR	CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	-	<1	<1	<1	<1	<1	4.3	<1	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	7.4	<0.5	0.7	0.9	0.7
	Fluorene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	6.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	6	<0.5	0.6	0.9	0.7
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	-	<1	<1	<1	<1	<1	39	<1	1.3	2.3	1.4
Asbestos	Asbestos	-	-	ND	ND	-	-	ND	-	ND	ND	ND	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 1
Soil Analytical Results - Comparisin Against Health Investigation Levels for High Density Residential Lane Uses (HIL D)

Haymarket Precinct, Sydney NSW

CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
24/07/2012	24/07/2012	24/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012
89247-48	89247-48	89247-48	92455-57	92455-57	92455-57	92455-57

Chem_Group	ChemName	Units	LOR	CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	210	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	580	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	790	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5
	Benzo(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	5.8	1.1	<0.5	<0.5
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	6	1.8	<0.5	<0.5
	Benzo(b)k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	9.1	2.8	<1
	Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benzo(q,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	3.7	1.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	4	1.1	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	12	1.6	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	2.7	1	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	8.9	0.6	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	11	1.8	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	68	13	<1	<1
Asbestos	Asbestos	—	-	-	-	-	ND	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results

Haymarket Precinct, Sydney

	Sample ID	BH1	BH12	BH13	MW25	MW30	MW06	MW09	MW25	MW30
	LocCode									
	Well ID	BH1	BH12	BH13	MW25	MW30	MW06	MW09	MW25	MW30
	Sample Date	4/07/2011	12/07/2011	12/07/2011	9/05/2012	9/05/2012	2/08/2012	2/08/2012	2/08/2012	2/08/2012
Chemical Group	Chemical Name	Units	LOR	95% Trigger Values for Marine Water (ANZECC 2000)						
Inorganics	pH (Lab)	pH_Units	0		-	-	-	7	7.4	-
	TDS	mg/L	10		-	-	-	18,900	19,700	-
Metals	Arsenic (Filtered)	mg/L	0.002	0.0023	0.002	<0.001	0.008	<0.002	-	-
	Cadmium (Filtered)	mg/L	0.001	0.0055	0.0002	<0.0001	<0.0001	<0.001	<0.001	-
	Chromium Total (Filtered)	mg/L	0.01	0.0044	0.007	<0.001	<0.001	<0.01	<0.01	-
	Copper (Filtered)	mg/L	0.001	0.0013	0.021	0.004	0.003	<0.001	0.001	-
	Lead (Filtered)	mg/L	0.001	0.0044	0.009	<0.001	<0.001	<0.001	<0.001	-
	Mercury	mg/L	0.0001	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-
	Nickel (Filtered)	mg/L	0.01	0.07	0.003	0.003	0.003	<0.01	<0.01	-
	Zinc (Filtered)	mg/L	0.002	0.015	0.53	0.25	0.16	0.011	0.02	-
BTEX	Benzene	µg/L	0.5	500	<0.5	<0.5	<0.5	<5	<0.5	<1
	Ethylbenzene	µg/L	0.5	5	<0.5	0.5	<0.5	<5	<0.5	<1
	Toluene	µg/L	0.5	180	<0.5	13	<0.5	<5	<0.5	<1
	Xylene (m & p)	µg/L	1	75	<1	3	<1	<10	<1	<2
	Xylene (o)	µg/L	0.5	200	<0.5	1.4	<0.5	<5	<0.5	<1
	Xylene Total	µg/L	1.5	75	<1.5	4	<1.5	<15	<1.5	<3
TPH	TPH C6 - C9	µg/L	40	40	<40	<40	<40	<400	<40	<20
	TPH C10 - C14	µg/L	100	100	<100	<100	<100	<100	<50	<50
	TPH C15 - C28	µg/L	200	200	<200	<200	<200	<200	<100	<100
	TPH C29 - C36	µg/L	200	200	<200	<200	<200	<200	<100	<100
PAH	Acenaphthene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Acenaphthylene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Anthracene	µg/L	0.1	0.4	<0.1	<0.1	<0.1	0.1	<1	<1
	Benzo(a)anthracene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Benzo(a)pyrene	µg/L	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<1	<1
	Benzo(b)fluoranthene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<2	<2
	Benzo(g,h,i)perylene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Benzo(k)fluoranthene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<2	<2
	Chrysene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Dibenz(a,h)anthracene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Fluoranthene	µg/L	0.1	1.4	<0.1	<0.1	<0.1	0.2	<0.1	<1
	Fluorene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Indeno(1,2,3-c,d)pyrene	µg/L	0.1		<0.1	<0.1	<0.1	<0.1	<1	<1
	Naphthalene	µg/L	0.1	70	<0.1	<0.1	<0.1	<0.1	<1	<1
	Phenanthrene	µg/L	0.1	2	<0.1	<0.1	<0.1	0.4	<0.1	<1
	Pyrene	µg/L	0.1		<0.1	<0.1	<0.1	0.1	<0.1	<1
VOC								<LOR		
SVOC								<LOR		

Table 2
Groundwater Analytical Results

Haymarket Precinct, Sydney

Sample ID	MW6	MW9	MW25	MW30	MW120
LocCode					
Well ID	MW6	MW9	MW25	MW30	MW120
Sample Date	10/01/2013	8/01/2013	8/01/2013	9/01/2013	10/01/2013
Chemical Group					
Chemical Name					
Units					
LOR					
95% Trigger Values for Marine Water (ANZECC 2000)					
Inorganics	pH (Lab)	pH_Units	0	-	-
	TDS	mg/L	10	-	-
Metals	Arsenic (Filtered)	mg/L	0.002	0.0023	<0.001
	Cadmium (Filtered)	mg/L	0.001	0.0055	0.0002
	Chromium Total (Filtered)	mg/L	0.01	0.0044	<0.001
	Copper (Filtered)	mg/L	0.001	0.0013	0.001
	Lead (Filtered)	mg/L	0.001	0.0044	<0.001
	Mercury	mg/L	0.0001	0.0004	<0.0001
	Nickel (Filtered)	mg/L	0.01	0.07	<0.001
	Zinc (Filtered)	mg/L	0.002	0.015	<0.005
BTEX	Benzene	µg/L	0.5	500	<1
	Ethylbenzene	µg/L	0.5	5	<1
	Toluene	µg/L	0.5	180	<1
	Xylene (m & p)	µg/L	1	75	<2
	Xylene (o)	µg/L	0.5	200	<1
	Xylene Total	µg/L	1.5	75	<3
TPH	TPH C6 - C9	µg/L	40	40	<20
	TPH C10 - C14	µg/L	100	100	<50
	TPH C15 - C28	µg/L	200	200	<100
	TPH C29 - C36	µg/L	200	200	<100
PAH	Acenaphthene	µg/L	0.1		<0.01
	Acenaphthylene	µg/L	0.1		<0.01
	Anthracene	µg/L	0.1	0.4	<0.01
	Benzo(a)anthracene	µg/L	0.1		<0.01
	Benzo(a)pyrene	µg/L	0.1	0.2	<0.01
	Benzo(b)fluoranthene	µg/L	0.1		<0.02
	Benzo(g,h,i)perylene	µg/L	0.1		<0.01
	Benzo(k)fluoranthene	µg/L	0.1		<0.02
	Chrysene	µg/L	0.1		<0.05
	Dibenz(a,h)anthracene	µg/L	0.1		<0.05
	Fluoranthene	µg/L	0.1	1.4	<0.05
	Fluorene	µg/L	0.1		<0.05
	Indeno(1,2,3-c,d)pyrene	µg/L	0.1		<0.05
	Naphthalene	µg/L	0.1	70	<0.05
	Phenanthrene	µg/L	0.1	2	<0.05
	Pyrene	µg/L	0.1		<0.05
VOC					
SVOC					

Table 3
Groundwater Analytical Results
Comparison of PAH Filtered / Unfiltered Results

Field_ID	MW6FILT	MW6	MW9FILT	MW9	MW25FILT	MW25	MW30FILT	MW30	MW120FILT	MW120
Sampled_Date-Time	10/01/2013	10/01/2013	8/01/2013	8/01/2013	8/01/2013	8/01/2013	9/01/2013	9/01/2013	10/01/2013	10/01/2013
Lab Report Number	365010	365010	364828	364798	364828	364798	364911	364911	365010	365010

Chem_Group	ChemName	Units	LOR											
PAH	Acenaphthene	µg/L	0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
	Acenaphthylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Anthracene	µg/L	0.01	<0.01	<0.01	<0.01	0.05	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01
	Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01
	Benzo(a)pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
	Benzo(b)&(k)fluoranthene	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02
	Benzo(g,h,i)perylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Chrysene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Dibenz(a,h)anthracene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Fluoranthene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Fluorene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Indeno(1,2,3-c,d)pyrene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Naphthalene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Phenanthrene	µg/L	0.01	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Pyrene	µg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05
	Total PAHs	µg/L	0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	<0.05

Table 4
ASLP Soil Leachate Analytical Results

Haymarket Precinct, Sydney

Field_ID	BH127_(0.3-0.5)_A	BH129_(0.28-0.38)
Sampled_Date-Time	10/12/2012	10/12/2012
Lab_Report_Number	363634	363634

Chem_Grp	ChemName	Units	LOR		
Inorganics	pH (Initial)	pH_Units	0.1	9.2	8
	Moisture Content (dried @ 10%)		0.1	6.9 - 7	10 - 11
	pH (after HCL)	pH_Units	0.1	9.4	8.7
Metals	Arsenic	mg/L	0.005	<0.005	<0.005
	Cadmium	mg/L	0.0005	<0.0005	<0.0005
	Chromium	mg/L	0.005	<0.005	<0.005
	Copper	mg/L	0.005	<0.005	<0.005
	Lead	mg/L	0.005	<0.005	<0.005
	Mercury	mg/L	0.0001	<0.0001	<0.0001
	Nickel	mg/L	0.005	<0.005	<0.005
	Zinc	mg/L	0.005	<0.005	<0.005
PAH	Acenaphthene	µg/L	1	-	-
	Acenaphthylene	µg/L	1	-	-
	Anthracene	µg/L	1	-	-
	Benzo(a)anthracene	µg/L	1	-	-
	Benzo(a)pyrene	µg/L	1	-	-
	Benzo(b)&(k)fluoranthene	µg/L	2	-	-
	Benzo(g,h,i)perylene	µg/L	1	-	-
	Chrysene	µg/L	1	-	-
	Dibenz(a,h)anthracene	µg/L	1	-	-
	Fluoranthene	µg/L	1	-	-
	Fluorene	µg/L	1	-	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1	-	-
	Naphthalene	µg/L	1	-	-
	Phenanthrene	µg/L	1	-	-
	Pyrene	µg/L	1	-	-
TPH	Total PAHs	µg/L	2	-	-
	C10 - C14	µg/L	50	-	-
	C15 - C28	µg/L	100	-	-
	C29 - C36	µg/L	100	-	-
	C10 - C36 (Sum of total)	µg/L	100	-	-

Notes:

- Not Analysed

Table 5
TCLP Soil Leachate Analytical Results

Haymarket Precinct, Sydney

Field_ID	BH4	BH10	BH14	BH15	BH17	EB1	EB3	CBH5A_(2.0-2.1m)_1
LocCode								CBH5A
Sample_Depth_Range	2	1.1-1.3	2.5	2.5-2.6	1.0-1.1	1.4-1.5	1-1.1	2.0-2.1
Sampled_Date-Time	6/06/2011	10/06/2011	17/06/2011	21/06/2011	16/06/2011	10/06/2011	10/06/2011	27/07/2012
Matrix_Description								Soil

Analyte Group	Analyte	Units	LOR	BH4	BH10	BH14	BH15	BH17	EB1	EB3	CBH5A_(2.0-2.1m)_1
PAH	Leachable benzo(a)pyrene	µg/L	0.1	-	0.1	-	-	-	<0.1	<0.1	1
Metals	Leachable arsenic	mg/L	<0.05	-	-	-	-	-	-	-	-
	Leachable cadmium	mg/L	<0.005	-	-	-	-	-	-	-	-
	Leachable Chromium	mg/L	<0.005	-	-	-	-	-	-	-	-
	Leachable copper	mg/L	<0.005	-	-	-	-	-	-	-	-
	Leachable lead	mg/L	0.02	0.19	0.76	0.036	0.11	-	-	-	-
	Leachable nickel	mg/L	<0.005	-	-	-	-	-	-	-	-
	Leachable zinc	mg/L	<0.005	-	-	-	-	-	-	-	-
	Leachable Mercury	mg/L	0.0001	-	-	-	-	-	<0.0001	-	-

Notes

- Not Analysed

Table 5
TCLP Soil Leachate Analytical Results

Haymarket Precinct, Sydney

Field_ID	CBH7_(1.5-1.6m)	BH101.1-1.3	NBH29_0.9-1.0	CBH9_(1.0-1.1m)	CBH10_(1.0-1.1m)	CBH11_(1.0-1.1m)	BH127_(0.3-0.5)_A	BH129_(0.28-0.38)
LocCode	CBH7	BH10	NBH29 ¹	CBH9	CBH10	CBH11	BH127_(0.3-0.5)_A	BH129_(0.28-0.38)
Sample_Depth_Range	1.5-1.6	1.0-1.3	0.9-1.0	1.0-1.1	1.0-1.1	1.0-1.1		
Sampled_Date-Time	24/07/2012	10/06/2011	17/04/2012	26/07/2012	26/07/2012	26/07/2012	10/12/2012	10/12/2012
Matrix_Description	Soil	Soil	Soil	Soil	Soil	Soil		

Analyte Group	Analyte	Units	LOR							
PAH	Leachable benzo(a)pyrene	µg/L	0.1	1	<0.1	<0.1	<1	<1	<1	-
Metals	Leachable arsenic	mg/L	<0.05	-	-	<0.05	-	-	<0.005	<0.005
	Leachable cadmium	mg/L	<0.005	-	-	<0.005	-	-	<0.0005	<0.0005
	Leachable Chromium	mg/L	<0.005	-	-	-	-	-	<0.005	<0.005
	Leachable copper	mg/L	<0.005	-	-	0.27	-	-	<0.005	<0.005
	Leachable lead	mg/L	0.02	-	0.76	0.08	-	-	<0.005	<0.005
	Leachable nickel	mg/L	<0.005	-	-	0.014	-	-	<0.0001	<0.0001
	Leachable zinc	mg/L	<0.005	-	-	9.5	-	-	<0.005	<0.005
	Leachable Mercury	mg/L	0.0001	-	-	-	-	-	<0.005	<0.005

Notes

- Not Analysed

Table 6
Acid Sulfate Soil Screening Results
Haymarket Precinct, Sydney

Field_ID		NBH18_3.0-3.45	NBH21_3.0-3.45	NBH28_3.0-3.4	NBH30_4.5- 4.9	CBH5A_ASS1_3.5m	CBH6_ASS1_2.5m	CBH6_ASS3_3.5m	CBH8_ASS2 (3.5-3.6m)	CBH8_ASS4(4.5-4.6m)	CBH9_ASS1_3.0m	
Sampled Date-Time						27/07/2012	25/07/2012	25/07/2012	24/07/2012	24/07/2012	26/07/2012	
Lab Report Number		(SE107686)	(SE107815)	(CE77724)	(SE107819)	346177	345835	345835	345664	345664	346021	
Chem_Group	ChemName	Units										
Acid Sulphate Soils Field pH Test	pH-F (Field pH Test)	pH_Units	6.5	6	7.1	8.1	7.5	5.6	7	7.3	7.6	7.7
	pH-FOX (Field pH Peroxide test)	pH_Units	5.1	2	2.1	4.5	5.7	4.5	1.8	1.6	2.2	2.4
	Reaction Ratings	Comment	Low / Slight	High	Volcanic / Vigorous	Volcanic / Vigorous	high	Low	Volcanic	high	Volcanic	high

Notes:

Qualitative Description of Reaction Ratings

Low = Slight Reaction

Medium = Moderate Reaction

High = High Reaction

Volcanic = Very rigorous reaction, gas evolution and heat generation

Table 6
Acid Sulfate Soil Screening Results
Haymarket Precinct, Sydney

Field_ID		CBH9_ASS3_4.0m	CBH9_ASS5_5.0m	CBH10_ASS2_4.0m	CBH11_ASS1_3.5m	CBH11_ASS2_4.0m
Sampled Date-Time		26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012
Lab Report Number		346021	346021	346021	346177	346177
Chem_Group	ChemName	Units				
Acid Sulphate Soils Field pH Test	pH-F (Field pH Test)	pH_Units	8.5	8.6	8	8.2
	pH-FOX (Field pH Peroxide test)	pH_Units	6.1	7.1	4.7	2.6
	Reaction Ratings	Comment	volcanic	low	high	volcanic
						high

Notes:

Qualitative Description of Reaction Ratings

Low = Slight Reaction

Medium = Moderate Reaction

High = High Reaction

Volcanic = Very rigorous reaction, gas evolution and heat generation

Table 7
Acid Sulfate Soils - Chromium Reducible Sulfur Analytical Results
Haymarket Precinct, Sydney

Field_ID			BH5_8.5m	BH6_9.5	BH12_4.5	BH13_4.0	BH14_2.5		
Sampled_Date-Time			15/06/2011	9/06/2011	10/06/2011	9/06/2011	17/06/2011		
Lab_Report_Number			SE100735-1	SE100700-1	SE100700-1	SE100700-1	SE100711-1		
Chem_Group	ChemName	Units	EQL	Assessment Criteria					
Chromium Reducible Sulfur	pH KCl ·	pH Units	<0.1	-	7.5	5.2	9.2	8	8.6
	s-TAA pH 6.5	%w/wS	<0.01	-	<0.01	0.02	<0.01	<0.01	<0.01
	TAA pH 6.5	mole H+/t	<5	-	<5	11	<5	<5	<5
	Chromium	% w/w	<0.005	0.03% w/w	<0.005	<0.005	0.028	0.92	0.013
	Reducible Sulfur	mole H+/t	<5	-	<5	<5	17	570	8
	SHCI	% w/w	<0.005	-	NA	NA	NA	NA	NA
	S KCl	% w/w	<0.005	-	NA	NA	NA	NA	NA
	S NAS	% w/w	<0.005	-	NA	NA	NA	NA	NA
	Acid Neutralisation Capacity	% CaCO ₃	<0.1	-	NA	NA	NA	0.8	NA
	s-ANCBT	% w/w S	<0.01	-	NA	NA	NA	0.26	NA
	a-ANCBT	mole H+/t	<5	-	NA	NA	NA	160	NA
	s-Net Acidity	% w/w S	<0.1	-	<0.01	0.02	0.03	0.74	0.01
	a-Net Acidity	mole H+/t	<5	-	<5	12	16	460	6.7
	Liming Rate	kg CaCO ₃	<0.1	-	NA	NA	NA	35	NA
	Verification s-Net Acidity	% w/w S		-	NA	NA	NA	0.74	NA
	a-Net Acidity without ANC	mole H+/t	<5	-	<5	12	16	570	6.7
	Liming Rate without ANC	kg CaCO ₃	<0.1	-	NA	NA	NA	43	NA

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		EB1 / 1.0-1.1	EB1 / 1.4-1.5	EB1 / 2.0-2.1	EB1 / 3.0-3.1	NBH24	NBH24	NBH24	CBH5_(0.5-0.6m)	DUP4	CBH5_(1.0-1.1m)	CBH5_(2.0-2.1m)	CBH5A_(1.0-1.1m)	CBH5A_(2.0-2.1m)
LocCode		EB1	EB1	EB1	NBH24	NBH24	NBH24	CBH5	CBH5	CBH5	CBH5A	CBH5A	CBH5A	CBH5A
Sample_Depth_Range		1.0-1.1	1.4-1.5	2.0-2.1	3.0-3.1	0.3-0.5	0-0.1	1.5-1.95	3.0-3.45	0.5-0.6	0.5-0.6	1.0-1.1	2.0-2.1	2.0-2.1
Sampled Date-Time		10/06/2011	10/06/2011	10/06/2011	10/06/2011	24/04/2012	24/04/2012	24/04/2012	24/04/2012	25/07/2012	25/07/2012	25/07/2012	27/07/2012	27/07/2012
Matrix Description		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Analyte Group	Analyte	Units	LOR	CT1¹	CT2¹	TCLP1¹	SCC1¹	TCLP2¹	SCC2¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	-	<0.1	-	<0.1	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	-	<0.1	0.4	<0.1	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	-	<0.1	<0.1	<0.1	<0.5
	Total BTEX	mg/kg	1.5							<LOR	-	<LOR	<1.5	<1.5
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	-	<0.2	1.1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	-	<0.1	0.3	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200	-	<0.3	-	<0.3	1.4	<1.5
PAH	Acenaphthene	mg/kg	0.5							-	<0.1	13	<0.1	<0.5
	Acenaphthylene	mg/kg	0.5							-	<0.1	<1	<0.1	<0.5
	Anthracene	mg/kg	0.5							-	<0.1	23	0.1	<0.5
	Benz(a)anthracene	mg/kg	0.5							-	<0.1	50	0.3	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10	23	-	74	4.3	<0.05	-	0.9
	Leachable benzo(a)pyrene	µg/L	0.1		40		160	-	-	-	-	-	-	1
	Benz(b&k)fluoranthene	mg/kg	1							-	<0.1	38	0.3	<1
	Benz(g,h,i)perylene	mg/kg	0.5							-	<0.1	15	0.1	<0.5
	Chrysene	mg/kg	0.5							-	<0.1	42	0.3	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							-	<0.1	3.1	<0.1	<0.5
	Fluoranthene	mg/kg	0.5							-	<0.1	79	0.4	<0.5
	Fluorene	mg/kg	0.5							-	<0.1	12	<0.1	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							-	<0.1	11	<0.1	<0.5
	Naphthalene	mg/kg	0.5							-	<0.1	120	0.5	<0.5
	Phenanthrene	mg/kg	0.5							-	<0.1	110	0.6	<0.5
	Pyrene	mg/kg	0.5							-	<0.1	3562	2.7	<1
	Total PAHs	mg/kg	1		200		800	-	1400	70	3	-	<0.8	550
TPH	C6 - C9	mg/kg	10		650		2600	-	<20	<20	<20	21	<20	<10
	C10 - C14	mg/kg	50						130	<20	<20	62	<20	<50
	C15 - C28	mg/kg	100						4300	290	310	<50	<50	<50
	C29 - C36	mg/kg	100						1900	150	140	<50	<100	<100
	C10 - C36 (Sum of total)	mg/kg	100		10,000		40,000	-	4620	440	450	<120	<120	<100
Metals	Arsenic	mg/kg	3	100	400		500	2000	-	13	6	8	-	<3
	Leachable arsenic	mg/L								-	<3	<3	16	-
	Cadmium	mg/kg	0.3	20	80		100	400	-	0.5	<0.3	<0.3	<0.3	-
	Leachable cadmium	mg/L								-	<0.3	<0.3	<0.3	-
	Chromium ³	mg/kg	0.3	100	400		1900	7600	-	29	15	13	-	<3
	Leachable copper	mg/L								-	98	30	15	-
	Copper	mg/kg	0.5						-	-	5.4	8.5	3.4	-
	Leachable copper	mg/L								-	-	-	-	-
	Lead	mg/kg	1	100	400		1500	6000	-	540	75	31	-	-
	Leachable lead	mg/L	0.02		5		20		-	-	-	-	-	-
	Nickel	mg/kg	0.5	40	160		1050	4200	-	26	6.5	1.9	-	-
	Leachable nickel	mg/L							-	460	89	22	-	-
	Zinc	mg/kg	0.5						-	-	22	33	9.9	-
	Leachable zinc	mg/L							-	-	-	-	-	-
	Mercury	mg/kg	0.05	4	16		50	200	-	1.2	0.22	0.05	-	<0.05

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		CBH5A_(3.0-3.1m)	CBH5A_(3.5-3.6m)	CBH6_(0.5-0.6m)	CBH6_(1.0-1.1m)	CBH6_(1.5-1.6m)	CBH6_(2.0-2.1m)	CBH6_(2.5-2.6m)	CBH7_(0.5-0.6m)	CBH7_(1.0-1.1m) ²	CBH7_(1.5-1.6m)	DUP7	CBH7A_(1.0-1.1m)	CBH7A_(2.0-2.1m)	CBH7A_(2.9-3.0m)
LocCode		CBH5A	CBH5A	CBH6	CBH6	CBH6	CBH6	CBH7	CBH7	CBH7	CBH7A	CBH7A	CBH7A	CBH7A	CBH7A
Sample_Depth_Range		3.0-3.1	3.5-3.6	0.5-0.6	0.5-0.6	1.5-1.6	2.0-2.1	2.5-2.6	0.5-0.6	1.0-1.1	1.5-1.6	2.9-3.0	1.0-1.1	2.0-2.1	2.9-3.0
Sampled Date-Time		27/07/2012	27/07/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	24/07/2012	24/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012
Matrix Description		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Analyte Group	Analyte	Units	LOR	CT1¹	CT2¹	TCLP1¹	SCC1¹	TCLP2¹	SCC2¹						
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	-	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	-	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	-	<0.5	<0.5	<0.5
	Total BTEX	mg/kg	1.5							<1.5	<1.5	-	<1.5	<1.5	<1.5
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	-	<1	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	133	-	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8		200	7200	<1.5	133	<1.5	0	<1.5	<1.5
PAH	Acenaphthene	mg/kg	0.5							<0.5	<0.5	-	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5	-	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5							<0.5	133	<0.5	0	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5							<0.5	1	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	<0.5	0.9	<0.5	-	<0.5	<0.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160		-	-	-	-	1	-
	Benz(b&k)fluoranthene	mg/kg	1							<1	1.4	<1	<1	<1	<1
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	<0.5	-	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.5							<0.5	50	<0.5	-	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	50	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							<0.5	2.1	<0.5	-	<0.5	<0.5
	Fluorene	mg/kg	0.5							<0.5	<0.5	-	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	<0.5	-	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.5							<0.5	1.1	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.5							<0.5	2	<0.5	-	<0.5	<0.5
	Pyrene	mg/kg	0.5							<0.5	<0.5	-	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	1			200		800	<1	9.4	<1	-	<1	<1	39
TPH	C6 - C9	mg/kg	10			650		2600	<10	<10	<10	-	<10	<10	<10
	C10 - C14	mg/kg	50						<50	<50	<50	-	<50	<50	<50
	C15 - C28	mg/kg	100						<100	<100	<100	-	<100	<100	<100
	C29 - C36	mg/kg	100						<100	<100	<100	-	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<100	<100	<100	-	<100	<100	<100
Metals	Arsenic	mg/kg	3	100	400	500		2000	-	-	-	-	-	-	-
	Leachable arsenic	mg/L													
	Cadmium	mg/kg	0.3	20	80	100		400	-	-	-	-	-	-	-
	Leachable cadmium	mg/L													
	Chromium ³	mg/kg	0.3	100	400	1900		7600	-	-	-	-	-	-	-
	Leachable copper	mg/L													
	Copper	mg/kg	0.5						-	-	-	-	-	-	-
	Leachable copper	mg/L													
	Lead	mg/kg	1	100	400	1500		6000	-	-	-	-	-	-	-
	Leachable lead	mg/L	0.02		5		20		-	-	-	-	-	-	-
	Nickel	mg/kg	0.5	40	160	1050		4200	-	-	-	-	-	-	-
	Leachable nickel	mg/L													
	Zinc	mg/kg	0.5						-	-	-	-	-	-	-
	Leachable zinc	mg/L													
	Mercury	mg/kg	0.05	4	16	50		200	-	-	-	-	-	-	-

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		CBH8_(0.15-0.6m)	CBH8_(1.5-1.6m)	CBH8_(2.0-2.1m)	CBH8_(2.5-2.6m)	BH101.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	NBH29 0.4-0.5 ²	NBH29 0.9-1.0 ²	NBH29 2.0-2.1 ²	CBH9_(0.5-0.6m)	CBH9_(1.0-1.1m)	CBH9_(1.5-1.6m)
LocCode		CBH8	CBH8	CBH8	BH10	BH10	BH10	BH10	NBH29 ¹	NBH29 ¹	NBH29 ¹	CBH9	CBH9	CBH9	
Sample_Depth_Range		0.15-0.6	1.5-1.6	2.0-2.1	2.5-2.6	1.0-1.3	2.0	3.0	4.0	0.4-0.5	0.9-1.0	2.0-2.1	0.5-0.6	1.0-1.1	1.5-1.6
Sampled Date-Time		27/07/2012	24/07/2012	24/07/2012	24/07/2012	10/06/2011	10/06/2011	10/06/2011	10/06/2011	17/04/2012	17/04/2012	17/04/2012	26/07/2012	26/07/2012	26/07/2012
Matrix Description		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Analyte Group	Analyte	Units	LOR	CT1¹	CT2¹	TCLP1¹	SCC1¹	TCLP2¹	SCC2¹						
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	<1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	<1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	<1	<0.1	<0.1	<0.5
	Total BTEX	mg/kg	1.5							<1.5	<1.5	<1.5	<LOR	<LOR	<LOR
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	<1	<2	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5	<1	<0.5	<0.1	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8		200	7200	<1.5	<1.5	<1.5	<3	<0.3	<0.3
PAH	Acenaphthene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	2.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	0.9
	Anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	<0.5
	Benz(a)anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	5.8
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	<0.5	<0.5	<0.5	20	0.5	1.8
	Leachable benzo(a)pyrene	µg/L	0.1			40		160		-	-	<0.1	-	-	-
	Benz(b&k)fluoranthene	mg/kg	1							<1	<1	<1	-	-	9.1
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	2.8
	Chrysene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	4
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	1.1
	Fluoranthene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	12
	Fluorene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	1
	Naphthalene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	<0.5
	Phenanthrene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	8.9
	Pyrene	mg/kg	0.5							<0.5	<0.5	<0.5	-	-	0.6
	Total PAHs	mg/kg	1			200		800	1.4	<1	<1	<1	280	-	13
TPH	C6 - C9	mg/kg	10			650		2600	<10	<10	<10	<10	<20	<20	<10
	C10 - C14	mg/kg	50						<50	<50	<50	22	<20	<20	<50
	C15 - C28	mg/kg	100						<100	<100	<100	1100	590	<50	<100
	C29 - C36	mg/kg	100						<100	<100	<100	510	220	52	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<100	<100	<100	1632	810	<120	<100
												172	4220	1230	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	-	-	4	-	8	-
	Leachable arsenic	mg/L										-	-	4	-
	Cadmium	mg/kg	0.3	20	80		100		400	-	-	<0.3	-	0.3	-
	Leachable cadmium	mg/L										-	-	<0.3	-
	Chromium ³	mg/kg	0.3	100	400		1900		7600	-	-	11	-	13	-
	Leachable copper	mg/L										-	-	<0.005	-
	Copper	mg/kg	0.5							-	-	44	-	4.9	-
	Leachable copper	mg/L										-	-	0.27	-
	Lead	mg/kg	1	100	400		1500		6000	-	-	260	-	19	24
	Leachable lead	mg/L	0.02		5		20			-	-	0.76	-	1.2	6
	Nickel	mg/kg	0.5	40	160		1050		4200	-	-	7.7	-	4.7	38
	Leachable nickel	mg/L										-	-	0.014	-
	Zinc	mg/kg	0.5							-	-	72	-	18	9.5
	Leachable zinc	mg/L										-	-	-	-
	Mercury	mg/kg	0.05	4	16		50		200	-	-	0.13	-	<0.05	2.1

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		CBH9_(2.5-2.6m)	CBH10_(0.5-0.6m)	CBH10_(1.0-1.1m)	CBH10_(1.5-1.6m)	CBH10_(2.0-2.1m)	DUP5	DUP5A	CBH11_(0.5-0.6m)	CBH11_(1.0-1.1m)	CBH11_(2.0-2.1m)	CBH11_(3.0-3.1m)	BH12_0.5	BH12_1.0	BH12_1.5
LocCode		CBH9	CBH10	CBH10	CBH10	CBH10	CBH10	CBH11	CBH11	CBH11	CBH11	BH12	BH12	BH12	
Sample_Depth_Range		2.5-2.6	0.5-0.6	1.0-1.1	1.5-1.6	2.0-2.1	2.0-2.1	0.5-0.6	1.0-1.1	2.0-2.1	3.0-3.1	0.5	1.0	1.5	
Sampled Date-Time		26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	10/06/2011	10/06/2011	10/06/2012
Matrix Description		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹						
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1
	Total BTEX	mg/kg	1.5							<1.5	<1.5	<1.5	<1.5	<25	<1.5
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	<1	<1	<2	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5	<0.5	<0.5	<1	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8		200	7200	<1.5	<1.5	<1.5	<1.5	<1.5	<3
PAH	Acenaphthene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.1	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	3.5	0.7	<0.5	0.7	<0.5
	Anthracene	mg/kg	0.5							<0.5	8.2	12	<0.5	5.1	<0.5
	Benz(a)anthracene	mg/kg	0.5							<0.5	16	20	<0.5	0.1	0.6
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	<0.5	10	19	<0.5	0.5	7.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160		-	<1	-	-	-	-
	Benz(b&k)fluoranthene	mg/kg	1							<1	17	28	<1	1.1	13
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	5.1	11	<0.5	3.2	0.5
	Chrysene	mg/kg	0.5							<0.5	9.2	13	<0.5	6.7	1.3
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	37	50	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							<0.5	1.9	5.1	<0.5	2.7	0.5
	Fluorene	mg/kg	0.5							<0.5	4.2	8.6	<0.5	3.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	32	42	<0.5	16	3.2
	Naphthalene	mg/kg	0.5							<0.5	0.6	3.8	<0.5	1	<0.5
	Phenanthrene	mg/kg	0.5							<0.5	31	43	<0.5	1	<0.5
	Pyrene	mg/kg	0.5							<0.5	31	43	<0.5	1	<0.5
	Total PAHs	mg/kg	1			200		800	<1	180	260	1.3	<1	4.2	-
TPH	C6 - C9	mg/kg	10			650		2600	<10	<10	<10	<10	<10	<10	<20
	C10 - C14	mg/kg	50						<50	<50	<50	<50	<50	<50	<20
	C15 - C28	mg/kg	100						<100	470	690	<100	<100	540	<100
	C29 - C36	mg/kg	100						<100	200	420	<100	<100	280	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<100	670	1100	<100	<100	820	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	-	-	-	-	-	-
	Leachable arsenic	mg/L								-	-	-	-	-	-
	Cadmium	mg/kg	0.3	20	80		100		400	-	-	-	-	-	-
	Leachable cadmium	mg/L								-	-	-	-	-	-
	Chromium ³	mg/kg	0.3	100	400		1900		7600	-	-	-	-	-	-
	Leachable copper	mg/L								-	-	-	-	-	-
	Copper	mg/kg	0.5							-	-	-	-	-	-
	Leachable copper	mg/L								-	-	-	-	-	-
	Lead	mg/kg	1	100	400		1500		6000	-	-	-	-	-	0.63
	Leachable lead	mg/L	0.02		5		20			-	-	-	-	-	3.2
	Nickel	mg/kg	0.5	40	160		1050		4200	-	-	-	-	-	1.9
	Leachable nickel	mg/L								-	-	-	-	-	-
	Zinc	mg/kg	0.5							-	-	-	-	-	-
	Leachable zinc	mg/L								-	-	-	-	-	-
	Mercury	mg/kg	0.05	4	16		50		200	-	-	-	-	-	-

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID			BH12 2.0	BH12 3.0	BH23 0.5-0.6	BH23 1.5-1.95	BH23 3-3.45	BH18_(0.5-0.6m)_A	BH18_(0.5-0.6m)	BH18_(1.0-1.1m)	BH18_(2.0-2.1m)_A	BH18_(2.0-2.1m)	BH18_(3.0-3.1m)	BH18_(3.5-3.6m)	BH19_(0.11-0.21m)							
LocCode			BH12	BH12	BH23	BH23	BH23	BH18_(0.5-0.6m)_A	BH18_(0.5-0.6m)	BH18_(1.0-1.1m)	BH18_(2.0-2.1m)_A	BH18_(2.0-2.1m)	BH18_(3.0-3.1m)	BH18_(3.5-3.6m)	BH19_(0.11-0.21m)							
Sample_Depth_Range			2.0	3.0	0.5-0.6	1.5-1.95	3-3.45															
Sampled Date-Time			10/06/2011	10/06/2011	24/04/2012	24/04/2012	24/04/2012	24/04/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012							
Matrix Description			Soil	Soil	Soil	Soil	Soil															
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹													
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.1	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.1	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.1	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Total BTEX	mg/kg	1.5							-	-											
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	-	<0.1	<0.2	<1	<1	<1	<1	<1	<1			
	Xylene (o)	mg/kg	0.5							<0.5	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Xylene Total	mg/kg	1.5	1000	4000	1.8		200	7200	<0.3	-	<0.3	<0.3	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5			
PAH	Acenaphthene	mg/kg	0.5							-	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Acenaphthylene	mg/kg	0.5							-	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Anthracene	mg/kg	0.5							-	-	0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Benz(a)anthracene	mg/kg	0.5							-	-	0.3	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	<0.05	<0.05	0.3	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Leachable benzo(a)pyrene	µg/L	0.1			40		160														
	Benz(b&k)fluoranthene	mg/kg	1							-	-	0.4	0.2	<0.1	<1	<1	<1	<1	<1			
	Benz(g,h,i)perylene	mg/kg	0.5							-	-	0.2	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Chrysene	mg/kg	0.5							-	-	0.3	0.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5			
	Dibenz(a,h)anthracene	mg/kg	0.5							-	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Fluoranthene	mg/kg	0.5							-	-	0.5	0.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5			
	Fluorene	mg/kg	0.5							-	-	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							-	-	0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Naphthalene	mg/kg	0.5							-	-	0.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Phenanthrene	mg/kg	0.5							-	-	0.5	0.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5			
	Pyrene	mg/kg	0.5							-	-	0.5	0.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5			
	Total PAHs	mg/kg	1			200		800	<1.75	<1.75	3.3	1.4	<0.8	<1	<1	<1	<1	<1	<1			
TPH	C6 - C9	mg/kg	10			650		2600	<20	-	<20	<20	<20	<10	<10	<10	<10	<10	<10			
	C10 - C14	mg/kg	50						<20	-	<20	<20	<20	<50	<50	<50	<50	<50	<50			
	C15 - C28	mg/kg	100						<50	-	<50	<50	<50	<100	<100	<100	<100	<100	<100			
	C29 - C36	mg/kg	100						<50	-	<50	<50	<50	<100	<100	<100	<100	<100	<100			
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<120	-	<120	<120	<100	<100	<100	<100	<100	<100	<100			
Metals	Arsenic	mg/kg	3	100	400		500		2000	-	-	<0.1	<0.1	4.6	<2	-	-	2.8	4.1	-	<2	
	Leachable arsenic	mg/L										-	-									
	Cadmium	mg/kg	0.3	20	80		100		400	-	-	<0.1	<0.1	<0.4	<0.4	-	-	<0.4	<0.4	-	<0.4	
	Leachable cadmium	mg/L								-	-	-	-									
	Chromium ³	mg/kg	0.3	100	400		1900		7600	-	-	0.1	<0.1	5.6	7	-	-	6.1	<5	-	<5	
	Leachable copper	mg/L								-	-	-	-									
	Copper	mg/kg	0.5							-	-	0.3	0.2	<0.1	17	23	-	-	<5	5	-	75
	Leachable copper	mg/L								-	-	-	-									
	Lead	mg/kg	1	100	400		1500		6000	<0.05	<0.05	0.3	0.1	<0.1	58	44	-	-	13	7.6	-	5.6
	Leachable lead	mg/L	0.02		5		20			-	-	-	-									
	Nickel	mg/kg	0.5	40	160		1050		4200	-	-	0.4	0.2	<0.1	11	7.3	-	-	<5	<5	-	210

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)	BH119_(2.1-2.3m)	BH120_(0.03-0.13m)	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)
LocCode		BH119_0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)	BH119_(2.1-2.3m)	BH120_(0.03-0.13m)	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)
Sample_Depth_Range														
Sampled Date-Time		12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012
Matrix Description														
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	-	<0.5	-	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	-	<0.5	-	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	-	<0.5	-	<0.5	<0.5
	Total BTEX	mg/kg	1.5											
	Xylene (m & p)	mg/kg	1			<0.5	-			-	<1	-	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				-	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200	-	<1.5	-	<1.5	<1.5	<1.5
PAH	Acenaphthene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Anthracene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	-	<0.5	-	<0.5	<0.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160						
	Benz(b&k)fluoranthene	mg/kg	1							-	<1	-	<1	<1
	Benz(g,h,i)perylene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Chrysene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Fluorene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Naphthalene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Pyrene	mg/kg	0.5							-	<0.5	-	<0.5	<0.5
	Total PAHs	mg/kg	1			200		800	-	<1	-	<1	<1	<1
TPH	C6 - C9	mg/kg	10			650		2600	-	<10	-	<10	<10	<10
	C10 - C14	mg/kg	50						-	<50	-	<50	<50	<50
	C15 - C28	mg/kg	100						-	<100	-	<100	<100	<100
	C29 - C36	mg/kg	100						-	<100	-	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	-	<100	-	<100	<100	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	-	4.8	-	3.8	6.1
	Leachable arsenic	mg/L									16	34	4	-
	Cadmium	mg/kg	0.3	20	80		100		400	-	<0.4	-	<0.4	<0.4
	Leachable cadmium	mg/L									<0.4	-	<0.4	<0.4
	Chromium ³	mg/kg	0.3	100	400		1900		7600	-	<5	-	21	6.7
	Leachable copper	mg/L									<5	-	24	51
	Copper	mg/kg	0.5							-	17	-	96	-
	Leachable copper	mg/L									17	-	43	-
	Lead	mg/kg	1	100	400		1500		6000	-	40	-	190	51
	Leachable lead	mg/L	0.02		5		20			-	40	-	63	250
	Nickel	mg/kg	0.5	40	160		1050		4200	-	6.3	-	530	-
	Leachable nickel	mg/L									6.3	-	35	-
	Zinc	mg/kg	0.5							-	26	-	70	190
	Leachable zinc	mg/L									26	-	30	-
	Mercury	mg/kg	0.05	4	16		50		200	-	0.2	-	1.8	0.57

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)	BH121A_(0.5-0.6m)	BH121A_(1.0-1.1m)_A	BH121A_(1.0-1.1m)	BH121A_(1.5-1.6m)	BH121A_(2.5-2.6m)	BH122_(0.5-0.6m)	BH122_(1.5-1.6m)	BH122A_(0.5-0.6m)	BH122A_(1.0-1.1m)	BH122A_(1.5-1.6m)_A
LocCode		BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)	BH121A_(0.5-0.6m)	BH121A_(1.0-1.1m)_A	BH121A_(1.0-1.1m)	BH121A_(1.5-1.6m)	BH121A_(2.5-2.6m)	BH122_(0.5-0.6m)	BH122_(1.5-1.6m)	BH122A_(0.5-0.6m)	BH122A_(1.0-1.1m)	BH122A_(1.5-1.6m)_A
Sample_Depth_Range														
Sampled Date-Time		18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	13/12/2012	13/12/2012	13/12/2012
Matrix Description														
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	<0.5	<0.5	<0.5
	Total BTEX	mg/kg	1.5											
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200		<1.5	<1.5	<1.5	<1.5	<1.5
PAH	Acenaphthene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5							1.1	1.2	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5							<0.5	<0.5	0.7	31	18
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10	23	0.7	0.8	<0.5	0.5	22	13
	Leachable benzo(a)pyrene	µg/L	0.1			40		160						
	Benz(b&k)fluoranthene	mg/kg	1							1.4	<1	1.1	39	21
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	<0.5	<0.5	11	6.6
	Chrysene	mg/kg	0.5							0.8	<0.5	0.6	23	14
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							2	2.3	0.9	55	30
	Fluorene	mg/kg	0.5							<0.5	<0.5	<0.5	<5	<5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	<0.5	<0.5	9.8	3.5
	Naphthalene	mg/kg	0.5							<0.5	<0.5	<0.5	1	0.6
	Phenanthrene	mg/kg	0.5							1.2	1.2	<0.5	28	14
	Pyrene	mg/kg	0.5							1.7	2	<0.5	1	53
	Total PAHs	mg/kg	1			200		800	8.9	7.5	<1	4.8	280	160
TPH	C6 - C9	mg/kg	10			650		2600	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	50						<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	100						<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	100						<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<100	<100	<100	<100	<100	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	-	8.7	-	14	-
	Leachable arsenic	mg/L											14	-
	Cadmium	mg/kg	0.3	20	80		100		400	-	<0.4	-	<0.4	-
	Leachable cadmium	mg/L											<0.4	-
	Chromium ³	mg/kg	0.3	100	400		1900		7600	-	42	-	11	-
	Leachable copper	mg/L											27	-
	Copper	mg/kg	0.5							130	-	93	-	350
	Leachable copper	mg/L											20	-
	Lead	mg/kg	1	100	400		1500		6000	-	79	-	160	-
	Leachable lead	mg/L	0.02		5		20						2700	-
	Nickel	mg/kg	0.5	40	160		1050		4200	-	51	-	14	-
	Leachable nickel	mg/L											62	-
	Zinc	mg/kg	0.5							-	120	-	150	-
	Leachable zinc	mg/L											310	-
	Mercury	mg/kg	0.05	4	16		50		200	-	0.41	-	0.59	-

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH122A_(1.5-1.6m)	BH122A_(2.0-2.1m)	BH122A_(3.0-3.1m)	BH122A_(3.4-3.5m)	BH123_(0.08-0.18m)	BH123_(0.5-0.6m)	BH123_(1.5-1.6m)_A	BH123_(1.5-1.6m)	BH123A_(0.5-0.6m)	BH123A_(1.0-1.1m)	BH123A_(1.0-1.1m)	BH123A_(2.0-2.1m)	BH123A_(3.0-3.1m)
LocCode		BH122A_(1.5-1.6m)	BH122A_(2.0-2.1m)	BH122A_(3.0-3.1m)	BH122A_(3.4-3.5m)	BH123_(0.08-0.18m)	BH123_(0.5-0.6m)	BH123_(1.5-1.6m)_A	BH123_(1.5-1.6m)	BH123A_(0.5-0.6m)	BH123A_(1.0-1.1m)	BH123A_(1.0-1.1m)	BH123A_(2.0-2.1m)	BH123A_(3.0-3.1m)
Sample_Depth_Range														
Sampled Date-Time		13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
Matrix Description														
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	<0.5	<0.5	<0.5
	Total BTEX	mg/kg	1.5											
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200		<1.5	<1.5	<1.5	<1.5	<1.5
PAH	Acenaphthene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5							0.7	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5							2.2	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10	23	2.1	<0.5	<0.5	<0.5	<0.5	<0.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160						
	Benz(b&k)fluoranthene	mg/kg	1							3.5	<1	<1	<1	<1
	Benz(g,h,i)perylene	mg/kg	0.5							1.1	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.5							2	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							4.2	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							1	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.5							2.7	0.8	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.5							4	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	1			200		800	24	<1	<1	<1	5.2	350
TPH	C6 - C9	mg/kg	10			650		2600	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	50						<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	100						180	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	100						<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	180	<100	<100	<100	1055	505
Metals	Arsenic	mg/kg	3	100	400		500		2000	4.5	5	<2	-	-
	Leachable arsenic	mg/L										-	-	7.6
	Cadmium	mg/kg	0.3	20	80		100		400	<0.4	<0.4	<0.4	-	0.4
	Leachable cadmium	mg/L										-	-	<0.4
	Chromium ³	mg/kg	0.3	100	400		1900		7600	11	11	7.6	-	-
	Leachable copper	mg/L								26	48	6.9	-	-
	Copper	mg/kg	0.5							<5	<5	<5	-	-
	Leachable copper	mg/L										-	-	50
	Lead	mg/kg	1	100	400		1500		6000	52	140	9.3	-	-
	Leachable lead	mg/L	0.02		5		20					-	-	69
	Nickel	mg/kg	0.5	40	160		1050		4200	<5	<5	<5	-	-
	Leachable nickel	mg/L										-	-	11
	Zinc	mg/kg	0.5							56	81	<5	-	-
	Leachable zinc	mg/L										-	-	110
	Mercury	mg/kg	0.05	4	16		50		200	0.16	0.35	0.11	-	-

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH123A_(4.0-4.1m)	BH124_(0.01-0.11m)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A	BH124_(4.6-4.8m)	BH125_(0.23-0.33m)	BH125_(0.23-0.33m)
LocCode		BH123A_(4.0-4.1m)	BH124_(0.01-0.11m)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A	BH124_(4.6-4.8m)	BH125_(0.23-0.33m)	BH125_(0.23-0.33m)
Sample_Depth_Range														
Sampled Date-Time		13/12/2012	13/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012
Matrix Description														
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	-	<0.5	<0.5	-
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	-	<0.5	<0.5	-
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	-	<0.5	<0.5	-
	Total BTEX	mg/kg	1.5											
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	-	<1	<1	-
	Xylene (o)	mg/kg	0.5			1.6				<0.5	-	<0.5	<0.5	-
	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200	<1.5	-	<1.5	<1.5	<1.5	<1.5
PAH	Acenaphthene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Acenaphthylene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Anthracene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Benz(a)anthracene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	<0.5	-	<0.5	<0.5	-
	Leachable benzo(a)pyrene	µg/L	0.1			40		160						
	Benz(b&k)fluoranthene	mg/kg	1							<1	-	<1	<1	-
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Chrysene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Fluoranthene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Fluorene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Naphthalene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Phenanthrene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Pyrene	mg/kg	0.5							<0.5	-	<0.5	<0.5	-
	Total PAHs	mg/kg	1			200		800	<1	-	4.1	<1	-	-
TPH	C6 - C9	mg/kg	10			650		2600	<10	-	<10	<10	<10	-
	C10 - C14	mg/kg	50						<50	-	<50	<50	110	620
	C15 - C28	mg/kg	100						<100	-	<100	<100	1300	3800
	C29 - C36	mg/kg	100						<100	-	<100	<100	220	350
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<100	-	<100	<100	1630	4770
Metals	Arsenic	mg/kg	3	100	400		500		2000	2.5	-	13	13	6.8
	Leachable arsenic	mg/L										-	-	-
	Cadmium	mg/kg	0.3	20	80		100		400	<0.4	-	1	0.6	0.4
	Leachable cadmium	mg/L										-	-	-
	Chromium ³	mg/kg	0.3	100	400		1900		7600	<5	-	12	11	8.5
	Leachable copper	mg/L										-	-	-
	Copper	mg/kg	0.5							<5	-	92	140	59
	Leachable copper	mg/L										-	-	-
	Lead	mg/kg	1	100	400		1500		6000	<5	-	180	120	64
	Leachable lead	mg/L	0.02		5		20					-	-	-
	Nickel	mg/kg	0.5	40	160		1050		4200	<5	-	16	12	20
	Leachable nickel	mg/L										-	-	-
	Zinc	mg/kg	0.5							<5	-	240	170	94
	Leachable zinc	mg/L										-	-	-
	Mercury	mg/kg	0.05	4	16		50		200	<0.05	-	0.22	0.26	0.23

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH125_(1.0-1.1m)_A	BH125A_(0.5-0.6M)_A	BH125A_(0.5-0.6M)	BH125A_(1.4-1.5M)	BH125A_(2.0-2.1M)_A	BH125A_(2.0-2.1M)	BH125A_(3.0-3.1M)	BH126_(0.31-0.41m)	BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A
LocCode		BH125_(1.0-1.1m)_A	BH125A_(0.5-0.6M)_A	BH125A_(0.5-0.6M)	BH125A_(1.4-1.5M)	BH125A_(2.0-2.1M)_A	BH125A_(2.0-2.1M)	BH125A_(3.0-3.1M)	BH126_(0.31-0.41m)	BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A
Sample_Depth_Range														
Sampled Date-Time		11/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	10/12/2012
Matrix Description														
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	<0.5	<0.5	<0.5
	Total BTEX	mg/kg	1.5											
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5	<0.5	<0.5	<0.5
PAH	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200		<1.5	<1.5	<1.5	<1.5	<1.5
	Acenaphthene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.5							0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5							1	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10		23	0.7	<0.5	<0.5	<0.5	<0.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160						
	Benz(b&k)fluoranthene	mg/kg	1							1.4	<1	<1	<1	<1
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.5							0.9	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							1.9	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.5							1.4	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.5							1.9	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	1			200		800	9.7	<1	<1	<1	<1	<1
TPH	C6 - C9	mg/kg	10			650		2600	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	50						<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	100						<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	100						<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000	<100	<100	<100	<100	<100	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	5.1	-	<2	16	-
	Leachable arsenic	mg/L									-	-	<2	3.7
	Cadmium	mg/kg	0.3	20	80		100		400	<0.4	-	<0.4	<0.4	<0.4
	Leachable cadmium	mg/L									-	-	<0.4	<0.4
	Chromium ³	mg/kg	0.3	100	400		1900		7600	18	-	<5	15	-
	Leachable copper	mg/L								43	-	5.8	19	-
	Copper	mg/kg	0.5								-	-	-	15
	Leachable copper	mg/L									-	-	-	20
	Lead	mg/kg	1	100	400		1500		6000	110	-	13	57	-
	Leachable lead	mg/L	0.02		5			20			-	-	-	33
	Nickel	mg/kg	0.5	40	160		1050		4200	5.3	-	<5	9.1	-
	Leachable nickel	mg/L								77	-	12	220	-
Zinc	Zinc	mg/kg	0.5								-	-	-	29
	Leachable zinc	mg/L									-	-	-	95
	Mercury	mg/kg	0.05	4	16		50		200	0.34	-	<0.05	0.62	-
											-	-	-	0.3

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)	BH127_(1.5-1.6m)_A	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)	BH128_(0.28-0.38M)	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)	BH128_(1.5-1.6M)_A	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)
LocCode		BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)	BH127_(1.5-1.6m)_A	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)	BH128_(0.28-0.38M)	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)	BH128_(1.5-1.6M)_A	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)
Sample_Depth_Range														
Sampled Date-Time		10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012
Matrix Description														
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹					
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5	<0.5	<0.5	<0.5
	Total BTEX	mg/kg	1.5											
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5	<0.5	<0.5	<0.5
PAH	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200		<1.5	<1.5	<1.5	<1.5	<1.5
	Acenaphthene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5	3.7	2.7	<0.5
	Anthracene	mg/kg	0.5							<0.5	0.5	6.7	3.6	<0.5
	Benz(a)anthracene	mg/kg	0.5							<0.5	0.8	15	7.4	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10	23		<0.5	0.8	12	5.9	<0.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160						
	Benz(b&k)fluoranthene	mg/kg	1							<1	1.3	20	9.7	<1
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	<0.5	4.9	2.6	<0.5
	Chrysene	mg/kg	0.5							<0.5	0.7	11	5.1	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.5							<0.5	1.9	31	16	<0.5
	Fluorene	mg/kg	0.5							<0.5	3.1	1.8	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	4.4	2.2	<0.5	<0.5
	Naphthalene	mg/kg	0.5							<0.5	1.2	21	13	<0.5
TPH	Phenanthrene	mg/kg	0.5							<0.5	1.2	1	0.5	<0.5
	Pyrene	mg/kg	0.5							<0.5	1.9	28	14	<0.5
	Total PAHs	mg/kg	1			200		800		<1	9.1	160	84	<1
	C6 - C9	mg/kg	10			650		2600		<10	<10	<10	<10	<10
	C10 - C14	mg/kg	50							<50	<50	<50	<50	<50
	C15 - C28	mg/kg	100							<100	250	350	190	<100
	C29 - C36	mg/kg	100							<100	550	860	730	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000		<100	800	1235	945	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	<2	3.6	5.2	4.4	<2
	Leachable arsenic	mg/L												
	Cadmium	mg/kg	0.3	20	80		100		400	<0.4	<0.4	<0.4	<0.4	<0.4
	Leachable cadmium	mg/L												
	Chromium ³	mg/kg	0.3	100	400		1900		7600	6.3	9.3	7.6	5.5	<5
	Leachable copper	mg/L												
	Copper	mg/kg	0.5							55	28	43	42	<5
	Leachable copper	mg/L												
	Lead	mg/kg	1	100	400		1500		6000	6.8	85	190	160	<5
	Leachable lead	mg/L	0.02		5		20							
	Nickel	mg/kg	0.5	40	160		1050		4200	120	15	14	15	<5
	Leachable nickel	mg/L												
	Zinc	mg/kg	0.5							67	93	140	140	<5
	Leachable zinc	mg/L												
	Mercury	mg/kg	0.05	4	16		50		200	<0.05	0.17	0.55	0.55	<0.05

Table 8
Preliminary Waste Classification Assessment
Haymarket Precinct, Sydney

Field_ID		BH128_(2.9-3.0M)	BH129_(0.24-0.28M)	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A	BH129_(1.0-1.1m)	BH129_(1.5-1.6M)	BH129_(2.0-2.1m)	BH129_(2.9-3.0m)	BH129_(3.9-4.0m)	BH129_(5.0-5.1m)
LocCode		BH128_(2.9-3.0M)	BH129_(0.24-0.28M)	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A	BH129_(1.0-1.1m)	BH129_(1.5-1.6M)	BH129_(2.0-2.1m)	BH129_(2.9-3.0m)	BH129_(3.9-4.0m)	BH129_(5.0-5.1m)
Sample_Depth_Range											
Sampled Date-Time		17/12/2012	10/12/2012	10/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012
Matrix Description											
Analyte Group	Analyte	Units	LOR	CT1 ¹	CT2 ¹	TCLP1 ¹	SCC1 ¹	TCLP2 ¹	SCC2 ¹		
Volatile	Benzene	mg/kg	0.5	10	40	0.5	18	2	72	<0.5	<0.5
	Ethylbenzene	mg/kg	0.5	600	2400	30	1080	120	4320	<0.5	<0.5
	Toluene	mg/kg	0.5	288	1152	14.4	518	57.6	2073	<0.5	<0.5
	Total BTEX	mg/kg	1.5								
	Xylene (m & p)	mg/kg	1			<0.5	-			<1	<1
	Xylene (o)	mg/kg	0.5			1.6				<0.5	<0.5
	Xylene Total	mg/kg	1.5	1000	4000	1.8	200	7200		<1.5	<1.5
PAH	Acenaphthene	mg/kg	0.5							<0.5	<0.5
	Acenaphthylene	mg/kg	0.5							<0.5	<0.5
	Anthracene	mg/kg	0.5							<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.5							<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.5	0.8	3.2		10	23		<0.5	<0.5
	Leachable benzo(a)pyrene	µg/L	0.1			40		160			
	Benz(b&k)fluoranthene	mg/kg	1							<1	<1
	Benz(g,h,i)perylene	mg/kg	0.5							<0.5	<0.5
	Chrysene	mg/kg	0.5							<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5							<0.5	<0.5
	Fluoranthene	mg/kg	0.5							<0.5	<0.5
	Fluorene	mg/kg	0.5							<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5							<0.5	<0.5
	Naphthalene	mg/kg	0.5							<0.5	<0.5
	Phenanthrene	mg/kg	0.5							<0.5	<0.5
	Pyrene	mg/kg	0.5							<0.5	<0.5
	Total PAHs	mg/kg	1			200		800		<1	<1
TPH	C6 - C9	mg/kg	10			650		2600		<10	<10
	C10 - C14	mg/kg	50							<50	<50
	C15 - C28	mg/kg	100							<100	<100
	C29 - C36	mg/kg	100							<100	<100
	C10 - C36 (Sum of total)	mg/kg	100			10,000		40,000		<100	<100
Metals	Arsenic	mg/kg	3	100	400		500		2000	-	4.1
	Leachable arsenic	mg/L									4.9
	Cadmium	mg/kg	0.3	20	80		100		400	-	<0.4
	Leachable cadmium	mg/L									0.5
	Chromium ³	mg/kg	0.3	100	400		1900		7600	-	<5
	Leachable copper	mg/L									16
	Copper	mg/kg	0.5							29	49
	Leachable copper	mg/L									130
	Lead	mg/kg	1	100	400		1500		6000	-	52
	Leachable lead	mg/L	0.02		5		20			150	410
	Nickel	mg/kg	0.5	40	160		1050		4200	-	6.6
	Leachable nickel	mg/L								14	12
	Zinc	mg/kg	0.5							140	430
	Leachable zinc	mg/L									1700
	Mercury	mg/kg	0.05	4	16		50		200	-	0.43

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

Field ID	BH1 1.0	BH1 3.0	BH10 1.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	BH11 0.1m	BH11 0.5m	BH11 1.0m	BH12 0.5	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH13 1.0	BH13 1.5	BH13 2.5			
LocCode	BH1 1.0	BH1 3.0	BH10 1.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	BH11 0.1m	BH11 0.5m	BH11 1.0m	BH12 0.5	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH13 1.0	BH13 1.5	BH13 2.5			
Sample Depth Range																				
Sampled Date-Time	7/06/2011	7/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	1/06/2011	1/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	9/06/2011	9/06/2011	9/06/2011			
Matrix Description																				
SDG	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100639-1	SE100639-1	SE100639-1	SE100700-1										
Inorganics	Moisture	%	0.5				10	16	8.9	13	17	16	-	18	9.4	9.9	5.5	11		
Metals	Arsenic	mg/kg	2 / 3	500	3	9	4	-	8	4	-	5	<3	5	<3	6	5	8		
	Cadmium	mg/kg	0.3 / 0.4	100	0.3	<0.3	<0.3	-	<0.3	<0.3	-	0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	0.8	
	Chromium	mg/kg	0.3 / 5	500	9	16	11	-	13	13	-	16	20	13	13	14	11	16	9.3	
	Copper	mg/kg	0.5	500	13	21	44	-	4.9	35	-	34	18	13	39	36	3.8	5.1	-	
	Lead	mg/kg	1 / 5	1500	15	25	260	-	19	150	-	74	21	34	31	240	24	13	-	
	Mercury	mg/kg	0.05	75	<0.05	0.05	0.13	-	<0.05	0.22	-	0.12	0.09	0.1	0.11	0.19	<0.05	<0.05	0.45	
	Nickel	mg/kg	0.5 / 2.5 / 5	3000	7.7	3.6	7.7	-	1.2	4.7	-	4.6	5.1	9.3	13	7.8	1	1.7	-	
	Zinc	mg/kg	0.5 / 5	28000	30	25	72	-	18	110	-	77	160	83	64	92	380	520	730	
BTEX	Benzene	mg/kg	0.1 / 0.5	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	-	
	Ethylbenzene	mg/kg	0.1 / 0.5	50	<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	-	
	Toluene	mg/kg	0.1	130	<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	-	
	Xylene (m & p)	mg/kg	0.2 / 1	-	<1	<1	<2	<1	<1	<1	-	<0.2	<1	<1	<0.2	<1	<1	<1	-	
	Xylene (o)	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<1	<0.5	<0.5	<0.5	-	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	-	
	Xylene Total	mg/kg	0.3 / 1.5	25	<0.3	<3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	
TPH	C6 - C9	mg/kg	10 / 20	65	-	-	-	-	-	-	<20	<20	-	-	-	-	-	-	-	
	C10 - C14	mg/kg	20 / 50	-	-	-	-	-	-	-	28	23	-	-	-	-	-	-	-	
	C15 - C28	mg/kg	50 / 100	-	-	-	-	-	-	-	1200	430	-	-	-	-	-	-	-	
	C29 - C36	mg/kg	50 / 100	-	-	-	-	-	-	-	620	260	-	-	-	-	-	-	-	
	C10 - C36 (Sum of total)	mg/kg	120 / 100	1000	-	-	-	-	-	-	1848	713	-	-	-	-	-	-	-	
	PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	<0.1	<0.1	7.3	-	<0.1	1	-	2.3	3.2	<0.1	0.6	0.4	<0.1	<0.1	-
		Acenaphthylene	mg/kg	0.1 / 0.5	-	<0.1	<0.1	0.6	-	<0.1	<0.1	-	12	0.7	0.1	0.7	0.4	<0.1	<0.1	0.2
		Anthracene	mg/kg	0.1 / 0.5	-	<0.1	<0.1	17	-	<0.1	2.3	-	23	6	0.2	1.3	0.5	<0.1	<0.1	0.2
Benz(a)anthracene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	30	-	<0.1	3.2	-	55	8.5	0.8	3.9	2.3	<0.1	<0.1	0.9	
Benz(a)pyrene		mg/kg	0.05 / 0.1 / 0.5	5	<0.05	<0.05	20	-	<0.05	2.1	-	47	7	0.63	3.2	1.9	<0.05	<0.05	0.88	
Benz(b)&(k)fluoranthene		mg/kg	0.1 / 1	-	<0.1	<0.1	24	-	<0.1	2.8	-	64	3	0.8	3.7	<0.1	<0.1	<0.1	1	
Benz(b)fluoranthene		mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	
Benz(k)fluoranthene		mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	
Benz(g,h,i)perylene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	9.6	-	<0.1	0.9	-	25	4.6	0.3	1.7	0.9	<0.1	<0.1	0.5	
Chrysene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	17	-	<0.1	1.7	-	40	6.1	0.4	2	1.2	<0.1	<0.1	0.6	
Dibenz(a,h)anthracene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	2.4	-	<0.1	0.2	-	2.7	0.8	<0.1	0.3	0.2	<0.1	<0.1	<0.1	
Fluoranthene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	51	-	0.2	6	-	120	16	1.1	3.9	2.5	0.1	<0.1	1.1	
Fluorene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	9	-	<0.1	1.2	-	8.9	3.6	<0.1	0.6	0.3	<0.1	<0.1	<0.1	
Indeno(1,2,3-c,d)pyrene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	8.8	-	<0.1	0.9	-	23	3.9	0.3	1.4	0.8	<0.1	<0.1	0.4	
Naphthalene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	5	-	<0.1	0.7	-	2.6	2.6	<0.1	0.4	0.3	<0.1	<0.1	<0.1	
Phenanthrene		mg/kg	0.1 / 0.5	-	<0.1	<0.1	52	-	0.1	6.7	-	84	14	0.5	3.2	1.7	<0.1	<0.1	0.5	
Pyrene	mg/kg	0.1 / 0.5	-	<0.1	<0.1	51	-	0.1	5.6	-	120	18	1.2	6.3	3.8	0.2	<0.1	1.2		
Total PAHs	mg/kg	0.8 / 1.0 / 1.75	100	<1.75	<1.75	280	-	<1.75	32	-	-	110	5.6	29	17					

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH13_4.0	BH14_2.5	BH14_5.5	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1	BH17_8-8.1	BH2_0.6m	BH2_1.5m	BH2_2.5m	BH2_2-2.2m	BH3_0.5m	BH3_1.0m	BH3_2.5m	BH3_5.5m	BH4_0.5m	
BH13_4.0	BH14_2.5	BH14_5.5	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1	BH17_8-8.1	BH2_0.6m	BH2_1.5m	BH2_2.5m	BH2_2-2.2m	BH3_0.5m	BH3_1.0m	BH3_2.5m	BH3_5.5m	BH4_0.5m	
2.5	5.5	1-1.1	2.5-2.6															
9/06/2011	17/06/2011	17/06/2011	21/06/2011	21/06/2011	16/06/2011	16/06/2011	16/06/2011	16/06/2011	3/06/2011	3/06/2011	3/06/2011	3/06/2011	3/06/2011	2/06/2011	2/06/2011	2/06/2011	6/06/2011	
SE100700-1	SE100711-1	SE100711-1	SE100739-1	SE100739-1	SE100735-1	SE100735-1	SE100735-1	SE100639-1										

Chem_Group	ChemName	Units	LOR	BH13_4.0	BH14_2.5	BH14_5.5	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1	BH17_8-8.1	BH2_0.6m	BH2_1.5m	BH2_2.5m	BH2_2-2.2m	BH3_0.5m	BH3_1.0m	BH3_2.5m	BH3_5.5m	BH4_0.5m
Inorganics	Moisture	%	0.5	28	25	24	16	32	24	23	18	17	8.5	-	13	17	13	17	-	15	12
Metals	Arsenic	mg/kg	2 / 3	180	7	6	6	11	6	7	<3	16	4	-	23	28	4	4	-	<3	12
	Cadmium	mg/kg	0.3 / 0.4	<0.3	0.5	0.5	<0.3	0.5	0.6	0.6	<0.3	0.5	<0.3	-	0.4	0.4	<0.3	<0.3	-	<0.3	<0.3
	Chromium	mg/kg	0.3 / 5	17	18	14	12	31	14	11	9.5	13	7.4	-	16	11	7.5	14	-	6	10
	Copper	mg/kg	0.5	11	120	9.4	61	79	72	46	7.3	9.9	-	51	56	51	58	-	4.9	63	
	Lead	mg/kg	1 / 5	49	170	19	110	300	240	140	15	13	15	-	93	98	15	27	-	6	47
	Mercury	mg/kg	0.05	0.21	1	0.06	0.74	2.2	4.9	0.44	0.07	<0.05	<0.05	-	0.55	0.37	<0.05	0.48	-	<0.05	0.15
	Nickel	mg/kg	0.5 / 2.5 / 5	11	14	6.8	3.7	14	6.7	2.7	3.5	2.5	11	-	11	7	6.6	22	-	0.9	5.6
	Zinc	mg/kg	0.5 / 5	18	340	130	100	100	340	110	19	27	38	-	160	110	32	50	-	1.9	91
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
	Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<0.2	<0.2	<0.2	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3
TPH	C6 - C9	mg/kg	10 / 20	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	-	<20	<20
	C10 - C14	mg/kg	20 / 50	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	-	<20	<20
	C15 - C28	mg/kg	50 / 100	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	140	130	<50	<50	-	<50	<50
	C29 - C36	mg/kg	50 / 100	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	88	92	<50	<50	-	<50	<50
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	<120	<120	<120	<120	<120	<120	<120	<120	<120	-	238	232	<120	<120	-	<120	<120
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.1	-	<0.1	<0.1
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.2	<0.5	<0.1	-	<0.1	<0.1	<0.1
	Anthracene	mg/kg	0.1 / 0.5	<0.1	0.2	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	<0.5	<0.1	-	<0.1	<0.1	0.1
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.1	0.3	-	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.9	<0.5	0.1	-	<0.1	<0.3	0.3
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.05	0.29	-	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.86	<0.5	0.1	-	<0.1	<0.35	0.35
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	<1	<0.1	-	<0.1	<0.2	<0.2
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.1	0.2	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.5	<0.5	<0.1	-	<0.1	<0.2	0.2

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
6/06/2011	6/06/2011	6/06/2011	6/06/2011	14/06/2011	14/06/2011	14/06/2011	9/06/2011	9/06/2011	6/06/2011	9/06/2011	14/06/2011	15/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	
SE100639-1	SE100639-1	SE100639-1	SE100639-1	SE100735-1	SE100735-1	SE100700-1	SE100700-1	SE100639-1	SE100700-1	SE100735-1	SE100735-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	

Chem. Group	ChemName	Units	LOR	BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
Inorganics	Moisture	%	0.5	-	-	15	14	15	18	23	21	21	-	18	8.1	9	-	20	17	18	13
Metals	Arsenic	mg/kg	2 / 3	-	-	14	<3	4	-	6	3	8	-	25	5	4	-	13	6	8	9
	Cadmium	mg/kg	0.3 / 0.4	-	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	0.6	0.8	0.3	-	0.5	<0.3	<0.3	0.3
	Chromium	mg/kg	0.3 / 5	-	-	12	12	9.8	-	11	13	6.4	-	13	12	-	-	29	15	13	9.7
	Copper	mg/kg	0.5	-	-	42	1.2	26	-	14	16	9.3	-	1.2	39	30	-	98	30	15	320
	Lead	mg/kg	1 / 5	-	-	110	7	57	-	37	12	15	-	12	130	66	-	540	75	31	190
	Mercury	mg/kg	0.05	-	-	0.64	<0.05	0.24	-	0.23	<0.05	0.41	-	<0.05	0.27	0.12	-	1.2	0.22	0.05	0.64
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	10	1.2	13	-	5.7	13	1.2	-	1.3	7.2	19	-	26	6.5	1.9	13
	Zinc	mg/kg	0.5 / 5	-	-	110	2.5	96	-	25	22	12	-	7.9	190	93	-	460	89	22	270
BTEX	Benzene	mg/kg	0.1 / 0.5	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1	-	-	<0.2	<1	<1	-	<0.2	<1	<1	-	<0.2	<1	<1	-	<0.2	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	-	-	<0.1	<0.5	<0.5	-	<0.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.1	<0.1	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	-	-	<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
TPH	C6 - C9	mg/kg	10 / 20	-	-	<20	<20	<20	-	<20	-	-	-	<20	<20	-	<20	<20	<20	<20	
	C10 - C14	mg/kg	20 / 50	-	-	<20	<20	<20	-	<20	-	-	-	<20	<20	-	130	<20	<20	<20	
	C15 - C28	mg/kg	50 / 100	-	-	380	<50	<50	-	<50	-	-	-	-	89	54	-	4300	290	310	170
	C29 - C36	mg/kg	50 / 100	-	-	110	<50	<50	-	<50	-	-	-	-	76	53	-	1900	150	140	130
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	-	500	<120	<120	-	<120	-	-	-	-	175	117	-	6330	450	460	310
PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	35	1.6	2.4	0.2
	Acenaphthylene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	0.5	0.2	-	1.1	<0.1	<0.1	0.4
	Anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.1	-	<0.1	<0.1	<0.1	-	<0.1	0.7	0.2	-	69	3.2	<0.1	1
	Benz(a)anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.2	-	<0.1	<0.1	<0.1	-	<0.1	1.6	0.8	-	160	8.7	<0.1	4
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	-	-	<0.5	-	0.24	-	<0.05	<0.05	<0.05	-	<0.05	1.5	0.92	-	74	4.3	<0.05	3.2
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	-	-	<1	-	0.4	-	<0.1	<0.1	<0.1	-	<0.1	0.9	0.5	-	-	<0.1	1.2	
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	6.6	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	1.3	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.1	-	<0.1	<0.1	<0.1	-	<0.1	1	0.7	-	38	2.3	<0.1	1.9
	Chrysene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.2	-	<0.1	<0.1	<0.1	-	<0.1	1.4	0.7	-	98	4.5	<0.1	1.9
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	&							

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

	EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
	EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	24/04/2012	24/04/2012	24/04/2012	18/04/2012	18/04/2012	18/04/2012	24/04/2012	27/04/2012	27/04/2012	27/04/2012
	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE107686-1	SE107686-1	SE107686-1	SE107335-1	SE107335-1	SE107335-1	SE107686-1	SE107819-1	SE107819-1	SE107819-1

Chem_Group	ChemName	Units	LOR	EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
Inorganics	Moisture	%	0.5	17	-	10	15	9.1	18	-	-	-	-	-	-	-	-	-	
Metals	Arsenic	mg/kg	2 / 3	7	-	13	6	5	-	3	5	8	4	12	12	4	6	5	<3
	Cadmium	mg/kg	0.3 / 0.4	<0.3	-	<0.3	<0.3	<0.3	-	0.3	0.3	<0.3	<0.3	0.4	0.3	0.4	0.3	<0.3	<0.3
	Chromium	mg/kg	0.3 / 5	13	-	18	9.5	15	-	5.1	7.9	5.6	7.3	9.9	21	6.9	17	16	
	Copper	mg/kg	0.5	18	-	110	7.3	12	-	51	580	5.8	23	41	63	98	2.3	13	8.6
	Lead	mg/kg	1 / 5	32	-	310	23	31	-	220	92	14	13	93	91	96	9	30	15
	Mercury	mg/kg	0.05	1	-	0.68	<0.05	0.07	-	0.89	1.3	0.07	0.07	0.26	0.18	0.13	<0.05	0.08	<0.05
	Nickel	mg/kg	0.5 / 2.5 / 5	3.5	-	11	1.3	4.6	-	12	7.3	1.6	5	16	4.8	11	<0.5	12	3.7
	Zinc	mg/kg	0.5 / 5	32	-	190	12	17	-	310	110	6	33	100	95	210	21	27	3.7
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
	Toluene	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	
	Xylene (m & p)	mg/kg	0.2 / 1	<1	-	<1	<1	<1	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
	Xylene Total	mg/kg	0.3 / 1.5	<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	
TPH	C6 - C9	mg/kg	10 / 20	<20	-	<20	<20	<20	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	C10 - C14	mg/kg	20 / 50	<20	-	<20	<20	<20	-	<20	<20	<20	<20	<20	30	<20	<20	<20	
	C15 - C28	mg/kg	50 / 100	<50	-	320	<50	<50	-	<50	<50	<50	<50	190	<50	450	<50	<50	
	C29 - C36	mg/kg	50 / 100	<50	-	190	<50	<50	-	<50	<50	<50	<50	55	<50	420	<50	<50	
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<120	-	520	<120	<120	-	<120	<120	<120	<120	255	<120	900	<120	<120	
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.1	-	0.4	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	3	<0.1	<0.1	<0.1
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.1	-	1.5	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.5	0.1	1.4	<0.1	<0.1	<0.1
	Anthracene	mg/kg	0.1 / 0.5	0.3	-	2.3	<0.1	0.2	-	0.1	<0.1	<0.1	<0.1	1.2	0.3	3.8	<0.1	<0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1 / 0.5	0.4	-	6.4	0.3	0.4	-	0.3	0.2	<0.1	<0.1	2.2	0.6	4.8	<0.1	<0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.35	-	3.9	0.15	0.25	<0.05	0.3	0.1	<0.1	<0.1	1.6	0.5	4.4	<0.1	<0.1	<0.1
	Benzo(b)fluoranthene	mg/kg	0.1 / 1	0.1	-	1.5	<0.1	0.1	-	-	-	-	-	-	-	-	-	-	
	Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	0.4	0.2	<0.1	<0.1	1.9	0.6	5.9	<0.1	<0.1	<0.1
	Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	0.2	<0.1	<0.1	<0.1	0.7	0.3	2	<0.1	<0.1	<0.1
	Benzo(q,h,i)perylene	mg/kg	0.1 / 0.5	0.2	-	2.1	<0.1	0.2	<0.1	0.2	0.1	<0.1	<0.1	0.8	0.3	3.2	<0.1	<0.1	<0.1
	Chrysene	mg/kg	0.1 / 0.5	0.3	-	3.2	0.1	0.2	<0.1	0.3	0.2	<0.1	<0.1	1.4	0.4	3.6	<0.1	<0.1	<0.1
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.1	-	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<1	<0.1	<0.1	<0.1
	Fluoranthene	mg/kg	0.1 / 0.5	0.8	-	9.1	0.4	0.7	&										

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
17/04/2012	17/04/2012	17/04/2012	27/04/2012	27/04/2012	27/04/2012	27/04/2012	24/04/2012	24/04/2012	24/04/2012	24/04/2012	12/12/2012	12/12/2012
SE107335-1	SE107335-1	SE107335-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE10789-90	SE10789-90
SE107335-1	SE107335-1	SE107335-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE10786-1	SE10786-1
SE10786-1	SE10786-1	SE10786-1	SE10786-1	SE10786-1	103789-90	103789-90						

Chem_Group	ChemName	Units	LOR	BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	<3	4	3	<3	4	<3	9	<3	-	<3	16	4.6	<2
	Cadmium	mg/kg	0.3 / 0.4	0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	22	8.9	4.7	11	11	9.7	260	4.9	-	7.6	12	5.6	7
	Copper	mg/kg	0.5	80	83	5.5	35	8.7	4.7	33	5.4	-	8.5	3.4	17	23
	Lead	mg/kg	1 / 5	24	230	6	51	18	27	19	11	-	16	14	58	44
	Mercury	mg/kg	0.05	0.3	2.1	<0.05	0.28	0.08	0.08	<0.05	<0.05	-	<0.05	<0.05	0.06	0.07
	Nickel	mg/kg	0.5 / 2.5 / 5	38	9.6	<0.5	31	3.2	2.1	25	3.6	-	6.2	4.1	11	7.3
	Zinc	mg/kg	0.5 / 5	71	310	3.5	89	23	32	9.4	22	-	33	9.9	250	280
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	<0.1	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	1.1	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	<0.1	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	1.4	<0.3	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<20	<20	<20	<20	<20	<20	<20	<20	-	21	<20	<10	<10
	C10 - C14	mg/kg	20 / 50	20	<20	<20	<20	<20	<20	<20	<20	-	62	<20	<50	<50
	C15 - C28	mg/kg	50 / 100	2500	840	<50	<50	<50	<50	<50	<50	-	2400	<50	<100	<100
	C29 - C36	mg/kg	50 / 100	1700	380	<50	<50	<50	<50	<50	<50	-	1100	<50	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	4220	1230	<120	<120	<120	<120	<120	<120	-	3562	<120	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	0.2	2.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	-	13	<0.1	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	0.1	4.7	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	-	<1	<0.1	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	0.7	13	0.2	0.7	<0.1	0.3	<0.1	<0.1	-	23	0.1	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.8	26	0.2	1.2	<0.1	0.5	<0.1	<0.1	-	50	0.3	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.5	16	0.1	1	<0.1	0.6	<0.1	<0.1	-	30	0.2	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	-	-	-	-	-	-	-	-	-	-	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	0.7	21	0.2	1.1	<0.1	<0.1	<0.1	-	28	0.2	-	-
	Benz(k)fluoranthene	mg/kg	0.1	0.4	5.6	0.1	0.6	<0.1	0.4	<0.1	<0.1	-	10	0.1	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	0.5	9.3	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	-	15	0.1	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	0.8	14	0.2	0.9	<0.1	0.4	<0.1	<0.1	-	42	0.3	<0.5	<0.5
	Dibenz(a,b)anthracene	mg/kg	0.1 / 0.5	<0.1	2.5	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	-	3.1	<0.1	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1.5	53	0.5	2.6	<0.1	1.2	<0.1	<0.1	-	79	0.4	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	0.3	5.5	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	-	12	<0.1	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	0.3	8.1	<0.1	0.5	<0.1								

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9m)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9m)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012
103789-90	103789-90	103789-90	103789-90	103789-90	103787-103788		103787-103788		103787-103788	103787-103788

Chem. Group	ChemName	Units	LOR	BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9m)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	2.8	4.1	-	<2	-	4.8	-	3.8	16
	Cadmium	mg/kg	0.3 / 0.4	-	-	<0.4	<0.4	-	<0.4	-	<0.4	-	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	-	-	6.1	<5	-	<5	-	<5	-	21	24
	Copper	mg/kg	0.5	-	-	<5	5	-	75	-	17	-	24	<5
	Lead	mg/kg	1 / 5	-	-	13	7.6	-	5.6	-	40	-	190	63
	Mercury	mg/kg	0.05	-	-	<0.05	<0.05	-	<0.05	-	0.2	-	1.8	0.51
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	<5	<5	-	210	-	6.3	-	6.7	<5
	Zinc	mg/kg	0.5 / 5	-	-	78	140	-	90	-	26	-	70	30
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	-	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	-	<50	-	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	-	<100	-	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	-	<100	-	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	<100	<100	-	<100	-	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
Asbestos	Asbestos	-	-	ND	-	-	-	-	ND	D	ND	ND	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH119_(2.1-2.3m)	BH120_(0.03-0.13m)_A	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)	BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)
BH119_(2.1-2.3m)	BH120_(0.03-0.13m)_A	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)	BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)
12/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012
103787-103788	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99

Chem. Group	ChemName	Units	LOR	BH119_(2.1-2.3m)	BH120_(0.03-0.13m)_A	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)	BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	34	-	4	6.1	-	-	-	-	8.7	-	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	-	<0.4	<0.4	-	-	-	-	<0.4	-	-
	Chromium	mg/kg	0.3 / 5	35	-	110	6.7	-	-	-	-	42	-	-
	Copper	mg/kg	0.5	96	-	43	51	-	-	-	-	130	-	-
	Lead	mg/kg	1 / 5	530	-	6.2	250	-	-	-	-	79	-	-
	Mercury	mg/kg	0.05	4.9	-	<0.05	0.57	-	-	-	-	0.41	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	35	-	120	<5	-	-	-	-	51	-	-
	Zinc	mg/kg	0.5 / 5	220	-	79	190	-	-	-	-	120	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	160	390	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	160	390	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.7	4.1	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	8.9	<0.5	<0.5	1.1	1.2	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	5.6	12	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.4	3.9	8.7	<0.5	0.7	0.8	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	2.2	7.1	15	<1	<1	1.4	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1	2	4.6	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	4.8	9.6	<0.5	0.8	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.9	12	27	<0.5	<0.5	2	2.3
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.7	3.8	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.8	1.8	4.1	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.1	9.1	31	<0.5	1.2	1.2	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.1	10	23	<0.5	1.7	2	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	13	67	140	<1	<1	8.9	7.5
Asbestos	Asbestos	-	-	-	ND	-	ND	-	-	-	-	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	<LOR	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	<LOR	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	<LOR	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	<LOR	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	<LOR	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH121A_(0.5-0.6m)	BH121A_(1.0-1.1m)_A	BH121A_(1.0-1.1m)	BH121A_(1.5-1.6m)	BH121A_(2.5-2.6m)	BH122_(0.5-0.6m)	BH122_(1.5-1.6m)	BH122A_(0.5-0.6m)	BH122A_(1.0-1.1M)	BH122A_(1.5-1.6m)_A	BH122A_(1.5-1.6m)
BH121A_(0.5-0.6m)	BH121A_(1.0-1.1m)_A	BH121A_(1.0-1.1m)	BH121A_(1.5-1.6m)	BH121A_(2.5-2.6m)	BH122_(0.5-0.6m)	BH122_(1.5-1.6m)	BH122A_(0.5-0.6m)	BH122A_(1.0-1.1m)	BH122A_(1.5-1.6m)_A	BH122A_(1.5-1.6m)
18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
103797-99	103797-99	103797-99	103797-99	103797-99	103789-90	103789-90	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR	BH121A_(0.5-0.6m)	BH121A_(1.0-1.1m)_A	BH121A_(1.0-1.1m)	BH121A_(1.5-1.6m)	BH121A_(2.5-2.6m)	BH122_(0.5-0.6m)	BH122_(1.5-1.6m)	BH122A_(0.5-0.6m)	BH122A_(1.0-1.1M)	BH122A_(1.5-1.6m)_A	BH122A_(1.5-1.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	14	-	-	14	-	2.1	-	2.8	-	5.2	4.5
	Cadmium	mg/kg	0.3 / 0.4	<0.4	-	-	<0.4	-	<0.4	-	<0.4	-	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	11	-	-	27	-	11	-	7.5	-	11	11
	Copper	mg/kg	0.5	93	-	-	350	-	20	-	29	-	26	26
	Lead	mg/kg	1 / 5	160	-	-	2700	-	35	-	47	-	56	52
	Mercury	mg/kg	0.05	0.59	-	-	3.4	-	0.06	-	0.06	-	0.12	0.16
	Nickel	mg/kg	0.5 / 2.5 / 5	14	-	-	62	-	8	-	<5	-	<5	<5
	Zinc	mg/kg	0.5 / 5	150	-	-	310	-	60	-	55	-	63	56
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	1300	520	350	<100	<100	<100	<100	-	<100	180
	C29 - C36	mg/kg	50 / 100	<100	810	270	270	<100	<100	<100	<100	-	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	2135	790	620	<100	<100	<100	<100	-	<100	180
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<5	<5	1.4	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	7.9	14	3.6	<0.5	<0.5	<0.5	<0.5	-	<0.5	0.7
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.7	31	18	10	<0.5	<0.5	1.3	<0.5	-	1.3	2.2
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.5	22	13	7.8	<0.5	<0.5	1.3	<0.5	-	1.2	2.1
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	1.1	39	21	13	<1	<1	2	<1	-	2.1	3.5
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	<0.5	11	6.6	3.8	<0.5	<0.5	0.7	<0.5	-	0.7	1.1
	Chrysene	mg/kg	0.1 / 0.5	0.6	23	14	8	<0.5	<0.5	1.1	<0.5	-	1.1	2
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	0.9	55	30	18	0.8	0.9	2.4	<0.5	-	2.4	4.2
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<5	<5	1.2	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	9.8	<5	3.5	<0.5	<0.5	0.6	<0.5	-	0.6	1
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	1	0.6	0.8	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	28	14	14	<0.5	<0.5	0.6	1.4	<0.5	-	1.4
	Pyrene	mg/kg	0.1 / 0.5	1	53	31	17	0.8	0.9	2.3	<0.5	-	2.2	4
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	4.8	280	160	100	1.6	2.4	13	<1	-	13	24
Asbestos	Asbestos	-	-	ND	-	-	ND	-	ND	ND	ND	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH122A_ (2.0-2.1m)	BH122A_ (3.0-3.1m)	BH122A_ (3.4-3.5m)	BH123_ (0.08-0.18m)	BH123_ (0.5-0.6m)	BH123_ (1.5-1.6m) A	BH123_ (1.5-1.6m)	BH123A_ (0.5-0.6m)	BH123A_ (1.0-1.1m) A	BH123A_ (1.0-1.1m)	BH123A_ (2.0-2.1m)
BH122A_ (2.0-2.1m)	BH122A_ (3.0-3.1m)	BH122A_ (3.4-3.5m)	BH123_ (0.08-0.18m)	BH123_ (0.5-0.6m)	BH123_ (1.5-1.6m) A	BH123_ (1.5-1.6m)	BH123A_ (0.5-0.6m)	BH123A_ (1.0-1.1m) A	BH123A_ (1.0-1.1m)	BH123A_ (2.0-2.1m)
13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
103791-93	103791-93	103791-93	103789-90	103789-90	103789-90	103789-90	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR							
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	5	<2	-	-	-	7.6	6.1
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	-	-	0.4	<0.4
	Chromium	mg/kg	0.3 / 5	11	7.6	-	-	-	10	<5
	Copper	mg/kg	0.5	48	6.9	-	-	-	50	26
	Lead	mg/kg	1 / 5	140	9.3	-	-	-	69	36
	Mercury	mg/kg	0.05	0.35	0.11	-	-	-	0.12	0.1
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	<5	-	-	-	11	<5
BTEX	Zinc	mg/kg	0.5 / 5	81	<5	-	-	-	110	51
	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TPH	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	810	380	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	220	100	<100
PAH	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	1055	505	<100
	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.6	0.8	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	5.3	4.8	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	6	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	34	13	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	30	14	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	46	20	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	13	6.7	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	27	8.8	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	4	1.6	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	58	28	0.9
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	6.2	3.9	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	5.6	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	3	2.7	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	0.8	<0.5	<0.5	<0.5	44	19	0.8
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	55	25	0.9
Asbestos	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	5.2	350	160
	Asbestos	-	-	-	-	-	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
13/12/2012	13/12/2012	13/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012
103791-93	103791-93		103791-93	103791-93	103791-93	103791-93	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR	BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	6.9	2.5	-	13	13	6.8	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	1	0.6	0.4	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	12	<5	-	12	11	8.5	-	-	-	-	-
	Copper	mg/kg	0.5	9.4	<5	-	92	140	59	-	-	-	-	-
	Lead	mg/kg	1 / 5	<5	<5	-	180	120	64	-	-	-	-	-
	Mercury	mg/kg	0.05	0.07	<0.05	-	0.22	0.26	0.23	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	<5	-	16	12	20	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	13	<5	-	240	170	94	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	-	<50	<50	<50	110	620	630	<50	630
	C15 - C28	mg/kg	50 / 100	<100	<100	-	<100	<100	<100	1300	3800	2700	<100	3200
	C29 - C36	mg/kg	50 / 100	<100	<100	-	<100	<100	<100	220	350	220	160	320
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	-	<100	<100	<100	1630	4770	3550	160	4150
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	-	<1	<1	<1	-	-	-	-	-
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	0.9	1.4	<0.5	1.2
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1	<0.5	<0.5	-	1.3	<0.5	<0.5	1.9
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	-	4.1	<1	-	-	-	-	-	-
Asbestos	Asbestos	-	-	-	-	ND	ND	-	-	-	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	<LOR
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	0.7
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	1.3
	Other VOC	mg/kg	-	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	<LOR
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	<LOR

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

	BH124_ (4.6-4.8m)	BH125_ (0.23-0.33m) A	BH125_ (0.23-0.33m)	BH125_ (1.0-1.1m) A	BH125A_ (0.5-0.6M) A	BH125A_ (0.5-0.6M)	BH125A_ (1.4-1.5M)	BH125A_ (2.0-2.1M) A	BH125A_ (2.0-2.1M)	BH125A_ (3.0-3.1M)	BH126_ (0.31-0.41m)
	BH124_ (4.6-4.8m)	BH125_ (0.23-0.33m) A	BH125_ (0.23-0.33m)	BH125_ (1.0-1.1m) A	BH125A_ (0.5-0.6M) A	BH125A_ (0.5-0.6M)	BH125A_ (1.4-1.5M)	BH125A_ (2.0-2.1M) A	BH125A_ (2.0-2.1M)	BH125A_ (3.0-3.1M)	BH126_ (0.31-0.41m)
	14/12/2012	11/12/2012	11/12/2012	11/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	12/12/2012
	103791-93	103786	103786	103786	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103787-103788

Chem. Group	ChemName	Units	LOR								
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	2.9	3.6	5.1	-	<2	16	-
	Cadmium	mg/kg	0.3 / 0.4	-	<0.4	<0.4	<0.4	-	<0.4	-	<0.4
	Chromium	mg/kg	0.3 / 5	-	<5	<5	18	-	<5	15	<5
	Copper	mg/kg	0.5	-	26	39	43	-	5.8	19	15
	Lead	mg/kg	1 / 5	-	99	84	110	-	13	57	-
	Mercury	mg/kg	0.05	-	0.21	0.24	0.34	-	<0.05	0.62	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	<5	<5	5.3	-	<5	9.1	-
BTEX	Zinc	mg/kg	0.5 / 5	-	93	74	77	-	12	220	-
	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	660	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	2600	940	740	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	310	530	470	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	3600	1500	1235	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	2.1	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	18	13	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	18	13	0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	27	31	1	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	20	25	0.7	<0.5	<0.5	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	-	33	39	1.4	<1	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	7.8	12	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	18	24	0.9	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	1.8	3.1	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthenne	mg/kg	0.1 / 0.5	<0.5	66	65	1.9	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	1.1	15	4.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	7.4	9.8	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	18	3.7	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	1.6	87	65	1.4	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	54	64	1.9	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	-	390	370	9.7	<1	<1	<1	<1
Asbestos	Asbestos	-	-	-	-	-	-	ND	ND	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	<LOR	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	0.8	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	0.9	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	<LOR	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	<LOR	-	-	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
12/12/2012	12/12/2012	12/12/2012	12/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012
103787-103788	103787-103788	103787-103788	103787-103788	103784-103785	103784-103785	103786	103786	103786	103786	103786

Chem. Group	ChemName	Units	LOR	BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	3.7	<2	3.5	25	<2	<2	3.6	5.2	4.4	<2	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	-
	Chromium	mg/kg	0.3 / 5	<5	<5	7.4	<5	<5	6.3	9.3	7.6	5.5	<5	-
	Copper	mg/kg	0.5	20	41	560	<5	64	55	28	43	42	<5	-
	Lead	mg/kg	1 / 5	68	95	710	9.7	11	6.8	85	190	160	<5	-
	Mercury	mg/kg	0.05	0.36	0.47	5.7	<0.05	<0.05	<0.05	0.17	0.55	0.55	<0.05	-
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	5.7	7.4	<5	130	120	15	14	15	<5	-
	Zinc	mg/kg	0.5 / 5	95	100	140	<5	71	67	93	140	140	<5	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	250	<100	<100	250	350	190	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	550	860	730	260	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	250	<100	<100	800	1235	945	260	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	3.7	2.3	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	0.7	1.3	<0.5	<0.5	<0.5	0.5	6.7	3.6	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	1.3	4.1	<0.5	<0.5	<0.5	0.8	15	7.4	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	0.9	3.1	<0.5	<0.5	<0.5	0.8	12	5.9	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	1.6	5.9	<1	<1	<1	1.3	20	9.7	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	4.9	2.6	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	1.1	3.1	<0.5	<0.5	<0.5	0.7	11	5.1	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	31	16	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	2.8	7.3	<0.5	<0.5	<0.5	1.9	31	16	<0.5	0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.1	1.8	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	4.4	2.2	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	1	0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	2.2	3.7	<0.5	<0.5	<0.5	1.2	21	13	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	2.5	5.9	<0.5	<0.5	<0.5	1.9	28	14	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	13	38	<1	<1	<1	9.1	160	84	<1	<1
Asbestos	Asbestos	-	-	-	ND	-	-	-	ND	ND	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	2-naphthylamine	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	g-BHC (Lindane)	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	Other VOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
Other SVOC	SVOC	mg/kg	-	-	-	<LOR								

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	10/12/2012	10/12/2012	11/12/2012
103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103784-103785	103784-103785	103787-103788

Chem. Group	ChemName	Units	LOR	BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	3.4	5.2	-	7.4	4.5	3.5	-	-	4.1	4.9	6.9
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	<0.4	<0.4	<0.4	-	-	<0.4	0.5	0.5
	Chromium	mg/kg	0.3 / 5	12	12	-	21	23	11	-	-	<5	16	7.1
	Copper	mg/kg	0.5	27	27	-	36	24	13	-	-	29	49	130
	Lead	mg/kg	1 / 5	89	96	-	430	200	93	-	-	52	150	410
	Mercury	mg/kg	0.05	0.18	0.27	-	1.2	1.5	0.54	-	-	0.43	0.68	4.5
	Nickel	mg/kg	0.5 / 2.5 / 5	5.6	5.8	-	12	8.2	<5	-	-	6.6	14	12
	Zinc	mg/kg	0.5 / 5	78	94	-	410	220	130	-	-	140	430	1700
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	110	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	110	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.6	4.4	1.2	0.7	1.2	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.7	2.9	1.2	0.9	1.4	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	1.1	5	2.1	1.6	2.3	<1	<1	<1	<1	1.1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	1.6	0.9	0.7	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	0.6	3	1.2	0.8	1.2	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1.2	8.8	2	1.2	2	<0.5	<0.5	<0.5	<0.5	1	1
	Fluorene	mg/kg	0.1 / 0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	1.6	0.7	0.6	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	0.7	11	1.2	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	1.2	7.4	2	1.3	2	<0.5	<0.5	<0.5	<0.5	1	0.9
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	6.1	53	13	7.8	13	<1	<1	<1	<1	4.9	1.9
Asbestos	Asbestos	-	-	-	ND	ND	-	-	-	-	-	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	<LOR	-	-	1.8	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	<LOR	-	-	<LOR	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	<LOR	-	-	<LOR	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	<LOR	-	-	<LOR	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	<LOR	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	25/07/2012
103787-103788		103787-103788	103787-103788	103787-103788	103787-103788	92455-57	92455-57	92455-57	92455-57	89249-50

Chem. Group	ChemName	Units	LOR	BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	9.6	-	9.3	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	0.6	-	1.2	-	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	6.9	-	10	-	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	150	-	110	-	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	370	-	330	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	4.3	-	3	-	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	14	-	11	-	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	1700	-	2200	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	-	<100	<100	<100	<100	470	690	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	-	<100	<100	<100	<100	200	420	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	-	<100	<100	<100	<100	670	1135	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	-	1	<0.5	<0.5	<0.5	3.5	0.7	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	-	1.9	<0.5	<0.5	<0.5	8.2	12	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	-	3.4	0.8	<0.5	<0.5	16	20	<0.5	<0.5	0.6
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	-	2.9	0.7	<0.5	<0.5	10	19	<0.5	<0.5	0.6
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	<1	-	4.7	1.1	<1	<1	17	28	<1	<1	1.1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	-	1.4	<0.5	<0.5	<0.5	5.1	11	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	-	3.7	0.7	<0.5	<0.5	9.2	13	<0.5	<0.5	0.6
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1	-	11	1.5	<0.5	<0.5	37	50	0.6	<0.5	1.2
	Fluorene	mg/kg	0.1 / 0.5	<0.5	-	0.7	<0.5	<0.5	<0.5	1.9	5.1	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	-	1.2	<0.5	<0.5	<0.5	4.2	8.6	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	0.6	3.8	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	-	9.9	0.7	<0.5	<0.5	32	42	0.7	<0.5	0.7
	Pyrene	mg/kg	0.1 / 0.5	0.9	-	9.2	1.4	<0.5	<0.5	31	43	<0.5	<0.5	1.2
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	1.9	-	51	6.9	<1	<1	180	260	1.3	<1	6
Asbestos	Asbestos	-	-	ND	ND	-	-	-	ND	-	ND	-	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)
	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)
	26/07/2012	26/07/2012	26/07/2012	25/07/2012	25/07/2012	25/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012	25/07/2012
	92458-59	92458-59	92458-59	89249-50	89249-50	89249-50	92458-59	92458-59	92458-59	92458-59	89249-50

Chem. Group	ChemName	Units	LOR	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)	
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-	-	-	-	-	
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-	-	-	-	-	
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Copper	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-	-	-	-	-	
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-	-	-	-	-	
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
	C15 - C28	mg/kg	50 / 100	540	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
	C29 - C36	mg/kg	50 / 100	280	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
	C10 - C36 (Sum of total)	mg/kg	120 / 100	820	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
PAH	Acenaphthene	mg/kg	0.1 / 0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Acenaphthylene	mg/kg	0.1 / 0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Anthracene	mg/kg	0.1 / 0.5	5.1	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benz(a)anthracene	mg/kg	0.1 / 0.5	11	1.8	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	0.8	<0.5	1	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	7.5	1.1	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	0.9	<0.5	0.9	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	13	2	<1	<1	<1	1.4	<1	1.4	<1	1.4	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	3.2	0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	6.7	1.3	<0.5	<0.5	<0.5	0.8	<0.5	0.7	<0.5	0.9	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	18	3.5	<0.5	<0.5	<0.5	1.8	<0.5	1.6	<0.5	2.1	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	2.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	16	3.2	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	1.1	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	18	3.7	<0.5	<0.5	<0.5	1.7	<0.5	1.7	<0.5	2	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	110	19	<1	<1	<1	9.2	<1	7.6	<1	9.4	<1	<1
Asbestos	Asbestos	-	-	ND	ND	-	ND	ND	-	ND	ND	-	-	-	
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
25/07/2012	25/07/2012	25/07/2012	25/07/2012	24/07/2012	24/07/2012	24/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012
89249-50	89249-50	89249-50	89249-50	89247-48	89247-48	89247-48	92458-59	92458-59	92458-59	89247-48

Chem. Group	ChemName	Units	LOR	CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	-	<1	<1	<1	<1	<1	4.3	<1	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	7.4	<0.5	0.7	0.9	0.7
	Fluorene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	6.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	6	<0.5	0.6	0.9	0.7
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	-	<1	<1	<1	<1	<1	39	<1	1.3	2.3	1.4
Asbestos	Asbestos	-	-	ND	ND	-	-	ND	-	ND	ND	ND	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 9
Soil Analytical Results - Comparison Against Commercial/Industrial Health Investigation Levels (HIL F)

Haymarket Precinct, Sydney NSW

CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
24/07/2012	24/07/2012	24/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012
89247-48	89247-48	89247-48	92455-57	92455-57	92455-57	92455-57

Chem_Group	ChemName	Units	LOR	CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	210	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	580	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	790	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5
	Benzo(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	5.8	1.1	<0.5
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	6	1.8	<0.5
	Benzo(b)k(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	9.1	2.8	<1
	Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benzo(q,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	3.7	1.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	4	1.1	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	1.6	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.7	1	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	8.9	0.6	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	11	1.8	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	68	13	<1
Asbestos	Asbestos	—	-	-	-	-	ND	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

Field ID	BH1 1.0	BH1 3.0	BH10 1.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	BH11 0.1m	BH11 0.5m	BH11 1.0m	BH12 0.5	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH13 1.0	BH13 1.5	BH13 2.5				
LocCode	BH1 1.0	BH1 3.0	BH10 1.1-1.3	BH10 2.0	BH10 3.0	BH10 4.0	BH11 0.1m	BH11 0.5m	BH11 1.0m	BH12 0.5	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH13 1.0	BH13 1.5	BH13 2.5				
Sample Depth Range																					
Sampled Date-Time	7/06/2011	7/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	1/06/2011	1/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	9/06/2011	9/06/2011	9/06/2011				
Matrix Description																					
SDG	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100700-1	SE100639-1	SE100639-1	SE100639-1	SE100700-1											
Chem. Group	ChemName	Units	LOR	HIL																	
Inorganics	Moisture	%	0.5		10	16	8.9	13	17	16	-	18	9.4	9.9	5.5	11	20	18	-	15	-
Metals	Arsenic	mg/kg	2 / 3	200	3	9	4	-	8	4	-	5	<3	5	<3	6	5	8	-	10	-
	Cadmium	mg/kg	0.3 / 0.4	40	0.3	<0.3	<0.3	-	<0.3	<0.3	-	0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	-	0.8	-
	Chromium	mg/kg	0.3 / 5	200	9	16	11	-	13	13	-	16	20	13	13	14	11	16	-	9.3	-
	Copper	mg/kg	0.5	2000	13	21	44	-	4.9	35	-	34	18	13	39	36	3.8	5.1	-	70	-
	Lead	mg/kg	1 / 5	600	15	25	260	-	19	150	-	74	21	34	31	240	24	13	-	140	-
	Mercury	mg/kg	0.05	30	<0.05	0.05	0.13	-	<0.05	0.22	-	0.12	0.09	0.1	0.11	0.19	<0.05	<0.05	-	0.45	-
	Nickel	mg/kg	0.5 / 2.5 / 5	600	7.7	3.6	7.7	-	1.2	4.7	-	4.6	5.1	9.3	13	7.8	1	1.7	-	6.2	-
	Zinc	mg/kg	0.5 / 5	14000	30	25	72	-	18	110	-	77	160	83	64	92	380	520	-	730	-
BTEX	Benzene	mg/kg	0.1 / 0.5	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	-
	Ethylbenzene	mg/kg	0.1 / 0.5	50	<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	-
	Toluene	mg/kg	0.1	130	<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	-
	Xylene (m & p)	mg/kg	0.2 / 1		<1	<1	<2	<1	<1	<1	-	<0.2	<1	<1	<0.2	<1	<1	<1	-	<1	-
	Xylene (o)	mg/kg	0.1 / 0.5		<0.5	<0.5	<1	<0.5	<0.5	<0.5	-	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	-	<0.5	-
	Xylene Total	mg/kg	0.3 / 1.5	25	<0.3	<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	-
TPH	C6 - C9	mg/kg	10 / 20	65	-	-	-	-	-	-	-	<20	<20	-	-	-	-	-	-	-	-
	C10 - C14	mg/kg	20 / 50		-	-	-	-	-	-	-	28	23	-	-	-	-	-	-	-	-
	C15 - C28	mg/kg	50 / 100		-	-	-	-	-	-	-	1200	430	-	-	-	-	-	-	-	-
	C29 - C36	mg/kg	50 / 100		-	-	-	-	-	-	-	620	260	-	-	-	-	-	-	-	-
	C10 - C36 (Sum of total)	mg/kg	120 / 100	1000	-	-	-	-	-	-	-	1848	713	-	-	-	-	-	-	-	-
PAH	Acenaphthene	mg/kg	0.1 / 0.5		<0.1	<0.1	7.3	-	<0.1	1	-	2.3	3.2	<0.1	0.6	0.4	<0.1	<0.1	-	<0.1	-
	Acenaphthylene	mg/kg	0.1 / 0.5		<0.1	<0.1	0.6	-	<0.1	<0.1	-	12	0.7	0.1	0.7	0.4	<0.1	<0.1	-	0.2	-
	Anthracene	mg/kg	0.1 / 0.5		<0.1	<0.1	17	-	<0.1	2.3	-	23	6	0.2	1.3	0.5	<0.1	<0.1	-	0.2	-
	Benzo(a)anthracene	mg/kg	0.1 / 0.5		<0.1	<0.1	30	-	<0.1	3.2	-	55	8.5	0.8	3.9	2.3	<0.1	<0.1	-	0.9	-
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	2	<0.05	<0.05	20	-	<0.05	2.1	-	47	7	0.63	3.2	1.9	<0.05	<0.05	-	0.88	-
	Benzo(b)&(k)fluoranthene	mg/kg	0.1 / 1		<0.1	<0.1	24	-	<0.1	2.8	-	64	3	0.8	3.7	<0.1	<0.1	-	1	-	
	Benzo(b)fluoranthene	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	
	Benzo(k)fluoranthene	mg/kg	0.1		-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	
	Benzo(g,h,i)perylene	mg/kg	0.1 / 0.5		<0.1	<0.1	9.6	-	<0.1	0.9	-	25	4.6	0.3	1.7	0.9	<0.1	<0.1	-	0.5	-
	Chrysene	mg/kg	0.1 / 0.5		<0.1	<0.1	17	-	<0.1	1.7	-	40	6.1	0.4	2	1.2	<0.1	<0.1	-	0.6	-
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5		<0.1	<0.1	2.4	-	<0.1	0.2	-	2.7	0.8	<0.1	0.3	0.2	<0.1	<0.1	-	<0.1	-
	Fluoranthene	mg/kg	0.1 / 0.5		<0.1	<0.1	51	-	0.2	6	-	120	16	1.1	3.9	2.5	0.1	<0.1	-	1.1	-
	Fluorene	mg/kg	0.1 / 0.5		<0.1	<0.1	9	-	<0.1	1.2	-	8.9	3.6	<0.1	0.6	0.3	<0.1	<0.1	-	<0.1	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5		<0.1	<0.1	8.8	-	<0.1	0.9	-	23	3.9	0.3	1.4	0.8	<0.1	<0.1	-	0.4	-
	Naphthalene	mg/kg																			

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

	BH13_4.0	BH14_2.5	BH14_5.5	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1	BH17_8-8.1	BH2_0.6m	BH2_1.5m	BH2_2.5m	BH2_2-2.2m	BH3_0.5m	BH3_1.0m	BH3_2.5m	BH3_5.5m	BH4_0.5m	
	BH13_4.0	BH14_2.5	BH14_5.5	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1	BH17_8-8.1	BH2_0.6m	BH2_1.5m	BH2_2.5m	BH2_2-2.2m	BH3_0.5m	BH3_1.0m	BH3_2.5m	BH3_5.5m	BH4_0.5m	
	2.5	5.5	1-1.1	2.5-2.6															
	9/06/2011	17/06/2011	17/06/2011	21/06/2011	21/06/2011	16/06/2011	16/06/2011	16/06/2011	16/06/2011	3/06/2011	3/06/2011	3/06/2011	3/06/2011	3/06/2011	3/06/2011	2/06/2011	2/06/2011	2/06/2011	6/06/2011
	SE100700-1	SE100711-1	SE100711-1	SE100739-1	SE100739-1	SE100735-1	SE100735-1	SE100735-1	SE100639-1										

Chem_Group	ChemName	Units	LOR	BH13_4.0	BH14_2.5	BH14_5.5	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1	BH17_8-8.1	BH2_0.6m	BH2_1.5m	BH2_2.5m	BH2_2-2.2m	BH3_0.5m	BH3_1.0m	BH3_2.5m	BH3_5.5m	BH4_0.5m
Inorganics	Moisture	%	0.5	28	25	24	16	32	24	23	18	17	8.5	-	13	17	13	17	-	15	12
Metals	Arsenic	mg/kg	2 / 3	180	7	6	6	11	6	7	<3	16	4	-	23	28	4	4	-	<3	12
	Cadmium	mg/kg	0.3 / 0.4	<0.3	0.5	0.5	<0.3	0.5	0.6	0.6	<0.3	0.5	<0.3	-	0.4	0.4	<0.3	<0.3	-	<0.3	<0.3
	Chromium	mg/kg	0.3 / 5	17	18	14	12	31	14	11	9.5	13	7.4	-	16	11	7.5	14	-	6	10
	Copper	mg/kg	0.5	11	120	9.4	61	79	72	46	7.3	9.9	-	51	56	51	58	-	4.9	63	
	Lead	mg/kg	1 / 5	49	170	19	110	300	240	140	15	13	15	-	93	98	15	27	-	6	47
	Mercury	mg/kg	0.05	0.21	1	0.06	0.74	2.2	4.9	0.44	0.07	<0.05	<0.05	-	0.55	0.37	<0.05	0.48	-	<0.05	0.15
	Nickel	mg/kg	0.5 / 2.5 / 5	11	14	6.8	3.7	14	6.7	2.7	3.5	2.5	11	-	11	7	6.6	22	-	0.9	5.6
	Zinc	mg/kg	0.5 / 5	18	340	130	100	100	340	110	19	27	38	-	160	110	32	50	-	1.9	91
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
	Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1	<0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<0.2	<0.2	<0.2	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.1	<0.1	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3
TPH	C6 - C9	mg/kg	10 / 20	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	-	<20	<20
	C10 - C14	mg/kg	20 / 50	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	-	<20	<20
	C15 - C28	mg/kg	50 / 100	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	140	130	<50	<50	-	<50	<50
	C29 - C36	mg/kg	50 / 100	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	88	92	<50	<50	-	<50	<50
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	<120	<120	<120	<120	<120	<120	<120	<120	<120	-	238	232	<120	<120	-	<120	<120
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.1	-	<0.1	<0.1
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.2	<0.5	<0.1	-	<0.1	<0.1	<0.1
	Anthracene	mg/kg	0.1 / 0.5	<0.1	0.2	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	<0.5	<0.1	-	<0.1	<0.1	0.1
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.1	0.3	-	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.9	<0.5	0.1	-	<0.1	0.3	
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.05	0.29	-	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.86	<0.5	0.1	-	<0.1	0.35	
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	<1	<0.1	-	<0.1	0.2	
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.1	0.2	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.5	<0.5	<0.1	-	<0.1	0.2	

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
6/06/2011	6/06/2011	6/06/2011	6/06/2011	14/06/2011	14/06/2011	14/06/2011	9/06/2011	9/06/2011	6/06/2011	9/06/2011	14/06/2011	15/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	
SE100639-1	SE100639-1	SE100639-1	SE100639-1	SE100735-1	SE100735-1	SE100700-1	SE100700-1	SE100639-1	SE100700-1	SE100735-1	SE100735-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	

Chem. Group	ChemName	Units	LOR	BH4 1.0m	BH4 1.5m	BH4 2.0m	BH4 5.5m	BH5 1.5-1.6	BH5 2.5-2.6	BH5 4-4.1	BH6 14.0	BH6 2.0	BH6 2.5m	BH6 6.0	BH8 0.5-0.6	BH9 0.5-0.6	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6
Inorganics	Moisture	%	0.5	-	-	15	14	15	18	23	21	21	-	18	8.1	9	-	20	17	18	13
Metals	Arsenic	mg/kg	2 / 3	-	-	14	<3	4	-	6	3	8	-	25	5	4	-	13	6	8	9
	Cadmium	mg/kg	0.3 / 0.4	-	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	0.6	0.8	0.3	-	0.5	<0.3	<0.3	0.3
	Chromium	mg/kg	0.3 / 5	-	-	12	12	9.8	-	11	13	6.4	-	13	12	-	-	29	15	13	9.7
	Copper	mg/kg	0.5	-	-	42	1.2	26	-	14	16	9.3	-	1.2	39	30	-	98	30	15	320
	Lead	mg/kg	1 / 5	-	-	110	7	57	-	37	12	15	-	12	130	66	-	540	75	31	190
	Mercury	mg/kg	0.05	-	-	0.64	<0.05	0.24	-	0.23	<0.05	0.41	-	<0.05	0.27	0.12	-	1.2	0.22	0.05	0.64
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	10	1.2	13	-	5.7	13	1.2	-	1.3	7.2	19	-	26	6.5	1.9	13
	Zinc	mg/kg	0.5 / 5	-	-	110	2.5	96	-	25	22	12	-	7.9	190	93	-	460	89	22	270
BTEX	Benzene	mg/kg	0.1 / 0.5	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1 / 0.5	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	-	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
	Xylene (m & p)	mg/kg	0.2 / 1	-	-	<0.2	<1	<1	-	<0.2	<1	<1	-	<0.2	<1	<1	-	<0.2	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	-	-	<0.1	<0.5	<0.5	-	<0.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.1	<0.1	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	-	-	<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
TPH	C6 - C9	mg/kg	10 / 20	-	-	<20	<20	<20	-	<20	-	-	-	<20	<20	-	<20	<20	<20	<20	
	C10 - C14	mg/kg	20 / 50	-	-	<20	<20	<20	-	<20	-	-	-	<20	<20	-	130	<20	<20	<20	
	C15 - C28	mg/kg	50 / 100	-	-	380	<50	<50	-	<50	-	-	-	-	89	54	-	4300	290	310	170
	C29 - C36	mg/kg	50 / 100	-	-	110	<50	<50	-	<50	-	-	-	-	76	53	-	1900	150	140	130
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	-	500	<120	<120	-	<120	-	-	-	-	175	117	-	6330	450	460	310
PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	35	1.6	2.4	0.2
	Acenaphthylene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	0.5	0.2	-	1.1	<0.1	<0.1	0.4
	Anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.1	-	<0.1	<0.1	<0.1	-	<0.1	0.7	0.2	-	69	3.2	<0.1	1
	Benz(a)anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.2	-	<0.1	<0.1	<0.1	-	<0.1	1.6	0.8	-	160	8.7	<0.1	4
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	-	-	<0.5	-	0.24	-	<0.05	<0.05	<0.05	-	<0.05	1.5	0.92	-	74	4.3	<0.05	3.2
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	-	-	<1	-	0.4	-	<0.1	<0.1	<0.1	-	<0.1	0.9	0.5	-	-	<0.1	1.2	
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110	6.6	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	1.3	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.1	-	<0.1	<0.1	<0.1	-	<0.1	1	0.7	-	38	2.3	<0.1	1.9
	Chrysene	mg/kg	0.1 / 0.5	-	-	<0.5	-	0.2	-	<0.1	<0.1	<0.1	-	<0.1	1.4	0.7	-	98	4.5	<0.1	1.9
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	-	-	<0.5	-	<0.1	-	<0.1	<0.1	<0.1	-								

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
EB2/2.0-2.1	EB3/1.0-1.1	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1	EB3/3.0-3.1	BH23_0.5-0.6	BH23_1.5-1.95	BH23_3-3.45	BH25_0.5-0.6	BH25_1.5-1.7	BH25_4.5-4.9	BH26_Surface	BH27_1.5-1.9	BH27_3.0-3.4	BH27_4.5-4.9
10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	10/06/2011	24/04/2012	24/04/2012	24/04/2012	18/04/2012	18/04/2012	18/04/2012	24/04/2012	27/04/2012	27/04/2012	27/04/2012
SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE100692-1	SE107686-1	SE107686-1	SE107686-1	SE107335-1	SE107335-1	SE107335-1	SE107686-1	SE107819-1	SE107819-1	SE107819-1

Chem_Group	ChemName	Units	LOR	Moisture	17	-	10	15	9.1	18	-	-	-	-	-	-	
Inorganics		%		0.5	2 / 3	7	-	13	6	5	-	3	5	8	4	12	
Metals	Arsenic	mg/kg		0.3 / 0.4	<0.3	-	<0.3	<0.3	<0.3	-	0.3	0.3	<0.3	<0.3	0.4	0.3	
	Cadmium	mg/kg															<0.3
	Chromium	mg/kg		0.3 / 5	13	-	18	9.5	15	-	5.1	7.9	5.6	7.3	9.9	21	6.9
	Copper	mg/kg		0.5	18	-	110	7.3	12	-	51	580	5.8	23	41	63	17
	Lead	mg/kg		1 / 5	32	-	310	23	31	-	220	92	14	13	93	91	8.6
	Mercury	mg/kg		0.05	1	-	0.68	<0.05	0.07	-	0.89	1.3	0.07	0.07	0.26	0.18	0.13
	Nickel	mg/kg		0.5 / 2.5 / 5	3.5	-	11	1.3	4.6	-	12	7.3	1.6	5	16	4.8	11
	Zinc	mg/kg		0.5 / 5	32	-	190	12	17	-	310	110	6	33	100	95	210
BTEX	Benzene	mg/kg		0.1 / 0.5	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
	Ethylbenzene	mg/kg		0.1 / 0.5	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg		0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
	Xylene (m & p)	mg/kg		0.2 / 1	<1	-	<1	<1	<1	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Xylene (o)	mg/kg		0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Xylene Total	mg/kg		0.3 / 1.5	<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
TPH	C6 - C9	mg/kg		10 / 20	<20	-	<20	<20	<20	-	<20	<20	<20	<20	<20	<20	<20
	C10 - C14	mg/kg		20 / 50	<20	-	<20	<20	<20	-	<20	<20	<20	<20	30	<20	<20
	C15 - C28	mg/kg		50 / 100	<50	-	320	<50	<50	-	<50	<50	<50	190	<50	450	<50
	C29 - C36	mg/kg		50 / 100	<50	-	190	<50	<50	-	<50	<50	<50	55	<50	420	<50
	C10 - C36 (Sum of total)	mg/kg		120 / 100	<120	-	520	<120	<120	-	<120	<120	<120	255	<120	900	<120
PAH	Acenaphthene	mg/kg		0.1 / 0.5	<0.1	-	0.4	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.2	<0.1	3	<0.1
	Acenaphthylene	mg/kg		0.1 / 0.5	<0.1	-	1.5	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.5	0.1	1.4	<0.1
	Anthracene	mg/kg		0.1 / 0.5	0.3	-	2.3	<0.1	0.2	-	0.1	<0.1	<0.1	1.2	0.3	3.8	<0.1
	Benz(a)anthracene	mg/kg		0.1 / 0.5	0.4	-	6.4	0.3	0.4	-	0.3	0.2	<0.1	2.2	0.6	4.8	<0.1
	Benz(a)pyrene	mg/kg		0.05 / 0.1 / 0.5	0.35	-	3.9	0.15	0.25	<0.05	0.3	0.1	<0.1	1.6	0.5	4.4	<0.1
	Benz(b)fluoranthene	mg/kg		0.1 / 1	0.1	-	1.5	<0.1	0.1	-	-	-	-	-	-	-	-
	Benz(b)fluoranthene	mg/kg		0.1	-	-	-	-	-	-	0.4	0.2	<0.1	0.1	1.9	0.6	5.9
	Benz(k)fluoranthene	mg/kg		0.1	-	-	-	-	-	-	0.2	<0.1	<0.1	0.7	0.3	2	<0.1
	Benz(q,h,i)perylene	mg/kg		0.1 / 0.5	0.2	-	2.1	<0.1	0.2	<0.1	0.2	0.1	<0.1	0.1	0.8	0.3	3.2
	Chrysene	mg/kg		0.1 / 0.5	0.3	-	3.2	0.1	0.2	<0.1	0.3	0.2	<0.1	0.1	1.4	0.4	3.6
	Dibenz(a,h)anthracene	mg/kg		0.1 / 0.5	<0.1	-	0.6	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.2	<0.1	<1	<0.1
	Fluoranthene	mg/kg		0.1 / 0.5	0.8	-	9.1	0.4	0.7	<0.1	0.5	0.2	<0.1	0.1	3.9	1	15
	Fluorene	mg/kg		0.1 / 0.5	0.1	-	1.5	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.5	0.1	<1	<0.1
	Indeno(1,2,3-c,d)pyrene	mg/kg		0.1 / 0.5	0.2	-	2.2	<0.1	0.1	<0.1	0.1	<0.1	<0.1	0.7	0.2	2.3	<0.1
	Naphthalene	mg/kg		0.1 / 0.5	<0.1	-	0.7	<0.1	<0.1	-	0.2	<0.1	<0.1	0.2	<0.1	1.2	<0.1
	Phenanthrene	mg/kg		0.1 / 0.5	0.6	-	7.9	0.3	0.6	<0.1	0.5	0.2	<0.1	0.1	3.1	0.8	8.2
	Pyrene	mg/kg		0.1 / 0.5	0.8	-	8.8	0.3	0.7	<0.1	0.5	0.2	<0.1	0.1	3.7	1	14
	Total PAHs	mg/kg		0.8 / 1.0 / 1.75	4.7	-	58	<1.75	3.8	<1.75	3.3	1.4	<0.8	<0.8	23	6	73
Asbestos	Asbestos		</														

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
17/04/2012	17/04/2012	17/04/2012	27/04/2012	27/04/2012	27/04/2012	27/04/2012	24/04/2012	24/04/2012	24/04/2012	24/04/2012	12/12/2012	12/12/2012
SE107335-1	SE107335-1	SE107335-1	SE107819-1	SE107819-1	SE107819-1	SE107819-1	SE107686-1	SE107686-1	SE107686-1	SE107686-1	103789-90	103789-90

Chem_Group	ChemName	Units	LOR	BH29_0.4-0.5	BH29_0.9-1.0	BH29_2.0-2.1	BH30_0.5-0.6	BH30_1.5-1.9	BH30_3.0-5.4	BH30_4.5-4.9	NBH24_0-0.1	NBH24_0.3-0.5	NBH24_1.5-1.95	NBH24_3.0-3.45	BH118_(0.5-0.6m)_A	BH118_(0.5-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	<3	4	3	<3	4	<3	9	<3	-	<3	16	4.6	<2
	Cadmium	mg/kg	0.3 / 0.4	0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	22	8.9	4.7	11	11	9.7	260	4.9	-	7.6	12	5.6	7
	Copper	mg/kg	0.5	80	83	5.5	35	8.7	4.7	33	5.4	-	8.5	3.4	17	23
	Lead	mg/kg	1 / 5	24	230	6	51	18	27	19	11	-	16	14	58	44
	Mercury	mg/kg	0.05	0.3	2.1	<0.05	0.28	0.08	0.08	<0.05	<0.05	-	<0.05	<0.05	0.06	0.07
	Nickel	mg/kg	0.5 / 2.5 / 5	38	9.6	<0.5	31	3.2	2.1	25	3.6	-	6.2	4.1	11	7.3
	Zinc	mg/kg	0.5 / 5	71	310	3.5	89	23	32	9.4	22	-	33	9.9	250	280
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	<0.1	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	1.1	<0.2	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	<0.1	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	1.4	<0.3	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<20	<20	<20	<20	<20	<20	<20	<20	-	21	<20	<10	<10
	C10 - C14	mg/kg	20 / 50	20	<20	<20	<20	<20	<20	<20	<20	-	62	<20	<50	<50
	C15 - C28	mg/kg	50 / 100	2500	840	<50	<50	<50	<50	<50	<50	-	2400	<50	<100	<100
	C29 - C36	mg/kg	50 / 100	1700	380	<50	<50	<50	<50	<50	<50	-	1100	<50	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	4220	1230	<120	<120	<120	<120	<120	<120	-	3562	<120	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	0.2	2.5	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	-	13	<0.1	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	0.1	4.7	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	-	<1	<0.1	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	0.7	13	0.2	0.7	<0.1	0.3	<0.1	<0.1	-	23	0.1	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.8	26	0.2	1.2	<0.1	0.5	<0.1	<0.1	-	50	0.3	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.5	16	0.1	1	<0.1	0.6	<0.1	<0.1	-	30	0.2	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	-	-	-	-	-	-	-	-	-	-	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	0.7	21	0.2	1.1	<0.1	<0.1	<0.1	-	28	0.2	-	-
	Benz(k)fluoranthene	mg/kg	0.1	0.4	5.6	0.1	0.6	<0.1	0.4	<0.1	<0.1	-	10	0.1	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	0.5	9.3	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	-	15	0.1	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	0.8	14	0.2	0.9	<0.1	0.4	<0.1	<0.1	-	42	0.3	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.1	2.5	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	-	3.1	<0.1	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1.5	53	0.5	2.6	<0.1	1.2	<0.1	<0.1	-	79	0.4	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	0.3	5.5	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	-	12	<0.1	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	0.3	8.1	<0.1	0.5	<0.1	0.4	<0.1	<0.1	-	11	<0.1	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	0.1	2.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<1	<0.1	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	3.2	69	0.6	2	<0.1	0.8	<0.1	<0.1	-	120	0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	1.3	51	0.5	2.4	<0.1	1.2	<0.1	<0.1	-	110	0.6	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 /													

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012	12/12/2012
103789-90	103789-90	103789-90	103789-90	103789-90	103787-103788			103787-103788		103787-103788

Chem. Group	ChemName	Units	LOR	BH118_(1.0-1.1m)	BH118_(2.0-2.1m)_A	BH118_(2.0-2.1m)	BH118_(3.0-3.1m)	BH118_(3.5-3.6m)	BH119_(0.11-0.21m)	BH119_(0.33ASB)	BH119_(0.4-0.5m)	BH119_(0.8-0.9M)	BH119_(1.4-1.5m)_A	BH119_(1.4-1.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	2.8	4.1	-	<2	-	4.8	-	3.8	16
	Cadmium	mg/kg	0.3 / 0.4	-	-	<0.4	<0.4	-	<0.4	-	<0.4	-	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	-	-	6.1	<5	-	<5	-	<5	-	21	24
	Copper	mg/kg	0.5	-	-	<5	5	-	75	-	17	-	24	<5
	Lead	mg/kg	1 / 5	-	-	13	7.6	-	5.6	-	40	-	190	63
	Mercury	mg/kg	0.05	-	-	<0.05	<0.05	-	<0.05	-	0.2	-	1.8	0.51
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	<5	<5	-	210	-	6.3	-	6.7	<5
	Zinc	mg/kg	0.5 / 5	-	-	78	140	-	90	-	26	-	70	30
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	-	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	-	<50	-	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	-	<100	-	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	-	<100	-	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	<100	<100	-	<100	-	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
Asbestos	Asbestos	-	-	ND	-	-	-	-	ND	D	ND	ND	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH119_(2.1-2.3m)	BH120_(0.03-0.13m)_A	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)	BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)
BH119_(2.1-2.3m)	BH120_(0.03-0.13m)_A	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)	BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)
12/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012
103787-103788	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99	103797-99

Chem. Group	ChemName	Units	LOR	BH119_(2.1-2.3m)	BH120_(0.03-0.13m)_A	BH120_(0.03-0.13m)	BH120_(1.0-1.1m)	BH120_(1.5-1.6m)_A	BH120_(1.5-1.6m)	BH120_(2.4-2.5m)	BH120_(3.5-3.6m)	BH121_(0.5-0.6m)_A	BH121_(0.5-0.6m)	BH121_(3.4-3.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	34	-	4	6.1	-	-	-	-	8.7	-	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	-	<0.4	<0.4	-	-	-	-	<0.4	-	-
	Chromium	mg/kg	0.3 / 5	35	-	110	6.7	-	-	-	-	42	-	-
	Copper	mg/kg	0.5	96	-	43	51	-	-	-	-	130	-	-
	Lead	mg/kg	1 / 5	530	-	6.2	250	-	-	-	-	79	-	-
	Mercury	mg/kg	0.05	4.9	-	<0.05	0.57	-	-	-	-	0.41	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	35	-	120	<5	-	-	-	-	51	-	-
	Zinc	mg/kg	0.5 / 5	220	-	79	190	-	-	-	-	120	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	160	390	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	160	390	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.7	4.1	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	8.9	<0.5	<0.5	<0.5	1.1	1.2	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	5.6	12	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.4	3.9	8.7	<0.5	<0.5	0.7	0.8
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	2.2	7.1	15	<1	<1	1.4	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1	2	4.6	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	4.8	9.6	<0.5	<0.5	0.8	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.9	12	27	<0.5	<0.5	2	2.3
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.7	3.8	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.8	1.8	4.1	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.1	9.1	31	<0.5	<0.5	1.2	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.1	10	23	<0.5	<0.5	1.7	2
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	13	67	140	<1	<1	8.9	7.5
Asbestos	Asbestos	-	-	-	ND	-	ND	-	-	-	-	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	<LOR	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	<LOR	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	<LOR	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	<LOR	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	<LOR	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH121A_ (0.5-0.6m)	BH121A_ (1.0-1.1m) A	BH121A_ (1.0-1.1m)	BH121A_ (1.5-1.6m)	BH121A_ (2.5-2.6m)	BH122_ (0.5-0.6m)	BH122_ (1.5-1.6m)	BH122A_ (0.5-0.6m)	BH122A_ (1.0-1.1M)	BH122A_ (1.5-1.6m) A	BH122A_ (1.5-1.6m)
BH121A_ (0.5-0.6m)	BH121A_ (1.0-1.1m) A	BH121A_ (1.0-1.1m)	BH121A_ (1.5-1.6m)	BH121A_ (2.5-2.6m)	BH122_ (0.5-0.6m)	BH122_ (1.5-1.6m)	BH122A_ (0.5-0.6m)	BH122A_ (1.0-1.1m)	BH122A_ (1.5-1.6m) A	BH122A_ (1.5-1.6m)
18/12/2012	18/12/2012	18/12/2012	18/12/2012	18/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
103797-99	103797-99	103797-99	103797-99	103797-99	103789-90	103789-90	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR	BH121A_ (0.5-0.6m)	BH121A_ (1.0-1.1m) A	BH121A_ (1.0-1.1m)	BH121A_ (1.5-1.6m)	BH121A_ (2.5-2.6m)	BH122_ (0.5-0.6m)	BH122_ (1.5-1.6m)	BH122A_ (0.5-0.6m)	BH122A_ (1.0-1.1M)	BH122A_ (1.5-1.6m) A	BH122A_ (1.5-1.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	14	-	-	14	-	2.1	-	2.8	-	5.2	4.5
	Cadmium	mg/kg	0.3 / 0.4	<0.4	-	-	<0.4	-	<0.4	-	<0.4	-	<0.4	<0.4
	Chromium	mg/kg	0.3 / 5	11	-	-	27	-	11	-	7.5	-	11	11
	Copper	mg/kg	0.5	93	-	-	350	-	20	-	29	-	26	26
	Lead	mg/kg	1 / 5	160	-	-	2700	-	35	-	47	-	56	52
	Mercury	mg/kg	0.05	0.59	-	-	3.4	-	0.06	-	0.06	-	0.12	0.16
	Nickel	mg/kg	0.5 / 2.5 / 5	14	-	-	62	-	8	-	<5	-	<5	<5
	Zinc	mg/kg	0.5 / 5	150	-	-	310	-	60	-	55	-	63	56
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	1300	520	350	<100	<100	<100	<100	-	<100	180
	C29 - C36	mg/kg	50 / 100	<100	810	270	270	<100	<100	<100	<100	-	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	2135	790	620	<100	<100	<100	<100	-	<100	180
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<5	<5	1.4	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	7.9	14	3.6	<0.5	<0.5	<0.5	<0.5	-	<0.5	0.7
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.7	31	18	10	<0.5	<0.5	1.3	<0.5	-	1.3	2.2
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.5	22	13	7.8	<0.5	<0.5	1.3	<0.5	-	1.2	2.1
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	1.1	39	21	13	<1	<1	2	<1	-	2.1	3.5
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	11	6.6	3.8	<0.5	<0.5	0.7	<0.5	-	0.7	1.1
	Chrysene	mg/kg	0.1 / 0.5	0.6	23	14	8	<0.5	<0.5	1.1	<0.5	-	1.1	2
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	0.9	55	30	18	0.8	0.9	2.4	<0.5	-	2.4	4.2
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<5	<5	1.2	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	9.8	<5	3.5	<0.5	<0.5	0.6	<0.5	-	0.6	1
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	1	0.6	0.8	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	28	14	14	<0.5	<0.5	0.6	1.4	<0.5	-	1.4
	Pyrene	mg/kg	0.1 / 0.5	1	53	31	17	0.8	0.9	2.3	<0.5	-	2.2	4
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	4.8	280	160	100	1.6	2.4	13	<1	-	13	24
Asbestos	Asbestos	-	-	ND	-	-	ND	-	ND	ND	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH122A_ (2.0-2.1m)	BH122A_ (3.0-3.1m)	BH122A_ (3.4-3.5m)	BH123_ (0.08-0.18m)	BH123_ (0.5-0.6m)	BH123_ (1.5-1.6m) A	BH123_ (1.5-1.6m)	BH123A_ (0.5-0.6m)	BH123A_ (1.0-1.1m) A	BH123A_ (1.0-1.1m)	BH123A_ (2.0-2.1m)
BH122A_ (2.0-2.1m)	BH122A_ (3.0-3.1m)	BH122A_ (3.4-3.5m)	BH123_ (0.08-0.18m)	BH123_ (0.5-0.6m)	BH123_ (1.5-1.6m) A	BH123_ (1.5-1.6m)	BH123A_ (0.5-0.6m)	BH123A_ (1.0-1.1m) A	BH123A_ (1.0-1.1m)	BH123A_ (2.0-2.1m)
13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
103791-93	103791-93	103791-93	103789-90	103789-90	103789-90	103789-90	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR							
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	5	<2	-	-	-	7.6	6.1
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	-	-	0.4	<0.4
	Chromium	mg/kg	0.3 / 5	11	7.6	-	-	-	10	<5
	Copper	mg/kg	0.5	48	6.9	-	-	-	50	26
	Lead	mg/kg	1 / 5	140	9.3	-	-	-	69	36
	Mercury	mg/kg	0.05	0.35	0.11	-	-	-	0.12	0.1
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	<5	-	-	-	11	<5
BTEX	Zinc	mg/kg	0.5 / 5	81	<5	-	-	-	110	51
	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TPH	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	810	380	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	220	100	<100
PAH	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	1055	505	<100
	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.6	0.8	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	5.3	4.8	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	6	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	34	13	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	30	14	<0.5
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	46	20	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	13	6.7	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	27	8.8	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	4	1.6	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	58	28	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	6.2	3.9	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	5.6	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	3	2.7	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	0.8	<0.5	<0.5	<0.5	44	19	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	55	25	<0.5
Asbestos	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	5.2	350	160
	Asbestos	-	-	-	-	-	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
13/12/2012	13/12/2012	13/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012
103791-93	103791-93		103791-93	103791-93	103791-93	103791-93	103791-93	103791-93	103791-93	103791-93

Chem. Group	ChemName	Units	LOR	BH123A_(3.0-3.1m)	BH123A_(4.0-4.1m)	BH124_(0.01-0.11M)	BH124_(0.5-0.6m)	BH124_(1.5-1.6m)	BH124_(2.5-2.6m)	BH124_(2.9-3.0m)_A	BH124_(2.9-3.0m)	BH124_(3.4-3.5m)	BH124_(3.8-3.9m)	BH124_(4.6-4.8m)_A
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	6.9	2.5	-	13	13	6.8	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	1	0.6	0.4	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	12	<5	-	12	11	8.5	-	-	-	-	-
	Copper	mg/kg	0.5	9.4	<5	-	92	140	59	-	-	-	-	-
	Lead	mg/kg	1 / 5	<5	<5	-	180	120	64	-	-	-	-	-
	Mercury	mg/kg	0.05	0.07	<0.05	-	0.22	0.26	0.23	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	<5	-	16	12	20	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	13	<5	-	240	170	94	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	-	<50	<50	<50	110	620	630	<50	630
	C15 - C28	mg/kg	50 / 100	<100	<100	-	<100	<100	<100	1300	3800	2700	<100	3200
	C29 - C36	mg/kg	50 / 100	<100	<100	-	<100	<100	<100	220	350	220	160	320
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	-	<100	<100	<100	1630	4770	3550	160	4150
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	<1	<1	-	<1	<1	<1	-	-	-	-	-
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1.1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	0.9	1.4	<0.5	1.2
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1	<0.5	<0.5	-	1.3	<0.5	<0.5	1.9
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	-	1	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	-	4.1	<1	-	-	-	-	-	-
Asbestos	Asbestos	-	-	-	-	ND	ND	-	-	-	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	<LOR
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	0.7
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	1.3
	Other VOC	mg/kg	-	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	<LOR
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	<LOR	-	<LOR	<LOR	<LOR	<LOR

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

Table 10
Soil Analytical Results - Comparision Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
12/12/2012	12/12/2012	12/12/2012	12/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012	10/12/2012
103787-103788	103787-103788	103787-103788	103787-103788	103784-103785	103784-103785	103786	103786	103786	103786	103786

Chem. Group	ChemName	Units	LOR	BH126_(0.5-0.6m)_A	BH126_(0.5-0.6m)	BH126_(1.4-1.5m)	BH126_(2.4-2.5m)	BH127_(0.3-0.5M)_A	BH127_(0.3-0.5M)	BH127_(1.0-1.1m)	BH127_(1.5-1.6m)_A	BH127_(1.5-1.6m)	BH127_(2.6-2.7m)	BH127_(3.4-3.5m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	3.7	<2	3.5	25	<2	<2	3.6	5.2	4.4	<2	-
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	-
	Chromium	mg/kg	0.3 / 5	<5	<5	7.4	<5	<5	6.3	9.3	7.6	5.5	<5	-
	Copper	mg/kg	0.5	20	41	560	<5	64	55	28	43	42	<5	-
	Lead	mg/kg	1 / 5	68	95	710	9.7	11	6.8	85	190	160	<5	-
	Mercury	mg/kg	0.05	0.36	0.47	5.7	<0.05	<0.05	<0.05	0.17	0.55	0.55	<0.05	-
	Nickel	mg/kg	0.5 / 2.5 / 5	<5	5.7	7.4	<5	130	120	15	14	15	<5	-
	Zinc	mg/kg	0.5 / 5	95	100	140	<5	71	67	93	140	140	<5	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	250	<100	<100	250	350	190	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	550	860	730	260	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	250	<100	<100	800	1235	945	260	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	3.7	2.3	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	0.7	1.3	<0.5	<0.5	<0.5	0.5	6.7	3.6	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	1.3	4.1	<0.5	<0.5	<0.5	0.8	15	7.4	<0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	0.9	3.1	<0.5	<0.5	<0.5	0.8	12	5.9	<0.5	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	1.6	5.9	<1	<1	<1	1.3	20	9.7	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	4.9	2.6	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	1.1	3.1	<0.5	<0.5	<0.5	0.7	11	5.1	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	31	16	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	2.8	7.3	<0.5	<0.5	<0.5	1.9	31	16	<0.5	0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.1	1.8	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	4.4	2.2	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	1	0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	2.2	3.7	<0.5	<0.5	<0.5	1.2	21	13	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	2.5	5.9	<0.5	<0.5	<0.5	1.9	28	14	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	13	38	<1	<1	<1	9.1	160	84	<1	<1
Asbestos	Asbestos	-	-	-	ND	-	-	-	ND	ND	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	2-naphthylamine	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	g-BHC (Lindane)	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
	Other VOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	<LOR	<LOR
Other SVOC	SVOC	mg/kg	-	-	-	<LOR</								

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	10/12/2012	10/12/2012	11/12/2012
103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103794-103796	103784-103785	103784-103785	103787-103788

Chem. Group	ChemName	Units	LOR	BH128_(0.28-0.38M)_A	BH128_(0.28-0.38M)	BH128_(0.5-0.6M)	BH128_(1.5-1.6M)_A	BH128_(1.5-1.6M)	BH128_(2.0-2.1M)	BH128_(2.5-2.6M)	BH128_(2.9-3.0M)	BH129_(0.24-0.28M)_A	BH129_(0.28-0.38M)	BH129_(1.0-1.1m)_A
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	3.4	5.2	-	7.4	4.5	3.5	-	-	4.1	4.9	6.9
	Cadmium	mg/kg	0.3 / 0.4	<0.4	<0.4	-	<0.4	<0.4	<0.4	-	-	<0.4	0.5	0.5
	Chromium	mg/kg	0.3 / 5	12	12	-	21	23	11	-	-	<5	16	7.1
	Copper	mg/kg	0.5	27	27	-	36	24	13	-	-	29	49	130
	Lead	mg/kg	1 / 5	89	96	-	430	200	93	-	-	52	150	410
	Mercury	mg/kg	0.05	0.18	0.27	-	1.2	1.5	0.54	-	-	0.43	0.68	4.5
	Nickel	mg/kg	0.5 / 2.5 / 5	5.6	5.8	-	12	8.2	<5	-	-	6.6	14	12
	Zinc	mg/kg	0.5 / 5	78	94	-	410	220	130	-	-	140	430	1700
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	110	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	110	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	0.6	4.4	1.2	0.7	1.2	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	0.7	2.9	1.2	0.9	1.4	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	1.1	5	2.1	1.6	2.3	<1	<1	<1	<1	1.1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	<0.5	1.6	0.9	0.7	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	0.6	3	1.2	0.8	1.2	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1.2	8.8	2	1.2	2	<0.5	<0.5	<0.5	<0.5	1	1
	Fluorene	mg/kg	0.1 / 0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	1.6	0.7	0.6	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	0.7	11	1.2	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	1.2	7.4	2	1.3	2	<0.5	<0.5	<0.5	<0.5	1	0.9
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	6.1	53	13	7.8	13	<1	<1	<1	<1	4.9	1.9
Asbestos	Asbestos	-	-	-	ND	ND	-	-	-	-	-	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	<LOR	-	-	1.8	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	<LOR	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	<LOR	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	<LOR	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	<LOR	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	11/12/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012	25/07/2012
103787-103788		103787-103788	103787-103788	103787-103788	103787-103788	92455-57	92455-57	92455-57	92455-57	89249-50

Chem. Group	ChemName	Units	LOR	BH129_ (1.0-1.1m)	BH129_ (1.5-1.6M)	BH129_ (2.0-2.1m)	BH129_ (2.9-3.0m)	BH129_ (3.9-4.0m)	BH129_ (5.0-5.1m)	CBH10_ (0.5-0.6m)	CBH10_ (1.0-1.1m)	CBH10_ (1.5-1.6m)	CBH10_ (2.0-2.1m)	CBH11_ (0.5-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	9.6	-	9.3	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	0.6	-	1.2	-	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	6.9	-	10	-	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	150	-	110	-	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	370	-	330	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	4.3	-	3	-	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	14	-	11	-	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	1700	-	2200	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	-	<100	<100	<100	<100	470	690	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	-	<100	<100	<100	<100	200	420	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	-	<100	<100	<100	<100	670	1135	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	-	1	<0.5	<0.5	<0.5	3.5	0.7	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	-	1.9	<0.5	<0.5	<0.5	8.2	12	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	<0.5	-	3.4	0.8	<0.5	<0.5	16	20	<0.5	<0.5	0.6
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	-	2.9	0.7	<0.5	<0.5	10	19	<0.5	<0.5	0.6
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	<1	-	4.7	1.1	<1	<1	17	28	<1	<1	1.1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	-	1.4	<0.5	<0.5	<0.5	5.1	11	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	-	3.7	0.7	<0.5	<0.5	9.2	13	<0.5	<0.5	0.6
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	4.2	8.6	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	1	-	11	1.5	<0.5	<0.5	37	50	0.6	<0.5	1.2
	Fluorene	mg/kg	0.1 / 0.5	<0.5	-	0.7	<0.5	<0.5	<0.5	1.9	5.1	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	-	1.2	<0.5	<0.5	<0.5	32	42	0.7	<0.5	0.7
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	3.8	43	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	-	9.9	0.7	<0.5	<0.5	31	43	<0.5	<0.5	1.2
	Pyrene	mg/kg	0.1 / 0.5	0.9	-	9.2	1.4	<0.5	<0.5	180	260	1.3	<1	6
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	1.9	-	51	6.9	<1	<1	-	-	-	-	-
Asbestos	Asbestos	-	-	ND	ND	-	-	-	-	ND	-	-	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	<LOR	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	<LOR	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)
CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)
26/07/2012	26/07/2012	26/07/2012	25/07/2012	25/07/2012	25/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012	25/07/2012
92458-59	92458-59	92458-59	89249-50	89249-50	89249-50	92458-59	92458-59	92458-59	92458-59	89249-50

Chem. Group	ChemName	Units	LOR	CBH11_ (1.0-1.1m)	CBH11_ (2.0-2.1m)	CBH11_ (3.0-3.1m)	CBH5_ (0.5-0.6m)	CBH5_ (1.0-1.1m)	CBH5_ (2.0-2.1m)	CBH5A_ (1.0-1.1m)_ 1	CBH5A_ (2.0-2.1m)_ 1	CBH5A_ (3.0-3.1m)	CBH5A_ (3.5-3.6m)	CBH6_ (0.5-0.6m)	
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-	
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-	-	-	-	-	
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-	-	-	-	-	
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Copper	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-	-	-	-	-	
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-	-	-	-	-	
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-	-	-	-	-	
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
	C15 - C28	mg/kg	50 / 100	540	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
	C29 - C36	mg/kg	50 / 100	280	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
	C10 - C36 (Sum of total)	mg/kg	120 / 100	820	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
PAH	Acenaphthene	mg/kg	0.1 / 0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Acenaphthylene	mg/kg	0.1 / 0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Anthracene	mg/kg	0.1 / 0.5	5.1	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	Benz(a)anthracene	mg/kg	0.1 / 0.5	11	1.8	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	0.8	<0.5	1	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	7.5	1.1	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	0.9	<0.5	0.9	<0.5
	Benz(b)&(k)fluoranthene	mg/kg	0.1 / 1	13	2	<1	<1	<1	1.4	<1	1.4	<1	1.4	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,i)perylene	mg/kg	0.1 / 0.5	3.2	0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	6.7	1.3	<0.5	<0.5	<0.5	0.8	<0.5	0.7	<0.5	0.9	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	18	3.5	<0.5	<0.5	<0.5	1.8	<0.5	1.6	<0.5	2.1	<0.5	<0.5
	Fluorene	mg/kg	0.1 / 0.5	2.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	16	3.2	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	1.1	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	18	3.7	<0.5	<0.5	<0.5	1.7	<0.5	1.7	<0.5	2	<0.5	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	110	19	<1	<1	<1	9.2	<1	7.6	<1	9.4	<1	<1
Asbestos	Asbestos	-	-	ND	ND	-	ND	ND	-	ND	ND	-	-	-	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
25/07/2012	25/07/2012	25/07/2012	25/07/2012	24/07/2012	24/07/2012	24/07/2012	27/07/2012	27/07/2012	27/07/2012	27/07/2012
89249-50	89249-50	89249-50	89249-50	89247-48	89247-48	89247-48	92458-59	92458-59	92458-59	89247-48

Chem. Group	ChemName	Units	LOR	CBH6_ (1.0-1.1m)	CBH6_ (1.5-1.6m)	CBH6_ (2.0-2.1m)	CBH6_ (2.5-2.6m)	CBH7_ (0.5-0.6m)	CBH7_ (1.0-1.1m)	CBH7_ (1.5-1.6m)	CBH7A_ (1.0-1.1m) 1	CBH7A_ (2.0-2.1m)	CBH7A_ (2.9-3.0m)	CBH8_ (0.15-0.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	mg/kg	50 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	0.5	<0.5
	Benz(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5
	Benz(b&k)fluoranthene	mg/kg	0.1 / 1	-	<1	<1	<1	<1	<1	4.3	<1	<1	<1	<1
	Benz(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-
	Benz(g,h,)perylene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	7.4	<0.5	0.7	0.9	0.7
	Fluorene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	6.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	mg/kg	0.1 / 0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	6	<0.5	0.6	0.9	0.7
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	-	<1	<1	<1	<1	<1	39	<1	1.3	2.3	1.4
Asbestos	Asbestos	-	-	ND	ND	-	-	ND	-	ND	ND	ND	-	ND
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-

Table 10
Soil Analytical Results - Comparisn Against Health Investigation Levels for Public Open Space (HIL E)

Haymarket Precinct, Sydney NSW

CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
24/07/2012	24/07/2012	24/07/2012	26/07/2012	26/07/2012	26/07/2012	26/07/2012
89247-48	89247-48	89247-48	92455-57	92455-57	92455-57	92455-57

Chem_Group	ChemName	Units	LOR	CBH8_ (1.5-1.6m)	CBH8_ (2.0-2.1m)	CBH8_ (2.5-2.6m)	CBH9_ (0.5-0.6m)	CBH9_ (1.0-1.1m)	CBH9_ (1.5-1.6m)	CBH9_ (2.5-2.6m)
Inorganics	Moisture	%	0.5	-	-	-	-	-	-	-
Metals	Arsenic	mg/kg	2 / 3	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.3 / 0.4	-	-	-	-	-	-	-
	Chromium	mg/kg	0.3 / 5	-	-	-	-	-	-	-
	Copper	mg/kg	0.5	-	-	-	-	-	-	-
	Lead	mg/kg	1 / 5	-	-	-	-	-	-	-
	Mercury	mg/kg	0.05	-	-	-	-	-	-	-
	Nickel	mg/kg	0.5 / 2.5 / 5	-	-	-	-	-	-	-
	Zinc	mg/kg	0.5 / 5	-	-	-	-	-	-	-
BTEX	Benzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Toluene	mg/kg	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene (m & p)	mg/kg	0.2 / 1	<1	<1	<1	<1	<1	<1	<1
	Xylene (o)	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Xylene Total	mg/kg	0.3 / 1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH	C6 - C9	mg/kg	10 / 20	<10	<10	<10	<10	<10	<10	<10
	C10 - C14	mg/kg	20 / 50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	mg/kg	50 / 100	<100	<100	<100	<100	210	<100	<100
	C29 - C36	mg/kg	50 / 100	<100	<100	<100	<100	580	<100	<100
	C10 - C36 (Sum of total)	mg/kg	120 / 100	<100	<100	<100	<100	790	<100	<100
PAH	Acenaphthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5
	Acenaphthylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5
	Benzo(a)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	5.8	1.1	<0.5
	Benzo(a)pyrene	mg/kg	0.05 / 0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	6	1.8	<0.5
	Benzo(b)k)fluoranthene	mg/kg	0.1 / 1	<1	<1	<1	<1	9.1	2.8	<1
	Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-
	Benzo(q,h,i)perylene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	3.7	1.5	<0.5
	Chrysene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	4	1.1	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	12	1.6	<0.5
	Fluorene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	2.7	1	<0.5
	Naphthalene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
	Phenanthrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	8.9	0.6	<0.5
	Pyrene	mg/kg	0.1 / 0.5	<0.5	<0.5	<0.5	<0.5	11	1.8	<0.5
	Total PAHs	mg/kg	0.8 / 1.0 / 1.75	<1	<1	<1	<1	68	13	<1
Asbestos	Asbestos	-	-	-	-	-	ND	-	ND	-
VOC	4-Nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-
	2-naphthylamine	mg/kg	0.5	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-
	Other VOC	mg/kg	-	-	-	-	-	-	-	-
Other SVOC	SVOC	mg/kg	-	-	-	-	-	-	-	-

Appendix D

Laboratory Test Certificates

**Overarching Remedial Action Plan
Haymarket Precinct, Darling Harbour, Sydney NSW**



ANALYTICAL REPORT



CLIENT DETAILS

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Project GEOTLCOV24303AA
Order Number 92605-92607
Samples 19

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SGS Reference SE100639 R0
Report Number 0000003282
Date Reported 17 Jun 2011
Date Received 07 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

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ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	<0.1

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	<1
Chloromethane	mg/kg	1	-	<1	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	<0.1
Bromomethane	mg/kg	1	-	<1	-	<1
Chloroethane	mg/kg	1	-	<1	-	<1
Trichlorofluoromethane	mg/kg	1	-	<1	-	<1
Iodomethane	mg/kg	5	-	<5	-	<5
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	<0.5
Allyl chloride	mg/kg	0.1	-	<0.1	-	<0.1
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	<0.1
Bromochloromethane	mg/kg	0.1	-	<0.1	-	<0.1
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	<0.1
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	<0.1
Dibromomethane	mg/kg	0.1	-	<0.1	-	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	<0.1	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	<0.1
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	<1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	<1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	<0.1

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1
Bromobenzene	mg/kg	0.1	-	<0.1	-	<0.1
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	<0.1

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	<0.1	-	<0.1
Toluene	mg/kg	0.1	-	<0.1	-	<0.1
Ethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1
m/p-xylene	mg/kg	0.2	-	<0.2	-	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	<0.1
o-xylene	mg/kg	0.1	-	<0.1	-	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	<0.1
n-propylbenzene	mg/kg	0.1	-	<0.1	-	<0.1



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	<0.1
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	<0.1
n-butylbenzene	mg/kg	0.1	-	<0.1	-	<0.1

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	<0.1	-	<0.1
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	<10	-	<10
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	<0.5	-	<0.5
Vinyl acetate	mg/kg	10	-	<10	-	<10
MEK (2-butanone)	mg/kg	10	-	<10	-	<10
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	<1
2-hexanone (MBK)	mg/kg	5	-	<5	-	<5

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	<0.1	-	<0.1
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	<0.5	-	<0.5
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	94	-	87
d4-1,2-dichloroethane (Surrogate)	%	-	-	106	-	100
d8-toluene (Surrogate)	%	-	-	108	-	111
Bromofluorobenzene (Surrogate)	%	-	-	105	-	91

Totals

Total BTEX*	mg/kg	-	-	0	-	0
Total Xylenes*	mg/kg	0.3	-	<0.3	-	<0.3
Total VOC*	mg/kg	24	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	<0.1	-	<0.1
Bromodichloromethane	mg/kg	0.1	-	<0.1	-	<0.1
Chlorodibromomethane	mg/kg	0.1	-	<0.1	-	<0.1
Bromoform	mg/kg	0.1	-	<0.1	-	<0.1

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	-	<20	<20	<20
Benzene	mg/kg	0.1	-	-	<0.1	<0.1
Toluene	mg/kg	0.1	-	-	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	-	-	<0.1	<0.1
m/p-xylene	mg/kg	1	-	-	<1	<1
o-xylene	mg/kg	0.5	-	-	<0.5	<0.5
Total Xylenes	mg/kg	0.3	-	-	<0.3	<0.3
Total BTEX*	mg/kg	2.7	-	-	<2.7	<2.7



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SE100639 R0

Sample Number	SE100639.001	SE100639.002	SE100639.003	SE100639.005
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	01 Jun 2011	01 Jun 2011	01 Jun 2011	02 Jun 2011
Sample Name	BH11 0.1-0.2	BH11 0.5m	BH11 1.0m	BH3 0.5m

Parameter

Units

LOR

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	69	114	114
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	2.3	-	<0.5
Acenaphthylene	mg/kg	0.5	-	12	-	<0.5
Anthracene	mg/kg	0.5	-	23	-	<0.5
Benzo(a)anthracene	mg/kg	0.5	-	55	-	<0.5
Benzo(b&k)fluoranthene	mg/kg	1	-	64	-	<1
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	25	-	<0.5
Benzo(a)pyrene	mg/kg	0.5	-	47	-	<0.5
Chrysene	mg/kg	0.5	-	40	-	<0.5
Dibenzo(ah)anthracene	mg/kg	0.5	-	2.7	-	<0.5
Fluoranthene	mg/kg	0.5	-	120	-	<0.5
Fluorene	mg/kg	0.5	-	8.9	-	<0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	23	-	<0.5
1-methylnaphthalene	mg/kg	0.5	-	2.1	-	<0.5
2-methylnaphthalene	mg/kg	0.5	-	1.5	-	<0.5
Naphthalene	mg/kg	0.5	-	2.6	-	<0.5
Phenanthrene	mg/kg	0.5	-	84	-	<0.5
Pyrene	mg/kg	0.5	-	120	-	<0.5
2-acetylaminofluorene	mg/kg	2	-	<2	-	<2
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	<0.5	-	<0.5
3-methylcholanthrene	mg/kg	1	-	<1	-	<1

OCs

Aldrin	mg/kg	0.5	-	<0.5	-	<0.5
Alpha-BHC	mg/kg	0.5	-	<0.5	-	<0.5
Beta-BHC	mg/kg	0.5	-	<0.5	-	<0.5
Delta-BHC	mg/kg	0.5	-	<0.5	-	<0.5
Gamma-BHC (Lindane)	mg/kg	0.5	-	<0.5	-	<0.5
p,p-DDD	mg/kg	0.5	-	<0.5	-	<0.5
p,p-DDE	mg/kg	0.5	-	<0.5	-	<0.5
p,p-DDT	mg/kg	0.5	-	<0.5	-	<0.5
Dieldrin	mg/kg	0.5	-	<0.5	-	<0.5
Alpha-endosulfan	mg/kg	0.5	-	<0.5	-	<0.5
Beta-endosulfan	mg/kg	0.5	-	<0.5	-	<0.5
Endosulfan sulphate	mg/kg	0.5	-	<0.5	-	<0.5
Endrin	mg/kg	0.5	-	<0.5	-	<0.5
Heptachlor	mg/kg	0.5	-	<0.5	-	<0.5
Heptachlor epoxide	mg/kg	0.5	-	<0.5	-	<0.5
Isodrin	mg/kg	0.5	-	<0.5	-	<0.5
Methoxychlor	mg/kg	0.5	-	<0.5	-	<0.5
Mirex	mg/kg	0.5	-	<0.5	-	<0.5
Alpha-chlordane	mg/kg	0.5	-	<0.5	-	<0.5
Gamma-chlordane	mg/kg	0.5	-	<0.5	-	<0.5
Endrin ketone	mg/kg	0.5	-	<0.5	-	<0.5

Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	<1	-	-	<1
Bromophos ethyl	mg/kg	1	-	<1	-	-	<1
Carbofenthion	mg/kg	1	-	<1	-	-	<1
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	<5	-	-	<5
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	<1	-	-	<1
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	<1	-	-	<1
Chlorpyrifos-methyl	mg/kg	1	-	<1	-	-	<1
Co-Ral (Coumaphos)	mg/kg	1	-	<1	-	-	<1
Diazinon (Dimpylate)	mg/kg	1	-	<1	-	-	<1
Dichlorvos	mg/kg	1	-	<1	-	-	<1
Demeton-S-methyl	mg/kg	1	-	<1	-	-	<1
Dimethoate	mg/kg	1	-	<1	-	-	<1
Disulfoton (Di-syston)	mg/kg	1	-	<1	-	-	<1
EPN*	mg/kg	1	-	<1	-	-	<1
Ethion	mg/kg	1	-	<1	-	-	<1
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	<1	-	-	<1
Famphur (Famophos)	mg/kg	1	-	<1	-	-	<1
Fenamiphos (Phenamiphos)	mg/kg	1	-	<1	-	-	<1
Fenchlorophos (Ronnel)	mg/kg	1	-	<1	-	-	<1
Fenitrothion	mg/kg	1	-	<1	-	-	<1
Fenthion	mg/kg	1	-	<1	-	-	<1
Malathion (Maldison)	mg/kg	1	-	<1	-	-	<1
Methidathion	mg/kg	1	-	<1	-	-	<1
Mevinphos-cis/trans	mg/kg	2	-	<2	-	-	<2
o,o,o-triethyl phosphorothioate	mg/kg	1	-	<1	-	-	<1
Parathion ethyl (Parathion)	mg/kg	1	-	<1	-	-	<1
Parathion methyl	mg/kg	1	-	<1	-	-	<1
Phorate	mg/kg	1	-	<1	-	-	<1
Pirimiphos-ethyl	mg/kg	1	-	<1	-	-	<1
Pirimiphos-methyl	mg/kg	1	-	<1	-	-	<1
Profenofos	mg/kg	1	-	<1	-	-	<1
Prothiophos (Tokuthion)*	mg/kg	1	-	<1	-	-	<1
Sulfotep	mg/kg	1	-	<1	-	-	<1
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	<1	-	-	<1

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	<0.5	-	-	<0.5
PCB Congener C52	mg/kg	0.5	-	<0.5	-	-	<0.5
PCB Congener C101	mg/kg	0.5	-	<0.5	-	-	<0.5
PCB Congener C118	mg/kg	0.5	-	<0.5	-	-	<0.5
PCB Congener C138	mg/kg	0.5	-	<0.5	-	-	<0.5
PCB Congener C153	mg/kg	0.5	-	<0.5	-	-	<0.5
PCB Congener C180	mg/kg	0.5	-	<0.5	-	-	<0.5

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	<0.5	-	-	<0.5
1,2-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	<0.5
1,3-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	<0.5
1,4-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	<0.5
Hexachlorobutadiene	mg/kg	0.5	-	<0.5	-	-	<0.5
Hexachlorocyclopentadiene	mg/kg	1	-	<1	-	-	<1
Hexachloroethane	mg/kg	0.5	-	<0.5	-	-	<0.5
Hexachloropropene	mg/kg	0.5	-	<0.5	-	-	<0.5
Pentachlorobenzene	mg/kg	0.5	-	<0.5	-	-	<0.5
Pentachloroethane	mg/kg	0.5	-	<0.5	-	-	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	<1	-	-	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	<0.5	-	-	<0.5
1/2-Chloronaphthalene	mg/kg	1	-	<1	-	-	<1



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.001	SE100639.002	SE100639.003	SE100639.005
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	01 Jun 2011	01 Jun 2011	01 Jun 2011	02 Jun 2011
Sample Name	BH11 0.1-0.2	BH11 0.5m	BH11 1.0m	BH3 0.5m

Parameter	Units	LOR				
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Full 8270 SVOC in Soil Method: AN420 (continued)

1,2,4-trichlorobenzene	mg/kg	0.5	-	<0.5	-	<0.5
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Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	<5	-	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	<0.5	-	<0.5
Butyl benzyl phthalate	mg/kg	0.5	-	<0.5	-	<0.5
Di-n-butyl phthalate	mg/kg	0.5	-	<0.5	-	<0.5
Diethyl phthalate	mg/kg	0.5	-	<0.5	-	<0.5
Dimethyl phthalate	mg/kg	0.5	-	<0.5	-	<0.5
Diocyl phthalate	mg/kg	0.5	-	<0.5	-	<0.5

Carbamates

Carbofuran	mg/kg	0.5	-	<0.5	-	<0.5
Carbaryl	mg/kg	0.5	-	<0.5	-	<0.5

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	<0.5	-	<0.5
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	<0.5	-	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	<1	-	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	<0.5	-	<0.5
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	<0.5	-	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	<0.5	-	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	<1	-	<1
4-amino biphenyl	mg/kg	1	-	<1	-	<1

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	<0.5	-	<0.5
1,3-dinitrobenzene	mg/kg	1	-	<1	-	<1
2,4-dinitrotoluene	mg/kg	0.5	-	<0.5	-	<0.5
2,6-dinitrotoluene	mg/kg	0.5	-	<0.5	-	<0.5
Isophorone	mg/kg	0.5	-	<0.5	-	<0.5
Nitrobenzene	mg/kg	0.5	-	<0.5	-	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	-	<1	-	<1
Phenacetin	mg/kg	1	-	<1	-	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	<0.5	-	<0.5

Anilines and Amines

Aniline	mg/kg	3	-	<3	-	<3
4-chloroaniline	mg/kg	1	-	<1	-	<1
2-nitroaniline	mg/kg	1	-	<1	-	<1
3-nitroaniline	mg/kg	1	-	<1	-	<1
4-nitroaniline	mg/kg	1	-	<1	-	<1
Diphenylamine	mg/kg	0.5	-	<0.5	-	<0.5
o-toluidine	mg/kg	1	-	<1	-	<1
5-nitro-o-toluidine	mg/kg	1	-	<1	-	<1
1-naphthylamine	mg/kg	1	-	<1	-	<1
2-naphthylamine	mg/kg	1	-	<1	-	<1



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Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	<0.5	-	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	-	<0.5	-	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	<0.5	-	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	-	<0.5	-	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	-	<0.5	-	<0.5

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	<1	-	<1
Ethyl methanesulfonate	mg/kg	1	-	<1	-	<1
Dibenzofuran	mg/kg	0.5	-	7.0	-	<0.5
Benzyl alcohol	mg/kg	1	-	<1	-	<1
Safrole	mg/kg	0.5	-	<0.5	-	<0.5
Isosafrole Isomer 1	mg/kg	1	-	<1	-	<1
Isosafrole Isomer 2	mg/kg	1	-	<1	-	<1
1,4-naphthoquinone	mg/kg	0.5	-	<0.5	-	<0.5
Thionazin	mg/kg	1	-	<1	-	<1

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	<1	-	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	-	<0.5	-	<0.5
2,6-dichlorophenol	mg/kg	0.5	-	<0.5	-	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	<1	-	<1
2,4,5-trichlorophenol	mg/kg	0.5	-	<0.5	-	<0.5
4-chloro-3-methylphenol	mg/kg	1	-	<1	-	<1
2-chlorophenol	mg/kg	0.5	-	<0.5	-	<0.5
2,4-dichlorophenol	mg/kg	0.5	-	<0.5	-	<0.5
2,4-dimethyl phenol	mg/kg	0.5	-	<0.5	-	<0.5
2-nitrophenol	mg/kg	0.5	-	<0.5	-	<0.5
Phenol	mg/kg	0.5	-	<0.5	-	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	-	<0.5	-	<0.5
Pentachlorophenol	mg/kg	0.5	-	<0.5	-	<0.5
4-nitrophenol	mg/kg	0.5	-	<0.5	-	<0.5

Surrogates

d5-phenol (Surrogate)	%	-	-	72	-	73
d5-nitrobenzene (Surrogate)	%	-	-	93	-	120
2-fluorobiphenyl (Surrogate)	%	-	-	73	-	105
2,4,6-tribromophenol (Surrogate)	%	-	-	67	-	109
d14-p-terphenyl (Surrogate)	%	-	-	75	-	110

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	-	28	23	<20
TRH C15-C28	mg/kg	50	-	1200	430	<50
TRH C29-C36	mg/kg	50	-	620	260	<50

Surrogates

TRH (Surrogate)	%	-	-	-	-	-
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ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	-	-	-	2.6	-
Acenaphthylene	mg/kg	0.1	-	-	-	0.7	-
Acenaphthene	mg/kg	0.1	-	-	-	3.2	-
Fluorene	mg/kg	0.1	-	-	-	3.6	-
Phenanthrene	mg/kg	0.1	-	-	-	14	-
Anthracene	mg/kg	0.1	-	-	-	6.0	-
Fluoranthene	mg/kg	0.1	-	-	-	16	-
Pyrene	mg/kg	0.1	-	-	-	18	-
Benzo(a)anthracene	mg/kg	0.1	-	-	-	8.5	-
Chrysene	mg/kg	0.1	-	-	-	6.1	-
Benzo(b)fluoranthene	mg/kg	0.1	-	-	-	9.0	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	-	3.0	-
Benzo(a)pyrene	mg/kg	0.05	-	-	-	7.0	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	-	3.9	-
Dibenz(a&h)anthracene	mg/kg	0.1	-	-	-	0.8	-
Benzo(ghi)perylene	mg/kg	0.1	-	-	-	4.6	-
Total PAH	mg/kg	1.75	-	-	-	110	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	121	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	107	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	110	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	-	5	<3	4
Cadmium, Cd	mg/kg	0.3	-	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	-	16	20	7.5
Copper, Cu	mg/kg	0.5	-	34	18	51
Lead, Pb	mg/kg	1	-	74	21	15
Nickel, Ni	mg/kg	0.5	-	4.6	5.1	6.6
Zinc, Zn	mg/kg	0.5	-	77	160	32

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	-	0.12	0.09	<0.05
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Fibre Identification in soil Method: AN602

FibreID						
Asbestos Detected	No unit	-	No	-	No	-

Moisture Content Method: AN234

% Moisture	%	0.5	-	18	9.4	13
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VOCs in Water Method: AN433/AN434

Fumigants

2,2-dichloropropane	µg/L	0.5	-	-	-	-
1,2-dichloropropane	µg/L	0.5	-	-	-	-
cis-1,3-dichloropropene	µg/L	0.5	-	-	-	-
trans-1,3-dichloropropene	µg/L	0.5	-	-	-	-
1,2-dibromoethane (EDB)	µg/L	0.5	-	-	-	-

Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

VOCs in Water Method: AN433/AN434 (continued)

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	µg/L	5	-	-	-	-	-
Chloromethane	µg/L	5	-	-	-	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	-	-	-	-	-
Bromomethane	µg/L	10	-	-	-	-	-
Chloroethane	µg/L	5	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	-	-	-
Iodomethane	µg/L	5	-	-	-	-	-
1,1-dichloroethene	µg/L	0.5	-	-	-	-	-
Dichloromethane (Methylene chloride)	µg/L	5	-	-	-	-	-
Allyl chloride	µg/L	2	-	-	-	-	-
trans-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-
1,1-dichloroethane	µg/L	0.5	-	-	-	-	-
cis-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-
Bromochloromethane	µg/L	0.5	-	-	-	-	-
1,2-dichloroethane	µg/L	0.5	-	-	-	-	-
1,1,1-trichloroethane	µg/L	0.5	-	-	-	-	-
1,1-dichloropropene	µg/L	0.5	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	-	-	-	-	-
Dibromomethane	µg/L	0.5	-	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	-	-	-	-
1,1,2-trichloroethane	µg/L	0.5	-	-	-	-	-
1,3-dichloropropane	µg/L	0.5	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	-	-	-	-
1,1,1,2-tetrachloroethane	µg/L	0.5	-	-	-	-	-
cis-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	-	-	-	-	-
1,2,3-trichloropropene	µg/L	0.5	-	-	-	-	-
trans-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-	-	-	-	-
Hexachlorobutadiene	µg/L	0.5	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	µg/L	0.5	-	-	-	-	-
Bromobenzene	µg/L	0.5	-	-	-	-	-
2-chlorotoluene	µg/L	0.5	-	-	-	-	-
4-chlorotoluene	µg/L	0.5	-	-	-	-	-
1,3-dichlorobenzene	µg/L	0.5	-	-	-	-	-
1,4-dichlorobenzene	µg/L	0.3	-	-	-	-	-
1,2-dichlorobenzene	µg/L	0.5	-	-	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	-	-	-	-	-
1,2,3-trichlorobenzene	µg/L	0.5	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	µg/L	0.5	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-
Styrene (Vinyl benzene)	µg/L	0.5	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-
Isopropylbenzene (Cumene)	µg/L	0.5	-	-	-	-	-
n-propylbenzene	µg/L	0.5	-	-	-	-	-
1,3,5-trimethylbenzene	µg/L	0.5	-	-	-	-	-
tert-butylbenzene	µg/L	0.5	-	-	-	-	-
1,2,4-trimethylbenzene	µg/L	0.5	-	-	-	-	-
sec-butylbenzene	µg/L	0.5	-	-	-	-	-
p-isopropyltoluene	µg/L	0.5	-	-	-	-	-
n-butylbenzene	µg/L	0.5	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.001	SE100639.002	SE100639.003	SE100639.005
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	01 Jun 2011	01 Jun 2011	01 Jun 2011	02 Jun 2011
Sample Name	BH11 0.1-0.2	BH11 0.5m	BH11 1.0m	BH3 0.5m

Parameter	Units	LOR					
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VOCs in Water Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	µg/L	0.5	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	µg/L	10	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	-	-
Vinyl acetate	µg/L	10	-	-	-	-	-
MEK (2-butanone)	µg/L	10	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-	-	-	-	-
2-hexanone (MBK)	µg/L	5	-	-	-	-	-

Polycyclic VOCs

Naphthalene	µg/L	0.5	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	µg/L	2	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

Totals

Total VOC	µg/L	10	-	-	-	-	-
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Trihalomethanes

Chloroform (THM)	µg/L	0.5	-	-	-	-	-
Bromodichloromethane (THM)	µg/L	0.5	-	-	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	-	-	-	-	-
Bromoform (THM)	µg/L	0.5	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	40	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.001	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.1-0.2	Sample Number	SE100639.002	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 0.5m	Sample Number	SE100639.003	Sample Matrix	Soil	Sample Date	01 Jun 2011	Sample Name	BH11 1.0m	Sample Number	SE100639.005	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 0.5m
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Parameter

Units

LOR

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 (continued)

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	-
Cadmium, Cd	µg/L	0.1	-	-	-	-	-
Chromium, Cr	µg/L	1	-	-	-	-	-
Copper, Cu	µg/L	1	-	-	-	-	-
Lead, Pb	µg/L	1	-	-	-	-	-
Nickel, Ni	µg/L	1	-	-	-	-	-
Zinc, Zn	µg/L	1	-	-	-	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-
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Sample Number	SE100639.006	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 1.0m	Sample Number	SE100639.007	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 2.5m	Sample Number	SE100639.008	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 5.5m	Sample Number	SE100639.009	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	QC01	Sample Number	SE100639.010	Sample Matrix	Water	Sample Date	03 Jun 2011	Sample Name	QC02
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.006	SE100639.007	SE100639.008	SE100639.009	SE100639.010
Sample Matrix	Soil	Soil	Soil	Soil	Water
Sample Date	02 Jun 2011	02 Jun 2011	02 Jun 2011	02 Jun 2011	03 Jun 2011
Sample Name	BH3 1.0m	BH3 2.5m	BH3 5.5m	QC01	QC02

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	-	-	-	-
Toluene	mg/kg	0.1	<0.1	-	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
m/p-xylene	mg/kg	0.2	<0.2	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	-
o-xylene	mg/kg	0.1	<0.1	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.006	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 1.0m	Sample Number	SE100639.007	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 2.5m	Sample Number	SE100639.008	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 5.5m	Sample Number	SE100639.009	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	QC01	Sample Number	SE100639.010	Sample Matrix	Water	Sample Date	03 Jun 2011	Sample Name	QC02
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Totals

Total BTEX*	mg/kg	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes*	mg/kg	0.3	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	mg/kg	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.006	SE100639.007	SE100639.008	SE100639.009	SE100639.010
Sample Matrix	Soil	Soil	Soil	Soil	Water
Sample Date	02 Jun 2011	02 Jun 2011	02 Jun 2011	02 Jun 2011	03 Jun 2011
Sample Name	BH3 1.0m	BH3 2.5m	BH3 5.5m	QC01	QC02

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	<0.5	-	-	-	-
Acenaphthylene	mg/kg	0.5	<0.5	-	-	-	-
Anthracene	mg/kg	0.5	<0.5	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	<0.5	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	<1	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	<0.5	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	<0.5	-	-	-	-
Chrysene	mg/kg	0.5	<0.5	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.5	<0.5	-	-	-	-
Fluoranthene	mg/kg	0.5	<0.5	-	-	-	-
Fluorene	mg/kg	0.5	<0.5	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	<0.5	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	<0.5	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	<0.5	-	-	-	-
Naphthalene	mg/kg	0.5	<0.5	-	-	-	-
Phenanthrene	mg/kg	0.5	<0.5	-	-	-	-
Pyrene	mg/kg	0.5	<0.5	-	-	-	-
2-acetylaminofluorene	mg/kg	2	<2	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-	-	-	-
3-methylcholanthrene	mg/kg	1	<1	-	-	-	-

OCs

Aldrin	mg/kg	0.5	<0.5	-	-	-	-
Alpha-BHC	mg/kg	0.5	<0.5	-	-	-	-
Beta-BHC	mg/kg	0.5	<0.5	-	-	-	-
Delta-BHC	mg/kg	0.5	<0.5	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	<0.5	-	-	-	-
p,p-DDD	mg/kg	0.5	<0.5	-	-	-	-
p,p-DDE	mg/kg	0.5	<0.5	-	-	-	-
p,p-DDT	mg/kg	0.5	<0.5	-	-	-	-
Dieldrin	mg/kg	0.5	<0.5	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	<0.5	-	-	-	-
Beta-endosulfan	mg/kg	0.5	<0.5	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	<0.5	-	-	-	-
Endrin	mg/kg	0.5	<0.5	-	-	-	-
Heptachlor	mg/kg	0.5	<0.5	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	<0.5	-	-	-	-
Isodrin	mg/kg	0.5	<0.5	-	-	-	-
Methoxychlor	mg/kg	0.5	<0.5	-	-	-	-
Mirex	mg/kg	0.5	<0.5	-	-	-	-
Alpha-chlordane	mg/kg	0.5	<0.5	-	-	-	-
Gamma-chlordane	mg/kg	0.5	<0.5	-	-	-	-
Endrin ketone	mg/kg	0.5	<0.5	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	<1	-	-	-	-
Bromophos ethyl	mg/kg	1	<1	-	-	-	-
Carbofenthion	mg/kg	1	<1	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	<5	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	<1	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	<1	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	<1	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	<1	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	<1	-	-	-	-
Dichlorvos	mg/kg	1	<1	-	-	-	-
Demeton-S-methyl	mg/kg	1	<1	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100639.006 Soil 02 Jun 2011 BH3 1.0m	SE100639.007 Soil 02 Jun 2011 BH3 2.5m	SE100639.008 Soil 02 Jun 2011 BH3 5.5m	SE100639.009 Soil 02 Jun 2011 QC01	SE100639.010 Water 03 Jun 2011 QC02
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Full 8270 SVOC in Soil Method: AN420 (continued)

Dimethoate	mg/kg	1	<1	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	<1	-	-	-	-	-
EPN*	mg/kg	1	<1	-	-	-	-	-
Ethion	mg/kg	1	<1	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	<1	-	-	-	-	-
Famphur (Famophos)	mg/kg	1	<1	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	<1	-	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	<1	-	-	-	-	-
Fenitrothion	mg/kg	1	<1	-	-	-	-	-
Fenthion	mg/kg	1	<1	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	<1	-	-	-	-	-
Methidathion	mg/kg	1	<1	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	<2	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	<1	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	<1	-	-	-	-	-
Parathion methyl	mg/kg	1	<1	-	-	-	-	-
Phorate	mg/kg	1	<1	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	<1	-	-	-	-	-
Pirimiphos-methyl	mg/kg	1	<1	-	-	-	-	-
Profenofos	mg/kg	1	<1	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	<1	-	-	-	-	-
Sulfotepp	mg/kg	1	<1	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	<1	-	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	<0.5	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	<0.5	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	<0.5	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	<0.5	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	<0.5	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	<0.5	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	<0.5	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	<0.5	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	<0.5	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	<0.5	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	<1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Parameter	Units	LOR	Sample Number SE100639.006	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 1.0m	Sample Number SE100639.007	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 2.5m	Sample Number SE100639.008	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 5.5m	Sample Number SE100639.009	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name QC01	Sample Number SE100639.010	Sample Matrix Water	Sample Date 03 Jun 2011	Sample Name QC02
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenacetin	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-toluidine	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Parameter	Units	LOR	Sample Number SE100639.006	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 1.0m	Sample Number SE100639.007	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 2.5m	Sample Number SE100639.008	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 5.5m	Sample Number SE100639.009	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name QC01	Sample Number SE100639.010	Sample Matrix Water	Sample Date 03 Jun 2011	Sample Name QC02
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safrole	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thioniazin	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	-	-	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-
TRH C15-C28	mg/kg	50	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	-	-	-	-
TRH C29-C36	mg/kg	50	<50	-	-	<50	-	<50	-	-	-	-	-	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	0.1	<0.1	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	0.1	<0.1	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	0.1	<0.1	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	0.1	<0.1	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	0.1	0.2	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.1	0.2	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	0.1	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1	<0.1	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	0.2	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	0.10	-	-	-	-	0.25	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.006	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 1.0m	Sample Number	SE100639.007	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 2.5m	Sample Number	SE100639.008	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 5.5m <th>Sample Number</th> <td>SE100639.009</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>02 Jun 2011</td> <th>Sample Name</th> <td>QC01</td> <th>Sample Number</th> <td>SE100639.010</td> <th>Sample Matrix</th> <td>Water</td> <th>Sample Date</th> <td>03 Jun 2011</td> <th>Sample Name</th> <td>QC02</td>	Sample Number	SE100639.009	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	QC01	Sample Number	SE100639.010	Sample Matrix	Water	Sample Date	03 Jun 2011	Sample Name	QC02
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Parameter

Units

LOR

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 (continued)

Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-	-	0.2	-
Total PAH	mg/kg	1.75	<1.8†	-	-	-	3.7	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	126	-	-	-	119	-
2-fluorobiphenyl (Surrogate)	%	-	109	-	-	-	106	-
d14-p-terphenyl (Surrogate)	%	-	105	-	-	-	102	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	4	-	-	<3	9	-
Cadmium, Cd	mg/kg	0.3	<0.3	-	-	<0.3	<0.3	-
Chromium, Cr	mg/kg	0.3	14	-	-	6.0	12	-
Copper, Cu	mg/kg	0.5	58	-	-	4.9	57	-
Lead, Pb	mg/kg	1	27	-	-	6	120	-
Nickel, Ni	mg/kg	0.5	22	-	-	0.9	10	-
Zinc, Zn	mg/kg	0.5	50	-	-	1.9	85	-

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.48	-	-	<0.05	0.47	-
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	No	No	-	-	-	-
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Moisture Content Method: AN234

% Moisture	%	0.5	17	-	-	15	14	-
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VOCs in Water Method: AN433/AN434

Fumigants

2,2-dichloropropane	µg/L	0.5	-	-	-	-	-	<0.5
1,2-dichloropropane	µg/L	0.5	-	-	-	-	-	<0.5
cis-1,3-dichloropropene	µg/L	0.5	-	-	-	-	-	<0.5
trans-1,3-dichloropropene	µg/L	0.5	-	-	-	-	-	<0.5
1,2-dibromoethane (EDB)	µg/L	0.5	-	-	-	-	-	<0.5

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	µg/L	5	-	-	-	-	-	<5
Chloromethane	µg/L	5	-	-	-	-	-	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	-	-	-	-	-	<0.3
Bromomethane	µg/L	10	-	-	-	-	-	<10
Chloroethane	µg/L	5	-	-	-	-	-	<5
Trichlorofluoromethane	µg/L	1	-	-	-	-	-	<1
Iodomethane	µg/L	5	-	-	-	-	-	<5
1,1-dichloroethene	µg/L	0.5	-	-	-	-	-	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	-	-	-	-	-	<5
Allyl chloride	µg/L	2	-	-	-	-	-	<2
trans-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-	<0.5
1,1-dichloroethane	µg/L	0.5	-	-	-	-	-	<0.5
cis-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-	<0.5
Bromochloromethane	µg/L	0.5	-	-	-	-	-	<0.5
1,2-dichloroethane	µg/L	0.5	-	-	-	-	-	<0.5
1,1,1-trichloroethane	µg/L	0.5	-	-	-	-	-	<0.5
1,1-dichloropropene	µg/L	0.5	-	-	-	-	-	<0.5
Carbon tetrachloride	µg/L	0.5	-	-	-	-	-	<0.5
Dibromomethane	µg/L	0.5	-	-	-	-	-	<0.5
Trichloroethylene (Trichloroethylene, TCE)	µg/L	0.5	-	-	-	-	-	<0.5
1,1,2-trichloroethane	µg/L	0.5	-	-	-	-	-	<0.5



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.006	SE100639.007	SE100639.008	SE100639.009	SE100639.010
Sample Matrix	Soil	Soil	Soil	Soil	Water
Sample Date	02 Jun 2011	02 Jun 2011	02 Jun 2011	02 Jun 2011	03 Jun 2011
Sample Name	BH3 1.0m	BH3 2.5m	BH3 5.5m	QC01	QC02

Parameter

Units

LOR

VOCs in Water Method: AN433/AN434 (continued)

1,3-dichloropropane	µg/L	0.5	-	-	-	-	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	-	-	-	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	-	-	-	-	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	<1
1,1,2,2-tetrachloroethane	µg/L	0.5	-	-	-	-	<0.5
1,2,3-trichloropropane	µg/L	0.5	-	-	-	-	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	<1
1,2-dibromo-3-chloropropane	µg/L	0.5	-	-	-	-	<0.5
Hexachlorobutadiene	µg/L	0.5	-	-	-	-	<0.5

Halogenated Aromatics

Chlorobenzene	µg/L	0.5	-	-	-	-	<0.5
Bromobenzene	µg/L	0.5	-	-	-	-	<0.5
2-chlorotoluene	µg/L	0.5	-	-	-	-	<0.5
4-chlorotoluene	µg/L	0.5	-	-	-	-	<0.5
1,3-dichlorobenzene	µg/L	0.5	-	-	-	-	<0.5
1,4-dichlorobenzene	µg/L	0.3	-	-	-	-	<0.3
1,2-dichlorobenzene	µg/L	0.5	-	-	-	-	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	-	-	-	-	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	-	-	-	-	<0.5

Monocyclic Aromatic Hydrocarbons

Benzene	µg/L	0.5	-	-	-	-	<0.5
Toluene	µg/L	0.5	-	-	-	-	<0.5
Ethylbenzene	µg/L	0.5	-	-	-	-	<0.5
m/p-xylene	µg/L	1	-	-	-	-	<1
Styrene (Vinyl benzene)	µg/L	0.5	-	-	-	-	<0.5
o-xylene	µg/L	0.5	-	-	-	-	<0.5
Isopropylbenzene (Cumene)	µg/L	0.5	-	-	-	-	<0.5
n-propylbenzene	µg/L	0.5	-	-	-	-	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	-	-	-	-	<0.5
tert-butylbenzene	µg/L	0.5	-	-	-	-	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	-	-	-	-	<0.5
sec-butylbenzene	µg/L	0.5	-	-	-	-	<0.5
p-isopropyltoluene	µg/L	0.5	-	-	-	-	<0.5
n-butylbenzene	µg/L	0.5	-	-	-	-	<0.5



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.006	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 1.0m	Sample Number	SE100639.007	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 2.5m	Sample Number	SE100639.008	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	BH3 5.5m	Sample Number	SE100639.009	Sample Matrix	Soil	Sample Date	02 Jun 2011	Sample Name	QC01	Sample Number	SE100639.010	Sample Matrix	Water	Sample Date	03 Jun 2011	Sample Name	QC02
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Parameter

Units

LOR

VOCs in Water Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
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Oxygenated Compounds

Acetone (2-propanone)	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
Vinyl acetate	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
MEK (2-butanone)	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
MIBK (4-methyl-2-pentanone)	µg/L	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5
2-hexanone (MBK)	µg/L	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5

Polycyclic VOCs

Naphthalene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
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Sulphonated Compounds

Carbon disulfide	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108

Totals

Total VOC	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Trihalomethanes

Chloroform (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Bromodichloromethane (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5

Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<40
Benzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Toluene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
m/p-xylene	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
o-xylene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Total BTEX*	µg/L	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.5

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100
TRH C15-C28	µg/L	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<200
TRH C29-C36	µg/L	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<200



ANALYTICAL REPORT

SE100639 R0

Parameter	Units	LOR	Sample Number SE100639.006	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 1.0m	Sample Number SE100639.007	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 2.5m	Sample Number SE100639.008	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name BH3 5.5m	Sample Number SE100639.009	Sample Matrix Soil	Sample Date 02 Jun 2011	Sample Name QC01	Sample Number SE100639.010	Sample Matrix Water	Sample Date 03 Jun 2011	Sample Name QC02
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TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 (continued)

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Acenaphthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Fluorene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Phenanthrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Anthracene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Fluoranthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Pyrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Chrysene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Total PAH (18)*	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Cadmium, Cd	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1
Chromium, Cr	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Copper, Cu	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Lead, Pb	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Nickel, Ni	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Zinc, Zn	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0001
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Parameter	Units	LOR	Sample Number SE100639.011	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name BH2 0.6m	Sample Number SE100639.013	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name BH2 1.5m	Sample Number SE100639.014	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name BH2 2-2.2m	Sample Number SE100639.015	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name BH2 2.5m
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	Sample Number	SE100639.013	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 1.5m	Sample Number	SE100639.014	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 2-2.2m	Sample Number	SE100639.015	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 2.5m
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	<1	-
Chloromethane	mg/kg	1	-	-	-	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	<0.1	-
Bromomethane	mg/kg	1	-	-	-	<1	-
Chloroethane	mg/kg	1	-	-	-	<1	-
Trichlorofluoromethane	mg/kg	1	-	-	-	<1	-
Iodomethane	mg/kg	5	-	-	-	<5	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	<0.5	-
Allyl chloride	mg/kg	0.1	-	-	-	<0.1	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	<0.1	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	<0.1	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	<0.1	-
Bromochloromethane	mg/kg	0.1	-	-	-	<0.1	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	<0.1	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	<0.1	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	<0.1	-
Dibromomethane	mg/kg	0.1	-	-	-	<0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	<0.1	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	<0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	<1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	<1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	<0.1	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	<0.1	-
Bromobenzene	mg/kg	0.1	-	-	-	<0.1	-
2-chlorotoluene	mg/kg	0.1	-	-	-	<0.1	-
4-chlorotoluene	mg/kg	0.1	-	-	-	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	<0.1	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	<0.1	-
Toluene	mg/kg	0.1	-	-	-	<0.1	-
Ethylbenzene	mg/kg	0.1	-	-	-	<0.1	-
m/p-xylene	mg/kg	0.2	-	-	-	<0.2	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	<0.1	-
o-xylene	mg/kg	0.1	-	-	-	<0.1	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	<0.1	-
n-propylbenzene	mg/kg	0.1	-	-	-	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	<0.1	-
tert-butylbenzene	mg/kg	0.1	-	-	-	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	<0.1	-
sec-butylbenzene	mg/kg	0.1	-	-	-	<0.1	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	<0.1	-
n-butylbenzene	mg/kg	0.1	-	-	-	<0.1	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	SE100639.013	Soil	03 Jun 2011	SE100639.014	Soil	03 Jun 2011	SE100639.015	Soil

Parameter	Units	LOR													
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VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	<0.1	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	<10	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	<0.5	-
Vinyl acetate	mg/kg	10	-	-	-	<10	-
MEK (2-butanone)	mg/kg	10	-	-	-	<10	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	<1	-
2-hexanone (MBK)	mg/kg	5	-	-	-	<5	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	<0.1	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	<0.5	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	90	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	101	-
d8-toluene (Surrogate)	%	-	-	-	-	117	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	114	-

Totals

Total BTEX*	mg/kg	-	-	-	-	0	-
Total Xylenes*	mg/kg	0.3	-	-	-	<0.3	-
Total VOC*	mg/kg	24	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	<0.1	-
Bromodichloromethane	mg/kg	0.1	-	-	-	<0.1	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	<0.1	-
Bromoform	mg/kg	0.1	-	-	-	<0.1	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	-	-	<20	<20
Benzene	mg/kg	0.1	<0.1	-	-	-	<0.1
Toluene	mg/kg	0.1	<0.1	-	-	-	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
m/p-xylene	mg/kg	1	<1	-	-	-	<1
o-xylene	mg/kg	0.5	<0.5	-	-	-	<0.5
Total Xylenes	mg/kg	0.3	<0.3	-	-	-	<0.3
Total BTEX*	mg/kg	2.7	<2.7	-	-	-	<2.7

Surrogates

Trifluorotoluene (Surrogate)	%	-	111	-	-	103	102
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	SE100639.013	Soil	03 Jun 2011	SE100639.014	Soil	03 Jun 2011	SE100639.015	Soil	03 Jun 2011	

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbofenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	SE100639.013	SE100639.014	SE100639.015
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	03 Jun 2011	03 Jun 2011	03 Jun 2011	03 Jun 2011
Sample Name	BH2 0.6m	BH2 1.5m	BH2 2-2.2m	BH2 2.5m

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Dimethoate	mg/kg	1	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-
EPN*	mg/kg	1	-	-	-	-
Ethion	mg/kg	1	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-
Famphur (Famophos)	mg/kg	1	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-
Methidathion	mg/kg	1	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-
Phorate	mg/kg	1	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-
Pirimiphos-methyl	mg/kg	1	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-
Sulfotepp	mg/kg	1	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	SE100639.013	Soil	03 Jun 2011	SE100639.014	Soil	03 Jun 2011	SE100639.015	Soil

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-piperidine (NPPIP)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	Sample Number	SE100639.013	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 1.5m	Sample Number	SE100639.014	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 2-2.2m	Sample Number	SE100639.015	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 2.5m
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Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	-	<20	<20
TRH C15-C28	mg/kg	50	<50	-	130	140
TRH C29-C36	mg/kg	50	<50	-	92	88

Surrogates

TRH (Surrogate)	%	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	0.1	-
Acenaphthylene	mg/kg	0.1	<0.1	-	0.2	-
Acenaphthene	mg/kg	0.1	<0.1	-	<0.1	-
Fluorene	mg/kg	0.1	<0.1	-	0.2	-
Phenanthrene	mg/kg	0.1	<0.1	-	1.1	-
Anthracene	mg/kg	0.1	<0.1	-	0.4	-
Fluoranthene	mg/kg	0.1	<0.1	-	1.7	-
Pyrene	mg/kg	0.1	<0.1	-	1.6	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	0.9	-
Chrysene	mg/kg	0.1	<0.1	-	0.7	-
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	-	0.9	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	0.3	-
Benzo(a)pyrene	mg/kg	0.05	<0.05	-	0.86	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	0.4	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	0.1	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	SE100639.013	Soil	03 Jun 2011	SE100639.014	Soil	03 Jun 2011	SE100639.015	Soil

Parameter	Units	LOR													
PAH (Polynuclear Aromatic Hydrocarbons) in Soil			Method: AN420 (continued)												
Benzo(ghi)perylene	mg/kg	0.1		<0.1		-		0.5		-					

Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	0.5	-									
Total PAH	mg/kg	1.75	<1.8†	-	10	-									

Surrogates

d5-nitrobenzene (Surrogate)	%	-	121	-	122	-									
2-fluorobiphenyl (Surrogate)	%	-	106	-	106	-									
d14-p-terphenyl (Surrogate)	%	-	103	-	101	-									

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	4	-	28	-	23								
Cadmium, Cd	mg/kg	0.3	<0.3	-	0.4	-	0.4								
Chromium, Cr	mg/kg	0.3	7.4	-	11	-	16								
Copper, Cu	mg/kg	0.5	9.9	-	56	-	51								
Lead, Pb	mg/kg	1	15	-	98	-	93								
Nickel, Ni	mg/kg	0.5	11	-	7.0	-	11								
Zinc, Zn	mg/kg	0.5	38	-	110	-	160								

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	<0.05	-	0.37	-	0.55								
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Fibre Identification in soil Method: AN602

FibreID															
Asbestos Detected	No unit	-	No	No	-	-	-								

Moisture Content Method: AN234

% Moisture	%	0.5	8.5	-	17	-	13								
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VOCs in Water Method: AN433/AN434

Fumigants

2,2-dichloropropane	µg/L	0.5	-	-	-	-	-								
1,2-dichloropropane	µg/L	0.5	-	-	-	-	-								
cis-1,3-dichloropropene	µg/L	0.5	-	-	-	-	-								
trans-1,3-dichloropropene	µg/L	0.5	-	-	-	-	-								
1,2-dibromoethane (EDB)	µg/L	0.5	-	-	-	-	-								

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	µg/L	5	-	-	-	-	-								
Chloromethane	µg/L	5	-	-	-	-	-								
Vinyl chloride (Chloroethene)	µg/L	0.3	-	-	-	-	-								
Bromomethane	µg/L	10	-	-	-	-	-								
Chloroethane	µg/L	5	-	-	-	-	-								
Trichlorofluoromethane	µg/L	1	-	-	-	-	-								
Iodomethane	µg/L	5	-	-	-	-	-								
1,1-dichloroethene	µg/L	0.5	-	-	-	-	-								
Dichloromethane (Methylene chloride)	µg/L	5	-	-	-	-	-								
Allyl chloride	µg/L	2	-	-	-	-	-								
trans-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-								
1,1-dichloroethane	µg/L	0.5	-	-	-	-	-								
cis-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-								
Bromochloromethane	µg/L	0.5	-	-	-	-	-								
1,2-dichloroethane	µg/L	0.5	-	-	-	-	-								
1,1,1-trichloroethane	µg/L	0.5	-	-	-	-	-								
1,1-dichloropropene	µg/L	0.5	-	-	-	-	-								
Carbon tetrachloride	µg/L	0.5	-	-	-	-	-								
Dibromomethane	µg/L	0.5	-	-	-	-	-								
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	-	-	-	-								
1,1,2-trichloroethane	µg/L	0.5	-	-	-	-	-								



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	SE100639.013	Soil	03 Jun 2011	SE100639.014	Soil	03 Jun 2011	SE100639.015	Soil	03 Jun 2011

Parameter

Units LOR

VOCs in Water Method: AN433/AN434 (continued)

1,3-dichloropropane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichloropropane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorotoluene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorotoluene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	µg/L	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichlorobenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene (Vinyl benzene)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-trimethylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	SE100639.013	Soil	03 Jun 2011	SE100639.014	Soil	03 Jun 2011	SE100639.015	Soil

Parameter

Units

LOR

VOCs in Water Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-
MEK (2-butanone)	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-	-	-	-	-	-	-	-	-	-	-	-	-
2-hexanone (MBK)	µg/L	5	-	-	-	-	-	-	-	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Totals

Total VOC	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-
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Trihalomethanes

Chloroform (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform (THM)	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	40	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.011	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 0.6m	Sample Number	SE100639.013	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 1.5m	Sample Number	SE100639.014	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 2-2.2m	Sample Number	SE100639.015	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	BH2 2.5m
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Parameter

Units

LOR

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 (continued)

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	-
Cadmium, Cd	µg/L	0.1	-	-	-	-	-
Chromium, Cr	µg/L	1	-	-	-	-	-
Copper, Cu	µg/L	1	-	-	-	-	-
Lead, Pb	µg/L	1	-	-	-	-	-
Nickel, Ni	µg/L	1	-	-	-	-	-
Zinc, Zn	µg/L	1	-	-	-	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-
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Sample Number	SE100639.016	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	QC03	Sample Number	SE100639.017	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 0.5m	Sample Number	SE100639.018	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 1.0m	Sample Number	SE100639.019	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 1.5m	Sample Number	SE100639.020	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 2.0m
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-	<0.1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-	<0.1
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	-	<0.1



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.016	SE100639.017	SE100639.018	SE100639.019	SE100639.020
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	03 Jun 2011	06 Jun 2011	06 Jun 2011	06 Jun 2011	06 Jun 2011
Sample Name	QC03	BH4 0.5m	BH4 1.0m	BH4 1.5m	BH4 2.0m

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	<1
Chloromethane	mg/kg	1	<1	-	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromomethane	mg/kg	1	<1	-	-	-	<1
Chloroethane	mg/kg	1	<1	-	-	-	<1
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	<1
Iodomethane	mg/kg	5	<5	-	-	-	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	<0.5
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	<0.1
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	<0.1
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	<1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	<1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	<0.1

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	<0.1

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	-	-	-	<0.1
Toluene	mg/kg	0.1	<0.1	-	-	-	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
m/p-xylene	mg/kg	0.2	<0.2	-	-	-	<0.2
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	<0.1
o-xylene	mg/kg	0.1	<0.1	-	-	-	<0.1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1



ANALYTICAL REPORT

SE100639 R0

Parameter	Units	LOR	Sample Number SE100639.016	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name QC03	Sample Number SE100639.017	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 0.5m	Sample Number SE100639.018	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 1.0m	Sample Number SE100639.019	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 1.5m	Sample Number SE100639.020	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 2.0m
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VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	-	-	<0.1
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	-	-	-	-	<10
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	<0.5	-	-	-	-	-	<0.5
Vinyl acetate	mg/kg	10	<10	-	-	-	-	-	<10
MEK (2-butanone)	mg/kg	10	<10	-	-	-	-	-	<10
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	-	-	<1
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	-	-	<5

Polycyclic VOCs

Naphthalene	mg/kg	0.1	<0.1	-	-	-	-	-	<0.1
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	-	-	<0.5
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	95	-	-	-	-	-	89
d4-1,2-dichloroethane (Surrogate)	%	-	100	-	-	-	-	-	104
d8-toluene (Surrogate)	%	-	82	-	-	-	-	-	120
Bromofluorobenzene (Surrogate)	%	-	107	-	-	-	-	-	102

Totals

Total BTEX*	mg/kg	-	0	-	-	-	-	-	0
Total Xylenes*	mg/kg	0.3	<0.3	-	-	-	-	-	<0.3
Total VOC*	mg/kg	24	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	<0.1	-	-	-	-	-	<0.1
Bromodichloromethane	mg/kg	0.1	<0.1	-	-	-	-	-	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	-	-	-	-	-	<0.1
Bromoform	mg/kg	0.1	<0.1	-	-	-	-	-	<0.1

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	-	-	-	-	<20
Benzene	mg/kg	0.1	-	<0.1	-	-	-	-	-
Toluene	mg/kg	0.1	-	<0.1	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-
m/p-xylene	mg/kg	1	-	<1	-	-	-	-	-
o-xylene	mg/kg	0.5	-	<0.5	-	-	-	-	-
Total Xylenes	mg/kg	0.3	-	<0.3	-	-	-	-	-
Total BTEX*	mg/kg	2.7	-	<2.7	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	115	104	-	-	-	-	99
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-

Sample Number	SE100639.016	SE100639.017	SE100639.018	SE100639.019	SE100639.020
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	03 Jun 2011	06 Jun 2011	06 Jun 2011	06 Jun 2011	06 Jun 2011
Sample Name	QC03	BH4 0.5m	BH4 1.0m	BH4 1.5m	BH4 2.0m

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	<0.5
Acenaphthylene	mg/kg	0.5	-	-	-	-	<0.5
Anthracene	mg/kg	0.5	-	-	-	-	<0.5
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	<0.5
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	<1
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	<0.5
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	<0.5
Chrysene	mg/kg	0.5	-	-	-	-	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5	-	-	-	-	<0.5
Fluoranthene	mg/kg	0.5	-	-	-	-	0.6
Fluorene	mg/kg	0.5	-	-	-	-	<0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	<0.5
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	<0.5
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	<0.5
Naphthalene	mg/kg	0.5	-	-	-	-	<0.5
Phenanthrene	mg/kg	0.5	-	-	-	-	<0.5
Pyrene	mg/kg	0.5	-	-	-	-	1.2
2-acetylaminofluorene	mg/kg	2	-	-	-	-	<2
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	<0.5
3-methylcholanthrene	mg/kg	1	-	-	-	-	<1

OCs

Aldrin	mg/kg	0.5	-	-	-	-	<0.5
Alpha-BHC	mg/kg	0.5	-	-	-	-	<0.5
Beta-BHC	mg/kg	0.5	-	-	-	-	<0.5
Delta-BHC	mg/kg	0.5	-	-	-	-	<0.5
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	<0.5
p,p-DDD	mg/kg	0.5	-	-	-	-	<0.5
p,p-DDE	mg/kg	0.5	-	-	-	-	<0.5
p,p-DDT	mg/kg	0.5	-	-	-	-	<0.5
Dieldrin	mg/kg	0.5	-	-	-	-	<0.5
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	<0.5
Beta-endosulfan	mg/kg	0.5	-	-	-	-	<0.5
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	<0.5
Endrin	mg/kg	0.5	-	-	-	-	<0.5
Heptachlor	mg/kg	0.5	-	-	-	-	<0.5
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	<0.5
Isodrin	mg/kg	0.5	-	-	-	-	<0.5
Methoxychlor	mg/kg	0.5	-	-	-	-	<0.5
Mirex	mg/kg	0.5	-	-	-	-	<0.5
Alpha-chlordane	mg/kg	0.5	-	-	-	-	<0.5
Gamma-chlordane	mg/kg	0.5	-	-	-	-	<0.5
Endrin ketone	mg/kg	0.5	-	-	-	-	<0.5

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	<1
Bromophos ethyl	mg/kg	1	-	-	-	-	<1
Carbofenthion	mg/kg	1	-	-	-	-	<1
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	<5
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	<1
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	<1
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	<1
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	<1
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	<1
Dichlorvos	mg/kg	1	-	-	-	-	<1
Demeton-S-methyl	mg/kg	1	-	-	-	-	<1



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100639.016 Soil 03 Jun 2011 QC03	SE100639.017 Soil 06 Jun 2011 BH4 0.5m	SE100639.018 Soil 06 Jun 2011 BH4 1.0m	SE100639.019 Soil 06 Jun 2011 BH4 1.5m	SE100639.020 Soil 06 Jun 2011 BH4 2.0m
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Full 8270 SVOC in Soil Method: AN420 (continued)

Dimethoate	mg/kg	1	-	-	-	-	-	<1
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-	<1
EPN*	mg/kg	1	-	-	-	-	-	<1
Ethion	mg/kg	1	-	-	-	-	-	<1
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-	<1
Famphur (Famophos)	mg/kg	1	-	-	-	-	-	<1
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-	<1
Fenchlorophos (Ronnel)	mg/kg	1	-	-	-	-	-	<1
Fenitrothion	mg/kg	1	-	-	-	-	-	<1
Fenthion	mg/kg	1	-	-	-	-	-	<1
Malathion (Maldison)	mg/kg	1	-	-	-	-	-	<1
Methidathion	mg/kg	1	-	-	-	-	-	<1
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-	<2
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-	<1
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-	<1
Parathion methyl	mg/kg	1	-	-	-	-	-	<1
Phorate	mg/kg	1	-	-	-	-	-	<1
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-	<1
Pirimiphos-methyl	mg/kg	1	-	-	-	-	-	<1
Profenofos	mg/kg	1	-	-	-	-	-	<1
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-	<1
Sulfotepp	mg/kg	1	-	-	-	-	-	<1
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-	<1

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-	-	<0.5
PCB Congener C52	mg/kg	0.5	-	-	-	-	-	<0.5
PCB Congener C101	mg/kg	0.5	-	-	-	-	-	<0.5
PCB Congener C118	mg/kg	0.5	-	-	-	-	-	<0.5
PCB Congener C138	mg/kg	0.5	-	-	-	-	-	<0.5
PCB Congener C153	mg/kg	0.5	-	-	-	-	-	<0.5
PCB Congener C180	mg/kg	0.5	-	-	-	-	-	<0.5

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-	<0.5
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-	<1
Hexachloroethane	mg/kg	0.5	-	-	-	-	-	<0.5
Hexachloropropene	mg/kg	0.5	-	-	-	-	-	<0.5
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
Pentachloroethane	mg/kg	0.5	-	-	-	-	-	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-	<1
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-	<0.5



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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100639.016 Soil 03 Jun 2011 QC03	SE100639.017 Soil 06 Jun 2011 BH4 0.5m	SE100639.018 Soil 06 Jun 2011 BH4 1.0m	SE100639.019 Soil 06 Jun 2011 BH4 1.5m	SE100639.020 Soil 06 Jun 2011 BH4 2.0m
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	<0.5
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	<0.5
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	<0.5
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	<0.5
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	<0.5
Diocyl phthalate	mg/kg	0.5	-	-	-	-	-	<0.5

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	<0.5
Carbaryl	mg/kg	0.5	-	-	-	-	-	<0.5

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	<0.5
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	<0.5
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	<0.5
N-nitroso-piperidine (NPPIP)	mg/kg	0.5	-	-	-	-	-	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	<1
4-amino biphenyl	mg/kg	1	-	-	-	-	-	<1

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	<0.5
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	<1
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	<0.5
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	<0.5
Isophorone	mg/kg	0.5	-	-	-	-	-	<0.5
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	<1
Phenacetin	mg/kg	1	-	-	-	-	-	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	<0.5

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	<3
4-chloroaniline	mg/kg	1	-	-	-	-	-	<1
2-nitroaniline	mg/kg	1	-	-	-	-	-	<1
3-nitroaniline	mg/kg	1	-	-	-	-	-	<1
4-nitroaniline	mg/kg	1	-	-	-	-	-	<1
Diphenylamine	mg/kg	0.5	-	-	-	-	-	<0.5
o-toluidine	mg/kg	1	-	-	-	-	-	<1
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	<1
1-naphthylamine	mg/kg	1	-	-	-	-	-	<1
2-naphthylamine	mg/kg	1	-	-	-	-	-	<1

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	<0.5



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number SE100639.016	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name QC03	Sample Number SE100639.017	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 0.5m	Sample Number SE100639.018	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 1.0m	Sample Number SE100639.019	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 1.5m	Sample Number SE100639.020	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 2.0m
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Dibenzofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Benzyl alcohol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Safrole	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Thionazin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1
2-chlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
2-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
4-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	101
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	<20
TRH C15-C28	mg/kg	50	140	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	380
TRH C29-C36	mg/kg	50	85	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	110

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	0.3	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	0.1	0.2	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	0.1	1.4	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	0.1	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	0.1	2.2	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.1	2.1	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	1.2	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1	0.9	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	1.1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	0.6	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	1.1	0.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.5	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

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Sample Number	SE100639.016	Sample Matrix	Soil	Sample Date	03 Jun 2011	Sample Name	QC03	Sample Number	SE100639.017	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 0.5m	Sample Number	SE100639.018	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 1.0m <th>Sample Number</th> <td>SE100639.019</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>06 Jun 2011</td> <th>Sample Name</th> <td>BH4 1.5m</td> <th>Sample Number</th> <td>SE100639.020</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>06 Jun 2011</td> <th>Sample Name</th> <td>BH4 2.0m</td>	Sample Number	SE100639.019	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 1.5m	Sample Number	SE100639.020	Sample Matrix	Soil	Sample Date	06 Jun 2011	Sample Name	BH4 2.0m
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Parameter

Units

LOR

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 (continued)

Benzo(ghi)perylene	mg/kg	0.1	0.6	0.2	-	-	-	-
Total PAH	mg/kg	1.75	13	3.8	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	126	123	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	108	107	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	102	101	-	-	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	21	12	-	-	-	14
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	-	-	-	<0.3
Chromium, Cr	mg/kg	0.3	16	10	-	-	-	12
Copper, Cu	mg/kg	0.5	56	63	-	-	-	42
Lead, Pb	mg/kg	1	140	47	-	-	-	110
Nickel, Ni	mg/kg	0.5	8.2	5.6	-	-	-	10
Zinc, Zn	mg/kg	0.5	100	91	-	-	-	110

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.40	0.15	-	-	-	0.64
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	-	-	No	No	-
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Moisture Content Method: AN234

% Moisture	%	0.5	16	12	-	-	-	15
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VOCs in Water Method: AN433/AN434

Fumigants

2,2-dichloropropane	µg/L	0.5	-	-	-	-	-	-
1,2-dichloropropane	µg/L	0.5	-	-	-	-	-	-
cis-1,3-dichloropropene	µg/L	0.5	-	-	-	-	-	-
trans-1,3-dichloropropene	µg/L	0.5	-	-	-	-	-	-
1,2-dibromoethane (EDB)	µg/L	0.5	-	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	µg/L	5	-	-	-	-	-	-
Chloromethane	µg/L	5	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	-	-	-	-	-	-
Bromomethane	µg/L	10	-	-	-	-	-	-
Chloroethane	µg/L	5	-	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	-	-	-	-
Iodomethane	µg/L	5	-	-	-	-	-	-
1,1-dichloroethene	µg/L	0.5	-	-	-	-	-	-
Dichloromethane (Methylene chloride)	µg/L	5	-	-	-	-	-	-
Allyl chloride	µg/L	2	-	-	-	-	-	-
trans-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-	-
1,1-dichloroethane	µg/L	0.5	-	-	-	-	-	-
cis-1,2-dichloroethene	µg/L	0.5	-	-	-	-	-	-
Bromochloromethane	µg/L	0.5	-	-	-	-	-	-
1,2-dichloroethane	µg/L	0.5	-	-	-	-	-	-
1,1,1-trichloroethane	µg/L	0.5	-	-	-	-	-	-
1,1-dichloropropene	µg/L	0.5	-	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	-	-	-	-	-	-
Dibromomethane	µg/L	0.5	-	-	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	-	-	-	-	-
1,1,2-trichloroethane	µg/L	0.5	-	-	-	-	-	-



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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100639.016 Soil 03 Jun 2011 QC03	SE100639.017 Soil 06 Jun 2011 BH4 0.5m	SE100639.018 Soil 06 Jun 2011 BH4 1.0m	SE100639.019 Soil 06 Jun 2011 BH4 1.5m	SE100639.020 Soil 06 Jun 2011 BH4 2.0m
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VOCs in Water Method: AN433/AN434 (continued)

1,3-dichloropropane	µg/L	0.5	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	µg/L	0.5	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	-	-	-	-	-	-
1,2,3-trichloropropane	µg/L	0.5	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	µg/L	1	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-	-	-	-	-	-
Hexachlorobutadiene	µg/L	0.5	-	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	µg/L	0.5	-	-	-	-	-	-
Bromobenzene	µg/L	0.5	-	-	-	-	-	-
2-chlorotoluene	µg/L	0.5	-	-	-	-	-	-
4-chlorotoluene	µg/L	0.5	-	-	-	-	-	-
1,3-dichlorobenzene	µg/L	0.5	-	-	-	-	-	-
1,4-dichlorobenzene	µg/L	0.3	-	-	-	-	-	-
1,2-dichlorobenzene	µg/L	0.5	-	-	-	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	-	-	-	-	-	-
1,2,3-trichlorobenzene	µg/L	0.5	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
Styrene (Vinyl benzene)	µg/L	0.5	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
Isopropylbenzene (Cumene)	µg/L	0.5	-	-	-	-	-	-
n-propylbenzene	µg/L	0.5	-	-	-	-	-	-
1,3,5-trimethylbenzene	µg/L	0.5	-	-	-	-	-	-
tert-butylbenzene	µg/L	0.5	-	-	-	-	-	-
1,2,4-trimethylbenzene	µg/L	0.5	-	-	-	-	-	-
sec-butylbenzene	µg/L	0.5	-	-	-	-	-	-
p-isopropyltoluene	µg/L	0.5	-	-	-	-	-	-
n-butylbenzene	µg/L	0.5	-	-	-	-	-	-



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100639.016 Soil 03 Jun 2011 QC03	SE100639.017 Soil 06 Jun 2011 BH4 0.5m	SE100639.018 Soil 06 Jun 2011 BH4 1.0m	SE100639.019 Soil 06 Jun 2011 BH4 1.5m	SE100639.020 Soil 06 Jun 2011 BH4 2.0m
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VOCs in Water Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	µg/L	0.5	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	µg/L	10	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	-	-	-
Vinyl acetate	µg/L	10	-	-	-	-	-	-
MEK (2-butanone)	µg/L	10	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-	-	-	-	-	-
2-hexanone (MBK)	µg/L	5	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	µg/L	0.5	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	µg/L	2	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

Totals

Total VOC	µg/L	10	-	-	-	-	-	-
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Trihalomethanes

Chloroform (THM)	µg/L	0.5	-	-	-	-	-	-
Bromodichloromethane (THM)	µg/L	0.5	-	-	-	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	-	-	-	-	-	-
Bromoform (THM)	µg/L	0.5	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	40	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number SE100639.016	Sample Matrix Soil	Sample Date 03 Jun 2011	Sample Name QC03	Sample Number SE100639.017	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 0.5m	Sample Number SE100639.018	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 1.0m	Sample Number SE100639.019	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 1.5m	Sample Number SE100639.020	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 2.0m
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TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 (continued)

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium, Cd	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium, Cr	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper, Cu	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead, Pb	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel, Ni	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc, Zn	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Parameter	Units	LOR	Sample Number SE100639.021	Sample Matrix Soil	Sample Date 06 Jun 2011	Sample Name BH4 5.5m
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-
1,2-dichloropropane	mg/kg	0.1	-
cis-1,3-dichloropropene	mg/kg	0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-

Sample Number	SE100639.021
Sample Matrix	Soil
Sample Date	06 Jun 2011
Sample Name	BH4 5.5m

Parameter	Units	LOR
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VOC's in Soil Method: AN433/AN434 (continued)

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-
Chloromethane	mg/kg	1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-
Bromomethane	mg/kg	1	-
Chloroethane	mg/kg	1	-
Trichlorofluoromethane	mg/kg	1	-
Iodomethane	mg/kg	5	-
1,1-dichloroethene	mg/kg	0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-
Allyl chloride	mg/kg	0.1	-
trans-1,2-dichloroethene	mg/kg	0.1	-
1,1-dichloroethane	mg/kg	0.1	-
cis-1,2-dichloroethene	mg/kg	0.1	-
Bromochloromethane	mg/kg	0.1	-
1,2-dichloroethane	mg/kg	0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-
1,1-dichloropropene	mg/kg	0.1	-
Carbon tetrachloride	mg/kg	0.1	-
Dibromomethane	mg/kg	0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-
1,3-dichloropropane	mg/kg	0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-
Hexachlorobutadiene	mg/kg	0.1	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-
Bromobenzene	mg/kg	0.1	-
2-chlorotoluene	mg/kg	0.1	-
4-chlorotoluene	mg/kg	0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-
Toluene	mg/kg	0.1	-
Ethylbenzene	mg/kg	0.1	-
m/p-xylene	mg/kg	0.2	-
Styrene (Vinyl benzene)	mg/kg	0.1	-
o-xylene	mg/kg	0.1	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-
n-propylbenzene	mg/kg	0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-
tert-butylbenzene	mg/kg	0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-
sec-butylbenzene	mg/kg	0.1	-
p-isopropyltoluene	mg/kg	0.1	-
n-butylbenzene	mg/kg	0.1	-



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Sample Number SE100639.021
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 5.5m

Parameter	Units	LOR	
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VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-
Vinyl acetate	mg/kg	10	-
MEK (2-butanone)	mg/kg	10	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-
2-hexanone (MBK)	mg/kg	5	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-
d8-toluene (Surrogate)	%	-	-
Bromofluorobenzene (Surrogate)	%	-	-

Totals

Total BTEX*	mg/kg	-	-
Total Xylenes*	mg/kg	0.3	-
Total VOC*	mg/kg	24	-

Trihalomethanes

Chloroform	mg/kg	0.1	-
Bromodichloromethane	mg/kg	0.1	-
Chlorodibromomethane	mg/kg	0.1	-
Bromoform	mg/kg	0.1	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	1	<1
o-xylene	mg/kg	0.5	<0.5
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX*	mg/kg	2.7	<2.7

Surrogates

Trifluorotoluene (Surrogate)	%	-	102
Dibromofluoromethane (Surrogate)	%	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-
d8-toluene (Surrogate)	%	-	-
Bromofluorobenzene (Surrogate)	%	-	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-
Acenaphthylene	mg/kg	0.5	-
Anthracene	mg/kg	0.5	-
Benzo(a)anthracene	mg/kg	0.5	-

Sample Number	SE100639.021
Sample Matrix	Soil
Sample Date	06 Jun 2011
Sample Name	BH4 5.5m

Parameter	Units	LOR	
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Full 8270 SVOC in Soil Method: AN420 (continued)

Benzo(b&k)fluoranthene	mg/kg	1	-
Benzo(b)fluoranthene	mg/kg	0.5	-
Benzo(k)fluoranthene	mg/kg	0.5	-
Benzo(ghi)perylene	mg/kg	0.5	-
Benzo(a)pyrene	mg/kg	0.5	-
Chrysene	mg/kg	0.5	-
Dibenzo(ah)anthracene	mg/kg	0.5	-
Fluoranthene	mg/kg	0.5	-
Fluorene	mg/kg	0.5	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-
1-methylnaphthalene	mg/kg	0.5	-
2-methylnaphthalene	mg/kg	0.5	-
Naphthalene	mg/kg	0.5	-
Phenanthrene	mg/kg	0.5	-
Pyrene	mg/kg	0.5	-
2-acetylaminofluorene	mg/kg	2	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-
3-methylcholanthrene	mg/kg	1	-

OCs

Aldrin	mg/kg	0.5	-
Alpha-BHC	mg/kg	0.5	-
Beta-BHC	mg/kg	0.5	-
Delta-BHC	mg/kg	0.5	-
Gamma-BHC (Lindane)	mg/kg	0.5	-
p,p-DDD	mg/kg	0.5	-
p,p-DDE	mg/kg	0.5	-
p,p-DDT	mg/kg	0.5	-
Dieldrin	mg/kg	0.5	-
Alpha-endosulfan	mg/kg	0.5	-
Beta-endosulfan	mg/kg	0.5	-
Endosulfan sulphate	mg/kg	0.5	-
Endrin	mg/kg	0.5	-
Heptachlor	mg/kg	0.5	-
Heptachlor epoxide	mg/kg	0.5	-
Isodrin	mg/kg	0.5	-
Methoxychlor	mg/kg	0.5	-
Mirex	mg/kg	0.5	-
Alpha-chlordane	mg/kg	0.5	-
Gamma-chlordane	mg/kg	0.5	-
Endrin ketone	mg/kg	0.5	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-
Bromophos ethyl	mg/kg	1	-
Carbofenothon	mg/kg	1	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-
Chlorpyrifos-methyl	mg/kg	1	-
Co-Ral (Coumaphos)	mg/kg	1	-
Diazinon (Dimpylate)	mg/kg	1	-
Dichlorvos	mg/kg	1	-
Demeton-S-methyl	mg/kg	1	-
Dimethoate	mg/kg	1	-
Disulfoton (Di-syston)	mg/kg	1	-
EPN*	mg/kg	1	-
Ethion	mg/kg	1	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-



ANALYTICAL REPORT

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Sample Number SE100639.021
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 5.5m

Parameter	Units	LOR
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Full 8270 SVOC in Soil Method: AN420 (continued)

Famphur (Famophos)	mg/kg	1	-
Fenamiphos (Phenamiphos)	mg/kg	1	-
Fenchlorophos (Ronnel)	mg/kg	1	-
Fenitrothion	mg/kg	1	-
Fenthion	mg/kg	1	-
Malathion (Maldison)	mg/kg	1	-
Methidathion	mg/kg	1	-
Mevinphos-cis/trans	mg/kg	2	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-
Parathion ethyl (Parathion)	mg/kg	1	-
Parathion methyl	mg/kg	1	-
Phorate	mg/kg	1	-
Pirimiphos-ethyl	mg/kg	1	-
Pirimiphos-methyl	mg/kg	1	-
Profenofos	mg/kg	1	-
Prothiophos (Tokuthion)*	mg/kg	1	-
Sulfotepp	mg/kg	1	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-
PCB Congener C52	mg/kg	0.5	-
PCB Congener C101	mg/kg	0.5	-
PCB Congener C118	mg/kg	0.5	-
PCB Congener C138	mg/kg	0.5	-
PCB Congener C153	mg/kg	0.5	-
PCB Congener C180	mg/kg	0.5	-

SVCH (CI Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-
1,2-dichlorobenzene	mg/kg	0.5	-
1,3-dichlorobenzene	mg/kg	0.5	-
1,4-dichlorobenzene	mg/kg	0.5	-
Hexachlorobutadiene	mg/kg	0.5	-
Hexachlorocyclopentadiene	mg/kg	1	-
Hexachloroethane	mg/kg	0.5	-
Hexachloropropene	mg/kg	0.5	-
Pentachlorobenzene	mg/kg	0.5	-
Pentachloroethane	mg/kg	0.5	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-
1/2-Chloronaphthalene	mg/kg	1	-
1,2,4-trichlorobenzene	mg/kg	0.5	-



ANALYTICAL REPORT

SE100639 R0

Sample Number SE100639.021
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 5.5m

Parameter	Units	LOR	
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-
Butyl benzyl phthalate	mg/kg	0.5	-
Di-n-butyl phthalate	mg/kg	0.5	-
Diethyl phthalate	mg/kg	0.5	-
Dimethyl phthalate	mg/kg	0.5	-
Diocyl phthalate	mg/kg	0.5	-

Carbamates

Carbofuran	mg/kg	0.5	-
Carbaryl	mg/kg	0.5	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-
N-nitroso-piperidine (NPPIP)	mg/kg	0.5	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-
4-amino biphenyl	mg/kg	1	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-
1,3-dinitrobenzene	mg/kg	1	-
2,4-dinitrotoluene	mg/kg	0.5	-
2,6-dinitrotoluene	mg/kg	0.5	-
Isophorone	mg/kg	0.5	-
Nitrobenzene	mg/kg	0.5	-
p-(dimethylamino) azobenzene	mg/kg	1	-
Phenacetin	mg/kg	1	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-

Anilines and Amines

Aniline	mg/kg	3	-
4-chloroaniline	mg/kg	1	-
2-nitroaniline	mg/kg	1	-
3-nitroaniline	mg/kg	1	-
4-nitroaniline	mg/kg	1	-
Diphenylamine	mg/kg	0.5	-
o-toluidine	mg/kg	1	-
5-nitro-o-toluidine	mg/kg	1	-
1-naphthylamine	mg/kg	1	-
2-naphthylamine	mg/kg	1	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-
4-bromophenyl phenyl ether	mg/kg	0.5	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.021
Sample Matrix	Soil
Sample Date	06 Jun 2011
Sample Name	BH4 5.5m

Parameter	Units	LOR	
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-
Ethyl methanesulfonate	mg/kg	1	-
Dibenzofuran	mg/kg	0.5	-
Benzyl alcohol	mg/kg	1	-
Safrole	mg/kg	0.5	-
Isosafrole Isomer 1	mg/kg	1	-
Isosafrole Isomer 2	mg/kg	1	-
1,4-naphthoquinone	mg/kg	0.5	-
Thionazin	mg/kg	1	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-
2,6-dichlorophenol	mg/kg	0.5	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-
2,4,5-trichlorophenol	mg/kg	0.5	-
4-chloro-3-methylphenol	mg/kg	1	-
2-chlorophenol	mg/kg	0.5	-
2,4-dichlorophenol	mg/kg	0.5	-
2,4-dimethyl phenol	mg/kg	0.5	-
2-nitrophenol	mg/kg	0.5	-
Phenol	mg/kg	0.5	-
2,4,6-trichlorophenol	mg/kg	0.5	-
Pentachlorophenol	mg/kg	0.5	-
4-nitrophenol	mg/kg	0.5	-

Surrogates

d5-phenol (Surrogate)	%	-	-
d5-nitrobenzene (Surrogate)	%	-	-
2-fluorobiphenyl (Surrogate)	%	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-
d14-p-terphenyl (Surrogate)	%	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	50	<50
TRH C29-C36	mg/kg	50	<50

Surrogates

TRH (Surrogate)	%	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	-
Acenaphthylene	mg/kg	0.1	-
Acenaphthene	mg/kg	0.1	-
Fluorene	mg/kg	0.1	-
Phenanthrene	mg/kg	0.1	-
Anthracene	mg/kg	0.1	-
Fluoranthene	mg/kg	0.1	-
Pyrene	mg/kg	0.1	-
Benzo(a)anthracene	mg/kg	0.1	-
Chrysene	mg/kg	0.1	-
Benzo(b)fluoranthene	mg/kg	0.1	-
Benzo(k)fluoranthene	mg/kg	0.1	-
Benzo(a)pyrene	mg/kg	0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-
Dibenzo(a&h)anthracene	mg/kg	0.1	-



ANALYTICAL REPORT

SE100639 R0

Sample Number SE100639.021
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 5.5m

Parameter	Units	LOR	
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 (continued)

Benzo(ghi)perylene	mg/kg	0.1	-
Total PAH	mg/kg	1.75	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-
2-fluorobiphenyl (Surrogate)	%	-	-
d14-p-terphenyl (Surrogate)	%	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	<3
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.3	12
Copper, Cu	mg/kg	0.5	1.2
Lead, Pb	mg/kg	1	7
Nickel, Ni	mg/kg	0.5	1.2
Zinc, Zn	mg/kg	0.5	2.5

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	<0.05
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-
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Moisture Content Method: AN234

% Moisture	%	0.5	14
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VOCs in Water Method: AN433/AN434

Fumigants

2,2-dichloropropane	µg/L	0.5	-
1,2-dichloropropane	µg/L	0.5	-
cis-1,3-dichloropropene	µg/L	0.5	-
trans-1,3-dichloropropene	µg/L	0.5	-
1,2-dibromoethane (EDB)	µg/L	0.5	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	µg/L	5	-
Chloromethane	µg/L	5	-
Vinyl chloride (Chloroethene)	µg/L	0.3	-
Bromomethane	µg/L	10	-
Chloroethane	µg/L	5	-
Trichlorofluoromethane	µg/L	1	-
Iodomethane	µg/L	5	-
1,1-dichloroethene	µg/L	0.5	-
Dichloromethane (Methylene chloride)	µg/L	5	-
Allyl chloride	µg/L	2	-
trans-1,2-dichloroethene	µg/L	0.5	-
1,1-dichloroethane	µg/L	0.5	-
cis-1,2-dichloroethene	µg/L	0.5	-
Bromochloromethane	µg/L	0.5	-
1,2-dichloroethane	µg/L	0.5	-
1,1,1-trichloroethane	µg/L	0.5	-
1,1-dichloropropene	µg/L	0.5	-
Carbon tetrachloride	µg/L	0.5	-
Dibromomethane	µg/L	0.5	-
Trichloroethylene (Trichloroethylene, TCE)	µg/L	0.5	-



ANALYTICAL REPORT

SE100639 R0

Sample Number SE100639.021
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 5.5m

Parameter	Units	LOR
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VOCs in Water Method: AN433/AN434 (continued)

1,1,2-trichloroethane	µg/L	0.5	-
1,3-dichloropropane	µg/L	0.5	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-
1,1,1,2-tetrachloroethane	µg/L	0.5	-
cis-1,4-dichloro-2-butene	µg/L	1	-
1,1,2,2-tetrachloroethane	µg/L	0.5	-
1,2,3-trichloropropane	µg/L	0.5	-
trans-1,4-dichloro-2-butene	µg/L	1	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-
Hexachlorobutadiene	µg/L	0.5	-

Halogenated Aromatics

Chlorobenzene	µg/L	0.5	-
Bromobenzene	µg/L	0.5	-
2-chlorotoluene	µg/L	0.5	-
4-chlorotoluene	µg/L	0.5	-
1,3-dichlorobenzene	µg/L	0.5	-
1,4-dichlorobenzene	µg/L	0.3	-
1,2-dichlorobenzene	µg/L	0.5	-
1,2,4-trichlorobenzene	µg/L	0.5	-
1,2,3-trichlorobenzene	µg/L	0.5	-

Monocyclic Aromatic Hydrocarbons

Benzene	µg/L	0.5	-
Toluene	µg/L	0.5	-
Ethylbenzene	µg/L	0.5	-
m/p-xylene	µg/L	1	-
Styrene (Vinyl benzene)	µg/L	0.5	-
o-xylene	µg/L	0.5	-
Isopropylbenzene (Cumene)	µg/L	0.5	-
n-propylbenzene	µg/L	0.5	-
1,3,5-trimethylbenzene	µg/L	0.5	-
tert-butylbenzene	µg/L	0.5	-
1,2,4-trimethylbenzene	µg/L	0.5	-
sec-butylbenzene	µg/L	0.5	-
p-isopropyltoluene	µg/L	0.5	-
n-butylbenzene	µg/L	0.5	-



ANALYTICAL REPORT

SE100639 R0

Sample Number	SE100639.021
Sample Matrix	Soil
Sample Date	06 Jun 2011
Sample Name	BH4 5.5m

Parameter Units LOR

VOCs in Water Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	µg/L	0.5	-
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Oxygenated Compounds

Acetone (2-propanone)	µg/L	10	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-
Vinyl acetate	µg/L	10	-
MEK (2-butanone)	µg/L	10	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-
2-hexanone (MBK)	µg/L	5	-

Polycyclic VOCs

Naphthalene	µg/L	0.5	-
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Sulphonated Compounds

Carbon disulfide	µg/L	2	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-
d8-toluene (Surrogate)	%	-	-
Bromofluorobenzene (Surrogate)	%	-	-

Totals

Total VOC	µg/L	10	-
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Trihalomethanes

Chloroform (THM)	µg/L	0.5	-
Bromodichloromethane (THM)	µg/L	0.5	-
Dibromochloromethane (THM)	µg/L	0.5	-
Bromoform (THM)	µg/L	0.5	-

Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	40	-
Benzene	µg/L	0.5	-
Toluene	µg/L	0.5	-
Ethylbenzene	µg/L	0.5	-
m/p-xylene	µg/L	1	-
o-xylene	µg/L	0.5	-
Total BTEX*	µg/L	3	-
Total Xylenes*	µg/L	1.5	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-
Dibromofluoromethane (Surrogate)	%	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-
d8-toluene (Surrogate)	%	-	-
Bromofluorobenzene (Surrogate)	%	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-
TRH C15-C28	µg/L	200	-
TRH C29-C36	µg/L	200	-



ANALYTICAL REPORT

SE100639 R0

Sample Number SE100639.021
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 5.5m

Parameter	Units	LOR
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TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 (continued)

Surrogates

TRH (Surrogate)	%	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-
Acenaphthylene	µg/L	0.1	-
Acenaphthene	µg/L	0.1	-
Fluorene	µg/L	0.1	-
Phenanthrene	µg/L	0.1	-
Anthracene	µg/L	0.1	-
Fluoranthene	µg/L	0.1	-
Pyrene	µg/L	0.1	-
Benzo(a)anthracene	µg/L	0.1	-
Chrysene	µg/L	0.1	-
Benzo(b)fluoranthene	µg/L	0.1	-
Benzo(k)fluoranthene	µg/L	0.1	-
Benzo(a)pyrene	µg/L	0.1	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-
Dibenzo(a&h)anthracene	µg/L	0.1	-
Benzo(ghi)perylene	µg/L	0.1	-
Total PAH (18)*	µg/L	1	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-
2-fluorobiphenyl (Surrogate)	%	-	-
d14-p-terphenyl (Surrogate)	%	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-
Cadmium, Cd	µg/L	0.1	-
Chromium, Cr	µg/L	1	-
Copper, Cu	µg/L	1	-
Lead, Pb	µg/L	1	-
Nickel, Ni	µg/L	1	-
Zinc, Zn	µg/L	1	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420

PAHs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acenaphthene	LB002494	mg/kg	0.5	<0.5	NA
Acenaphthylene	LB002494	mg/kg	0.5	<0.5	NA
Anthracene	LB002494	mg/kg	0.5	<0.5	120%
Benzo(a)anthracene	LB002494	mg/kg	0.5	<0.5	NA
Benzo(b&k)fluoranthene	LB002494	mg/kg	1	<1	NA
Benzo(ghi)perylene	LB002494	mg/kg	0.5	<0.5	NA
Benzo(a)pyrene	LB002494	mg/kg	0.5	<0.5	89%
Chrysene	LB002494	mg/kg	0.5	<0.5	NA
Dibeno(ah)anthracene	LB002494	mg/kg	0.5	<0.5	NA
Fluoranthene	LB002494	mg/kg	0.5	<0.5	111%
Fluorene	LB002494	mg/kg	0.5	<0.5	NA
Indeno(1,2,3-cd)pyrene	LB002494	mg/kg	0.5	<0.5	NA
1-methylnaphthalene	LB002494	mg/kg	0.5	<0.5	NA
2-methylnaphthalene	LB002494	mg/kg	0.5	<0.5	NA
Naphthalene	LB002494	mg/kg	0.5	<0.5	95%
Phenanthrene	LB002494	mg/kg	0.5	<0.5	111%
Pyrene	LB002494	mg/kg	0.5	<0.5	126%
2-acetylaminofluorene	LB002494	mg/kg	2	<2	NA
7,12-dimethyl-benz(a)anthracene	LB002494	mg/kg	0.5	<0.5	NA
3-methylcholanthrene	LB002494	mg/kg	1	<1	NA

OCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aldrin	LB002494	mg/kg	0.5	<0.5	73%
Alpha-BHC	LB002494	mg/kg	0.5	<0.5	NA
Beta-BHC	LB002494	mg/kg	0.5	<0.5	NA
Delta-BHC	LB002494	mg/kg	0.5	<0.5	NA
Gamma-BHC (Lindane)	LB002494	mg/kg	0.5	<0.5	NA
p,p-DDD	LB002494	mg/kg	0.5	<0.5	NA
p,p-DDE	LB002494	mg/kg	0.5	<0.5	NA
p,p-DDT	LB002494	mg/kg	0.5	<0.5	124%
Dieldrin	LB002494	mg/kg	0.5	<0.5	100%
Alpha-endosulfan	LB002494	mg/kg	0.5	<0.5	NA
Beta-endosulfan	LB002494	mg/kg	0.5	<0.5	NA
Endosulfan sulphate	LB002494	mg/kg	0.5	<0.5	NA
Endrin	LB002494	mg/kg	0.5	<0.5	91%
Heptachlor	LB002494	mg/kg	0.5	<0.5	106%
Heptachlor epoxide	LB002494	mg/kg	0.5	<0.5	NA
Isodrin	LB002494	mg/kg	0.5	<0.5	NA
Methoxychlor	LB002494	mg/kg	0.5	<0.5	NA
Mirex	LB002494	mg/kg	0.5	<0.5	NA
Alpha-chlordane	LB002494	mg/kg	0.5	<0.5	NA
Gamma-chlordane	LB002494	mg/kg	0.5	<0.5	NA
Endrin ketone	LB002494	mg/kg	0.5	<0.5	NA

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Azinphos-methyl (Guthion)	LB002494	mg/kg	1	<1	NA
Bromophos ethyl	LB002494	mg/kg	1	<1	NA
Carbophenothion	LB002494	mg/kg	1	<1	NA
Chlorfenvinphos-cis (Chlofenvinphos-cis)	LB002494	mg/kg	5	<5	NA
Chlorfenvinphos-trans (Chlofenvinphos-trans)	LB002494	mg/kg	1	<1	NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB002494	mg/kg	1	<1	130%
Chlorpyrifos-methyl	LB002494	mg/kg	1	<1	NA



QC SUMMARY

SE100639 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

			MB	LCS %Recovery
Co-Ral (Coumaphos)	LB002494	mg/kg	1	<1
Diazinon (Dimpylate)	LB002494	mg/kg	1	<1
Dichlorvos	LB002494	mg/kg	1	<1
Demeton-S-methyl	LB002494	mg/kg	1	<1
Dimethoate	LB002494	mg/kg	1	<1
Disulfoton (Di-syston)	LB002494	mg/kg	1	<1
EPN*	LB002494	mg/kg	1	<1
Ethion	LB002494	mg/kg	1	<1
Ethoprophos (ethoprop or prophos)	LB002494	mg/kg	1	<1
Famphur (Famophos)	LB002494	mg/kg	1	<1
Fenamiphos (Phenamiphos)	LB002494	mg/kg	1	<1
Fenchlorophos (Ronnel)	LB002494	mg/kg	1	<1
Fenitrothion	LB002494	mg/kg	1	<1
Fenthion	LB002494	mg/kg	1	<1
Malathion (Maldison)	LB002494	mg/kg	1	<1
Methidathion	LB002494	mg/kg	1	<1
Mevinphos-cis/trans	LB002494	mg/kg	2	<2
o,o,o-triethyl phosphorothioate	LB002494	mg/kg	1	<1
Parathion ethyl (Parathion)	LB002494	mg/kg	1	<1
Parathion methyl	LB002494	mg/kg	1	<1
Phorate	LB002494	mg/kg	1	<1
Pirimiphos-ethyl	LB002494	mg/kg	1	<1
Pirimiphos-methyl	LB002494	mg/kg	1	<1
Profenofos	LB002494	mg/kg	1	<1
Prothiophos (Tokuthion)*	LB002494	mg/kg	1	<1
Sulfotep	LB002494	mg/kg	1	<1
Tetrachlorvinphos (Stirophos)*	LB002494	mg/kg	1	<1

PCB UPAC(7) Congeners

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
PCB Congener C28	LB002494	mg/kg	0.5	<0.5	NA
PCB Congener C52	LB002494	mg/kg	0.5	<0.5	NA
PCB Congener C101	LB002494	mg/kg	0.5	<0.5	NA
PCB Congener C118	LB002494	mg/kg	0.5	<0.5	NA
PCB Congener C138	LB002494	mg/kg	0.5	<0.5	NA
PCB Congener C153	LB002494	mg/kg	0.5	<0.5	NA
PCB Congener C180	LB002494	mg/kg	0.5	<0.5	NA

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Hexachlorobenzene	LB002494	mg/kg	0.5	<0.5	79%
1,2-dichlorobenzene	LB002494	mg/kg	0.5	<0.5	NA
1,3-dichlorobenzene	LB002494	mg/kg	0.5	<0.5	NA
1,4-dichlorobenzene	LB002494	mg/kg	0.5	<0.5	NA
Hexachlorobutadiene	LB002494	mg/kg	0.5	<0.5	NA
Hexachlorocyclopentadiene	LB002494	mg/kg	1	<1	NA
Hexachloroethane	LB002494	mg/kg	0.5	<0.5	NA
Hexachloropropene	LB002494	mg/kg	0.5	<0.5	NA
Pentachlorobenzene	LB002494	mg/kg	0.5	<0.5	79%
Pentachloroethane	LB002494	mg/kg	0.5	<0.5	NA
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	LB002494	mg/kg	1	<1	NA
1,2,3,4-tetrachlorobenzene	LB002494	mg/kg	0.5	<0.5	76%
1,2-Chloronaphthalene	LB002494	mg/kg	1	<1	NA
1,2,4-trichlorobenzene	LB002494	mg/kg	0.5	<0.5	NA

Phthalates

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-ethylhexyl)phthalate	LB002494	mg/kg	5	<5	NA
Bis(2-ethylhexyl)adipate	LB002494	mg/kg	0.5	<0.5	NA
Butyl benzyl phthalate	LB002494	mg/kg	0.5	<0.5	98%
Di-n-butyl phthalate	LB002494	mg/kg	0.5	<0.5	108%
Diethyl phthalate	LB002494	mg/kg	0.5	<0.5	84%
Dimethyl phthalate	LB002494	mg/kg	0.5	<0.5	89%
Diocetyl phthalate	LB002494	mg/kg	0.5	<0.5	NA

Carbamates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbofuran	LB002494	mg/kg	0.5	<0.5	NA
Carbaryl	LB002494	mg/kg	0.5	<0.5	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluralin	LB002494	mg/kg	0.5	<0.5	NA

Nitrosamines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
N-nitroso-di-n-butylamine (NDBA)	LB002494	mg/kg	0.5	<0.5	NA
N-nitroso-diethylamine (NDEA)	LB002494	mg/kg	1	<1	NA
N-nitroso-di-n-propylamine (NDPA)	LB002494	mg/kg	0.5	<0.5	NA
N-nitroso-morpholine (NMOR)	LB002494	mg/kg	0.5	<0.5	NA
N-nitroso-piperidine (NPIP)	LB002494	mg/kg	0.5	<0.5	NA
N-nitroso-pyrrolidine (NPYR)	LB002494	mg/kg	1	<1	NA
4-amino biphenyl	LB002494	mg/kg	1	<1	NA

Nitroaromatics and Ketones

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetophenone	LB002494	mg/kg	0.5	<0.5	NA
1,3-dinitrobenzene	LB002494	mg/kg	1	<1	NA
2,4-dinitrotoluene	LB002494	mg/kg	0.5	<0.5	NA
2,6-dinitrotoluene	LB002494	mg/kg	0.5	<0.5	NA
Isophorone	LB002494	mg/kg	0.5	<0.5	NA
Nitrobenzene	LB002494	mg/kg	0.5	<0.5	NA
p-(dimethylamino) azobenzene	LB002494	mg/kg	1	<1	NA
Phenacetin	LB002494	mg/kg	1	<1	NA
Pentachloronitrobenzene (quintozene)	LB002494	mg/kg	0.5	<0.5	112%

Anilines and Amines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aniline	LB002494	mg/kg	3	<3	NA
4-chloroaniline	LB002494	mg/kg	1	<1	NA
2-nitroaniline	LB002494	mg/kg	1	<1	NA
3-nitroaniline	LB002494	mg/kg	1	<1	NA
4-nitroaniline	LB002494	mg/kg	1	<1	NA
Diphenylamine	LB002494	mg/kg	0.5	<0.5	NA
o-toluidine	LB002494	mg/kg	1	<1	NA
5-nitro-o-toluidine	LB002494	mg/kg	1	<1	NA
1-naphthylamine	LB002494	mg/kg	1	<1	NA
2-naphthylamine	LB002494	mg/kg	1	<1	NA

Halogenated Compounds

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-chloroethoxy) methane	LB002494	mg/kg	0.5	<0.5	NA
Bis(2-chloroethyl) ether	LB002494	mg/kg	0.5	<0.5	NA
Bis(2-chloroisopropyl) ether	LB002494	mg/kg	0.5	<0.5	NA
4-chlorophenyl phenyl ether	LB002494	mg/kg	0.5	<0.5	NA
4-bromophenyl phenyl ether	LB002494	mg/kg	0.5	<0.5	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Methyl methanesulfonate	LB002494	mg/kg	1	<1	NA
Ethyl methanesulfonate	LB002494	mg/kg	1	<1	NA
Dibenzofuran	LB002494	mg/kg	0.5	<0.5	NA
Benzyl alcohol	LB002494	mg/kg	1	<1	NA
Safrole	LB002494	mg/kg	0.5	<0.5	NA
Isosafrole Isomer 1	LB002494	mg/kg	1	<1	NA
Isosafrole Isomer 2	LB002494	mg/kg	1	<1	NA
1,4-naphthoquinone	LB002494	mg/kg	0.5	<0.5	NA
Thionazin	LB002494	mg/kg	1	<1	NA

Speciated Routine Phenols

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
3/4-methyl phenol (m/p-cresol)	LB002494	mg/kg	1	<1	NA
2-methyl phenol (o-cresol)	LB002494	mg/kg	0.5	<0.5	NA
2,6-dichlorophenol	LB002494	mg/kg	0.5	<0.5	NA
2,3,4,6 and 2,3,5,6-tetrachlorophenol	LB002494	mg/kg	1	<1	NA
2,4,5-trichlorophenol	LB002494	mg/kg	0.5	<0.5	NA
4-chloro-3-methylphenol	LB002494	mg/kg	1	<1	NA
2-chlorophenol	LB002494	mg/kg	0.5	<0.5	NA
2,4-dichlorophenol	LB002494	mg/kg	0.5	<0.5	125%
2,4-dimethyl phenol	LB002494	mg/kg	0.5	<0.5	NA
2-nitrophenol	LB002494	mg/kg	0.5	<0.5	NA
Phenol	LB002494	mg/kg	0.5	<0.5	110%
2,4,6-trichlorophenol	LB002494	mg/kg	0.5	<0.5	95%
Pentachlorophenol	LB002494	mg/kg	0.5	<0.5	90%
4-nitrophenol	LB002494	mg/kg	0.5	<0.5	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-phenol (Surrogate)	LB002494	%	-	97%	85%
d5-nitrobenzene (Surrogate)	LB002494	%	-	80%	78%
2-fluorobiphenyl (Surrogate)	LB002494	%	-	115%	98%
2,4,6-tribromophenol (Surrogate)	LB002494	%	-	108%	94%
d14-p-terphenyl (Surrogate)	LB002494	%	-	113%	100%

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311/AN312

Parameter	QC Reference	Units	LOR	MB
Mercury	LB002506	mg/L	0.0001	<0.0001

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB002605	mg/kg	0.05	<0.05	0 - 13%	113%	92%

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002605	mg/kg	3	<3	0 - 14%	97%	89%
Cadmium, Cd	LB002605	mg/kg	0.3	<0.3	3 - 7%	98%	92%
Chromium, Cr	LB002605	mg/kg	0.3	<0.3	1 - 7%	100%	99%
Copper, Cu	LB002605	mg/kg	0.5	<0.5	2 - 19%	97%	81%
Lead, Pb	LB002605	mg/kg	1	<1	33%	96%	107%
Nickel, Ni	LB002605	mg/kg	0.5	<0.5	4 - 9%	98%	92%
Zinc, Zn	LB002605	mg/kg	0.5	<0.5	1 - 5%	96%	134%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB002494	mg/kg	0.1	<0.1	42%	89%	106%
Acenaphthylene	LB002494	mg/kg	0.1	<0.1	10%	96%	115%
Acenaphthene	LB002494	mg/kg	0.1	<0.1	30%	101%	106%
Fluorene	LB002494	mg/kg	0.1	<0.1	25%	NA	NA
Phenanthrene	LB002494	mg/kg	0.1	<0.1	13%	101%	106%
Anthracene	LB002494	mg/kg	0.1	<0.1	17%	98%	116%
Fluoranthene	LB002494	mg/kg	0.1	<0.1	24%	113%	113%
Pyrene	LB002494	mg/kg	0.1	<0.1	29%	113%	116%
Benzo(a)anthracene	LB002494	mg/kg	0.1	<0.1	21%	NA	NA
Chrysene	LB002494	mg/kg	0.1	<0.1	18%	NA	NA
Benzo(b)fluoranthene	LB002494	mg/kg	0.1	<0.1	23%	NA	NA
Benzo(k)fluoranthene	LB002494	mg/kg	0.1	<0.1	29%	NA	NA
Benzo(a)pyrene	LB002494	mg/kg	0.05	<0.05	27%	100%	113%
Indeno(1,2,3-cd)pyrene	LB002494	mg/kg	0.1	<0.1	27%	NA	NA
Dibenzo(a&h)anthracene	LB002494	mg/kg	0.1	<0.1	19%	NA	NA
Benzo(ghi)perylene	LB002494	mg/kg	0.1	<0.1	29%	NA	NA
Total PAH	LB002494	mg/kg	1.75	<1.8	35%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d5-nitrobenzene (Surrogate)	LB002494	%	-	97%	0%	99%	123%
2-fluorobiphenyl (Surrogate)	LB002494	%	-	88%	2%	83%	106%
d14-p-terphenyl (Surrogate)	LB002494	%	-	95%	3%	84%	106%

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB002498	µg/L	0.1	<0.1	115%
Acenaphthylene	LB002498	µg/L	0.1	<0.1	119%
Acenaphthene	LB002498	µg/L	0.1	<0.1	113%
Fluorene	LB002498	µg/L	0.1	<0.1	NA
Phenanthrene	LB002498	µg/L	0.1	<0.1	108%
Anthracene	LB002498	µg/L	0.1	<0.1	112%
Fluoranthene	LB002498	µg/L	0.1	<0.1	108%
Pyrene	LB002498	µg/L	0.1	<0.1	113%
Benzo(a)anthracene	LB002498	µg/L	0.1	<0.1	NA
Chrysene	LB002498	µg/L	0.1	<0.1	NA
Benzo(b)fluoranthene	LB002498	µg/L	0.1	<0.1	NA
Benzo(k)fluoranthene	LB002498	µg/L	0.1	<0.1	NA
Benzo(a)pyrene	LB002498	µg/L	0.1	<0.1	99%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN420 (continued)

		MB	LCS
		%Recovery	
Indeno(1,2,3-cd)pyrene	LB002498	µg/L	0.1
Dibenzo(a&h)anthracene	LB002498	µg/L	0.1
Benzo(ghi)perylene	LB002498	µg/L	0.1
Total PAH (18)*	LB002498	µg/L	1 <1

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB002498	%	-	73%	83%
2-fluorobiphenyl (Surrogate)	LB002498	%	-	71%	79%
d14-p-terphenyl (Surrogate)	LB002498	%	-	70%	71%

Trace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002539	µg/L	1	<1	0%	98%	101%
Cadmium, Cd	LB002539	µg/L	0.1	<0.1	0%	105%	110%
Chromium, Cr	LB002539	µg/L	1	<1	0%	96%	98%
Copper, Cu	LB002539	µg/L	1	<1	0%	99%	103%
Lead, Pb	LB002539	µg/L	1	<1	0%	107%	110%
Nickel, Ni	LB002539	µg/L	1	<1		100%	103%
Zinc, Zn	LB002539	µg/L	1	<1	4%	101%	100%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C10-C14	LB002494	mg/kg	20	<20	0 - 14%	108%	108%
TRH C15-C28	LB002494	mg/kg	50	<50	8 - 21%	100%	110%
TRH C29-C36	LB002494	mg/kg	50	<50	23 - 34%	90%	123%

TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C10-C14	LB002498	µg/L	100	<100	93%
TRH C15-C28	LB002498	µg/L	200	<200	100%
TRH C29-C36	LB002498	µg/L	200	<200	91%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434

Fumigants

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
2,2-dichloropropane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2-dichloropropane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
cis-1,3-dichloropropene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
trans-1,3-dichloropropene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2-dibromoethane (EDB)	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Dichlorodifluoromethane (CFC-12)	LB002495	mg/kg	1	<1	0%	NA	NA
Chloromethane	LB002495	mg/kg	1	<1	0%	NA	NA
Vinyl chloride (Chloroethene)	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Bromomethane	LB002495	mg/kg	1	<1	0%	NA	NA
Chloroethane	LB002495	mg/kg	1	<1	0%	NA	NA
Trichlorofluoromethane	LB002495	mg/kg	1	<1	0%	NA	NA
Iodomethane	LB002495	mg/kg	5	<5	0%	NA	NA
1,1-dichloroethene	LB002495	mg/kg	0.1	<0.1	0%	88%	90%
Dichloromethane (Methylene chloride)	LB002495	mg/kg	0.5	<0.5	0%	NA	NA
Allyl chloride	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
trans-1,2-dichloroethene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,1-dichloroethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
cis-1,2-dichloroethene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Bromochloromethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2-dichloroethane	LB002495	mg/kg	0.1	<0.1	0%	96%	98%
1,1,1-trichloroethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,1-dichloropropene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Carbon tetrachloride	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Dibromomethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Trichloroethene (Trichloroethylene -TCE)	LB002495	mg/kg	0.1	<0.1	0%	82%	83%
1,1,2-trichloroethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,3-dichloropropane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Tetrachloroethene (Perchloroethylene,PCE)	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,1,1,2-tetrachloroethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
cis-1,4-dichloro-2-butene	LB002495	mg/kg	1	<1	0%	NA	NA
1,1,2,2-tetrachloroethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2,3-trichloropropane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
trans-1,4-dichloro-2-butene	LB002495	mg/kg	1	<1	0%	NA	NA
1,2-dibromo-3-chloropropane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
Hexachlorobutadiene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Chlorobenzene	LB002495	mg/kg	0.1	<0.1	0%	111%	107%
Bromobenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
2-chlorotoluene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
4-chlorotoluene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,3-dichlorobenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,4-dichlorobenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2-dichlorobenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2,4-trichlorobenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2,3-trichlorobenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

Monocyclic Aromatic Hydrocarbons

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene	LB002495	mg/kg	0.1	<0.1	0%	97%	98%
Toluene	LB002495	mg/kg	0.1	<0.1	0%	105%	104%
Ethylbenzene	LB002495	mg/kg	0.1	<0.1	0%	104%	108%
m/p-xylene	LB002495	mg/kg	0.2	<0.2	0%	99%	113%
Styrene (Vinyl benzene)	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
o-xylene	LB002495	mg/kg	0.1	<0.1	0%	101%	106%
Isopropylbenzene (Cumene)	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
n-propylbenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,3,5-trimethylbenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
tert-butylbenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
1,2,4-trimethylbenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
sec-butylbenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
p-isopropyltoluene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA
n-butylbenzene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Acrylonitrile	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Acetone (2-propanone)	LB002495	mg/kg	10	<10	0%	NA	NA
MtBE (Methyl-tert-butyl ether)	LB002495	mg/kg	0.5	<0.5	0%	NA	NA
Vinyl acetate	LB002495	mg/kg	10	<10	0%	NA	NA
MEK (2-butanone)	LB002495	mg/kg	10	<10	0%	NA	NA
MIBK (4-methyl-2-pentanone)	LB002495	mg/kg	1	<1	0%	NA	NA
2-hexanone (MBK)	LB002495	mg/kg	5	<5	0%	NA	NA

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Carbon disulfide	LB002495	mg/kg	0.5	<0.5	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Dibromofluoromethane (Surrogate)	LB002495	%	-	85%	10%	98%	99%
d4-1,2-dichloroethane (Surrogate)	LB002495	%	-	102%	6%	94%	105%
d8-toluene (Surrogate)	LB002495	%	-	97%	29%	100%	102%
Bromofluorobenzene (Surrogate)	LB002495	%	-	107%	0%	105%	108%

Totals

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Total BTEX*	LB002495	mg/kg	-	0	NA	NA	NA
Total Xylenes*	LB002495	mg/kg	0.3	<0.3	0%	NA	NA

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Chloroform	LB002495	mg/kg	0.1	<0.1	0%	79%	83%
Bromodichloromethane	LB002495	mg/kg	0.1	<0.1	0%	NA	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

			MB	DUP %RPD	LCS %Recovery	MS %Recovery
Chlorodibromomethane	LB002495	mg/kg	0.1	<0.1	0%	NA
Bromoform	LB002495	mg/kg	0.1	<0.1	0%	NA

VOCs in Water Method: ME-(AU)-[ENV]AN433/AN434
Fumigants

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2,2-dichloropropane	LB002526	µg/L	0.5	<0.5	NA
1,2-dichloropropane	LB002526	µg/L	0.5	<0.5	NA
cis-1,3-dichloropropene	LB002526	µg/L	0.5	<0.5	NA
trans-1,3-dichloropropene	LB002526	µg/L	0.5	<0.5	NA
1,2-dibromoethane (EDB)	LB002526	µg/L	0.5	<0.5	NA

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Dichlorodifluoromethane (CFC-12)	LB002526	µg/L	5	<5	NA
Chloromethane	LB002526	µg/L	5	<5	NA
Vinyl chloride (Chloroethene)	LB002526	µg/L	0.3	<0.3	NA
Bromomethane	LB002526	µg/L	10	<10	NA
Chloroethane	LB002526	µg/L	5	<5	NA
Trichlorofluoromethane	LB002526	µg/L	1	<1	NA
Iodomethane	LB002526	µg/L	5	<5	NA
1,1-dichloroethene	LB002526	µg/L	0.5	<0.5	109%
Dichloromethane (Methylene chloride)	LB002526	µg/L	5	<5	NA
Allyl chloride	LB002526	µg/L	2	<2	NA
trans-1,2-dichloroethene	LB002526	µg/L	0.5	<0.5	NA
1,1-dichloroethane	LB002526	µg/L	0.5	<0.5	NA
cis-1,2-dichloroethene	LB002526	µg/L	0.5	<0.5	NA
Bromo-chloromethane	LB002526	µg/L	0.5	<0.5	NA
1,2-dichloroethane	LB002526	µg/L	0.5	<0.5	120%
1,1,1-trichloroethane	LB002526	µg/L	0.5	<0.5	NA
1,1-dichloropropene	LB002526	µg/L	0.5	<0.5	NA
Carbon tetrachloride	LB002526	µg/L	0.5	<0.5	NA
Dibromomethane	LB002526	µg/L	0.5	<0.5	NA
Trichloroethene (Trichloroethylene,TCE)	LB002526	µg/L	0.5	<0.5	106%
1,1,2-trichloroethane	LB002526	µg/L	0.5	<0.5	NA
1,3-dichloropropane	LB002526	µg/L	0.5	<0.5	NA
Tetrachloroethene (Perchloroethylene,PCE)	LB002526	µg/L	0.5	<0.5	NA
1,1,1,2-tetrachloroethane	LB002526	µg/L	0.5	<0.5	NA
cis-1,4-dichloro-2-butene	LB002526	µg/L	1	<1	NA
1,1,2,2-tetrachloroethane	LB002526	µg/L	0.5	<0.5	NA
1,2,3-trichloropropane	LB002526	µg/L	0.5	<0.5	NA
trans-1,4-dichloro-2-butene	LB002526	µg/L	1	<1	NA
1,2-dibromo-3-chloropropane	LB002526	µg/L	0.5	<0.5	NA
Hexachlorobutadiene	LB002526	µg/L	0.5	<0.5	NA

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Chlorobenzene	LB002526	µg/L	0.5	<0.5	112%
Bromobenzene	LB002526	µg/L	0.5	<0.5	NA
2-chlorotoluene	LB002526	µg/L	0.5	<0.5	NA
4-chlorotoluene	LB002526	µg/L	0.5	<0.5	NA
1,3-dichlorobenzene	LB002526	µg/L	0.5	<0.5	NA
1,4-dichlorobenzene	LB002526	µg/L	0.3	<0.3	NA
1,2-dichlorobenzene	LB002526	µg/L	0.5	<0.5	NA
1,2,4-trichlorobenzene	LB002526	µg/L	0.5	<0.5	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOCs in Water Method: ME-(AU)-[ENV]AN433/AN434 (continued)

			MB	LCS	
				%Recovery	
1,2,3-trichlorobenzene	LB002526	µg/L	0.5	<0.5	NA

Monocyclic Aromatic Hydrocarbons

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Benzene	LB002526	µg/L	0.5	<0.5	116%
Toluene	LB002526	µg/L	0.5	<0.5	120%
Ethylbenzene	LB002526	µg/L	0.5	<0.5	115%
m/p-xylene	LB002526	µg/L	1	<1	103%
Styrene (Vinyl benzene)	LB002526	µg/L	0.5	<0.5	NA
o-xylene	LB002526	µg/L	0.5	<0.5	111%
Isopropylbenzene (Cumene)	LB002526	µg/L	0.5	<0.5	NA
n-propylbenzene	LB002526	µg/L	0.5	<0.5	NA
1,3,5-trimethylbenzene	LB002526	µg/L	0.5	<0.5	NA
tert-butylbenzene	LB002526	µg/L	0.5	<0.5	NA
1,2,4-trimethylbenzene	LB002526	µg/L	0.5	<0.5	NA
sec-butylbenzene	LB002526	µg/L	0.5	<0.5	NA
p-isopropyltoluene	LB002526	µg/L	0.5	<0.5	NA
n-butylbenzene	LB002526	µg/L	0.5	<0.5	NA

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acrylonitrile	LB002526	µg/L	0.5	<0.5	NA

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetone (2-propanone)	LB002526	µg/L	10	<10	NA
MtBE (Methyl-tert-butyl ether)	LB002526	µg/L	2	<2	NA
Vinyl acetate	LB002526	µg/L	10	<10	NA
MEK (2-butanone)	LB002526	µg/L	10	<10	NA
MIBK (4-methyl-2-pentanone)	LB002526	µg/L	5	<5	NA
2-hexanone (MBK)	LB002526	µg/L	5	<5	NA

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB002526	µg/L	0.5	<0.5	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbon disulfide	LB002526	µg/L	2	<2	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Dibromofluoromethane (Surrogate)	LB002526	%	-	108%	100%
d4-1,2-dichloroethane (Surrogate)	LB002526	%	-	117%	103%
d8-toluene (Surrogate)	LB002526	%	-	101%	97%
Bromofluorobenzene (Surrogate)	LB002526	%	-	105%	118%

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Chloroform (THM)	LB002526	µg/L	0.5	<0.5	95%
Bromodichloromethane (THM)	LB002526	µg/L	0.5	<0.5	NA
Dibromochloromethane (THM)	LB002526	µg/L	0.5	<0.5	NA
Bromoform (THM)	LB002526	µg/L	0.5	<0.5	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C9	LB002495	mg/kg	20	<20	0%	99%	131%
Benzene	LB002495	mg/kg	0.1	<0.1		70%	
Toluene	LB002495	mg/kg	0.1	<0.1		69%	
Ethylbenzene	LB002495	mg/kg	0.1	<0.1		69%	
m/p-xylene	LB002495	mg/kg	1	<1		68%	
o-xylene	LB002495	mg/kg	0.5	<0.5		69%	
Total Xylenes	LB002495	mg/kg	0.3	<0.3		69%	
Total BTEX*	LB002495	mg/kg	2.7	<2.7		NA	

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Trifluorotoluene (Surrogate)	LB002495	%	-	127%	10%	67%	71%

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C6-C9	LB002526	µg/L	40	<40	123%
Benzene	LB002526	µg/L	0.5	<0.5	
Toluene	LB002526	µg/L	0.5	<0.5	
Ethylbenzene	LB002526	µg/L	0.5	<0.5	
m/p-xylene	LB002526	µg/L	1	<1	
o-xylene	LB002526	µg/L	0.5	<0.5	
Total BTEX*	LB002526	µg/L	3	NA	
Total Xylenes*	LB002526	µg/L	1.5	NA	

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB002526	%	-	87%	69%

METHOD

METHODOLOGY SUMMARY

- AN020 Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
- AN040 A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
- AN083 Separatory funnels are used for aqueous samples and extracted by transferring an appropriate volume (mass) of liquid into a separatory funnel and adding 3 serial aliquots of dichloromethane. Samples receive a single extraction at pH 7 to recover base / neutral analytes and two extractions at pH < 2 to recover acidic analytes. QC samples are prepared by spiking organic free water with target analytes and extracting as per samples.
- AN088 Orbital rolling for Organic pollutants are extracted from soil/sediment by transferring an appropriate mass of sample to a clear soil jar and extracting with 1:1 Dichloromethane/Acetone. Orbital Rolling method is intended for the extraction of semi-volatile organic compounds from soil/sediment samples, and is based somewhat on USEPA method 3570 (Micro Organic extraction and sample preparation). Method 3700.
- AN234 The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
- AN311/AN312 Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
- AN312 Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
- AN318 Determination of elements at trace level in waters by ICP-MS technique, in accordance with USEPA 6020A.
- AN403 Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
- AN403 Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403 The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
- AN420 (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

METHOD

METHODOLOGY SUMMARY

AN433/AN434

VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

IS Insufficient sample for analysis.

LNR Sample listed, but not received.

* This analysis is not covered by the scope of accreditation.

^ Performed by outside laboratory.

LOR Limit of Reporting

↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance

QFL QC result is below the lower tolerance

- The sample was not analysed for this analyte

Samples analysed as received.

Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project **GEOTLCOV24303AA - Additional**
Order Number **92605-92607**
Samples 2

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SGS Reference SE100639A R0
Report Number 0000004789
Date Reported 04 Aug 2011
Date Received 07 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

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ANALYTICAL REPORT

SE100639A R0

Sample Number SE100639A.003
Sample Matrix Soil
Sample Date 01 Jun 2011
Sample Name BH11 1.0m

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	8.6
pH 1:20 plus HCl	pH Units	-	1.7
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	25
Volume of Extraction Solution Used*	mL	-	500
pH TCLP after 18 hours	pH Units	-	5.0

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: AN420

Naphthalene	µg/L	0.1	1.6
2-methylnaphthalene	µg/L	0.1	3.2
1-methylnaphthalene	µg/L	0.1	3.3
Acenaphthylene	µg/L	0.1	0.3
Acenaphthene	µg/L	0.1	9.6
Fluorene	µg/L	0.1	12
Phenanthrene	µg/L	0.1	24
Anthracene	µg/L	0.1	5.7
Fluoranthene	µg/L	0.1	3.6
Pyrene	µg/L	0.1	3.1
Benzo(a)anthracene	µg/L	0.1	0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&k)fluoranthene	µg/L	0.2	<0.2
Benzo(b)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(a&h)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1

Surrogates

d5-nitrobenzene (Surrogate)	%	-	95
2-fluorobiphenyl (Surrogate)	%	-	100
d14-p-terphenyl (Surrogate)	%	-	97

Metals in Soil (TCLP) by ICPOES Method: AN320/AN321

Lead, Pb	mg/L	0.02	-
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Sample Number SE100639A.020
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 2.0m

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	8.5
pH 1:20 plus HCl	pH Units	-	1.7
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of Extraction Solution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.1



ANALYTICAL REPORT

SE100639A R0

Sample Number SE100639A.020
Sample Matrix Soil
Sample Date 06 Jun 2011
Sample Name BH4 2.0m

Parameter	Units	LOR
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PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: AN420

Naphthalene	µg/L	0.1	-
2-methylnaphthalene	µg/L	0.1	-
1-methylnaphthalene	µg/L	0.1	-
Acenaphthylene	µg/L	0.1	-
Acenaphthene	µg/L	0.1	-
Fluorene	µg/L	0.1	-
Phenanthrene	µg/L	0.1	-
Anthracene	µg/L	0.1	-
Fluoranthene	µg/L	0.1	-
Pyrene	µg/L	0.1	-
Benzo(a)anthracene	µg/L	0.1	-
Chrysene	µg/L	0.1	-
Benzo(b&k)fluoranthene	µg/L	0.2	-
Benzo(b)fluoranthene	µg/L	0.1	-
Benzo(k)fluoranthene	µg/L	0.1	-
Benzo(a)pyrene	µg/L	0.1	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-
Dibenzo(a&h)anthracene	µg/L	0.1	-
Benzo(ghi)perylene	µg/L	0.1	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-
2-fluorobiphenyl (Surrogate)	%	-	-
d14-p-terphenyl (Surrogate)	%	-	-

Metals in Soil (TCLP) by ICPOES Method: AN320/AN321

Lead, Pb	mg/L	0.02	0.19
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Metals in Soil (TCLP) by ICPOES Method: ME-(AU)-[ENV]AN320/AN321

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Lead, Pb	LB003711	mg/L	0.02	<0.020	NA

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB003697	µg/L	0.1	<0.1	81%
2-methylnaphthalene	LB003697	µg/L	0.1	<0.1	NA
1-methylnaphthalene	LB003697	µg/L	0.1	<0.1	NA
Acenaphthylene	LB003697	µg/L	0.1	<0.1	86%
Acenaphthene	LB003697	µg/L	0.1	<0.1	92%
Fluorene	LB003697	µg/L	0.1	<0.1	NA
Phenanthrene	LB003697	µg/L	0.1	<0.1	92%
Anthracene	LB003697	µg/L	0.1	<0.1	96%
Fluoranthene	LB003697	µg/L	0.1	<0.1	94%
Pyrene	LB003697	µg/L	0.1	<0.1	100%
Benzo(a)anthracene	LB003697	µg/L	0.1	<0.1	NA
Chrysene	LB003697	µg/L	0.1	<0.1	NA
Benzo(b&k)fluoranthene	LB003697	µg/L	0.2	<0.2	NA
Benzo(b)fluoranthene	LB003697	µg/L	0.1	<0.1	NA
Benzo(k)fluoranthene	LB003697	µg/L	0.1	<0.1	NA
Benzo(a)pyrene	LB003697	µg/L	0.1	<0.1	104%
Indeno(1,2,3-cd)pyrene	LB003697	µg/L	0.1	<0.1	NA
Dibenzo(a&h)anthracene	LB003697	µg/L	0.1	<0.1	NA
Benzo(ghi)perylene	LB003697	µg/L	0.1	<0.1	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB003697	%	-	103%	113%
2-fluorobiphenyl (Surrogate)	LB003697	%	-	103%	113%
d14-p-terphenyl (Surrogate)	LB003697	%	-	96%	112%

METHOD

METHODOLOGY SUMMARY

AN006

Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.

AN006

Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05 .

AN006

Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05 .

AN320/AN321

Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.

AN320/AN321

Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.

AN420

(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	This analysis is not covered by the scope of accreditation.
^	Performed by outside laboratory.
LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting

QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte

NVL Not Validated

Samples analysed as received.

Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Order Number 92605-92607
Samples 19

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SGS Reference SE100639 R0
Report Number 0000003289
Date Reported 17/06/2011 6:17:57PM
Date Received 07 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

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ANALYTICAL REPORT

SE100639 R0

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est. %w/w
SE100639.001	BH11 0.1-0.2	Soil	57g Sand	01 Jun 2011	No Asbestos Detected	
SE100639.003	BH11 1.0m	Soil	36g Sand	01 Jun 2011	No Asbestos Detected	
SE100639.006	BH3 1.0m	Soil	44g Clay,soil	02 Jun 2011	No Asbestos Detected	
SE100639.007	BH3 2.5m	Soil	57g Soil,rocks	02 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100639.011	BH2 0.6m	Soil	45g Sand	03 Jun 2011	No Asbestos Detected	
SE100639.013	BH2 1.5m	Soil	65g Soil,rocks	03 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100639.018	BH4 1.0m	Soil	73g Soil,rocks	06 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100639.019	BH4 1.5m	Soil	63g Soil,rocks	06 Jun 2011	No Asbestos Detected Organic Fibres Detected	

METHOD

METHODOLOGY SUMMARY

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	- Brown Asbestos	NA - Not Analysed
Chrysotile	- White Asbestos	LNR - Listed Not Required
Crocidolite	- Blue Asbestos	* - Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1 000 to 1 in 10 000 parts by weight, equivalent to 1 to 0.1 g/kg."

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australia Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia-May 2009.

Sampled by the client

Where reported: 'Asbestos Detected':

Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'No Asbestos Detected':

No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':

Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.

Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Order Number 26331-26333
Samples 14

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SGS Reference SE100692 R0
Report Number 0000003474
Date Reported 22/06/2011 7:50:17PM
Date Received 16 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

8270D-The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.

PAH soils - Surrogate not recovered within acceptance criteria due to sample matrix interference.

SIGNATORIES

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Ravee Sivasubramaniam
Hygienist



ANALYTICAL REPORT

SE100692 R0

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est. %w/w
SE100692.001	EB1/1.0-1.1	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.002	EB1/1.4-1.5	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.003	EB1/2.0-2.1	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.005	EB2/0.5-0.6	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.007	EB3/0.5-0.6	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.008	EB3/1.0-1.1	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.009	EB3/1.6-1.7	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100692.010	EB3/2.0-2.1	Soil	Appox 170g Soil,sand,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	

METHOD

METHODOLOGY SUMMARY

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	- Brown Asbestos	NA - Not Analysed
Chrysotile	- White Asbestos	LNR - Listed Not Required
Crocidolite	- Blue Asbestos	* - Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
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Asbestos detected by polarized light microscopy, including dispersion staining

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No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':

Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.

Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

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ANALYTICAL REPORT



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Project GEOTLOC24303AA
Order Number 26331-26333
Samples 14

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SGS Reference SE100692 R0
Report Number 0000003472
Date Reported 22 Jun 2011
Date Received 16 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

8270D-The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.

PAH soils - Surrogate not recovered within acceptance criteria due to sample matrix interference.

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ANALYTICAL REPORT

SE100692 R0

	Sample Number	SE100692.001	SE100692.002	SE100692.003	SE100692.004	SE100692.005
	Sample Matrix	Soil	Soil	Soil	Soil	Soil
	Sample Date	10 Jun 2011				
	Sample Name	EB1/1.0-1.1	EB1/1.4-1.5	EB1/2.0-2.1	EB1/3.0-3.1	EB2/0.5-0.6

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	<0.1	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	<1	-	-
Chloromethane	mg/kg	1	-	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	-	<1	<1	-	-
Chloroethane	mg/kg	1	-	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	-	<1	<1	-	-
Iodomethane	mg/kg	5	-	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	-	-
Dichlormethane (Methylene chloride)	mg/kg	0.5	-	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	-	<0.1	<0.1	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	-	<0.1	<0.1	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	-	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	-	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	-	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	<1	<1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	<1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	<0.1	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	-	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	<0.1	<0.1	-	-
Toluene	mg/kg	0.1	-	<0.1	<0.1	-	-
Ethylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-
m/p-xylene	mg/kg	0.2	-	<0.2	<0.2	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	<0.1	-	-
o-xylene	mg/kg	0.1	-	<0.1	<0.1	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number SE100692.001	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.0-1.1	Sample Number SE100692.002	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.4-1.5	Sample Number SE100692.003	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/2.0-2.1	Sample Number SE100692.004	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/3.0-3.1	Sample Number SE100692.005	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/0.5-0.6
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VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	<10	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	<10	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	<10	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	<5	<5	-	-	-	-	-	-	-	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	3.7	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	89	91	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	100	101	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	102	103	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	83	85	-	-	-	-	-	-	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	-	<20	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	mg/kg	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.001 Soil 10 Jun 2011 EB1/1.0-1.1	SE100692.002 Soil 10 Jun 2011 EB1/1.4-1.5	SE100692.003 Soil 10 Jun 2011 EB1/2.0-2.1	SE100692.004 Soil 10 Jun 2011 EB1/3.0-3.1	SE100692.005 Soil 10 Jun 2011 EB2/0.5-0.6
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Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	98	119	127	117
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	-	130	<20	<20	<20
TRH C15-C28	mg/kg	50	-	4300	290	310	170
TRH C29-C36	mg/kg	50	-	1900	150	140	130

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	-	9.8	0.6	0.6	0.3
Acenaphthylene	mg/kg	0.1	-	1.1	<0.1	<0.1	0.4
Acenaphthene	mg/kg	0.1	-	35	1.6	2.4	0.2
Fluorene	mg/kg	0.1	-	50	2.2	<0.1	0.4
Phenanthrene	mg/kg	0.1	-	370	15	<0.1	3.2
Anthracene	mg/kg	0.1	-	69	3.2	<0.1	1.0
Fluoranthene	mg/kg	0.1	-	220	13	<0.1	5.2
Pyrene	mg/kg	0.1	-	220	12	<0.1	5.4
Benzo(a)anthracene	mg/kg	0.1	-	160	8.7	<0.1	4.0
Chrysene	mg/kg	0.1	-	98	4.5	<0.1	1.9
Benzo(b)fluoranthene	mg/kg	0.1	-	110	6.6	<0.1	4.3
Benzo(k)fluoranthene	mg/kg	0.1	-	34	1.3	<0.1	1.2
Benzo(a)pyrene	mg/kg	0.05	-	74	4.3	<0.05	3.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	32	2.2	<0.1	1.9
Dibenzo(a&h)anthracene	mg/kg	0.1	-	12	0.8	<0.1	0.5
Benzo(ghi)perylene	mg/kg	0.1	-	38	2.3	<0.1	1.9
Total PAH	mg/kg	1.75	-	1400	70	3.0	35

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	160	121	0	126
2-fluorobiphenyl (Surrogate)	%	-	-	168	112	0	116
d14-p-terphenyl (Surrogate)	%	-	-	249	122	0	123

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	54	4.2	-	-
Acenaphthylene	mg/kg	0.5	-	1.0	<0.5	-	-
Anthracene	mg/kg	0.5	-	110	8.8	-	-
Benzo(a)anthracene	mg/kg	0.5	-	260	14	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	340	18	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	62	7.2	-	-
Benzo(a)pyrene	mg/kg	0.5	-	200	11	-	-
Chrysene	mg/kg	0.5	-	300	16	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	19	1.6	-	-
Fluoranthene	mg/kg	0.5	-	570	30	-	-
Fluorene	mg/kg	0.5	-	68	5.5	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	60	5.9	-	-
1-methylnaphthalene	mg/kg	0.5	-	25	2.0	-	-
2-methylnaphthalene	mg/kg	0.5	-	26	2.1	-	-
Naphthalene	mg/kg	0.5	-	15	1.8	-	-



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Parameter	Units	LOR	Sample Number SE100692.001	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.0-1.1	Sample Number SE100692.002	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.4-1.5	Sample Number SE100692.003	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/2.0-2.1	Sample Number SE100692.004	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/3.0-3.1	Sample Number SE100692.005	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/0.5-0.6
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phenanthrene	mg/kg	0.5	-	580	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	540	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OCs

Aldrin	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbofenthion	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	<5	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPN*	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethion	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Famphur (Famophos)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenthion	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methidathion	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	<2	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorate	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Parameter	Units	LOR	Sample Number SE100692.001	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.0-1.1	Sample Number SE100692.002	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.4-1.5	Sample Number SE100692.003	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/2.0-2.1	Sample Number SE100692.004	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/3.0-3.1	Sample Number SE100692.005	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/0.5-0.6
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Full 8270 SVOC in Soil Method: AN420 (continued)

Parameter	Units	1	-	<1	<1	-	-
Pirimiphos-methyl	mg/kg	1	-	<1	<1	-	-
Profenofos	mg/kg	1	-	<1	<1	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	<1	<1	-	-
Sulfotepp	mg/kg	1	-	<1	<1	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	<1	<1	-	-

PCB UPAC(7) Congeners

Parameter	Units	0.5	-	<0.5	<0.5	-	-
PCB Congener C28	mg/kg	0.5	-	<0.5	<0.5	-	-
PCB Congener C52	mg/kg	0.5	-	<0.5	<0.5	-	-
PCB Congener C101	mg/kg	0.5	-	<0.5	<0.5	-	-
PCB Congener C118	mg/kg	0.5	-	<0.5	<0.5	-	-
PCB Congener C138	mg/kg	0.5	-	<0.5	<0.5	-	-
PCB Congener C153	mg/kg	0.5	-	<0.5	<0.5	-	-
PCB Congener C180	mg/kg	0.5	-	<0.5	<0.5	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	Units	0.5	-	<0.5	<0.5	-	-
Hexachlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-
Hexachlorobutadiene	mg/kg	0.5	-	<0.5	<0.5	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	<1	<1	-	-
Hexachloroethane	mg/kg	0.5	-	<0.5	<0.5	-	-
Hexachloropropene	mg/kg	0.5	-	<0.5	<0.5	-	-
Pentachlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-
Pentachloroethane	mg/kg	0.5	-	<0.5	<0.5	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	<1	<1	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-
1/2-Chloronaphthalene	mg/kg	1	-	<1	<1	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-



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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.001 Soil 10 Jun 2011 EB1/1.0-1.1	SE100692.002 Soil 10 Jun 2011 EB1/1.4-1.5	SE100692.003 Soil 10 Jun 2011 EB1/2.0-2.1	SE100692.004 Soil 10 Jun 2011 EB1/3.0-3.1	SE100692.005 Soil 10 Jun 2011 EB2/0.5-0.6
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	<5	<5	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Diethyl phthalate	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Dioctyl phthalate	mg/kg	0.5	-	<0.5	<0.5	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Carbaryl	mg/kg	0.5	-	<0.5	<0.5	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	<0.5	<0.5	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	<0.5	<0.5	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	<1	<1	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	<0.5	<0.5	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	<0.5	<0.5	-	-	-
N-nitroso-piperidine (NPPIP)	mg/kg	0.5	-	<0.5	<0.5	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	<1	<1	-	-	-
4-amino biphenyl	mg/kg	1	-	<1	<1	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	<0.5	<0.5	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	<1	<1	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	<0.5	<0.5	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Isophorone	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Nitrobenzene	mg/kg	0.5	-	<0.5	<0.5	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	<1	<1	-	-	-
Phenacetin	mg/kg	1	-	<1	<1	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	<0.5	<0.5	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	<3	<3	-	-	-
4-chloroaniline	mg/kg	1	-	<1	<1	-	-	-
2-nitroaniline	mg/kg	1	-	<1	<1	-	-	-
3-nitroaniline	mg/kg	1	-	<1	<1	-	-	-
4-nitroaniline	mg/kg	1	-	<1	<1	-	-	-
Diphenylamine	mg/kg	0.5	-	<0.5	<0.5	-	-	-
o-toluidine	mg/kg	1	-	<1	<1	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	<1	<1	-	-	-
1-naphthylamine	mg/kg	1	-	<1	<1	-	-	-
2-naphthylamine	mg/kg	1	-	<1	<1	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	<0.5	<0.5	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	<0.5	<0.5	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	<0.5	<0.5	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	<0.5	<0.5	-	-	-



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Parameter	Units	LOR	Sample Number SE100692.001	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.0-1.1	Sample Number SE100692.002	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/1.4-1.5	Sample Number SE100692.003	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/2.0-2.1	Sample Number SE100692.004	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB1/3.0-3.1	Sample Number SE100692.005	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/0.5-0.6
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	<1	<1	-	-
Ethyl methanesulfonate	mg/kg	1	-	<1	<1	-	-
Dibenzofuran	mg/kg	0.5	-	31	2.5	-	-
Benzyl alcohol	mg/kg	1	-	<1	<1	-	-
Safrole	mg/kg	0.5	-	<0.5	<0.5	-	-
Isosafrole Isomer 1	mg/kg	1	-	<1	<1	-	-
Isosafrole Isomer 2	mg/kg	1	-	<1	<1	-	-
1,4-naphthoquinone	mg/kg	0.5	-	<0.5	<0.5	-	-
Thionazin	mg/kg	1	-	<1	<1	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	<21	<1	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	<0.5	<0.5	-	-
2,6-dichlorophenol	mg/kg	0.5	-	<0.5	<0.5	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	<1	<1	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	<0.5	<0.5	-	-
4-chloro-3-methylphenol	mg/kg	1	-	<1	<1	-	-
2-chlorophenol	mg/kg	0.5	-	<0.5	<0.5	-	-
2,4-dichlorophenol	mg/kg	0.5	-	<0.5	<0.5	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	<0.8†	<0.5	-	-
2-nitrophenol	mg/kg	0.5	-	<0.5	<0.5	-	-
Phenol	mg/kg	0.5	-	<0.6†	<0.5	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	1.0	<0.5	-	-
Pentachlorophenol	mg/kg	0.5	-	<0.5	<0.5	-	-
4-nitrophenol	mg/kg	0.5	-	<0.5	<0.5	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	103	110	-	-
d5-nitrobenzene (Surrogate)	%	-	-	94	103	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	94	102	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	94	118	-	-
d14-p-terphenyl (Surrogate)	%	-	-	114	104	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	-	13	6	8	9
Cadmium, Cd	mg/kg	0.3	-	0.5	<0.3	<0.3	0.3
Chromium, Cr	mg/kg	0.3	-	29	15	13	9.7
Copper, Cu	mg/kg	0.5	-	98	30	15	320
Lead, Pb	mg/kg	1	-	540	75	31	190
Nickel, Ni	mg/kg	0.5	-	26	6.5	1.9	13
Zinc, Zn	mg/kg	0.5	-	460	89	22	270

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	-	1.2	0.22	0.05	0.64
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	No	No	No	-	No
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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.001 Soil 10 Jun 2011 EB1/1.0-1.1	SE100692.002 Soil 10 Jun 2011 EB1/1.4-1.5	SE100692.003 Soil 10 Jun 2011 EB1/2.0-2.1	SE100692.004 Soil 10 Jun 2011 EB1/3.0-3.1	SE100692.005 Soil 10 Jun 2011 EB2/0.5-0.6
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Moisture Content Method: AN234

% Moisture	%	0.5	-	20	17	18	13
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.006 Soil 10 Jun 2011 EB2/2.0-2.1	SE100692.007 Soil 10 Jun 2011 EB3/0.5-0.6	SE100692.008 Soil 10 Jun 2011 EB3/1.0-1.1	SE100692.009 Soil 10 Jun 2011 EB3/1.6-1.7	SE100692.010 Soil 10 Jun 2011 EB3/2.0-2.1
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-	-
Dichlormethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-	-



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Parameter	Units	LOR	Sample Number SE100692.006	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/2.0-2.1	Sample Number SE100692.007	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/0.5-0.6	Sample Number SE100692.008	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.0-1.1	Sample Number SE100692.009	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.6-1.7	Sample Number SE100692.010	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/2.0-2.1
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VOC's in Soil Method: AN433/AN434 (continued)

1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Parameter	Units	LOR	Sample Number SE100692.006	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/2.0-2.1	Sample Number SE100692.007	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/0.5-0.6	Sample Number SE100692.008	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.0-1.1	Sample Number SE100692.009	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.6-1.7	Sample Number SE100692.010	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/2.0-2.1
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VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	-	-	-	<20	-	<20	-	<20	-	<20	-	<20	-	<20
Benzene	mg/kg	0.1	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1
Toluene	mg/kg	0.1	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	-	-	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1
m/p-xylene	mg/kg	1	<1	-	-	-	<1	-	<1	-	<1	-	<1	-	<1	-	<1
o-xylene	mg/kg	0.5	<0.5	-	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5
Total Xylenes	mg/kg	0.3	<0.3	-	-	-	<0.3	-	<0.3	-	<0.3	-	<0.3	-	<0.3	-	<0.3
Total BTEX*	mg/kg	2.7	<2.7	-	-	-	<2.7	-	<2.7	-	<2.7	-	<2.7	-	<2.7	-	<2.7

Surrogates

Trifluorotoluene (Surrogate)	%	-	126	-	-	123	-	120	-	109	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Parameter	Units	LOR	Sample Number SE100692.006	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/2.0-2.1	Sample Number SE100692.007	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/0.5-0.6	Sample Number SE100692.008	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.0-1.1	Sample Number SE100692.009	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.6-1.7	Sample Number SE100692.010	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/2.0-2.1
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TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	-	<20	<20	<20	<20
TRH C15-C28	mg/kg	50	<50	-	320	<50	<50	<50
TRH C29-C36	mg/kg	50	<50	-	190	<50	<50	<50

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	0.7	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	-	1.5	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	-	0.4	<0.1	<0.1
Fluorene	mg/kg	0.1	0.1	-	1.5	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.6	-	7.9	0.3	0.6
Anthracene	mg/kg	0.1	0.3	-	2.3	<0.1	0.2
Fluoranthene	mg/kg	0.1	0.8	-	9.1	0.4	0.7
Pyrene	mg/kg	0.1	0.8	-	8.8	0.3	0.7
Benzo(a)anthracene	mg/kg	0.1	0.4	-	6.4	0.3	0.4
Chrysene	mg/kg	0.1	0.3	-	3.2	0.1	0.2
Benzo(b)fluoranthene	mg/kg	0.1	0.4	-	5.5	0.2	0.4
Benzo(k)fluoranthene	mg/kg	0.1	0.1	-	1.5	<0.1	0.1
Benzo(a)pyrene	mg/kg	0.05	0.35	-	3.9	0.15	0.25
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	-	2.2	<0.1	0.1
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	0.6	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	-	2.1	<0.1	0.2
Total PAH	mg/kg	1.75	4.7	-	58	<1.81	3.8

Surrogates

d5-nitrobenzene (Surrogate)	%	-	123	-	115	121	114
2-fluorobiphenyl (Surrogate)	%	-	106	-	117	106	100
d14-p-terphenyl (Surrogate)	%	-	118	-	126	120	119

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-	-
Phenanthrene	mg/kg	0.5	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Sample Number	SE100692.006	SE100692.007	SE100692.008	SE100692.009	SE100692.010
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	10 Jun 2011				
Sample Name	EB2/2.0-2.1	EB3/0.5-0.6	EB3/1.0-1.1	EB3/1.6-1.7	EB3/2.0-2.1

Parameter

Units LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-
Carbofenthion	mg/kg	1	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-
Dimethoate	mg/kg	1	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-
EPN*	mg/kg	1	-	-	-	-	-
Ethion	mg/kg	1	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-
Famphur (Famaphos)	mg/kg	1	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-
Fenchloriphos (Ronnel)	mg/kg	1	-	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-	-
Methodathion	mg/kg	1	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-	-
Phorate	mg/kg	1	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-
Pirimiphos-methyl	mg/kg	1	-	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-
Sulfotep	mg/kg	1	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number SE100692.006	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/2.0-2.1	Sample Number SE100692.007	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/0.5-0.6	Sample Number SE100692.008	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.0-1.1	Sample Number SE100692.009	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.6-1.7	Sample Number SE100692.010	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/2.0-2.1
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Full 8270 SVOC in Soil Method: AN420 (continued)

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diocetyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Sample Number	SE100692.006	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	EB2/0.2-2.1	SE100692.007	Soil	10 Jun 2011	SE100692.008	Soil	10 Jun 2011	SE100692.009	Soil	10 Jun 2011	SE100692.010	Soil

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phenacetin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number SE100692.006	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB2/0.2-0.1	Sample Number SE100692.007	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/0.5-0.6	Sample Number SE100692.008	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.0-1.1	Sample Number SE100692.009	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/1.6-1.7	Sample Number SE100692.010	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/2.0-2.1
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Full 8270 SVOC in Soil Method: AN420 (continued)

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	7	-	-	13	6	5
Cadmium, Cd	mg/kg	0.3	<0.3	-	-	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	13	-	-	18	9.5	15
Copper, Cu	mg/kg	0.5	18	-	-	110	7.3	12
Lead, Pb	mg/kg	1	32	-	-	310	23	31
Nickel, Ni	mg/kg	0.5	3.5	-	-	11	1.3	4.6
Zinc, Zn	mg/kg	0.5	32	-	-	190	12	17

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	1.0	-	-	0.68	<0.05	0.07
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	No	No	No	No
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Moisture Content Method: AN234

% Moisture	%	0.5	17	-	-	10	15	9.1
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

	Sample Number	SE100692.011	Sample Matrix	Soil	SE100692.012	Sample Date	10 Jun 2011	SE100692.013	Soil	10 Jun 2011	SE100692.014	Water
Parameter	Units	LOR	Sample Name	EB3/3.0-3.1	QC1	QC2	10 Jun 2011	TB				

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-
o-xylene	mg/kg	0.1	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.011 Soil 10 Jun 2011 EB3/3.0-3.1	SE100692.012 Soil 10 Jun 2011 QC1	SE100692.013 Soil 10 Jun 2011 QC2	SE100692.014 Water 10 Jun 2011 TB
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VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	<20	<20	-
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
m/p-xylene	mg/kg	1	<1	<1	<1	<1	-
o-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX*	mg/kg	2.7	<2.7	<2.7	<2.7	<2.7	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number SE100692.011	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/3-0-3.1	Sample Number SE100692.012	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC1	Sample Number SE100692.013	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC2	Sample Number SE100692.014	Sample Matrix Water	Sample Date 10 Jun 2011	Sample Name TB
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Surrogates

Trifluorotoluene (Surrogate)	%	-	119	109	120	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	150	<20	-
TRH C15-C28	mg/kg	50	<50	7000	440	-
TRH C29-C36	mg/kg	50	<50	3100	350	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	10	0.7	-
Acenaphthylene	mg/kg	0.1	<0.1	1.9	2.1	-
Acenaphthene	mg/kg	0.1	<0.1	47	0.5	-
Fluorene	mg/kg	0.1	<0.1	68	1.8	-
Phenanthrene	mg/kg	0.1	<0.1	480	13	-
Anthracene	mg/kg	0.1	<0.1	91	3.5	-
Fluoranthene	mg/kg	0.1	<0.1	280	15	-
Pyrene	mg/kg	0.1	<0.1	380	14	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	200	11	-
Chrysene	mg/kg	0.1	<0.1	130	4.7	-
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	120	8.8	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	45	2.0	-
Benzo(a)pyrene	mg/kg	0.05	<0.05	87	5.8	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	37	3.1	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	14	0.9	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	43	2.9	-
Total PAH	mg/kg	1.75	<1.8†	2000	90	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	120	143	128	-
2-fluorobiphenyl (Surrogate)	%	-	97	147	116	-
d14-p-terphenyl (Surrogate)	%	-	124	166	124	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number SE100692.011	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/3.0-3.1	Sample Number SE100692.012	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC1	Sample Number SE100692.013	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC2	Sample Number SE100692.014	Sample Matrix Water	Sample Date 10 Jun 2011	Sample Name TB
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phenanthrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbofenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPN*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Famphur (Famophos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methidathion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.011 Soil 10 Jun 2011 EB3/3.0-3.1	SE100692.012 Soil 10 Jun 2011 QC1	SE100692.013 Soil 10 Jun 2011 QC2	SE100692.014 Water 10 Jun 2011 TB
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Full 8270 SVOC in Soil Method: AN420 (continued)

Pirimiphos-methyl	mg/kg	1	-	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-
Sulfotepp	mg/kg	1	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100692.011 Soil 10 Jun 2011 EB3/3.0-3.1	SE100692.012 Soil 10 Jun 2011 QC1	SE100692.013 Soil 10 Jun 2011 QC2	SE100692.014 Water 10 Jun 2011 TB
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-



ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number SE100692.011	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name EB3/3.0-3.1	Sample Number SE100692.012	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC1	Sample Number SE100692.013	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC2	Sample Number SE100692.014	Sample Matrix Water	Sample Date 10 Jun 2011	Sample Name TB
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	-	-	12	7	-	-	-	-	-	-	-	-	-	-	-
Cadmium, Cd	mg/kg	0.3	-	-	0.5	<0.3	-	-	-	-	-	-	-	-	-	-	-
Chromium, Cr	mg/kg	0.3	-	-	33	22	-	-	-	-	-	-	-	-	-	-	-
Copper, Cu	mg/kg	0.5	-	-	100	110	-	-	-	-	-	-	-	-	-	-	-
Lead, Pb	mg/kg	1	-	-	300	360	-	-	-	-	-	-	-	-	-	-	-
Nickel, Ni	mg/kg	0.5	-	-	28	8.7	-	-	-	-	-	-	-	-	-	-	-
Zinc, Zn	mg/kg	0.5	-	-	540	230	-	-	-	-	-	-	-	-	-	-	-

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	-	-	0.81	0.39	-	-	-	-	-	-	-	-	-	-	-
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Fibre Identification in soil Method: AN602

FibreID	No unit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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ANALYTICAL REPORT

SE100692 R0

Parameter	Units	LOR	Sample Number	SE100692.011	SE100692.012	SE100692.013	SE100692.014
			Sample Matrix	Soil	Soil	Soil	Water
			Sample Date	10 Jun 2011	10 Jun 2011	10 Jun 2011	10 Jun 2011
			Sample Name	EB3/3.0-3.1	QC1	QC2	TB

Moisture Content Method: AN234

% Moisture	%	0.5	18	20	11	-
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-	-	<0.04
Benzene	µg/L	0.5	-	-	-	<0.5
Toluene	µg/L	0.5	-	-	-	1.0
Ethylbenzene	µg/L	0.5	-	-	-	<0.5
m/p-xylene	µg/L	1	-	-	-	<1
o-xylene	µg/L	0.5	-	-	-	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	-	-	<2
Total BTEX*	µg/L	3	-	-	-	<3
Total Xylenes*	µg/L	1.5	-	-	-	<2↑

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	80
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]JAN420

PAHs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acenaphthene	LB002699	mg/kg	0.5	<0.5	NA
Acenaphthylene	LB002699	mg/kg	0.5	<0.5	NA
Anthracene	LB002699	mg/kg	0.5	<0.5	80%
Benz(a)anthracene	LB002699	mg/kg	0.5	<0.5	NA
Benzo(b&k)fluoranthene	LB002699	mg/kg	1	<1	NA
Benzo(ghi)perylene	LB002699	mg/kg	0.5	<0.5	NA
Benzo(a)pyrene	LB002699	mg/kg	0.5	<0.5	71%
Chrysene	LB002699	mg/kg	0.5	<0.5	NA
Dibenzo(ah)anthracene	LB002699	mg/kg	0.5	<0.5	NA
Fluoranthene	LB002699	mg/kg	0.5	<0.5	77%
Fluorene	LB002699	mg/kg	0.5	<0.5	NA
Indeno(1,2,3-cd)pyrene	LB002699	mg/kg	0.5	<0.5	NA
1-methylnaphthalene	LB002699	mg/kg	0.5	<0.5	NA
2-methylnaphthalene	LB002699	mg/kg	0.5	<0.5	NA
Naphthalene	LB002699	mg/kg	0.5	<0.5	72%
Phenanthere	LB002699	mg/kg	0.5	<0.5	75%
Pyrene	LB002699	mg/kg	0.5	<0.5	83%
2-acetylaminofluorene	LB002699	mg/kg	2	<2	NA
7,12-dimethyl-benz(a)anthracene	LB002699	mg/kg	0.5	<0.5	NA
3-methylcholanthrene	LB002699	mg/kg	1	<1	NA

OCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aldrin	LB002699	mg/kg	0.5	<0.5	88%
Alpha-BHC	LB002699	mg/kg	0.5	<0.5	NA
Beta-BHC	LB002699	mg/kg	0.5	<0.5	NA
Delta-BHC	LB002699	mg/kg	0.5	<0.5	NA
Gamma-BHC (Lindane)	LB002699	mg/kg	0.5	<0.5	NA
p,p-DDD	LB002699	mg/kg	0.5	<0.5	NA
p,p-DDE	LB002699	mg/kg	0.5	<0.5	NA
p,p-DDT	LB002699	mg/kg	0.5	<0.5	82%
Dieldrin	LB002699	mg/kg	0.5	<0.5	79%
Alpha-endosulfan	LB002699	mg/kg	0.5	<0.5	NA
Beta-endosulfan	LB002699	mg/kg	0.5	<0.5	NA
Endosulfan sulphate	LB002699	mg/kg	0.5	<0.5	NA
Endrin	LB002699	mg/kg	0.5	<0.5	79%
Heptachlor	LB002699	mg/kg	0.5	<0.5	109%
Heptachlor epoxide	LB002699	mg/kg	0.5	<0.5	NA
Isodrin	LB002699	mg/kg	0.5	<0.5	NA
Methoxychlor	LB002699	mg/kg	0.5	<0.5	NA
Mirex	LB002699	mg/kg	0.5	<0.5	NA
Alpha-chlordane	LB002699	mg/kg	0.5	<0.5	NA
Gamma-chlordane	LB002699	mg/kg	0.5	<0.5	NA
Endrin ketone	LB002699	mg/kg	0.5	<0.5	NA

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Azinphos-methyl (Guthion)	LB002699	mg/kg	1	<1	NA
Bromophos ethyl	LB002699	mg/kg	1	<1	NA
Carbophenothion	LB002699	mg/kg	1	<1	NA
Chlорfenvinphos-cis (Chlорfenvinphos-cis)	LB002699	mg/kg	5	<5	NA
Chlорfenvinphos-trans (Chlорfenvinphos-trans)	LB002699	mg/kg	1	<1	NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB002699	mg/kg	1	<1	102%
Chlorpyrifos-methyl	LB002699	mg/kg	1	<1	NA



QC SUMMARY

SE100692 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

			MB	LCS %Recovery
Co-Ral (Counaphos)	LB002699	mg/kg	1	<1
Diazinon (Dimpylate)	LB002699	mg/kg	1	<1
Dichlorvos	LB002699	mg/kg	1	<1
Demeton-S-methyl	LB002699	mg/kg	1	<1
Dimethoate	LB002699	mg/kg	1	<1
Disulfoton (Di-syston)	LB002699	mg/kg	1	<1
EPN*	LB002699	mg/kg	1	<1
Ethion	LB002699	mg/kg	1	<1
Ethoprophos (ethoprop or prophos)	LB002699	mg/kg	1	<1
Famphur (Famophos)	LB002699	mg/kg	1	<1
Fenamiphos (Phenamiphos)	LB002699	mg/kg	1	<1
Fenchlorophos (Ronnel)	LB002699	mg/kg	1	<1
Fenitrothion	LB002699	mg/kg	1	<1
Fenthion	LB002699	mg/kg	1	<1
Malathion (Maldison)	LB002699	mg/kg	1	<1
Methidathion	LB002699	mg/kg	1	<1
Mevinphos-cis/trans	LB002699	mg/kg	2	<2
o,o,o-triethyl phosphorothioate	LB002699	mg/kg	1	<1
Parathion ethyl (Parathion)	LB002699	mg/kg	1	<1
Parathion methyl	LB002699	mg/kg	1	<1
Phorate	LB002699	mg/kg	1	<1
Pirimiphos-ethyl	LB002699	mg/kg	1	<1
Pirimiphos-methyl	LB002699	mg/kg	1	<1
Profenofos	LB002699	mg/kg	1	<1
Prothiophos (Tokuthion)*	LB002699	mg/kg	1	<1
Sulfotep	LB002699	mg/kg	1	<1
Tetrachlorvinphos (Stirophos)*	LB002699	mg/kg	1	<1

PCB UPAC(7) Congeners

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
PCB Congener C28	LB002699	mg/kg	0.5	<0.5	NA
PCB Congener C52	LB002699	mg/kg	0.5	<0.5	NA
PCB Congener C101	LB002699	mg/kg	0.5	<0.5	NA
PCB Congener C118	LB002699	mg/kg	0.5	<0.5	NA
PCB Congener C138	LB002699	mg/kg	0.5	<0.5	NA
PCB Congener C153	LB002699	mg/kg	0.5	<0.5	NA
PCB Congener C180	LB002699	mg/kg	0.5	<0.5	NA

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Hexachlorobenzene	LB002699	mg/kg	0.5	<0.5	118%
1,2-dichlorobenzene	LB002699	mg/kg	0.5	<0.5	NA
1,3-dichlorobenzene	LB002699	mg/kg	0.5	<0.5	NA
1,4-dichlorobenzene	LB002699	mg/kg	0.5	<0.5	NA
Hexachlorobutadiene	LB002699	mg/kg	0.5	<0.5	NA
Hexachlorocyclopentadiene	LB002699	mg/kg	1	<1	NA
Hexachloroethane	LB002699	mg/kg	0.5	<0.5	NA
Hexachloropropene	LB002699	mg/kg	0.5	<0.5	NA
Pentachlorobenzene	LB002699	mg/kg	0.5	<0.5	115%
Pentachloroethane	LB002699	mg/kg	0.5	<0.5	NA
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	LB002699	mg/kg	1	<1	NA
1,2,3,4-tetrachlorobenzene	LB002699	mg/kg	0.5	<0.5	124%
1,2-Chloronaphthalene	LB002699	mg/kg	1	<1	NA
1,2,4-trichlorobenzene	LB002699	mg/kg	0.5	<0.5	NA

Phthalates



QC SUMMARY

SE100692 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-ethylhexyl)phthalate	LB002699	mg/kg	5	<5	NA
Bis(2-ethylhexyl)adipate	LB002699	mg/kg	0.5	<0.5	NA
Butyl benzyl phthalate	LB002699	mg/kg	0.5	<0.5	120%
Di-n-butyl phthalate	LB002699	mg/kg	0.5	<0.5	111%
Diethyl phthalate	LB002699	mg/kg	0.5	<0.5	116%
Dimethyl phthalate	LB002699	mg/kg	0.5	<0.5	118%
Diocyl phthalate	LB002699	mg/kg	0.5	<0.5	NA

Carbamates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbofuran	LB002699	mg/kg	0.5	<0.5	NA
Carbaryl	LB002699	mg/kg	0.5	<0.5	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluralin	LB002699	mg/kg	0.5	<0.5	NA

Nitrosamines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
N-nitroso-di-n-butylamine (NDBA)	LB002699	mg/kg	0.5	<0.5	NA
N-nitroso-diethylamine (NDEA)	LB002699	mg/kg	1	<1	NA
N-nitroso-di-n-propylamine (NDPA)	LB002699	mg/kg	0.5	<0.5	NA
N-nitroso-morpholine (NMOR)	LB002699	mg/kg	0.5	<0.5	NA
N-nitroso-piperidine (NPIP)	LB002699	mg/kg	0.5	<0.5	NA
N-nitroso-pyrrolidine (NPYR)	LB002699	mg/kg	1	<1	NA
4-amino biphenyl	LB002699	mg/kg	1	<1	NA

Nitroaromatics and Ketones

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetophenone	LB002699	mg/kg	0.5	<0.5	NA
1,3-dinitrobenzene	LB002699	mg/kg	1	<1	NA
2,4-dinitrotoluene	LB002699	mg/kg	0.5	<0.5	NA
2,6-dinitrotoluene	LB002699	mg/kg	0.5	<0.5	NA
Isophorone	LB002699	mg/kg	0.5	<0.5	NA
Nitrobenzene	LB002699	mg/kg	0.5	<0.5	NA
p(dimethylamino) azobenzene	LB002699	mg/kg	1	<1	NA
Phenacetin	LB002699	mg/kg	1	<1	NA
Pentachloronitrobenzene (quintozene)	LB002699	mg/kg	0.5	<0.5	100%

Anilines and Amines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aniline	LB002699	mg/kg	3	<3	NA
4-chloroaniline	LB002699	mg/kg	1	<1	NA
2-nitroaniline	LB002699	mg/kg	1	<1	NA
3-nitroaniline	LB002699	mg/kg	1	<1	NA
4-nitroaniline	LB002699	mg/kg	1	<1	NA
Diphenylamine	LB002699	mg/kg	0.5	<0.5	NA
o-toluidine	LB002699	mg/kg	1	<1	NA
5-nitro-o-toluidine	LB002699	mg/kg	1	<1	NA
1-naphthylamine	LB002699	mg/kg	1	<1	NA
2-naphthylamine	LB002699	mg/kg	1	<1	NA

Haloethers

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-chloroethoxy) methane	LB002699	mg/kg	0.5	<0.5	NA
Bis(2-chloroethyl) ether	LB002699	mg/kg	0.5	<0.5	NA
Bis(2-chloroisopropyl) ether	LB002699	mg/kg	0.5	<0.5	NA
4-chlorophenyl phenyl ether	LB002699	mg/kg	0.5	<0.5	NA
4-bromophenyl phenyl ether	LB002699	mg/kg	0.5	<0.5	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Methyl methanesulfonate	LB002699	mg/kg	1	<1	NA
Ethyl methanesulfonate	LB002699	mg/kg	1	<1	NA
Dibenzofuran	LB002699	mg/kg	0.5	<0.5	NA
Benzyl alcohol	LB002699	mg/kg	1	<1	NA
Safrole	LB002699	mg/kg	0.5	<0.5	NA
Isosafrole Isomer 1	LB002699	mg/kg	1	<1	NA
Isosafrole Isomer 2	LB002699	mg/kg	1	<1	NA
1,4-naphthoquinone	LB002699	mg/kg	0.5	<0.5	NA
Thionazin	LB002699	mg/kg	1	<1	NA

Speciated Routine Phenols

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
3/4-methyl phenol (m/p-cresol)	LB002699	mg/kg	1	<1	NA
2-methyl phenol (o-cresol)	LB002699	mg/kg	0.5	<0.5	NA
2,6-dichlorophenol	LB002699	mg/kg	0.5	<0.5	NA
2,3,4,6 and 2,3,5,6-tetrachlorophenol	LB002699	mg/kg	1	<1	NA
2,4,5-trichlorophenol	LB002699	mg/kg	0.5	<0.5	NA
4-chloro-3-methylphenol	LB002699	mg/kg	1	<1	NA
2-chlorophenol	LB002699	mg/kg	0.5	<0.5	NA
2,4-dichlorophenol	LB002699	mg/kg	0.5	<0.5	130%
2,4-dimethyl phenol	LB002699	mg/kg	0.5	<0.5	NA
2-nitrophenol	LB002699	mg/kg	0.5	<0.5	NA
Phenol	LB002699	mg/kg	0.5	<0.5	110%
2,4,6-trichlorophenol	LB002699	mg/kg	0.5	<0.5	120%
Pentachlorophenol	LB002699	mg/kg	0.5	<0.5	100%
4-nitrophenol	LB002699	mg/kg	0.5	<0.5	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-phenol (Surrogate)	LB002699	%	-	122%	110%
d5-nitrobenzene (Surrogate)	LB002699	%	-	118%	108%
2-fluorobiphenyl (Surrogate)	LB002699	%	-	130%	118%
2,4,6-tribromophenol (Surrogate)	LB002699	%	-	128%	119%
d14-p-terphenyl (Surrogate)	LB002699	%	-	130%	115%

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB002717	mg/kg	0.05	<0.05	22 - 23%	111%	107%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002712	mg/kg	3	<3	8 - 16%	98%	94%
Cadmium, Cd	LB002712	mg/kg	0.3	<0.3	0 - 19%	97%	94%
Chromium, Cr	LB002712	mg/kg	0.3	<0.3	3 - 14%	96%	92%
Copper, Cu	LB002712	mg/kg	0.5	<0.5	4 - 9%	96%	90%
Lead, Pb	LB002712	mg/kg	1	<1	9%	95%	88%
Nickel, Ni	LB002712	mg/kg	0.5	<0.5	10 - 17%	97%	92%
Zinc, Zn	LB002712	mg/kg	0.5	<0.5	4 - 10%	96%	81%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Naphthalene	LB002668	mg/kg	0.1	<0.1	14%	119%
	LB002699	mg/kg	0.1	<0.1		113%
Acenaphthylene	LB002668	mg/kg	0.1	<0.1	17%	120%
	LB002699	mg/kg	0.1	<0.1		116%
Acenaphthene	LB002668	mg/kg	0.1	<0.1	16%	122%
	LB002699	mg/kg	0.1	<0.1		118%
Fluorene	LB002668	mg/kg	0.1	<0.1	16%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Phenanthrene	LB002668	mg/kg	0.1	<0.1	13%	120%
	LB002699	mg/kg	0.1	<0.1		117%
Anthracene	LB002668	mg/kg	0.1	<0.1	14%	119%
	LB002699	mg/kg	0.1	<0.1		120%
Fluoranthene	LB002668	mg/kg	0.1	<0.1	12%	116%
	LB002699	mg/kg	0.1	<0.1		119%
Pyrene	LB002668	mg/kg	0.1	<0.1	13%	123%
	LB002699	mg/kg	0.1	<0.1		127%
Benzo(a)anthracene	LB002668	mg/kg	0.1	<0.1	13%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Chrysene	LB002668	mg/kg	0.1	<0.1	15%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Benzo(b)fluoranthene	LB002668	mg/kg	0.1	<0.1	5%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Benzo(k)fluoranthene	LB002668	mg/kg	0.1	<0.1	14%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Benzo(a)pyrene	LB002668	mg/kg	0.05	<0.05	9%	123%
	LB002699	mg/kg	0.05	<0.05		120%
Indeno(1,2,3-cd)pyrene	LB002668	mg/kg	0.1	<0.1	11%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Dibenzo(a&h)anthracene	LB002668	mg/kg	0.1	<0.1	11%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Benzo(ghi)perylene	LB002668	mg/kg	0.1	<0.1	11%	NA
	LB002699	mg/kg	0.1	<0.1		NA
Total PAH	LB002668	mg/kg	1.75	<1.8	13%	NA
	LB002699	mg/kg	1.75	<1.8		NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB002668	%	-	125%	16%	120%
	LB002699	%	-	118%		117%
2-fluorobiphenyl (Surrogate)	LB002668	%	-	119%	15%	114%
	LB002699	%	-	105%		107%
d14-p-terphenyl (Surrogate)	LB002668	%	-	125%	8%	111%
	LB002699	%	-	121%		105%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C10-C14	LB002668	mg/kg	20	<20	0%	115%	
	LB002699	mg/kg	20	<20	18%	115%	128%
TRH C15-C28	LB002668	mg/kg	50	<50	19%	103%	
	LB002699	mg/kg	50	<50	29%	103%	90%
TRH C29-C36	LB002668	mg/kg	50	<50	24%	83%	
	LB002699	mg/kg	50	<50	30%	83%	95%

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434

Fumigants

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2,2-dichloropropane	LB002694	mg/kg	0.1	<0.1	NA
1,2-dichloropropane	LB002694	mg/kg	0.1	<0.1	NA
cis-1,3-dichloropropene	LB002694	mg/kg	0.1	<0.1	NA
trans-1,3-dichloropropene	LB002694	mg/kg	0.1	<0.1	NA
1,2-dibromoethane (EDB)	LB002694	mg/kg	0.1	<0.1	NA

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Dichlorodifluoromethane (CFC-12)	LB002694	mg/kg	1	<1	NA
Chloromethane	LB002694	mg/kg	1	<1	NA
Vinyl chloride (Chloroethene)	LB002694	mg/kg	0.1	<0.1	NA
Bromomethane	LB002694	mg/kg	1	<1	NA
Chloroethane	LB002694	mg/kg	1	<1	NA
Trichlorofluoromethane	LB002694	mg/kg	1	<1	NA
Iodomethane	LB002694	mg/kg	5	<5	NA
1,1-dichloroethene	LB002694	mg/kg	0.1	<0.1	96%
Dichloromethane (Methylene chloride)	LB002694	mg/kg	0.5	<0.5	NA
Allyl chloride	LB002694	mg/kg	0.1	<0.1	NA
trans-1,2-dichloroethene	LB002694	mg/kg	0.1	<0.1	NA
1,1-dichloroethane	LB002694	mg/kg	0.1	<0.1	NA
cis-1,2-dichloroethene	LB002694	mg/kg	0.1	<0.1	NA
Bromochloromethane	LB002694	mg/kg	0.1	<0.1	NA
1,2-dichloroethane	LB002694	mg/kg	0.1	<0.1	96%
1,1,1-trichloroethane	LB002694	mg/kg	0.1	<0.1	NA
1,1-dichloropropene	LB002694	mg/kg	0.1	<0.1	NA
Carbon tetrachloride	LB002694	mg/kg	0.1	<0.1	NA
Dibromomethane	LB002694	mg/kg	0.1	<0.1	NA
Trichloroethene (Trichloroethylene -TCE)	LB002694	mg/kg	0.1	<0.1	91%
1,1,2-trichloroethane	LB002694	mg/kg	0.1	<0.1	NA
1,3-dichloropropane	LB002694	mg/kg	0.1	<0.1	NA
Tetrachloroethene (Perchloroethylene,PCE)	LB002694	mg/kg	0.1	<0.1	NA
1,1,1,2-tetrachloroethane	LB002694	mg/kg	0.1	<0.1	NA
cis-1,4-dichloro-2-butene	LB002694	mg/kg	1	<1	NA
1,1,2,2-tetrachloroethane	LB002694	mg/kg	0.1	<0.1	NA
1,2,3-trichloropropane	LB002694	mg/kg	0.1	<0.1	NA
trans-1,4-dichloro-2-butene	LB002694	mg/kg	1	<1	NA
1,2-dibromo-3-chloropropane	LB002694	mg/kg	0.1	<0.1	NA
Hexachlorobutadiene	LB002694	mg/kg	0.1	<0.1	NA

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Chlorobenzene	LB002694	mg/kg	0.1	<0.1	113%
Bromobenzene	LB002694	mg/kg	0.1	<0.1	NA
2-chlorotoluene	LB002694	mg/kg	0.1	<0.1	NA
4-chlorotoluene	LB002694	mg/kg	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

			MB	LCS	
				%Recovery	
1,3-dichlorobenzene	LB002694	mg/kg	0.1	<0.1	NA
1,4-dichlorobenzene	LB002694	mg/kg	0.1	<0.1	NA
1,2-dichlorobenzene	LB002694	mg/kg	0.1	<0.1	NA
1,2,4-trichlorobenzene	LB002694	mg/kg	0.1	<0.1	NA
1,2,3-trichlorobenzene	LB002694	mg/kg	0.1	<0.1	NA

Monocyclic Aromatic Hydrocarbons

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Benzene	LB002694	mg/kg	0.1	<0.1	91%
Toluene	LB002694	mg/kg	0.1	<0.1	104%
Ethylbenzene	LB002694	mg/kg	0.1	<0.1	107%
m/p-xylene	LB002694	mg/kg	0.2	<0.2	111%
Styrene (Vinyl benzene)	LB002694	mg/kg	0.1	<0.1	NA
o-xylene	LB002694	mg/kg	0.1	<0.1	105%
Isopropylbenzene (Cumene)	LB002694	mg/kg	0.1	<0.1	NA
n-propylbenzene	LB002694	mg/kg	0.1	<0.1	NA
1,3,5-trimethylbenzene	LB002694	mg/kg	0.1	<0.1	NA
tert-butylbenzene	LB002694	mg/kg	0.1	<0.1	NA
1,2,4-trimethylbenzene	LB002694	mg/kg	0.1	<0.1	NA
sec-butylbenzene	LB002694	mg/kg	0.1	<0.1	NA
p-isopropyltoluene	LB002694	mg/kg	0.1	<0.1	NA
n-butylbenzene	LB002694	mg/kg	0.1	<0.1	NA

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acrylonitrile	LB002694	mg/kg	0.1	<0.1	NA

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetone (2-propanone)	LB002694	mg/kg	10	<10	NA
MIBE (Methyl-tert-butyl ether)	LB002694	mg/kg	0.5	<0.5	NA
Vinyl acetate	LB002694	mg/kg	10	<10	NA
MEK (2-butanone)	LB002694	mg/kg	10	<10	NA
MIBK (4-methyl-2-pentanone)	LB002694	mg/kg	1	<1	NA
2-hexanone (MBK)	LB002694	mg/kg	5	<5	NA

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB002694	mg/kg	0.1	<0.1	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbon disulfide	LB002694	mg/kg	0.5	<0.5	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Dibromofluoromethane (Surrogate)	LB002694	%	-	91%	92%
d4-1,2-dichloroethane (Surrogate)	LB002694	%	-	98%	98%
d8-toluene (Surrogate)	LB002694	%	-	102%	96%
Bromofluorobenzene (Surrogate)	LB002694	%	-	86%	109%

Totals

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Total Xylenes*	LB002694	mg/kg	0.3	<0.3	NA
Total BTEX*	LB002694	mg/kg	-	0	NA

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Chloroform	LB002694	mg/kg	0.1	<0.1	70%
Bromodichloromethane	LB002694	mg/kg	0.1	<0.1	NA
Chlorodibromomethane	LB002694	mg/kg	0.1	<0.1	NA
Bromoform	LB002694	mg/kg	0.1	<0.1	NA

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C9	LB002694	mg/kg	20	<20	0%	101%	101%
Benzene	LB002694	mg/kg	0.1	<0.1	0%	72%	
Toluene	LB002694	mg/kg	0.1	<0.1	0%	69%	
Ethylbenzene	LB002694	mg/kg	0.1	<0.1	0%	71%	
m/p-xylene	LB002694	mg/kg	1	<1	0%	70%	
o-xylene	LB002694	mg/kg	0.5	<0.5	0%	71%	
Total Xylenes	LB002694	mg/kg	0.3	<0.3	0%	70%	
Total BTEX*	LB002694	mg/kg	2.7	<2.7	0%	NA	

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Trifluorotoluene (Surrogate)	LB002694	%	-	111%	7 - 8%	122%	103%

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C6-C9	LB002753	µg/L	0.04	<0.04	125%
Benzene	LB002753	µg/L	0.5	<0.5	99%
Toluene	LB002753	µg/L	0.5	<0.5	100%
Ethylbenzene	LB002753	µg/L	0.5	<0.5	99%
m/p-xylene	LB002753	µg/L	1	<1	97%
o-xylene	LB002753	µg/L	0.5	<0.5	101%
MtBE (Methyl-tert-butyl ether)	LB002753	µg/L	2	<2	102%
Total BTEX*	LB002753	µg/L	3	<3	NA
Total Xylenes*	LB002753	µg/L	1.5	<2	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB002753	%	-	76%	71%

METHOD

METHODOLOGY SUMMARY

- AN040 A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
- AN088 Orbital rolling for Organic pollutants are extracted from soil/sediment by transferring an appropriate mass of sample to a clear soil jar and extracting with 1:1 Dichloromethane/Acetone. Orbital Rolling method is intended for the extraction of semi-volatile organic compounds from soil/sediment samples, and is based somewhat on USEPA method 3570 (Micro Organic extraction and sample preparation). Method 3700.
- AN234 The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
- AN312 Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
- AN403 Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
- AN403 Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403 The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
- AN420 (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
- AN433/AN434 VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
- AN602 Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

IS Insufficient sample for analysis.
LNR Sample listed, but not received.
* This analysis is not covered by the scope of accreditation.
^ Performed by outside laboratory.
LOR Limit of Reporting
↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance
QFL QC result is below the lower tolerance
- The sample was not analysed for this analyte

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

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Organics Supervisor



ANALYTICAL REPORT

SE100692A R0

Sample Number SE100692A.002
Sample Matrix Soil
Sample Date 10 Jun 2011
Sample Name EB1/1.4-1.5

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	8.5
pH 1:20 plus HCl	pH Units	-	1.8
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	50
Volume of Extraction Solution Used*	mL	-	1000
pH TCLP after 18 hours	pH Units	-	5.4

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: AN420

Naphthalene	µg/L	0.1	5.1
2-methylnaphthalene	µg/L	0.1	6.6
1-methylnaphthalene	µg/L	0.1	7.8
Acenaphthylene	µg/L	0.1	0.3
Acenaphthene	µg/L	0.1	12
Fluorene	µg/L	0.1	13
Phenanthrene	µg/L	0.1	29
Anthracene	µg/L	0.1	5.5
Fluoranthene	µg/L	0.1	5.6
Pyrene	µg/L	0.1	4.3
Benzo(a)anthracene	µg/L	0.1	0.2
Chrysene	µg/L	0.1	0.2
Benzo(b&k)fluoranthene	µg/L	0.2	<0.2
Benzo(b)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(a&h)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1

Surrogates

d5-nitrobenzene (Surrogate)	%	-	96
2-fluorobiphenyl (Surrogate)	%	-	99
d14-p-terphenyl (Surrogate)	%	-	98

Metals in Soil (TCLP) by ICP-OES Method: AN320/AN321

Lead, Pb	mg/L	0.02	0.47
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Sample Number SE100692A.008
Sample Matrix Soil
Sample Date 10 Jun 2011
Sample Name EB3/1.0-1.1

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	8.8
pH 1:20 plus HCl	pH Units	-	1.9
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	50
Volume of Extraction Solution Used*	mL	-	1000
pH TCLP after 18 hours	pH Units	-	5.7



ANALYTICAL REPORT

SE100692A R0

Sample Number SE100692A.008
Sample Matrix Soil
Sample Date 10 Jun 2011
Sample Name EB3/1.0-1.1

Parameter	Units	LOR
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PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: AN420

Naphthalene	µg/L	0.1	0.3
2-methylnaphthalene	µg/L	0.1	0.2
1-methylnaphthalene	µg/L	0.1	0.3
Acenaphthylene	µg/L	0.1	0.2
Acenaphthene	µg/L	0.1	0.4
Fluorene	µg/L	0.1	0.9
Phenanthrene	µg/L	0.1	4.3
Anthracene	µg/L	0.1	1.1
Fluoranthene	µg/L	0.1	1.9
Pyrene	µg/L	0.1	1.7
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&k)fluoranthene	µg/L	0.2	<0.2
Benzo(b)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(a&h)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1

Surrogates

d5-nitrobenzene (Surrogate)	%	-	92
2-fluorobiphenyl (Surrogate)	%	-	96
d14-p-terphenyl (Surrogate)	%	-	97

Metals in Soil (TCLP) by ICPOES Method: AN320/AN321

Lead, Pb	mg/L	0.02	0.16
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Metals in Soil (TCLP) by ICPOES Method: ME-(AU)-[ENV]AN320/AN321

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Lead, Pb	LB003711	mg/L	0.02	<0.020	NA

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB003697	µg/L	0.1	<0.1	81%
2-methylnaphthalene	LB003697	µg/L	0.1	<0.1	NA
1-methylnaphthalene	LB003697	µg/L	0.1	<0.1	NA
Acenaphthylene	LB003697	µg/L	0.1	<0.1	86%
Acenaphthene	LB003697	µg/L	0.1	<0.1	92%
Fluorene	LB003697	µg/L	0.1	<0.1	NA
Phenanthrene	LB003697	µg/L	0.1	<0.1	92%
Anthracene	LB003697	µg/L	0.1	<0.1	96%
Fluoranthene	LB003697	µg/L	0.1	<0.1	94%
Pyrene	LB003697	µg/L	0.1	<0.1	100%
Benzo(a)anthracene	LB003697	µg/L	0.1	<0.1	NA
Chrysene	LB003697	µg/L	0.1	<0.1	NA
Benzo(b&k)fluoranthene	LB003697	µg/L	0.2	<0.2	NA
Benzo(b)fluoranthene	LB003697	µg/L	0.1	<0.1	NA
Benzo(k)fluoranthene	LB003697	µg/L	0.1	<0.1	NA
Benzo(a)pyrene	LB003697	µg/L	0.1	<0.1	104%
Indeno(1,2,3-cd)pyrene	LB003697	µg/L	0.1	<0.1	NA
Dibenzo(a&h)anthracene	LB003697	µg/L	0.1	<0.1	NA
Benzo(ghi)perylene	LB003697	µg/L	0.1	<0.1	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB003697	%	-	103%	113%
2-fluorobiphenyl (Surrogate)	LB003697	%	-	103%	113%
d14-p-terphenyl (Surrogate)	LB003697	%	-	96%	112%

METHOD

METHODOLOGY SUMMARY

AN006

Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.

AN006

Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05 .

AN006

Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05 .

AN320/AN321

Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.

AN320/AN321

Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.

AN420

(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

IS Insufficient sample for analysis.

LNR Sample listed, but not received.

* This analysis is not covered by the scope of accreditation.

^ Performed by outside laboratory.

LOR Limit of Reporting

↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance

QFL QC result is below the lower tolerance

- The sample was not analysed for this analyte

NVL Not Validated

Samples analysed as received.

Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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 Project GEOTLOC24303AA-Sydney Convention Centre
 Order Number 92611-92612, 92615-62918
 Samples 32

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 SGS Reference SE100700 R0
 Report Number 0000003535
 Date Reported 24/06/2011 6:35:24PM
 Date Received 16 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
 Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

VOC-The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.

VPH - Sample #19 analysed after the recommended maximum holding time.

No respirable fibres detected using trace analysis technique.

Sample # 8: 2-5mm length fibre bundles found loose in sample and found in 6x4x2mm cement sheet fragment.,

Sample # 10: 4mm length fibre bundle x4 found loose in sample.

Asbestos analysed by Approved Identifier Yusuf Kuthpuдин.

SIGNATORIES

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 Business Manager

Jue Wang
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Ly Kim Ha
 Organics Supervisor

Ravee Sivasubramaniam
 Hygienist



ANALYTICAL REPORT

SE100700 R0

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est. %w/w
SE100700.005	AS01 1.0	Soil	15g Soil,Clay	07 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.006	AS01 3.0	Soil	18g Soil,Clay	07 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.007	BH13 1.0	Soil	27g Soil,Clay,Rocks	09 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.008	BH13 1.5	Soil	15g Soil,Clay,Rocks	09 Jun 2011	Amosite & Chrysotile Asbestos Detected Organic Fibres Detected	
SE100700.010	BH 13 2.5	Soil	10g Soil,Rocks	09 Jun 2011	Amosite & Chrysotile Asbestos Detected Organic Fibres Detected	
SE100700.013	BH6 2.0	Soil	24g Soil,Clay	09 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.014	BH6 2.5	Soil	30g Soil,Clay	09 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.015	BH6 4.0	Soil	7g Soil,Rocks	09 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.020	BH10 1.1-1.3	Soil	9g Soil,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.022	BH10 3.0	Soil	26g Soil,Clay	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100700.025	BH12 0.5	Soil	30g Soil,Clay,Rocks	10 Jun 2011	No Asbestos Detected	
SE100700.027	BH12 1.5	Soil	7g Soil,Clay,Rocks	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	

METHOD

METHODOLOGY SUMMARY

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	- Brown Asbestos	NA - Not Analysed
Chrysotile	- White Asbestos	LNR - Listed Not Required
Crocidolite	- Blue Asbestos	* - Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1 000 to 1 in 10 000 parts by weight, equivalent to 1 to 0.1 g/kg."

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australia Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia-May 2009.

Sampled by the client

Where reported: 'Asbestos Detected':

Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'No Asbestos Detected':

No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':

Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.

Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Order Number 92611-92612, 92615-62918
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Date Received 16 Jun 2011

COMMENTS

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Ly Kim Ha
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Ravee Sivasubramaniam
Hygienist



ANALYTICAL REPORT

SE100700 R0

	Sample Number	SE100700.001	SE100700.002	SE100700.003	SE100700.004	SE100700.005
	Sample Matrix	Soil	Soil	Soil	Soil	Soil
	Sample Date	07 Jun 2011				
	Sample Name	BH1 1.0	BH1 3.0	AS01 3.0	AS01 5.5	AS01 1.0

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-
m/p-xylene	mg/kg	0.2	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-
o-xylene	mg/kg	0.1	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.001	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name BH1 1.0	Sample Number SE100700.002	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name BH1 3.0	Sample Number SE100700.003	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 3.0	Sample Number SE100700.004	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 5.5	Sample Number SE100700.005	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 1.0
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VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	2.7	<2.7	<2.7	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
Parameter	Units	LOR				

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	103	74	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	-	-	-
TRH C15-C28	mg/kg	50	<50	<50	-	-	-
TRH C29-C36	mg/kg	50	<50	<50	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	-	-	-
Acenaphthene	mg/kg	0.1	<0.1	<0.1	-	-	-
Fluorene	mg/kg	0.1	<0.1	<0.1	-	-	-
Phenanthrene	mg/kg	0.1	<0.1	<0.1	-	-	-
Anthracene	mg/kg	0.1	<0.1	<0.1	-	-	-
Fluoranthene	mg/kg	0.1	<0.1	0.2	-	-	-
Pyrene	mg/kg	0.1	<0.1	0.2	-	-	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-	-
Chrysene	mg/kg	0.1	<0.1	<0.1	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-	-
Benzo(a)pyrene	mg/kg	0.05	<0.05	<0.05	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	<0.1	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-	-
Total PAH	mg/kg	1.75	<1.8†	<1.8†	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	108	102	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	101	100	-	-	-
d14-p-terphenyl (Surrogate)	%	-	84	102	-	-	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	<0.5	-	-	-
Acenaphthylene	mg/kg	0.5	-	<0.5	-	-	-
Anthracene	mg/kg	0.5	-	<0.5	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	<0.5	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	<1	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	<0.5	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	<0.5	-	-	-
Chrysene	mg/kg	0.5	-	<0.5	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	<0.5	-	-	-
Fluoranthene	mg/kg	0.5	-	<0.5	-	-	-
Fluorene	mg/kg	0.5	-	<0.5	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	<0.5	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	<0.5	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	<0.5	-	-	-
Naphthalene	mg/kg	0.5	-	<0.5	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.001	SE100700.002	SE100700.003	SE100700.004	SE100700.005
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	07 Jun 2011				
Sample Name	BH1 1.0	BH1 3.0	AS01 3.0	AS01 5.5	AS01 1.0

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phenanthrene	mg/kg	0.5	-	<0.5	-	-	-	-
Pyrene	mg/kg	0.5	-	<0.5	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	<2	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	<0.5	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	<1	-	-	-	-

OCs

Aldrin	mg/kg	0.5	-	<0.5	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	<0.5	-	-	-	-
Beta-BHC	mg/kg	0.5	-	<0.5	-	-	-	-
Delta-BHC	mg/kg	0.5	-	<0.5	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	<0.5	-	-	-	-
p,p-DDD	mg/kg	0.5	-	<0.5	-	-	-	-
p,p-DDE	mg/kg	0.5	-	<0.5	-	-	-	-
p,p-DDT	mg/kg	0.5	-	<0.5	-	-	-	-
Dieldrin	mg/kg	0.5	-	<0.5	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	<0.5	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	<0.5	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	<0.5	-	-	-	-
Endrin	mg/kg	0.5	-	<0.5	-	-	-	-
Heptachlor	mg/kg	0.5	-	<0.5	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	<0.5	-	-	-	-
Isodrin	mg/kg	0.5	-	<0.5	-	-	-	-
Methoxychlor	mg/kg	0.5	-	<0.5	-	-	-	-
Mirex	mg/kg	0.5	-	<0.5	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	<0.5	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	<0.5	-	-	-	-
Endrin ketone	mg/kg	0.5	-	<0.5	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	<1	-	-	-	-
Bromophos ethyl	mg/kg	1	-	<1	-	-	-	-
Carbofenothonion	mg/kg	1	-	<1	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	<5	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	<1	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	<1	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	<1	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	<1	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	<1	-	-	-	-
Dichlorvos	mg/kg	1	-	<1	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	<1	-	-	-	-
Dimethoate	mg/kg	1	-	<1	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	<1	-	-	-	-
EPN*	mg/kg	1	-	<1	-	-	-	-
Ethion	mg/kg	1	-	<1	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	<1	-	-	-	-
Famphur (Famaphos)	mg/kg	1	-	<1	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	<1	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	<1	-	-	-	-
Fenitrothion	mg/kg	1	-	<1	-	-	-	-
Fenthion	mg/kg	1	-	<1	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	<1	-	-	-	-
Methidathion	mg/kg	1	-	<1	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	<2	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	<1	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	<1	-	-	-	-
Parathion methyl	mg/kg	1	-	<1	-	-	-	-
Phorate	mg/kg	1	-	<1	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	<1	-	-	-	-



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
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Full 8270 SVOC in Soil Method: AN420 (continued)

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
Pirimiphos-methyl	mg/kg	1	-	<1	-	-	-	-
Profenofos	mg/kg	1	-	<1	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	<1	-	-	-	-
Sulfotepp	mg/kg	1	-	<1	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	<1	-	-	-	-

PCB UPAC(7) Congeners

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
PCB Congener C28	mg/kg	0.5	-	<0.5	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	<0.5	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	<0.5	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	<0.5	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	<0.5	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	<0.5	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	<0.5	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
Hexachlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	<0.5	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	<1	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	<0.5	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	<0.5	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	<0.5	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	<1	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	<1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-



ANALYTICAL REPORT

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Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	<5	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	<0.5	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	<0.5	-	-	-	-
Carbaryl	mg/kg	0.5	-	<0.5	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	<0.5	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	<0.5	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	<1	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	<0.5	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	<0.5	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	<0.5	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	<1	-	-	-	-
4-amino biphenyl	mg/kg	1	-	<1	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	<0.5	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	<1	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	<0.5	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	<0.5	-	-	-	-
Isophorone	mg/kg	0.5	-	<0.5	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	<0.5	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	<1	-	-	-	-
Phenacetin	mg/kg	1	-	<1	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	<0.5	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	<3	-	-	-	-
4-chloroaniline	mg/kg	1	-	<1	-	-	-	-
2-nitroaniline	mg/kg	1	-	<1	-	-	-	-
3-nitroaniline	mg/kg	1	-	<1	-	-	-	-
4-nitroaniline	mg/kg	1	-	<1	-	-	-	-
Diphenylamine	mg/kg	0.5	-	<0.5	-	-	-	-
o-toluidine	mg/kg	1	-	<1	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	<1	-	-	-	-
1-naphthylamine	mg/kg	1	-	<1	-	-	-	-
2-naphthylamine	mg/kg	1	-	<1	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	<0.5	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	<0.5	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	<0.5	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	<0.5	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	<0.5	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.001 Soil 07 Jun 2011 BH1 1.0	SE100700.002 Soil 07 Jun 2011 BH1 3.0	SE100700.003 Soil 07 Jun 2011 AS01 3.0	SE100700.004 Soil 07 Jun 2011 AS01 5.5	SE100700.005 Soil 07 Jun 2011 AS01 1.0
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	<1	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	<1	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	<0.5	-	-	-	-
Benzyl alcohol	mg/kg	1	-	<1	-	-	-	-
Safrole	mg/kg	0.5	-	<0.5	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	<1	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	<1	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	<0.5	-	-	-	-
Thionazin	mg/kg	1	-	<1	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	<1	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	<0.5	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	<1	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	<1	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	<0.5	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	<0.5	-	-	-	-
Phenol	mg/kg	0.5	-	<0.5	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	<0.5	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	106	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	113	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	128	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	128	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	128	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	-	-	8.0	8.3	-	-
PHfox	pH Units	-	-	-	2.9	4.0	-	-
Reaction*	No unit	-	-	-	XXX	X	-	-
pH Difference*	pH Units	-10	-	-	5.1	4.3	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	3	9	-	-	-	-
Cadmium, Cd	mg/kg	0.3	0.3	<0.3	-	-	-	-
Chromium, Cr	mg/kg	0.3	9.0	16	-	-	-	-
Copper, Cu	mg/kg	0.5	13	21	-	-	-	-
Lead, Pb	mg/kg	1	15	25	-	-	-	-
Nickel, Ni	mg/kg	0.5	7.7	3.6	-	-	-	-
Zinc, Zn	mg/kg	0.5	30	25	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number	SE100700.001	SE100700.002	SE100700.003	SE100700.004	SE100700.005
			Sample Matrix	Soil	Soil	Soil	Soil	Soil
			Sample Date	07 Jun 2011				
			Sample Name	BH1 1.0	BH1 3.0	AS01 3.0	AS01 5.5	AS01 1.0

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	<0.05	0.05	-	-	-	-
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	-	-	-	-	No
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Moisture Content Method: AN234

% Moisture	%	0.5	10	16	16	18	-	-
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	0.04	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.001	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name BH1 1.0	Sample Number SE100700.002	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name BH1 3.0	Sample Number SE100700.003	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 3.0	Sample Number SE100700.004	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 5.5	Sample Number SE100700.005	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 1.0
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420 (continued)

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Parameter	Units	LOR	Sample Number SE100700.001	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name BH1 1.0	Sample Number SE100700.002	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name BH1 3.0	Sample Number SE100700.003	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 3.0	Sample Number SE100700.004	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 5.5	Sample Number SE100700.005	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 1.0
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Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Parameter	Units	LOR	Sample Number SE100700.006	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 3.0	Sample Number SE100700.007	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 1.0	Sample Number SE100700.008	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 1.5	Sample Number SE100700.009	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 2.0	Sample Number SE100700.010	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH 13 2.5
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.006	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 3.0	Sample Number SE100700.007	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 1.0	Sample Number SE100700.008	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 1.5	Sample Number SE100700.009	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 2.0	Sample Number SE100700.010	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH 13 2.5
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VOC's in Soil Method: AN433/AN434 (continued)

1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.006	SE100700.007	SE100700.008	SE100700.009	SE100700.010
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	07 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011
Sample Name	AS01 3.0	BH13 1.0	BH13 1.5	BH13 2.0	BH 13 2.5

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	-	-	<20	-	-	-
Benzene	mg/kg	0.1	-	-	<0.1	-	-	-
Toluene	mg/kg	0.1	-	-	<0.1	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	<0.1	-	-	-
m/p-xylene	mg/kg	1	-	-	<1	-	-	-
o-xylene	mg/kg	0.5	-	-	<0.5	-	-	-
Total Xylenes	mg/kg	0.3	-	-	<0.3	-	-	-
Total BTEX*	mg/kg	2.7	-	-	<2.7	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	68	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.006	SE100700.007	SE100700.008	SE100700.009	SE100700.010
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	07 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011
Sample Name	AS01 3.0	BH13 1.0	BH13 1.5	BH13 2.0	BH 13 2.5

Parameter

Units

LOR

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	-	-	<20	-	-	-
TRH C15-C28	mg/kg	50	-	-	<50	-	-	-
TRH C29-C36	mg/kg	50	-	-	<50	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	-	-	<0.1	-	-	-
Acenaphthylene	mg/kg	0.1	-	-	0.2	-	-	-
Acenaphthene	mg/kg	0.1	-	-	<0.1	-	-	-
Fluorene	mg/kg	0.1	-	-	<0.1	-	-	-
Phenanthrene	mg/kg	0.1	-	-	0.5	-	-	-
Anthracene	mg/kg	0.1	-	-	0.2	-	-	-
Fluoranthene	mg/kg	0.1	-	-	1.1	-	-	-
Pyrene	mg/kg	0.1	-	-	1.2	-	-	-
Benzo(a)anthracene	mg/kg	0.1	-	-	0.9	-	-	-
Chrysene	mg/kg	0.1	-	-	0.6	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	-	-	1.0	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	-	-	0.4	-	-	-
Benzo(a)pyrene	mg/kg	0.05	-	-	0.88	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	0.4	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	-	-	<0.1	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	-	-	0.5	-	-	-
Total PAH	mg/kg	1.75	-	-	6.5	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	110	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	108	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	85	-	-	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-	-	-
Phenanthrene	mg/kg	0.5	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-	-

Sample Number	SE100700.006	Sample Matrix	Soil	Sample Date	07 Jun 2011	Sample Name	AS01 3.0	SE100700.007	Soil	09 Jun 2011	BH13 1.0	SE100700.008	Soil	09 Jun 2011	BH13 1.5	SE100700.009	Soil	09 Jun 2011	BH13 2.0	SE100700.010	Soil	09 Jun 2011	BH 13 2.5
Parameter	Units	LOR																					

Full 8270 SVOC in Soil Method: AN420 (continued)

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbofenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPN*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Famphur (Famophos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenchlorphos (Ronnel)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methodathion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfotepp	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.006 Soil 07 Jun 2011 AS01 3.0	SE100700.007 Soil 09 Jun 2011 BH13 1.0	SE100700.008 Soil 09 Jun 2011 BH13 1.5	SE100700.009 Soil 09 Jun 2011 BH13 2.0	SE100700.010 Soil 09 Jun 2011 BH 13 2.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Diocetyl phthalate	mg/kg	0.5	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.006 Soil 07 Jun 2011 AS01 3.0	SE100700.007 Soil 09 Jun 2011 BH13 1.0	SE100700.008 Soil 09 Jun 2011 BH13 1.5	SE100700.009 Soil 09 Jun 2011 BH13 2.0	SE100700.010 Soil 09 Jun 2011 BH 13 2.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phenacetin	mg/kg	1	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.006	Sample Matrix Soil	Sample Date 07 Jun 2011	Sample Name AS01 3.0	Sample Number SE100700.007	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 1.0	Sample Number SE100700.008	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 1.5	Sample Number SE100700.009	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 2.0	Sample Number SE100700.010	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH 13 2.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

pHf	pH Units	-	-	-	-	-	-	-	8.1	-	-
pHfox	pH Units	-	-	-	-	-	-	-	6.3	-	-
Reaction*	No unit	-	-	-	-	-	-	-	X	-	-
pH Difference*	pH Units	-10	-	-	-	-	-	-	1.7	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	-	-	-	10	-	-	-	-	-
Cadmium, Cd	mg/kg	0.3	-	-	-	0.8	-	-	-	-	-
Chromium, Cr	mg/kg	0.3	-	-	-	9.3	-	-	-	-	-
Copper, Cu	mg/kg	0.5	-	-	-	70	-	-	-	-	-
Lead, Pb	mg/kg	1	-	-	-	140	-	-	-	-	-
Nickel, Ni	mg/kg	0.5	-	-	-	6.2	-	-	-	-	-
Zinc, Zn	mg/kg	0.5	-	-	-	730	-	-	-	-	-

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	-	-	-	0.45	-	-	-
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	No	No	Yes	-	Yes
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Moisture Content Method: AN234

% Moisture	%	0.5	-	-	-	15	18	-
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.006	SE100700.007	SE100700.008	SE100700.009	SE100700.010
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	07 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011
Sample Name	AS01 3.0	BH13 1.0	BH13 1.5	BH13 2.0	BH 13 2.5

Parameter

Units LOR

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	-	-
Cadmium, Cd	µg/L	0.1	-	-	-	-	-	-
Chromium, Cr	µg/L	1	-	-	-	-	-	-
Copper, Cu	µg/L	1	-	-	-	-	-	-
Lead, Pb	µg/L	1	-	-	-	-	-	-
Nickel, Ni	µg/L	1	-	-	-	-	-	-
Zinc, Zn	µg/L	1	-	-	-	-	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-
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Sample Number	SE100700.011	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH13 4.0	Sample Number	SE100700.012	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH13 5.5	Sample Number	SE100700.013	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 2.0 <th>Sample Number</th> <td>SE100700.014</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>09 Jun 2011</td> <th>Sample Name</th> <td>BH6 2.5</td> <th>Sample Number</th> <td>SE100700.015</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>09 Jun 2011</td> <th>Sample Name</th> <td>BH6 4.0</td>	Sample Number	SE100700.014	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 2.5	Sample Number	SE100700.015	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 4.0
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	<0.1	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	<1	-	-	-
Chloromethane	mg/kg	1	<1	-	<1	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Bromomethane	mg/kg	1	<1	-	<1	-	-	-
Chloroethane	mg/kg	1	<1	-	<1	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	<1	-	-	-
Iodomethane	mg/kg	5	<5	-	<5	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	<0.5	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	<0.1	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	<1	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	<1	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	<0.1	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Toluene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
m/p-xylene	mg/kg	0.2	<0.2	-	<0.2	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	<0.1	-	-	-
o-xylene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	<0.1	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.011	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 4.0	Sample Number SE100700.012	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 5.5	Sample Number SE100700.013	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.0	Sample Number SE100700.014	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.5	Sample Number SE100700.015	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 4.0
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VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	<10	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	<10	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	88	-	88	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	104	-	106	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	98	-	97	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	82	-	83	-	-	-	-	-	-	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	<0.3	-	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	mg/kg	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

	Sample Number	SE100700.011	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH13 4.0	SE100700.012	Soil	09 Jun 2011	SE100700.013	Soil	09 Jun 2011	SE100700.014	Soil	09 Jun 2011	SE100700.015	Soil	09 Jun 2011
Parameter	Units	LOR																		

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	74	-	-	95	-	-	-	-	-	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-
TRH C15-C28	mg/kg	50	<50	-	-	<50	-	-	-	-	-	-	-	-	-	-	-	-
TRH C29-C36	mg/kg	50	<50	-	-	<50	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	<0.05	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-
Total PAH	mg/kg	1.75	<1.8†	-	-	<1.8†	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	109	-	-	73	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	98	-	-	82	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	83	-	-	81	-	-	-	-	-	-	-	-	-	-	-	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.011	SE100700.012	SE100700.013	SE100700.014	SE100700.015
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	09 Jun 2011				
Sample Name	BH13 4.0	BH13 5.5	BH6 2.0	BH6 2.5	BH6 4.0

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phenanthrene	mg/kg	0.5	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-	-

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-	-
Carbofenothonion	mg/kg	1	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-	-
EPN*	mg/kg	1	-	-	-	-	-	-
Ethion	mg/kg	1	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-	-
Famphur (Famaphos)	mg/kg	1	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-	-	-
Methidathion	mg/kg	1	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-	-	-
Phorate	mg/kg	1	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.011 Soil 09 Jun 2011 BH13 4.0	SE100700.012 Soil 09 Jun 2011 BH13 5.5	SE100700.013 Soil 09 Jun 2011 BH6 2.0	SE100700.014 Soil 09 Jun 2011 BH6 2.5	SE100700.015 Soil 09 Jun 2011 BH6 4.0
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Full 8270 SVOC in Soil Method: AN420 (continued)

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.011 Soil 09 Jun 2011 BH13 4.0	SE100700.012 Soil 09 Jun 2011 BH13 5.5	SE100700.013 Soil 09 Jun 2011 BH6 2.0	SE100700.014 Soil 09 Jun 2011 BH6 2.5	SE100700.015 Soil 09 Jun 2011 BH6 4.0
Pirimiphos-methyl	mg/kg	1	-	-	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-	-
Sulfotepp	mg/kg	1	-	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-	-

PCB UPAC(7) Congeners

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.011 Soil 09 Jun 2011 BH13 4.0	SE100700.012 Soil 09 Jun 2011 BH13 5.5	SE100700.013 Soil 09 Jun 2011 BH6 2.0	SE100700.014 Soil 09 Jun 2011 BH6 2.5	SE100700.015 Soil 09 Jun 2011 BH6 4.0
PCB Congener C28	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.011 Soil 09 Jun 2011 BH13 4.0	SE100700.012 Soil 09 Jun 2011 BH13 5.5	SE100700.013 Soil 09 Jun 2011 BH6 2.0	SE100700.014 Soil 09 Jun 2011 BH6 2.5	SE100700.015 Soil 09 Jun 2011 BH6 4.0
Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.011	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 4.0	Sample Number SE100700.012	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 5.5	Sample Number SE100700.013	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.0	Sample Number SE100700.014	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.5	Sample Number SE100700.015	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 4.0
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-piperidine (NPPIP)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.011	SE100700.012	SE100700.013	SE100700.014	SE100700.015
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	09 Jun 2011				
Sample Name	BH13 4.0	BH13 5.5	BH6 2.0	BH6 2.5	BH6 4.0

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	-	8.3	7.6	-	-
PHfox	pH Units	-	-	3.4	5.1	-	-
Reaction*	No unit	-	-	XXX	X	-	-
pH Difference*	pH Units	-10	-	4.9	2.5	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	180	-	8	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	-	<0.3	-	-
Chromium, Cr	mg/kg	0.3	17	-	6.4	-	-
Copper, Cu	mg/kg	0.5	11	-	9.3	-	-
Lead, Pb	mg/kg	1	49	-	15	-	-
Nickel, Ni	mg/kg	0.5	11	-	1.2	-	-
Zinc, Zn	mg/kg	0.5	18	-	12	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.011 Soil 09 Jun 2011 BH13 4.0	SE100700.012 Soil 09 Jun 2011 BH13 5.5	SE100700.013 Soil 09 Jun 2011 BH6 2.0	SE100700.014 Soil 09 Jun 2011 BH6 2.5	SE100700.015 Soil 09 Jun 2011 BH6 4.0
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Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.21	-	0.41	-	-	-
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	-	No	No	No	No
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Moisture Content Method: AN234

% Moisture	%	0.5	28	18	21	-	-	-
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	0.04	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.011	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 4.0	Sample Number SE100700.012	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 5.5	Sample Number SE100700.013	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.0	Sample Number SE100700.014	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.5	Sample Number SE100700.015	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 4.0
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420 (continued)

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Parameter	Units	LOR	Sample Number SE100700.011	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 4.0	Sample Number SE100700.012	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH13 5.5	Sample Number SE100700.013	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.0	Sample Number SE100700.014	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 2.5	Sample Number SE100700.015	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 4.0
Arsenic, As	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cadmium, Cd	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chromium, Cr	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Copper, Cu	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lead, Pb	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nickel, Ni	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Zinc, Zn	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Parameter	Units	LOR	Sample Number SE100700.016	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 6.0	Sample Number SE100700.017	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 9.5	Sample Number SE100700.018	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 14.0	Sample Number SE100700.019	Sample Matrix Water	Sample Date 09 Jun 2011	Sample Name QC08	Sample Number SE100700.020	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 1.1-1.3
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10†
Chloromethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10†
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5†
Bromomethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5†
Chloroethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5†
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5†
Iodomethane	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50†
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0†
Allyl chloride	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Bromochloromethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Dibromomethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10†
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.016 Soil 09 Jun 2011 BH6 6.0	SE100700.017 Soil 09 Jun 2011 BH6 9.5	SE100700.018 Soil 09 Jun 2011 BH6 14.0	SE100700.019 Water 09 Jun 2011 QC08	SE100700.020 Soil 10 Jun 2011 BH10 1.1-1.3
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VOC's in Soil Method: AN433/AN434 (continued)

1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-	<1.0†
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	<10†
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-	<1.0†
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-	<1.0†

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
Bromobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-	<1.0†
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	<1.0†

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-	-	<1.0†
Toluene	mg/kg	0.1	-	-	-	-	-	<1.0†
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
m/p-xylene	mg/kg	0.2	-	-	-	-	-	<2.0†
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-	<1.0†
o-xylene	mg/kg	0.1	-	-	-	-	-	<1.0†
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-	<1.0†
n-propylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-	<1.0†
n-butylbenzene	mg/kg	0.1	-	-	-	-	-	<1.0†



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.016	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 6.0	Sample Number	SE100700.017	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 9.5	Sample Number	SE100700.018	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 14.0	Sample Number	SE100700.019	Sample Matrix	Water	Sample Date	09 Jun 2011	Sample Name	QC08	Sample Number	SE100700.020	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH10 1.1-1.3
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100†
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0†
Vinyl acetate	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100†
MEK (2-butanone)	mg/kg	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100†
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10†
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50†

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0†
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	103
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	116
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3.0†
Total BTEX*	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†
Bromoform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0†

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20
Benzene	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	1	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Xylenes	mg/kg	0.3	<0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total BTEX*	mg/kg	2.7	<2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.016	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 6.0	Sample Number	SE100700.017	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 9.5	Sample Number	SE100700.018	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 14.0	Sample Number	SE100700.019	Sample Matrix	Water	Sample Date	09 Jun 2011	Sample Name	QC08	Sample Number	SE100700.020	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH10 1.1-1.3
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Parameter

Units

LOR

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	-	-	-	-	22
TRH C15-C28	mg/kg	50	<50	-	-	-	-	1100
TRH C29-C36	mg/kg	50	<50	-	-	-	-	510

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	<0.1	-	-	5.0
Acenaphthylene	mg/kg	0.1	<0.1	-	<0.1	-	-	0.6
Acenaphthene	mg/kg	0.1	<0.1	-	<0.1	-	-	7.3
Fluorene	mg/kg	0.1	<0.1	-	<0.1	-	-	9.0
Phenanthrene	mg/kg	0.1	<0.1	-	<0.1	-	-	52
Anthracene	mg/kg	0.1	<0.1	-	<0.1	-	-	17
Fluoranthene	mg/kg	0.1	<0.1	-	<0.1	-	-	51
Pyrene	mg/kg	0.1	<0.1	-	<0.1	-	-	51
Benzo(a)anthracene	mg/kg	0.1	<0.1	-	<0.1	-	-	30
Chrysene	mg/kg	0.1	<0.1	-	<0.1	-	-	17
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	-	<0.1	-	-	24
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	<0.1	-	-	10
Benzo(a)pyrene	mg/kg	0.05	<0.05	-	<0.05	-	-	20
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	<0.1	-	-	8.8
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	<0.1	-	-	2.4
Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	<0.1	-	-	9.6
Total PAH	mg/kg	1.75	<1.8†	-	<1.8†	-	-	280

Surrogates

d5-nitrobenzene (Surrogate)	%	-	100	-	109	-	-	107
2-fluorobiphenyl (Surrogate)	%	-	89	-	96	-	-	120
d14-p-terphenyl (Surrogate)	%	-	83	-	81	-	-	98

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-	-	-
Phenanthrene	mg/kg	0.5	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-	-

Sample Number	SE100700.016	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 6.0	Sample Number	SE100700.017	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 9.5	Sample Number	SE100700.018	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 14.0	Sample Number	SE100700.019	Sample Matrix	Water	Sample Date	09 Jun 2011	Sample Name	QC08	Sample Number	SE100700.020	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH10 1.1-1.3
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Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbofenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPN*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Famphur (Famophos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenchlorphos (Ronnel)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methodathion	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-methyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfotepp	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.016	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 6.0	Sample Number SE100700.017	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 9.5	Sample Number SE100700.018	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 14.0	Sample Number SE100700.019	Sample Matrix Water	Sample Date 09 Jun 2011	Sample Name QC08	Sample Number SE100700.020	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 1.1-1.3
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Full 8270 SVOC in Soil Method: AN420 (continued)

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.016	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 6.0	Sample Number	SE100700.017	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 9.5	Sample Number	SE100700.018	Sample Matrix	Soil	Sample Date	09 Jun 2011	Sample Name	BH6 14.0	Sample Number	SE100700.019	Sample Matrix	Water	Sample Date	09 Jun 2011	Sample Name	QC08	Sample Number	SE100700.020	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH10 1.1-1.3
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Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phenacetin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.016	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 6.0	Sample Number SE100700.017	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 9.5	Sample Number SE100700.018	Sample Matrix Soil	Sample Date 09 Jun 2011	Sample Name BH6 14.0	Sample Number SE100700.019	Sample Matrix Water	Sample Date 09 Jun 2011	Sample Name QC08	Sample Number SE100700.020	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 1.1-1.3
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Full 8270 SVOC in Soil Method: AN420 (continued)

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

pHf	pH Units	-	7.2	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-
pHfox	pH Units	-	5.9	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reaction*	No unit	-	XXX	XXX	-	-	-	-	-	-	-	-	-	-	-	-	-
pH Difference*	pH Units	-10	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	25	-	-	3	-	-	4
Cadmium, Cd	mg/kg	0.3	0.6	-	-	<0.3	-	-	<0.3
Chromium, Cr	mg/kg	0.3	13	-	-	13	-	-	11
Copper, Cu	mg/kg	0.5	1.2	-	-	16	-	-	44
Lead, Pb	mg/kg	1	12	-	-	12	-	-	260
Nickel, Ni	mg/kg	0.5	1.3	-	-	13	-	-	7.7
Zinc, Zn	mg/kg	0.5	7.9	-	-	22	-	-	72

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	<0.05	-	-	<0.05	-	-	0.13
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	-	-	-	-	-	No
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Moisture Content Method: AN234

% Moisture	%	0.5	18	24	21	-	-	8.9
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-	-	-	<0.04	-
Benzene	µg/L	0.5	-	-	-	-	<0.5	-
Toluene	µg/L	0.5	-	-	-	-	<0.5	-
Ethylbenzene	µg/L	0.5	-	-	-	-	<0.5	-
m/p-xylene	µg/L	1	-	-	-	-	<1	-
o-xylene	µg/L	0.5	-	-	-	-	<0.5	-
Total BTEX*	µg/L	3	-	-	-	-	<3	-
Total Xylenes*	µg/L	1.5	-	-	-	-	<2†	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	78	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Sample Number	Sample Matrix	Sample Date	Sample Name	SE100700.016	SE100700.017	SE100700.018	SE100700.019	SE100700.020
		Soil	09 Jun 2011	BH6 6.0				Water	Soil
					09 Jun 2011	09 Jun 2011	09 Jun 2011	09 Jun 2011	10 Jun 2011
					BH6 9.5	BH6 14.0	BH6 14.0	QC08	BH10 1.1-1.3

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

Parameter	Units	LOR							
TRH C10-C14	µg/L	100	-	-	-	-	<100	-	-
TRH C15-C28	µg/L	200	-	-	-	-	<200	-	-
TRH C29-C36	µg/L	200	-	-	-	-	<200	-	-

Surrogates

Parameter	Units								
TRH (Surrogate)	%	-	-	-	-	-	-	-	-

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	<0.1	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	<0.1	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	<0.1	-	-
Fluorene	µg/L	0.1	-	-	-	-	<0.1	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	<0.1	-	-
Anthracene	µg/L	0.1	-	-	-	-	<0.1	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	<0.1	-	-
Pyrene	µg/L	0.1	-	-	-	-	<0.1	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	<0.1	-	-
Chrysene	µg/L	0.1	-	-	-	-	<0.1	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	<0.1	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	<0.1	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	<0.1	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	<0.1	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	<0.1	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	<0.1	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	<1	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	101	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	99	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	75	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	<1	-	-
Cadmium, Cd	µg/L	0.1	-	-	-	-	<0.1	-	-
Chromium, Cr	µg/L	1	-	-	-	-	<1	-	-
Copper, Cu	µg/L	1	-	-	-	-	<1	-	-
Lead, Pb	µg/L	1	-	-	-	-	<1	-	-
Nickel, Ni	µg/L	1	-	-	-	-	<1	-	-
Zinc, Zn	µg/L	1	-	-	-	-	65	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	<0.0001	-	-
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ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.021	SE100700.022	SE100700.023	SE100700.024	SE100700.025
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	10 Jun 2011				
Sample Name	BH10 2.0	BH10 3.0	BH10 4.0	BH10 8.0	BH12 0.5

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-
Dichlormethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-
o-xylene	mg/kg	0.1	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.021 Soil 10 Jun 2011 BH10 2.0	SE100700.022 Soil 10 Jun 2011 BH10 3.0	SE100700.023 Soil 10 Jun 2011 BH10 4.0	SE100700.024 Soil 10 Jun 2011 BH10 8.0	SE100700.025 Soil 10 Jun 2011 BH12 0.5
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VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	<20	-	-	-
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-	-
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-	-
m/p-xylene	mg/kg	1	<1	<1	<1	-	-	-
o-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	-	-	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-	-	-
Total BTEX*	mg/kg	2.7	<2.7	<2.7	<2.7	-	-	-



ANALYTICAL REPORT

SE100700 R0

	Sample Number	SE100700.021	SE100700.022	SE100700.023	SE100700.024	SE100700.025
	Sample Matrix	Soil	Soil	Soil	Soil	Soil
	Sample Date	10 Jun 2011				
	Sample Name	BH10 2.0	BH10 3.0	BH10 4.0	BH10 8.0	BH12 0.5

Parameter

Units

LOR

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	72	76	71	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	<20	-	-
TRH C15-C28	mg/kg	50	590	<50	120	-	-
TRH C29-C36	mg/kg	50	220	<50	52	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	-	<0.1	0.7	-	<0.1
Acenaphthylene	mg/kg	0.1	-	<0.1	<0.1	-	0.1
Acenaphthene	mg/kg	0.1	-	<0.1	1.0	-	<0.1
Fluorene	mg/kg	0.1	-	<0.1	1.2	-	<0.1
Phenanthrene	mg/kg	0.1	-	0.1	6.7	-	0.5
Anthracene	mg/kg	0.1	-	<0.1	2.3	-	0.2
Fluoranthene	mg/kg	0.1	-	0.2	6.0	-	1.1
Pyrene	mg/kg	0.1	-	0.1	5.6	-	1.2
Benzo(a)anthracene	mg/kg	0.1	-	<0.1	3.2	-	0.8
Chrysene	mg/kg	0.1	-	<0.1	1.7	-	0.4
Benzo(b)fluoranthene	mg/kg	0.1	-	<0.1	2.8	-	0.8
Benzo(k)fluoranthene	mg/kg	0.1	-	<0.1	0.8	-	0.3
Benzo(a)pyrene	mg/kg	0.05	-	<0.05	2.1	-	0.63
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	<0.1	0.9	-	0.3
Dibenzo(a&h)anthracene	mg/kg	0.1	-	<0.1	0.2	-	<0.1
Benzo(ghi)perylene	mg/kg	0.1	-	<0.1	0.9	-	0.3
Total PAH	mg/kg	1.75	-	<1.81	32	-	5.6

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	110	101	-	88
2-fluorobiphenyl (Surrogate)	%	-	-	97	104	-	82
d14-p-terphenyl (Surrogate)	%	-	-	83	87	-	84

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	-	-	-	-
Acenaphthylene	mg/kg	0.5	-	-	-	-	-
Anthracene	mg/kg	0.5	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	-	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	-	-	-	-
Chrysene	mg/kg	0.5	-	-	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	-	-	-	-
Fluoranthene	mg/kg	0.5	-	-	-	-	-
Fluorene	mg/kg	0.5	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	-	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	-	-	-	-
Naphthalene	mg/kg	0.5	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.021	SE100700.022	SE100700.023	SE100700.024	SE100700.025
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	10 Jun 2011				
Sample Name	BH10 2.0	BH10 3.0	BH10 4.0	BH10 8.0	BH12 0.5

Parameter

Units

LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phenanthrene	mg/kg	0.5	-	-	-	-	-	-
Pyrene	mg/kg	0.5	-	-	-	-	-	-
2-acetylaminofluorene	mg/kg	2	-	-	-	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	-	-	-	-	-
3-methylcholanthrene	mg/kg	1	-	-	-	-	-	-

OCs

Aldrin	mg/kg	0.5	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	-	-	-	-	-
Carbofenothonion	mg/kg	1	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	-	-	-	-	-
EPN*	mg/kg	1	-	-	-	-	-	-
Ethion	mg/kg	1	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	-	-	-	-	-
Famphur (Famaphos)	mg/kg	1	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	-	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	-	-	-	-	-
Fenthion	mg/kg	1	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	-	-	-	-	-
Methidathion	mg/kg	1	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	-	-	-	-	-
Phorate	mg/kg	1	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.021 Soil 10 Jun 2011 BH10 2.0	SE100700.022 Soil 10 Jun 2011 BH10 3.0	SE100700.023 Soil 10 Jun 2011 BH10 4.0	SE100700.024 Soil 10 Jun 2011 BH10 8.0	SE100700.025 Soil 10 Jun 2011 BH12 0.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Pirimiphos-methyl	mg/kg	1	-	-	-	-	-	-
Profenofos	mg/kg	1	-	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	-	-	-	-	-
Sulfotepp	mg/kg	1	-	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	-	-	-	-	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.021 Soil 10 Jun 2011 BH10 2.0	SE100700.022 Soil 10 Jun 2011 BH10 3.0	SE100700.023 Soil 10 Jun 2011 BH10 4.0	SE100700.024 Soil 10 Jun 2011 BH10 8.0	SE100700.025 Soil 10 Jun 2011 BH12 0.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	-	-	-	-	-
Phenacetin	mg/kg	1	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100700.021 Soil 10 Jun 2011 BH10 2.0	SE100700.022 Soil 10 Jun 2011 BH10 3.0	SE100700.023 Soil 10 Jun 2011 BH10 4.0	SE100700.024 Soil 10 Jun 2011 BH10 8.0	SE100700.025 Soil 10 Jun 2011 BH12 0.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	-	-	-	-	-
Safrole	mg/kg	0.5	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	-	-	-	-	-
Thionazin	mg/kg	1	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	-	-	-	-	-
Phenol	mg/kg	0.5	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	-	-	-	-	-

Surrogates

d5-phenol (Surrogate)	%	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	-	6.8	-	6.7	-
PHfox	pH Units	-	-	6.5	-	4.9	-
Reaction*	No unit	-	-	X	-	X	-
pH Difference*	pH Units	-10	-	0.3	-	1.9	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	-	8	4	-	5
Cadmium, Cd	mg/kg	0.3	-	<0.3	<0.3	-	<0.3
Chromium, Cr	mg/kg	0.3	-	13	13	-	13
Copper, Cu	mg/kg	0.5	-	4.9	35	-	13
Lead, Pb	mg/kg	1	-	19	150	-	34
Nickel, Ni	mg/kg	0.5	-	1.2	4.7	-	9.3
Zinc, Zn	mg/kg	0.5	-	18	110	-	83



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number	SE100700.021	SE100700.022	SE100700.023	SE100700.024	SE100700.025
			Sample Matrix	Soil	Soil	Soil	Soil	Soil
			Sample Date	10 Jun 2011				
			Sample Name	BH10 2.0	BH10 3.0	BH10 4.0	BH10 8.0	BH12 0.5

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	-	<0.05	0.22	-	-	0.10
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	No	-	-	-	No
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Moisture Content Method: AN234

% Moisture	%	0.5	13	17	16	16	9.9
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	µg/L	0.04	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.021	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 2.0	Sample Number SE100700.022	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 3.0	Sample Number SE100700.023	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 4.0	Sample Number SE100700.024	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 8.0	Sample Number SE100700.025	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 0.5
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420 (continued)

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Parameter	Units	LOR	Sample Number SE100700.021	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 2.0	Sample Number SE100700.022	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 3.0	Sample Number SE100700.023	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 4.0	Sample Number SE100700.024	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH10 8.0	Sample Number SE100700.025	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 0.5
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Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Parameter	Units	LOR	Sample Number SE100700.026	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.0	Sample Number SE100700.027	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.5	Sample Number SE100700.028	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 2.0	Sample Number SE100700.029	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 3.0	Sample Number SE100700.030	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 4.5
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iodomethane	mg/kg	5	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.026	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.0	Sample Number SE100700.027	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.5	Sample Number SE100700.028	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 2.0	Sample Number SE100700.029	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 3.0	Sample Number SE100700.030	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 4.5
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VOC's in Soil Method: AN433/AN434 (continued)

1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.026	SE100700.027	SE100700.028	SE100700.029	SE100700.030
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	10 Jun 2011				
Sample Name	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH12 4.5

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	<0.1	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	<10	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	<0.5	-	-	-	-
Vinyl acetate	mg/kg	10	-	<10	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	<10	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	<5	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	<0.1	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	<0.5	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	87	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	103	-	-	-	-
d8-toluene (Surrogate)	%	-	-	98	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	86	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	<0.3	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	<0.1	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	<0.1	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	<0.1	-	-	-	-
Bromoform	mg/kg	0.1	-	<0.1	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	<20	-	-	-
Benzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Toluene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
m/p-xylene	mg/kg	1	<1	-	<1	-	-	-
o-xylene	mg/kg	0.5	<0.5	-	<0.5	-	-	-
Total Xylenes	mg/kg	0.3	<0.3	-	<0.3	-	-	-
Total BTEX*	mg/kg	2.7	<2.7	-	<2.7	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	71	63	66	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.026	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 1.0	Sample Number	SE100700.027	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 1.5	Sample Number	SE100700.028	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 2.0 <th>Sample Number</th> <td>SE100700.029</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>10 Jun 2011</td> <th>Sample Name</th> <td>BH12 3.0</td> <th>Sample Number</th> <td>SE100700.030</td> <th>Sample Matrix</th> <td>Soil</td> <th>Sample Date</th> <td>10 Jun 2011</td> <th>Sample Name</th> <td>BH12 4.5</td>	Sample Number	SE100700.029	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 3.0	Sample Number	SE100700.030	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 4.5
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Parameter

Units

LOR

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	<20	-	-
TRH C15-C28	mg/kg	50	190	130	<50	-	-
TRH C29-C36	mg/kg	50	150	100	<50	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	0.4	0.3	<0.1	<0.1	-
Acenaphthylene	mg/kg	0.1	0.7	0.4	<0.1	<0.1	-
Acenaphthene	mg/kg	0.1	0.6	0.4	<0.1	<0.1	-
Fluorene	mg/kg	0.1	0.6	0.3	<0.1	<0.1	-
Phenanthrene	mg/kg	0.1	3.2	1.7	<0.1	<0.1	-
Anthracene	mg/kg	0.1	1.3	0.5	<0.1	<0.1	-
Fluoranthene	mg/kg	0.1	3.9	2.5	0.1	<0.1	-
Pyrene	mg/kg	0.1	6.3	3.8	0.2	<0.1	-
Benzo(a)anthracene	mg/kg	0.1	3.9	2.3	<0.1	<0.1	-
Chrysene	mg/kg	0.1	2.0	1.2	<0.1	<0.1	-
Benzo(b)fluoranthene	mg/kg	0.1	3.7	2.5	<0.1	<0.1	-
Benzo(k)fluoranthene	mg/kg	0.1	1.1	0.8	<0.1	<0.1	-
Benzo(a)pyrene	mg/kg	0.05	3.2	1.9	<0.05	<0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.4	0.8	<0.1	<0.1	-
Dibenzo(a&h)anthracene	mg/kg	0.1	0.3	0.2	<0.1	<0.1	-
Benzo(ghi)perylene	mg/kg	0.1	1.7	0.9	<0.1	<0.1	-
Total PAH	mg/kg	1.75	29	17	<1.8†	<1.8†	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	109	84	107	105	-
2-fluorobiphenyl (Surrogate)	%	-	112	88	96	96	-
d14-p-terphenyl (Surrogate)	%	-	88	92	83	84	-

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	-	0.9	-	-	-
Acenaphthylene	mg/kg	0.5	-	<0.5	-	-	-
Anthracene	mg/kg	0.5	-	1.2	-	-	-
Benzo(a)anthracene	mg/kg	0.5	-	3.8	-	-	-
Benzo(b&k)fluoranthene	mg/kg	1	-	8	-	-	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.5	-	2.0	-	-	-
Benzo(a)pyrene	mg/kg	0.5	-	5.2	-	-	-
Chrysene	mg/kg	0.5	-	3.8	-	-	-
Dibenzo(ah)anthracene	mg/kg	0.5	-	<0.5	-	-	-
Fluoranthene	mg/kg	0.5	-	6.3	-	-	-
Fluorene	mg/kg	0.5	-	0.7	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	-	2.1	-	-	-
1-methylnaphthalene	mg/kg	0.5	-	<0.5	-	-	-
2-methylnaphthalene	mg/kg	0.5	-	<0.5	-	-	-
Naphthalene	mg/kg	0.5	-	0.6	-	-	-
Phenanthrene	mg/kg	0.5	-	3.9	-	-	-
Pyrene	mg/kg	0.5	-	9.8	-	-	-
2-acetylaminofluorene	mg/kg	2	-	<2	-	-	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	-	<0.5	-	-	-
3-methylcholanthrene	mg/kg	1	-	<1	-	-	-

Sample Number	SE100700.026	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 1.0	Sample Number	SE100700.027	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 1.5	Sample Number	SE100700.028	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 2.0	Sample Number	SE100700.029	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 3.0	Sample Number	SE100700.030	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	BH12 4.5
Parameter	Units	LOR																																					

Full 8270 SVOC in Soil Method: AN420 (continued)

OCs

Aldrin	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-BHC	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-BHC	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delta-BHC	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-BHC (Lindane)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDD	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDE	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p,p-DDT	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dieldrin	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-endosulfan	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beta-endosulfan	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isodrin	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alpha-chlordane	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gamma-chlordane	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos ethyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbofenthion	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos-methyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Co-Ral (Coumaphos)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorvos	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demeton-S-methyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethoate	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disulfoton (Di-syston)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPN*	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethion	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Famphur (Famophos)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenamiphos (Phenamiphos)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenchlorophos (Ronnel)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenitrothion	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenthion	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malathion (Maldison)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methodathion	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mevinphos-cis/trans	mg/kg	2	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o,o,o-triethyl phosphorothioate	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion ethyl (Parathion)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parathion methyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phorate	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-ethyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimiphos-methyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Profenofos	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prothiophos (Tokuthion)*	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfotepp	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameter	Units	LOR	Sample Number SE100700.026	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.0	Sample Number SE100700.027	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.5	Sample Number SE100700.028	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 2.0	Sample Number SE100700.029	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 3.0	Sample Number SE100700.030	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 4.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C52	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C101	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C118	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C138	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C153	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB Congener C180	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloroethane	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachloropropene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloroethane	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2-Chloronaphthalene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diocyl phthalate	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Carbamates

Carbofuran	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbaryl	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-piperidine (NPIP)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-amino biphenyl	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dinitrobenzene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dinitrotoluene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isophorone	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
p-(dimethylamino) azobenzene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameter	Units	LOR	Sample Number SE100700.026	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.0	Sample Number SE100700.027	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.5	Sample Number SE100700.028	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 2.0	Sample Number SE100700.029	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 3.0	Sample Number SE100700.030	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 4.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phenacetin	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Anilines and Amines

Aniline	mg/kg	3	-	<3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloroaniline	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitroaniline	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-nitroaniline	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitroaniline	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphenylamine	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-toluidine	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-nitro-o-toluidine	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-naphthylamine	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-naphthylamine	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Other SVOCs

Methyl methanesulfonate	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl methanesulfonate	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzyl alcohol	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safrole	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 1	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isosafrole Isomer 2	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-naphthoquinone	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thionazin	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-methyl phenol (o-cresol)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,6-dichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-dimethyl phenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-nitrophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-nitrophenol	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.026	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.0	Sample Number SE100700.027	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 1.5	Sample Number SE100700.028	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 2.0	Sample Number SE100700.029	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 3.0	Sample Number SE100700.030	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name BH12 4.5
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Full 8270 SVOC in Soil Method: AN420 (continued)

Surrogates

d5-phenol (Surrogate)	%	-	-	-	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	-	-	-	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

pHf	pH Units	-	-	-	-	-	-	6.2	7.9
pHfox	pH Units	-	-	-	-	-	-	4.2	2.7
Reaction*	No unit	-	-	-	-	-	-	X	XXXX
pH Difference*	pH Units	-10	-	-	-	-	-	2.1	5.2

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	<3	6	5	8	-	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	0.4	<0.3	<0.3	-	-	-
Chromium, Cr	mg/kg	0.3	13	14	11	16	-	-	-
Copper, Cu	mg/kg	0.5	39	36	3.8	5.1	-	-	-
Lead, Pb	mg/kg	1	31	240	24	13	-	-	-
Nickel, Ni	mg/kg	0.5	13	7.8	1.0	1.7	-	-	-
Zinc, Zn	mg/kg	0.5	64	92	380	520	-	-	-

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.11	0.19	<0.05	<0.05	-	-	-
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	No	-	-	-	-	-
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Moisture Content Method: AN234

% Moisture	%	0.5	5.5	11	20	18	21	-	-
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-	-	-	-	-	-
Benzene	µg/L	0.5	-	-	-	-	-	-	-
Toluene	µg/L	0.5	-	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5	-	-	-	-	-	-	-
m/p-xylene	µg/L	1	-	-	-	-	-	-	-
o-xylene	µg/L	0.5	-	-	-	-	-	-	-
Total BTEX*	µg/L	3	-	-	-	-	-	-	-
Total Xylenes*	µg/L	1.5	-	-	-	-	-	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.026	SE100700.027	SE100700.028	SE100700.029	SE100700.030
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	10 Jun 2011				
Sample Name	BH12 1.0	BH12 1.5	BH12 2.0	BH12 3.0	BH12 4.5

Parameter	Units	LOR						
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TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-	-	-	-	-
TRH C15-C28	µg/L	200	-	-	-	-	-	-
TRH C29-C36	µg/L	200	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-	-	-
Acenaphthene	µg/L	0.1	-	-	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-	-	-
Total PAH (18)*	µg/L	1	-	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-	-	-	-	-
Cadmium, Cd	µg/L	0.1	-	-	-	-	-	-
Chromium, Cr	µg/L	1	-	-	-	-	-	-
Copper, Cu	µg/L	1	-	-	-	-	-	-
Lead, Pb	µg/L	1	-	-	-	-	-	-
Nickel, Ni	µg/L	1	-	-	-	-	-	-
Zinc, Zn	µg/L	1	-	-	-	-	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-	-	-	-	-
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Parameter	Units	LOR	Sample Number SE100700.031	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC09	Sample Number SE100700.032	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC10
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	<0.1	<1.0†
1,2-dichloropropane	mg/kg	0.1	<0.1	<1.0†
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<1.0†
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<1.0†
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<1.0†

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<10†
Chloromethane	mg/kg	1	<1	<10†
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.5†
Bromomethane	mg/kg	1	<1	<5†
Chloroethane	mg/kg	1	<1	<5†
Trichlorofluoromethane	mg/kg	1	<1	<5†
Iodomethane	mg/kg	5	<5	<50†
1,1-dichloroethene	mg/kg	0.1	<0.1	<1.0†
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<5.0†
Allyl chloride	mg/kg	0.1	<0.1	<1.0†
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<1.0†
1,1-dichloroethane	mg/kg	0.1	<0.1	<1.0†
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<1.0†
Bromochloromethane	mg/kg	0.1	<0.1	<1.0†
1,2-dichloroethane	mg/kg	0.1	<0.1	<1.0†
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<1.0†
1,1-dichloropropene	mg/kg	0.1	<0.1	<1.0†
Carbon tetrachloride	mg/kg	0.1	<0.1	<1.0†
Dibromomethane	mg/kg	0.1	<0.1	<1.0†
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<1.0†
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<1.0†
1,3-dichloropropane	mg/kg	0.1	<0.1	<1.0†
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<1.0†
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<1.0†
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<10†
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<1.0†
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<1.0†
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<10†
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<1.0†
Hexachlorobutadiene	mg/kg	0.1	<0.1	<1.0†

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	<0.1	<1.0†
Bromobenzene	mg/kg	0.1	<0.1	<1.0†
2-chlorotoluene	mg/kg	0.1	<0.1	<1.0†
4-chlorotoluene	mg/kg	0.1	<0.1	<1.0†
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<1.0†
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<1.0†
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<1.0†
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<1.0†
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<1.0†

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	<0.1	<1.0†
Toluene	mg/kg	0.1	<0.1	<1.0†
Ethylbenzene	mg/kg	0.1	<0.1	<1.0†
m/p-xylene	mg/kg	0.2	<0.2	<2.0†
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<1.0†
o-xylene	mg/kg	0.1	<0.1	<1.0†
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<1.0†
n-propylbenzene	mg/kg	0.1	<0.1	<1.0†



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.031	SE100700.032
Sample Matrix	Soil	Soil
Sample Date	10 Jun 2011	10 Jun 2011
Sample Name	QC09	QC10

Parameter Units LOR

VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<1.0†
tert-butylbenzene	mg/kg	0.1	<0.1	<1.0†
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<1.0†
sec-butylbenzene	mg/kg	0.1	<0.1	<1.0†
p-isopropyltoluene	mg/kg	0.1	<0.1	<1.0†
n-butylbenzene	mg/kg	0.1	<0.1	<1.0†

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	<0.1	<1.0†
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	<10	<100†
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	<0.5	<5.0†
Vinyl acetate	mg/kg	10	<10	<100†
MEK (2-butanone)	mg/kg	10	<10	<100†
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<10†
2-hexanone (MBK)	mg/kg	5	<5	<50†

Polycyclic VOCs

Naphthalene	mg/kg	0.1	<0.1	4.2
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	<0.5	<5.0†
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	86	112
d4-1,2-dichloroethane (Surrogate)	%	-	103	123
d8-toluene (Surrogate)	%	-	100	88
Bromofluorobenzene (Surrogate)	%	-	85	94

Totals

Total Xylenes*	mg/kg	0.3	<0.3	<3.0†
Total BTEX*	mg/kg	-	-	-
Total VOC*	mg/kg	24	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	<0.1	<1.0†
Bromodichloromethane	mg/kg	0.1	<0.1	<1.0†
Chlorodibromomethane	mg/kg	0.1	<0.1	<1.0†
Bromoform	mg/kg	0.1	<0.1	<1.0†

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20
Benzene	mg/kg	0.1	-	-
Toluene	mg/kg	0.1	-	-
Ethylbenzene	mg/kg	0.1	-	-
m/p-xylene	mg/kg	1	-	-
o-xylene	mg/kg	0.5	-	-
Total Xylenes	mg/kg	0.3	-	-
Total BTEX*	mg/kg	2.7	-	-

Parameter	Units	LOR	Sample Number SE100700.031	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC09	Sample Number SE100700.032	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC10
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Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	68	75
Dibromofluoromethane (Surrogate)	%	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-
d8-toluene (Surrogate)	%	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	50	89	190
TRH C29-C36	mg/kg	50	54	93

Surrogates

TRH (Surrogate)	%	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	0.3	12
Acenaphthylene	mg/kg	0.1	0.4	0.8
Acenaphthene	mg/kg	0.1	0.4	21
Fluorene	mg/kg	0.1	0.3	23
Phenanthrene	mg/kg	0.1	2.0	120
Anthracene	mg/kg	0.1	0.7	38
Fluoranthene	mg/kg	0.1	2.9	97
Pyrene	mg/kg	0.1	4.4	91
Benzo(a)anthracene	mg/kg	0.1	2.6	57
Chrysene	mg/kg	0.1	1.4	26
Benzo(b)fluoranthene	mg/kg	0.1	3.0	38
Benzo(k)fluoranthene	mg/kg	0.1	0.8	9.9
Benzo(a)pyrene	mg/kg	0.05	2.2	30
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.0	16
Dibenzo(a&h)anthracene	mg/kg	0.1	0.3	3.1
Benzo(ghi)perylene	mg/kg	0.1	1.1	18
Total PAH	mg/kg	1.75	20	550

Surrogates

d5-nitrobenzene (Surrogate)	%	-	82	110
2-fluorobiphenyl (Surrogate)	%	-	90	120
d14-p-terphenyl (Surrogate)	%	-	94	110

Full 8270 SVOC in Soil Method: AN420

PAHs

Acenaphthene	mg/kg	0.5	1.0	-
Acenaphthylene	mg/kg	0.5	0.6	-
Anthracene	mg/kg	0.5	1.5	-
Benzo(a)anthracene	mg/kg	0.5	4.9	-
Benzo(b&k)fluoranthene	mg/kg	1	10	-
Benzo(b)fluoranthene	mg/kg	0.5	-	-
Benzo(k)fluoranthene	mg/kg	0.5	-	-
Benzo(ghi)perylene	mg/kg	0.5	2.6	-
Benzo(a)pyrene	mg/kg	0.5	6.6	-
Chrysene	mg/kg	0.5	4.9	-
Dibenzo(ah)anthracene	mg/kg	0.5	0.7	-
Fluoranthene	mg/kg	0.5	7.8	-
Fluorene	mg/kg	0.5	0.8	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.5	2.6	-
1-methylnaphthalene	mg/kg	0.5	<0.5	-
2-methylnaphthalene	mg/kg	0.5	<0.5	-
Naphthalene	mg/kg	0.5	0.7	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.031	SE100700.032
Sample Matrix	Soil	Soil
Sample Date	10 Jun 2011	10 Jun 2011
Sample Name	QC09	QC10

Parameter

Units LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Phenanthrene	mg/kg	0.5	4.8	-
Pyrene	mg/kg	0.5	12	-
2-acetylaminofluorene	mg/kg	2	<2	-
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	-
3-methylcholanthrene	mg/kg	1	<1	-

OCs

Aldrin	mg/kg	0.5	<0.5	-
Alpha-BHC	mg/kg	0.5	<0.5	-
Beta-BHC	mg/kg	0.5	<0.5	-
Delta-BHC	mg/kg	0.5	<0.5	-
Gamma-BHC (Lindane)	mg/kg	0.5	<0.5	-
p,p-DDD	mg/kg	0.5	<0.5	-
p,p-DDE	mg/kg	0.5	<0.5	-
p,p-DDT	mg/kg	0.5	<0.5	-
Dieldrin	mg/kg	0.5	<0.5	-
Alpha-endosulfan	mg/kg	0.5	<0.5	-
Beta-endosulfan	mg/kg	0.5	<0.5	-
Endosulfan sulphate	mg/kg	0.5	<0.5	-
Endrin	mg/kg	0.5	<0.5	-
Heptachlor	mg/kg	0.5	<0.5	-
Heptachlor epoxide	mg/kg	0.5	<0.5	-
Isodrin	mg/kg	0.5	<0.5	-
Methoxychlor	mg/kg	0.5	<0.5	-
Mirex	mg/kg	0.5	<0.5	-
Alpha-chlordane	mg/kg	0.5	<0.5	-
Gamma-chlordane	mg/kg	0.5	<0.5	-
Endrin ketone	mg/kg	0.5	<0.5	-

OPs

Azinphos-methyl (Guthion)	mg/kg	1	<1	-
Bromophos ethyl	mg/kg	1	<1	-
Carbofenothonion	mg/kg	1	<1	-
Chlorfenvinphos-cis (Chlofenvinphos-cis)	mg/kg	5	<5	-
Chlorfenvinphos-trans (Chlofenvinphos-trans)	mg/kg	1	<1	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	1	<1	-
Chlorpyrifos-methyl	mg/kg	1	<1	-
Co-Ral (Coumaphos)	mg/kg	1	<1	-
Diazinon (Dimpylate)	mg/kg	1	<1	-
Dichlorvos	mg/kg	1	<1	-
Demeton-S-methyl	mg/kg	1	<1	-
Dimethoate	mg/kg	1	<1	-
Disulfoton (Di-syston)	mg/kg	1	<1	-
EPN*	mg/kg	1	<1	-
Ethion	mg/kg	1	<1	-
Ethoprophos (ethoprop or prophos)	mg/kg	1	<1	-
Famphur (Famaphos)	mg/kg	1	<1	-
Fenamiphos (Phenamiphos)	mg/kg	1	<1	-
Fenchlorophos (Ronnel)	mg/kg	1	<1	-
Fenitrothion	mg/kg	1	<1	-
Fenthion	mg/kg	1	<1	-
Malathion (Maldison)	mg/kg	1	<1	-
Methidathion	mg/kg	1	<1	-
Mevinphos-cis/trans	mg/kg	2	<2	-
o,o,o-triethyl phosphorothioate	mg/kg	1	<1	-
Parathion ethyl (Parathion)	mg/kg	1	<1	-
Parathion methyl	mg/kg	1	<1	-
Phorate	mg/kg	1	<1	-
Pirimiphos-ethyl	mg/kg	1	<1	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.031	SE100700.032
Sample Matrix	Soil	Soil
Sample Date	10 Jun 2011	10 Jun 2011
Sample Name	QC09	QC10

Parameter Units LOR

Full 8270 SVOC in Soil Method: AN420 (continued)

Parameter	Units	LOR		
Pirimiphos-methyl	mg/kg	1	<1	-
Profenofos	mg/kg	1	<1	-
Prothiophos (Tokuthion)*	mg/kg	1	<1	-
Sulfotepp	mg/kg	1	<1	-
Tetrachlorvinphos (Stirophos)*	mg/kg	1	<1	-

PCB UPAC(7) Congeners

PCB Congener C28	mg/kg	0.5	<0.5	-
PCB Congener C52	mg/kg	0.5	<0.5	-
PCB Congener C101	mg/kg	0.5	<0.5	-
PCB Congener C118	mg/kg	0.5	<0.5	-
PCB Congener C138	mg/kg	0.5	<0.5	-
PCB Congener C153	mg/kg	0.5	<0.5	-
PCB Congener C180	mg/kg	0.5	<0.5	-

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Hexachlorobenzene	mg/kg	0.5	<0.5	-
1,2-dichlorobenzene	mg/kg	0.5	<0.5	-
1,3-dichlorobenzene	mg/kg	0.5	<0.5	-
1,4-dichlorobenzene	mg/kg	0.5	<0.5	-
Hexachlorobutadiene	mg/kg	0.5	<0.5	-
Hexachlorocyclopentadiene	mg/kg	1	<1	-
Hexachloroethane	mg/kg	0.5	<0.5	-
Hexachloropropene	mg/kg	0.5	<0.5	-
Pentachlorobenzene	mg/kg	0.5	<0.5	-
Pentachloroethane	mg/kg	0.5	<0.5	-
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	-
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	-
1/2-Chloronaphthalene	mg/kg	1	<1	-
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	-



ANALYTICAL REPORT

SE100700 R0

Parameter	Units	LOR	Sample Number SE100700.031	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC09	Sample Number SE100700.032	Sample Matrix Soil	Sample Date 10 Jun 2011	Sample Name QC10
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Full 8270 SVOC in Soil Method: AN420 (continued)

Phthalates

Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	-
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	-
Butyl benzyl phthalate	mg/kg	0.5	<0.5	-
Di-n-butyl phthalate	mg/kg	0.5	<0.5	-
Diethyl phthalate	mg/kg	0.5	<0.5	-
Dimethyl phthalate	mg/kg	0.5	<0.5	-
Diocyl phthalate	mg/kg	0.5	<0.5	-

Carbamates

Carbofuran	mg/kg	0.5	<0.5	-
Carbaryl	mg/kg	0.5	<0.5	-

Herbicides (normal)

Trifluralin	mg/kg	0.5	<0.5	-
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Nitrosamines

N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	-
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	-
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	-
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	-
N-nitroso-piperidine (NPPIP)	mg/kg	0.5	<0.5	-
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	-
4-amino biphenyl	mg/kg	1	<1	-

Nitroaromatics and Ketones

Acetophenone	mg/kg	0.5	<0.5	-
1,3-dinitrobenzene	mg/kg	1	<1	-
2,4-dinitrotoluene	mg/kg	0.5	<0.5	-
2,6-dinitrotoluene	mg/kg	0.5	<0.5	-
Isophorone	mg/kg	0.5	<0.5	-
Nitrobenzene	mg/kg	0.5	<0.5	-
p-(dimethylamino) azobenzene	mg/kg	1	<1	-
Phenacetin	mg/kg	1	<1	-
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	-

Anilines and Amines

Aniline	mg/kg	3	<3	-
4-chloroaniline	mg/kg	1	<1	-
2-nitroaniline	mg/kg	1	<1	-
3-nitroaniline	mg/kg	1	<1	-
4-nitroaniline	mg/kg	1	<1	-
Diphenylamine	mg/kg	0.5	<0.5	-
o-toluidine	mg/kg	1	<1	-
5-nitro-o-toluidine	mg/kg	1	<1	-
1-naphthylamine	mg/kg	1	<1	-
2-naphthylamine	mg/kg	1	<1	-

Haloethers

Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	-
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	-
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	-
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	-
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.031	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	QC09	Sample Number	SE100700.032	Sample Matrix	Soil	Sample Date	10 Jun 2011	Sample Name	QC10
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Parameter	Units	LOR
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Full 8270 SVOC in Soil Method: AN420 (continued)

Other SVOCs

Methyl methanesulfonate	mg/kg	1	<1	-
Ethyl methanesulfonate	mg/kg	1	<1	-
Dibenzofuran	mg/kg	0.5	<0.5	-
Benzyl alcohol	mg/kg	1	<1	-
Safrole	mg/kg	0.5	<0.5	-
Isosafrole Isomer 1	mg/kg	1	<1	-
Isosafrole Isomer 2	mg/kg	1	<1	-
1,4-naphthoquinone	mg/kg	0.5	<0.5	-
Thionazin	mg/kg	1	<1	-

Speciated Routine Phenols

3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-
2,6-dichlorophenol	mg/kg	0.5	<0.5	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-
4-chloro-3-methylphenol	mg/kg	1	<1	-
2-chlorophenol	mg/kg	0.5	<0.5	-
2,4-dichlorophenol	mg/kg	0.5	<0.5	-
2,4-dimethyl phenol	mg/kg	0.5	<0.5	-
2-nitrophenol	mg/kg	0.5	<0.5	-
Phenol	mg/kg	0.5	<0.5	-
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	-
Pentachlorophenol	mg/kg	0.5	<0.5	-
4-nitrophenol	mg/kg	0.5	<0.5	-

Surrogates

d5-phenol (Surrogate)	%	-	90	-
d5-nitrobenzene (Surrogate)	%	-	95	-
2-fluorobiphenyl (Surrogate)	%	-	115	-
2,4,6-tribromophenol (Surrogate)	%	-	109	-
d14-p-terphenyl (Surrogate)	%	-	113	-

Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	-	-
PHfox	pH Units	-	-	-
Reaction*	No unit	-	-	-
pH Difference*	pH Units	-10	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	7	4
Cadmium, Cd	mg/kg	0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.3	12	10
Copper, Cu	mg/kg	0.5	38	47
Lead, Pb	mg/kg	1	290	180
Nickel, Ni	mg/kg	0.5	8.8	7.6
Zinc, Zn	mg/kg	0.5	140	81



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.031	SE100700.032
Sample Matrix	Soil	Soil
Sample Date	10 Jun 2011	10 Jun 2011
Sample Name	QC09	QC10

Parameter Units LOR

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.15	0.11
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-	-
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Moisture Content Method: AN234

% Moisture	%	0.5	10	8.5
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

TRH C6-C9	mg/L	0.04	-	-
Benzene	µg/L	0.5	-	-
Toluene	µg/L	0.5	-	-
Ethylbenzene	µg/L	0.5	-	-
m/p-xylene	µg/L	1	-	-
o-xylene	µg/L	0.5	-	-
Total BTEX*	µg/L	3	-	-
Total Xylenes*	µg/L	1.5	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-
d8-toluene (Surrogate)	%	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	-	-
TRH C15-C28	µg/L	200	-	-
TRH C29-C36	µg/L	200	-	-

Surrogates

TRH (Surrogate)	%	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	-	-
Acenaphthylene	µg/L	0.1	-	-
Acenaphthene	µg/L	0.1	-	-
Fluorene	µg/L	0.1	-	-
Phenanthrene	µg/L	0.1	-	-
Anthracene	µg/L	0.1	-	-
Fluoranthene	µg/L	0.1	-	-
Pyrene	µg/L	0.1	-	-
Benzo(a)anthracene	µg/L	0.1	-	-
Chrysene	µg/L	0.1	-	-
Benzo(b)fluoranthene	µg/L	0.1	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-
Benzo(a)pyrene	µg/L	0.1	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-
Total PAH (18)*	µg/L	1	-	-



ANALYTICAL REPORT

SE100700 R0

Sample Number	SE100700.031	SE100700.032
Sample Matrix	Soil	Soil
Sample Date	10 Jun 2011	10 Jun 2011
Sample Name	QC09	QC10

Parameter	Units	LOR		
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420 (continued)

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-

Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	-	-
Cadmium, Cd	µg/L	0.1	-	-
Chromium, Cr	µg/L	1	-	-
Copper, Cu	µg/L	1	-	-
Lead, Pb	µg/L	1	-	-
Nickel, Ni	µg/L	1	-	-
Zinc, Zn	µg/L	1	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	-	-
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Field pH for Acid Sulphate Soil Method: ME-(AU)-[ENV]AN104

Parameter	QC Reference	Units	LOR	DUP %RPD	LCS %Recovery
PHf	LB002760	pH Units	-	0 - 1%	NA
PHfox	LB002760	pH Units	-	1 - 2%	

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420
PAHs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acenaphthene	LB002738	mg/kg	0.5	<0.5	NA
Acenaphthylene	LB002738	mg/kg	0.5	<0.5	NA
Anthracene	LB002738	mg/kg	0.5	<0.5	80%
Benz(a)anthracene	LB002738	mg/kg	0.5	<0.5	NA
Benz(b&k)fluoranthene	LB002738	mg/kg	1	<1	NA
Benz(ghi)perylene	LB002738	mg/kg	0.5	<0.5	NA
Benzo(a)pyrene	LB002738	mg/kg	0.5	<0.5	71%
Chrysene	LB002738	mg/kg	0.5	<0.5	NA
Dibenzo(ah)anthracene	LB002738	mg/kg	0.5	<0.5	NA
Fluoranthene	LB002738	mg/kg	0.5	<0.5	77%
Fluorene	LB002738	mg/kg	0.5	<0.5	NA
Indeno(1,2,3-cd)pyrene	LB002738	mg/kg	0.5	<0.5	NA
1-methylnaphthalene	LB002738	mg/kg	0.5	<0.5	NA
2-methylnaphthalene	LB002738	mg/kg	0.5	<0.5	NA
Naphthalene	LB002738	mg/kg	0.5	<0.5	72%
Phenanthrene	LB002738	mg/kg	0.5	<0.5	75%
Pyrene	LB002738	mg/kg	0.5	<0.5	83%
2-acetylaminofluorene	LB002738	mg/kg	2	<2	NA
7,12-dimethyl-benz(a)anthracene	LB002738	mg/kg	0.5	<0.5	NA
3-methylcholanthrene	LB002738	mg/kg	1	<1	NA

OCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aldrin	LB002738	mg/kg	0.5	<0.5	88%
Alpha-BHC	LB002738	mg/kg	0.5	<0.5	NA
Beta-BHC	LB002738	mg/kg	0.5	<0.5	NA
Delta-BHC	LB002738	mg/kg	0.5	<0.5	NA
Gamma-BHC (Lindane)	LB002738	mg/kg	0.5	<0.5	NA
p,p-DDD	LB002738	mg/kg	0.5	<0.5	NA
p,p-DDE	LB002738	mg/kg	0.5	<0.5	NA
p,p-DDT	LB002738	mg/kg	0.5	<0.5	82%
Dieldrin	LB002738	mg/kg	0.5	<0.5	79%
Alpha-endosulfan	LB002738	mg/kg	0.5	<0.5	NA
Beta-endosulfan	LB002738	mg/kg	0.5	<0.5	NA
Endosulfan sulphate	LB002738	mg/kg	0.5	<0.5	NA
Endrin	LB002738	mg/kg	0.5	<0.5	79%
Heptachlor	LB002738	mg/kg	0.5	<0.5	109%
Heptachlor epoxide	LB002738	mg/kg	0.5	<0.5	NA
Isodrin	LB002738	mg/kg	0.5	<0.5	NA
Methoxychlor	LB002738	mg/kg	0.5	<0.5	NA
Mirex	LB002738	mg/kg	0.5	<0.5	NA
Alpha-chlordane	LB002738	mg/kg	0.5	<0.5	NA
Gamma-chlordane	LB002738	mg/kg	0.5	<0.5	NA
Endrin ketone	LB002738	mg/kg	0.5	<0.5	NA

OPs

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Azinphos-methyl (Guthion)	LB002738	mg/kg	1	<1	NA
Bromophos ethyl	LB002738	mg/kg	1	<1	NA
Carbophenothion	LB002738	mg/kg	1	<1	NA
Chlorfenvinphos-cis (Chlofenvinphos-cis)	LB002738	mg/kg	5	<5	NA
Chlorfenvinphos-trans (Chlofenvinphos-trans)	LB002738	mg/kg	1	<1	NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB002738	mg/kg	1	<1	102%
Chlorpyrifos-methyl	LB002738	mg/kg	1	<1	NA
Co-Ral (Counaphos)	LB002738	mg/kg	1	<1	NA
Diazinon (Dimpylate)	LB002738	mg/kg	1	<1	104%
Dichlorvos	LB002738	mg/kg	1	<1	124%
Demeton-S-methyl	LB002738	mg/kg	1	<1	NA
Dimethoate	LB002738	mg/kg	1	<1	NA
Disulfoton (Di-syston)	LB002738	mg/kg	1	<1	NA
EPN*	LB002738	mg/kg	1	<1	NA
Ethion	LB002738	mg/kg	1	<1	105%
Ethoprophos (ethoprop or prophos)	LB002738	mg/kg	1	<1	NA
Famphur (Famophos)	LB002738	mg/kg	1	<1	NA
Fenamiphos (Phenamiphos)	LB002738	mg/kg	1	<1	NA
Fenchlorophos (Ronnel)	LB002738	mg/kg	1	<1	NA
Fenitrothion	LB002738	mg/kg	1	<1	NA
Fenthion	LB002738	mg/kg	1	<1	NA
Malathion (Maldison)	LB002738	mg/kg	1	<1	NA
Methidathion	LB002738	mg/kg	1	<1	NA
Mevinphos-cis/trans	LB002738	mg/kg	2	<2	NA
o,o,o-triethyl phosphorothioate	LB002738	mg/kg	1	<1	NA
Parathion ethyl (Parathion)	LB002738	mg/kg	1	<1	NA
Parathion methyl	LB002738	mg/kg	1	<1	NA
Phorate	LB002738	mg/kg	1	<1	NA
Pirimiphos-ethyl	LB002738	mg/kg	1	<1	NA
Pirimiphos-methyl	LB002738	mg/kg	1	<1	NA
Profenofos	LB002738	mg/kg	1	<1	NA
Prothiophos (Tokuthion)*	LB002738	mg/kg	1	<1	NA
Sulfotep	LB002738	mg/kg	1	<1	NA
Tetrachlorvinphos (Stirophos)*	LB002738	mg/kg	1	<1	NA

PCB UPAC(7) Congeners

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
PCB Congener C28	LB002738	mg/kg	0.5	<0.5	NA
PCB Congener C52	LB002738	mg/kg	0.5	<0.5	NA
PCB Congener C101	LB002738	mg/kg	0.5	<0.5	NA
PCB Congener C118	LB002738	mg/kg	0.5	<0.5	NA
PCB Congener C138	LB002738	mg/kg	0.5	<0.5	NA
PCB Congener C153	LB002738	mg/kg	0.5	<0.5	NA
PCB Congener C180	LB002738	mg/kg	0.5	<0.5	NA

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Hexachlorobenzene	LB002738	mg/kg	0.5	<0.5	118%
1,2-dichlorobenzene	LB002738	mg/kg	0.5	<0.5	NA
1,3-dichlorobenzene	LB002738	mg/kg	0.5	<0.5	NA
1,4-dichlorobenzene	LB002738	mg/kg	0.5	<0.5	NA
Hexachlorobutadiene	LB002738	mg/kg	0.5	<0.5	NA
Hexachlorocyclopentadiene	LB002738	mg/kg	1	<1	NA
Hexachloroethane	LB002738	mg/kg	0.5	<0.5	NA
Hexachloropropene	LB002738	mg/kg	0.5	<0.5	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

			MB	LCS	
				%Recovery	
Pentachlorobenzene	LB002738	mg/kg	0.5	<0.5	115%
Pentachloroethane	LB002738	mg/kg	0.5	<0.5	NA
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	LB002738	mg/kg	1	<1	NA
1,2,3,4-tetrachlorobenzene	LB002738	mg/kg	0.5	<0.5	124%
1/2-Chloronaphthalene	LB002738	mg/kg	1	<1	NA
1,2,4-trichlorobenzene	LB002738	mg/kg	0.5	<0.5	NA

Phthalates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-ethylhexyl)phthalate	LB002738	mg/kg	5	<5	NA
Bis(2-ethylhexyl)adipate	LB002738	mg/kg	0.5	<0.5	NA
Butyl benzyl phthalate	LB002738	mg/kg	0.5	<0.5	120%
Di-n-butyl phthalate	LB002738	mg/kg	0.5	<0.5	111%
Diethyl phthalate	LB002738	mg/kg	0.5	<0.5	116%
Dimethyl phthalate	LB002738	mg/kg	0.5	<0.5	118%
Diocyl phthalate	LB002738	mg/kg	0.5	<0.5	NA

Carbamates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbofuran	LB002738	mg/kg	0.5	<0.5	NA
Carbaryl	LB002738	mg/kg	0.5	<0.5	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluralin	LB002738	mg/kg	0.5	<0.5	NA

Nitrosamines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
N-nitroso-di-n-butylamine (NDBA)	LB002738	mg/kg	0.5	<0.5	NA
N-nitroso-diethylamine (NDEA)	LB002738	mg/kg	1	<1	NA
N-nitroso-di-n-propylamine (NDPA)	LB002738	mg/kg	0.5	<0.5	NA
N-nitroso-morpholine (NMOR)	LB002738	mg/kg	0.5	<0.5	NA
N-nitroso-piperidine (NPIP)	LB002738	mg/kg	0.5	<0.5	NA
N-nitroso-pyrrolidine (NPYR)	LB002738	mg/kg	1	<1	NA
4-amino biphenyl	LB002738	mg/kg	1	<1	NA

Nitroaromatics and Ketones

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetophenone	LB002738	mg/kg	0.5	<0.5	NA
1,3-dinitrobenzene	LB002738	mg/kg	1	<1	NA
2,4-dinitrotoluene	LB002738	mg/kg	0.5	<0.5	NA
2,6-dinitrotoluene	LB002738	mg/kg	0.5	<0.5	NA
Isophorone	LB002738	mg/kg	0.5	<0.5	NA
Nitrobenzene	LB002738	mg/kg	0.5	<0.5	NA
p-(dimethylamino) azobenzene	LB002738	mg/kg	1	<1	NA
Phenacetin	LB002738	mg/kg	1	<1	NA
Pentachloronitrobenzene (quintozene)	LB002738	mg/kg	0.5	<0.5	100%

Anilines and Amines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aniline	LB002738	mg/kg	3	<3	NA
4-chloroaniline	LB002738	mg/kg	1	<1	NA
2-nitroaniline	LB002738	mg/kg	1	<1	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Soil Method: ME-(AU)-[ENV]AN420 (continued)

			MB	LCS	
				%Recovery	
3-nitroaniline	LB002738	mg/kg	1	<1	NA
4-nitroaniline	LB002738	mg/kg	1	<1	NA
Diphenylamine	LB002738	mg/kg	0.5	<0.5	NA
o-toluidine	LB002738	mg/kg	1	<1	NA
5-nitro-o-toluidine	LB002738	mg/kg	1	<1	NA
1-naphthylamine	LB002738	mg/kg	1	<1	NA
2-naphthylamine	LB002738	mg/kg	1	<1	NA

Haloethers

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-chloroethoxy) methane	LB002738	mg/kg	0.5	<0.5	NA
Bis(2-chloroethyl) ether	LB002738	mg/kg	0.5	<0.5	NA
Bis(2-chloroisopropyl) ether	LB002738	mg/kg	0.5	<0.5	NA
4-chlorophenyl phenyl ether	LB002738	mg/kg	0.5	<0.5	NA
4-bromophenyl phenyl ether	LB002738	mg/kg	0.5	<0.5	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Methyl methanesulfonate	LB002738	mg/kg	1	<1	NA
Ethyl methanesulfonate	LB002738	mg/kg	1	<1	NA
Dibenzofuran	LB002738	mg/kg	0.5	<0.5	NA
Benzyl alcohol	LB002738	mg/kg	1	<1	NA
Safrole	LB002738	mg/kg	0.5	<0.5	NA
Isosafrole Isomer 1	LB002738	mg/kg	1	<1	NA
Isosafrole Isomer 2	LB002738	mg/kg	1	<1	NA
1,4-naphthoquinone	LB002738	mg/kg	0.5	<0.5	NA
Thionazin	LB002738	mg/kg	1	<1	NA

Speciated Routine Phenols

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
3/4-methyl phenol (m/p-cresol)	LB002738	mg/kg	1	<1	NA
2-methyl phenol (o-cresol)	LB002738	mg/kg	0.5	<0.5	NA
2,6-dichlorophenol	LB002738	mg/kg	0.5	<0.5	NA
2,3,4,6 and 2,3,5,6-tetrachlorophenol	LB002738	mg/kg	1	<1	NA
2,4,5-trichlorophenol	LB002738	mg/kg	0.5	<0.5	NA
4-chloro-3-methylphenol	LB002738	mg/kg	1	<1	NA
2-chlorophenol	LB002738	mg/kg	0.5	<0.5	NA
2,4-dichlorophenol	LB002738	mg/kg	0.5	<0.5	130%
2,4-dimethyl phenol	LB002738	mg/kg	0.5	<0.5	NA
2-nitrophenol	LB002738	mg/kg	0.5	<0.5	NA
Phenol	LB002738	mg/kg	0.5	<0.5	110%
2,4,6-trichlorophenol	LB002738	mg/kg	0.5	<0.5	120%
Pentachlorophenol	LB002738	mg/kg	0.5	<0.5	100%
4-nitrophenol	LB002738	mg/kg	0.5	<0.5	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-phenol (Surrogate)	LB002738	%	-	122%	93%
d5-nitrobenzene (Surrogate)	LB002738	%	-	118%	105%
2-fluorobiphenyl (Surrogate)	LB002738	%	-	130%	118%
2,4,6-tribromophenol (Surrogate)	LB002738	%	-	128%	103%
d14-p-terphenyl (Surrogate)	LB002738	%	-	130%	118%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311/AN312

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Mercury	LB002756	mg/L	0.0001	<0.0001	108%

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB002786	mg/kg	0.05	<0.05	5 - 10%	114%	108%

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002781	mg/kg	3	<3	14 - 60%	100%	89%
Cadmium, Cd	LB002781	mg/kg	0.3	<0.3	0%	103%	89%
Chromium, Cr	LB002781	mg/kg	0.3	<0.3	1 - 18%	102%	89%
Copper, Cu	LB002781	mg/kg	0.5	<0.5	8 - 9%	104%	99%
Lead, Pb	LB002781	mg/kg	1	<1	4 - 6%	102%	83%
Nickel, Ni	LB002781	mg/kg	0.5	<0.5	7 - 17%	103%	88%
Zinc, Zn	LB002781	mg/kg	0.5	<0.5	3 - 7%	101%	81%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB002738	mg/kg	0.1	<0.1	0 - 6%	115%	116%
Acenaphthylene	LB002738	mg/kg	0.1	<0.1	0 - 3%	118%	119%
Acenaphthene	LB002738	mg/kg	0.1	<0.1	0 - 13%	113%	117%
Fluorene	LB002738	mg/kg	0.1	<0.1	0 - 13%	NA	NA
Phenanthrene	LB002738	mg/kg	0.1	<0.1	0 - 17%	111%	127%
Anthracene	LB002738	mg/kg	0.1	<0.1	0 - 13%	118%	125%
Fluoranthene	LB002738	mg/kg	0.1	<0.1	0 - 5%	111%	126%
Pyrene	LB002738	mg/kg	0.1	<0.1	0 - 4%	115%	130%
Benzo(a)anthracene	LB002738	mg/kg	0.1	<0.1	0 - 4%	NA	NA
Chrysene	LB002738	mg/kg	0.1	<0.1	0 - 1%	NA	NA
Benzo(b)fluoranthene	LB002738	mg/kg	0.1	<0.1	0 - 1%	NA	NA
Benzo(k)fluoranthene	LB002738	mg/kg	0.1	<0.1	0 - 5%	NA	NA
Benzo(a)pyrene	LB002738	mg/kg	0.05	<0.05	0 - 1%	113%	121%
Indeno(1,2,3-cd)pyrene	LB002738	mg/kg	0.1	<0.1	0 - 1%	NA	NA
Dibenzo(a&h)anthracene	LB002738	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(ghi)perylene	LB002738	mg/kg	0.1	<0.1	0 - 1%	NA	NA
Total PAH	LB002738	mg/kg	1.75	<1.8	0 - 5%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d5-nitrobenzene (Surrogate)	LB002738	%	-	118%	4 - 8%	106%	110%
2-fluorobiphenyl (Surrogate)	LB002738	%	-	104%	4 - 8%	107%	108%
d14-p-terphenyl (Surrogate)	LB002738	%	-	85%	0 - 4%	76%	91%

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB002750	µg/L	0.1	<0.1	125%
Acenaphthylene	LB002750	µg/L	0.1	<0.1	122%
Acenaphthene	LB002750	µg/L	0.1	<0.1	122%
Fluorene	LB002750	µg/L	0.1	<0.1	NA
Phenanthrene	LB002750	µg/L	0.1	<0.1	121%
Anthracene	LB002750	µg/L	0.1	<0.1	124%
Fluoranthene	LB002750	µg/L	0.1	<0.1	121%
Pyrene	LB002750	µg/L	0.1	<0.1	123%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN420 (continued)

		MB	LCS
		%Recovery	
Benzo(a)anthracene	LB002750	µg/L	0.1
Chrysene	LB002750	µg/L	0.1
Benzo(b)fluoranthene	LB002750	µg/L	0.1
Benzo(k)fluoranthene	LB002750	µg/L	0.1
Benzo(a)pyrene	LB002750	µg/L	0.1
Indeno(1,2,3-cd)pyrene	LB002750	µg/L	0.1
Dibenzo(a&h)anthracene	LB002750	µg/L	0.1
Benzo(ghi)perylene	LB002750	µg/L	0.1
Total PAH (18)*	LB002750	µg/L	1 <1

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB002750	%	-	125%	113%
2-fluorobiphenyl (Surrogate)	LB002750	%	-	109%	114%
d14-p-terphenyl (Surrogate)	LB002750	%	-	88%	110%

Trace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002729	µg/L	1	<1	0%	104%	
Cadmium, Cd	LB002729	µg/L	0.1	<0.1	0%	104%	
Chromium, Cr	LB002729	µg/L	1	<1	0%	108%	
Copper, Cu	LB002729	µg/L	1	<1	0%	107%	
Lead, Pb	LB002729	µg/L	1	<1	0%	109%	
Nickel, Ni	LB002729	µg/L	1	<1	0 - 2%	116%	110%
Zinc, Zn	LB002729	µg/L	1	<1	2 - 4%	102%	80%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C10-C14	LB002738	mg/kg	20	<20	0%	113%	103%
TRH C15-C28	LB002738	mg/kg	50	<50	0 - 5%	110%	120%
TRH C29-C36	LB002738	mg/kg	50	<50	0 - 6%	93%	90%

TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C10-C14	LB002750	µg/L	100	<100	81%
TRH C15-C28	LB002750	µg/L	200	<200	106%
TRH C29-C36	LB002750	µg/L	200	<200	104%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434

Fumigants

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
2,2-dichloropropane	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2-dichloropropane	LB002743	mg/kg	0.1	<0.1	0%	NA
cis-1,3-dichloropropene	LB002743	mg/kg	0.1	<0.1	0%	NA
trans-1,3-dichloropropene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2-dibromoethane (EDB)	LB002743	mg/kg	0.1	<0.1	0%	NA

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Dichlorodifluoromethane (CFC-12)	LB002743	mg/kg	1	<1	0%	NA
Chloromethane	LB002743	mg/kg	1	<1	0%	NA
Vinyl chloride (Chloroethene)	LB002743	mg/kg	0.1	<0.1	0%	NA
Bromomethane	LB002743	mg/kg	1	<1	0%	NA
Chloroethane	LB002743	mg/kg	1	<1	0%	NA
Trichlorofluoromethane	LB002743	mg/kg	1	<1	0%	NA
Iodomethane	LB002743	mg/kg	5	<5	0%	NA
1,1-dichloroethene	LB002743	mg/kg	0.1	<0.1	0%	106%
Dichloromethane (Methylene chloride)	LB002743	mg/kg	0.5	<0.5	0%	NA
Allyl chloride	LB002743	mg/kg	0.1	<0.1	0%	NA
trans-1,2-dichloroethene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,1-dichloroethane	LB002743	mg/kg	0.1	<0.1	0%	NA
cis-1,2-dichloroethene	LB002743	mg/kg	0.1	<0.1	0%	NA
Bromochloromethane	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2-dichloroethane	LB002743	mg/kg	0.1	<0.1	0%	114%
1,1,1-trichloroethane	LB002743	mg/kg	0.1	<0.1	0%	NA
1,1-dichloropropene	LB002743	mg/kg	0.1	<0.1	0%	NA
Carbon tetrachloride	LB002743	mg/kg	0.1	<0.1	0%	NA
Dibromomethane	LB002743	mg/kg	0.1	<0.1	0%	NA
Trichloroethene (Trichloroethylene -TCE)	LB002743	mg/kg	0.1	<0.1	0%	107%
1,1,2-trichloroethane	LB002743	mg/kg	0.1	<0.1	0%	NA
1,3-dichloropropane	LB002743	mg/kg	0.1	<0.1	0%	NA
Tetrachloroethene (Perchloroethylene,PCE)	LB002743	mg/kg	0.1	<0.1	0%	NA
1,1,1,2-tetrachloroethane	LB002743	mg/kg	0.1	<0.1	0%	NA
cis-1,4-dichloro-2-butene	LB002743	mg/kg	1	<1	0%	NA
1,1,2,2-tetrachloroethane	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2,3-trichloropropene	LB002743	mg/kg	0.1	<0.1	0%	NA
trans-1,4-dichloro-2-butene	LB002743	mg/kg	1	<1	0%	NA
1,2-dibromo-3-chloropropane	LB002743	mg/kg	0.1	<0.1	0%	NA
Hexachlorobutadiene	LB002743	mg/kg	0.1	<0.1	0%	NA

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Chlorobenzene	LB002743	mg/kg	0.1	<0.1	0%	105%
Bromobenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
2-chlorotoluene	LB002743	mg/kg	0.1	<0.1	0%	NA
4-chlorotoluene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,3-dichlorobenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,4-dichlorobenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2-dichlorobenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2,4-trichlorobenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2,3-trichlorobenzene	LB002743	mg/kg	0.1	<0.1	0%	NA

Monocyclic Aromatic Hydrocarbons

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Benzene	LB002743	mg/kg	0.1	<0.1	0%	108%
Toluene	LB002743	mg/kg	0.1	<0.1	0%	95%
Ethylbenzene	LB002743	mg/kg	0.1	<0.1	0%	89%
m/p-xylene	LB002743	mg/kg	0.2	<0.2	0%	111%
Styrene (Vinyl benzene)	LB002743	mg/kg	0.1	<0.1	0%	NA
o-xylene	LB002743	mg/kg	0.1	<0.1	0%	107%
Isopropylbenzene (Cumene)	LB002743	mg/kg	0.1	<0.1	0%	NA
n-propylbenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,3,5-trimethylbenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
tert-butylbenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
1,2,4-trimethylbenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
sec-butylbenzene	LB002743	mg/kg	0.1	<0.1	0%	NA
p-isopropyltoluene	LB002743	mg/kg	0.1	<0.1	0%	NA
n-butylbenzene	LB002743	mg/kg	0.1	<0.1	0%	NA

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acrylonitrile	LB002743	mg/kg	0.1	<0.1	0%	NA

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acetone (2-propanone)	LB002743	mg/kg	10	<10	0%	NA
MtBE (Methyl-tert-butyl ether)	LB002743	mg/kg	0.5	<0.5	0%	NA
Vinyl acetate	LB002743	mg/kg	10	<10	0%	NA
MEK (2-butanone)	LB002743	mg/kg	10	<10	0%	NA
MIBK (4-methyl-2-pentanone)	LB002743	mg/kg	1	<1	0%	NA
2-hexanone (MBK)	LB002743	mg/kg	5	<5	0%	NA

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Naphthalene	LB002743	mg/kg	0.1	<0.1	103%	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Carbon disulfide	LB002743	mg/kg	0.5	<0.5	0%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Dibromofluoromethane (Surrogate)	LB002743	%	-	90%	0%	88%
d4-1,2-dichloroethane (Surrogate)	LB002743	%	-	105%	2%	100%
d8-toluene (Surrogate)	LB002743	%	-	95%	7%	92%
Bromofluorobenzene (Surrogate)	LB002743	%	-	82%	10%	98%

Totals

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Total Xylenes*	LB002743	mg/kg	0.3	<0.3	0%	NA

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Chloroform	LB002743	mg/kg	0.1	<0.1	0%	86%
Bromodichloromethane	LB002743	mg/kg	0.1	<0.1	0%	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

			MB	DUP %RPD	LCS %Recovery
Chlorodibromomethane	LB002743	mg/kg	0.1	<0.1	0%
Bromoform	LB002743	mg/kg	0.1	<0.1	0%

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C9	LB002743	mg/kg	20	<20	0%	92%	128%
Benzene	LB002743	mg/kg	0.1	<0.1	0%	64%	122%
Toluene	LB002743	mg/kg	0.1	<0.1	0%	62%	120%
Ethylbenzene	LB002743	mg/kg	0.1	<0.1	0%	64%	121%
m/p-xylene	LB002743	mg/kg	1	<1	0%	65%	129%
o-xylene	LB002743	mg/kg	0.5	<0.5	0%	62%	123%
Total Xylenes	LB002743	mg/kg	0.3	<0.3	0%	64%	127%
Total BTEX*	LB002743	mg/kg	2.7	<2.7	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Trifluorotoluene (Surrogate)	LB002743	%	-	61%	1 - 5%	112%	108%

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C6-C9	LB002798	µg/L	0.04	<40	125%
Benzene	LB002798	µg/L	0.5	<0.5	99%
Toluene	LB002798	µg/L	0.5	<0.5	100%
Ethylbenzene	LB002798	µg/L	0.5	<0.5	99%
m/p-xylene	LB002798	µg/L	1	<1	97%
o-xylene	LB002798	µg/L	0.5	<0.5	101%
Total BTEX*	LB002798	µg/L	3	<3	NA
Total Xylenes*	LB002798	µg/L	1.5	<2	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB002798	%	-	76%	71%

METHOD

METHODOLOGY SUMMARY

- AN020 Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
- AN040 A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
- AN083 Separatory funnels are used for aqueous samples and extracted by transferring an appropriate volume (mass) of liquid into a separatory funnel and adding 3 serial aliquots of dichloromethane. Samples receive a single extraction at pH 7 to recover base / neutral analytes and two extractions at pH < 2 to recover acidic analytes. QC samples are prepared by spiking organic free water with target analytes and extracting as per samples.
- AN088 Orbital rolling for Organic pollutants are extracted from soil/sediment by transferring an appropriate mass of sample to a clear soil jar and extracting with 1:1 Dichloromethane/Acetone. Orbital Rolling method is intended for the extraction of semi-volatile organic compounds from soil/sediment samples, and is based somewhat on USEPA method 3570 (Micro Organic extraction and sample preparation). Method 3700.
- AN104 pH is determined on an extract of approximately 2g of as received sample in approximately 10 mL of deionised water with pH determined after standing 30 minutes.
- AN104 pHFox is determined on an extract of approximately 2g of as received sample with a few mLs of 30% hydrogen peroxide (adjusted to pH 4.5 to 5.5) with the extract reaction being rated from slight to extreme, with pH determined after reaction is complete and extract has cooled. Referenced to ASS Laboratory Methods Guidelines, method 23Af-Bf, 2004.
- AN234 The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
- AN311/AN312 Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
- AN312 Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
- AN318 Determination of elements at trace level in waters by ICP-MS technique, in accordance with USEPA 6020A.
- AN403 Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
- AN403 Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403 The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.

METHOD

METHODOLOGY SUMMARY

AN420

(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

AN433/AN434

VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

IS Insufficient sample for analysis.

LNR Sample listed, but not received.

* This analysis is not covered by the scope of accreditation.

^ Performed by outside laboratory.

LOR Limit of Reporting

↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance

QFL QC result is below the lower tolerance

- The sample was not analysed for this analyte

Samples analysed as received.

Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Order Number 92611-92612, 92615-62918
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COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Site : Sydney Convention Centre

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ANALYTICAL REPORT

SE100700B R1

Sample Number SE100700B.011
Sample Matrix Soil
Sample Date 09 Jun 2011
Sample Name BH13_4.0

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	8.7
pH 1:20 plus HCl	pH Units	-	1.7
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of Extraction Solution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.0

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: AN420

Naphthalene	µg/L	0.1	-
2-methylnaphthalene	µg/L	0.1	-
1-methylnaphthalene	µg/L	0.1	-
Acenaphthylene	µg/L	0.1	-
Acenaphthene	µg/L	0.1	-
Fluorene	µg/L	0.1	-
Phenanthrene	µg/L	0.1	-
Anthracene	µg/L	0.1	-
Fluoranthene	µg/L	0.1	-
Pyrene	µg/L	0.1	-
Benzo(a)anthracene	µg/L	0.1	-
Chrysene	µg/L	0.1	-
Benzo(b&k)fluoranthene	µg/L	0.2	-
Benzo(b)fluoranthene	µg/L	0.1	-
Benzo(k)fluoranthene	µg/L	0.1	-
Benzo(a)pyrene	µg/L	0.1	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-
Dibenzo(a&h)anthracene	µg/L	0.1	-
Benzo(ghi)perylene	µg/L	0.1	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-
2-fluorobiphenyl (Surrogate)	%	-	-
d14-p-terphenyl (Surrogate)	%	-	-

Metals in Soil (TCLP) by ICP-OES Method: AN320/AN321

Lead, Pb	mg/L	0.02	-
Nickel, Ni	mg/L	0.01	<0.010

Sample Number SE100700B.020
Sample Matrix Soil
Sample Date 10 Jun 2011
Sample Name BH10_1.1-1.3

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	9.0
pH 1:20 plus HCl	pH Units	-	1.7
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	25
Volume of Extraction Solution Used*	mL	-	500
pH TCLP after 18 hours	pH Units	-	5.4



ANALYTICAL REPORT

SE100700B R1

Sample Number SE100700B.020
Sample Matrix Soil
Sample Date 10 Jun 2011
Sample Name BH10_1.1-1.3

Parameter	Units	LOR
-----------	-------	-----

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: AN420

Naphthalene	µg/L	0.1	34
2-methylnaphthalene	µg/L	0.1	9.0
1-methylnaphthalene	µg/L	0.1	8.6
Acenaphthylene	µg/L	0.1	0.3
Acenaphthene	µg/L	0.1	23
Fluorene	µg/L	0.1	21
Phenanthrene	µg/L	0.1	35
Anthracene	µg/L	0.1	9.4
Fluoranthene	µg/L	0.1	4.1
Pyrene	µg/L	0.1	3.1
Benzo(a)anthracene	µg/L	0.1	0.2
Chrysene	µg/L	0.1	<0.1
Benzo(b&k)fluoranthene	µg/L	0.2	<0.2
Benzo(b)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(a&h)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1

Surrogates

d5-nitrobenzene (Surrogate)	%	-	91
2-fluorobiphenyl (Surrogate)	%	-	96
d14-p-terphenyl (Surrogate)	%	-	95

Metals in Soil (TCLP) by ICPOES Method: AN320/AN321

Lead, Pb	mg/L	0.02	0.76
Nickel, Ni	mg/L	0.01	-

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Metals in Soil (TCLP) by ICPOES Method: ME-(AU)-[ENV]AN320/AN321

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Lead, Pb	LB003711	mg/L	0.02	<0.020	NA
Nickel, Ni	LB003711	mg/L	0.01	<0.010	NA

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB003697	µg/L	0.1	<0.1	81%
2-methylnaphthalene	LB003697	µg/L	0.1	<0.1	NA
1-methylnaphthalene	LB003697	µg/L	0.1	<0.1	NA
Acenaphthylene	LB003697	µg/L	0.1	<0.1	86%
Acenaphthene	LB003697	µg/L	0.1	<0.1	92%
Fluorene	LB003697	µg/L	0.1	<0.1	NA
Phenanthrene	LB003697	µg/L	0.1	<0.1	92%
Anthracene	LB003697	µg/L	0.1	<0.1	96%
Fluoranthene	LB003697	µg/L	0.1	<0.1	94%
Pyrene	LB003697	µg/L	0.1	<0.1	100%
Benzo(a)anthracene	LB003697	µg/L	0.1	<0.1	NA
Chrysene	LB003697	µg/L	0.1	<0.1	NA
Benzo(b&k)fluoranthene	LB003697	µg/L	0.2	<0.2	NA
Benzo(b)fluoranthene	LB003697	µg/L	0.1	<0.1	NA
Benzo(k)fluoranthene	LB003697	µg/L	0.1	<0.1	NA
Benzo(a)pyrene	LB003697	µg/L	0.1	<0.1	104%
Indeno(1,2,3-cd)pyrene	LB003697	µg/L	0.1	<0.1	NA
Dibenzo(a&h)anthracene	LB003697	µg/L	0.1	<0.1	NA
Benzo(ghi)perylene	LB003697	µg/L	0.1	<0.1	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB003697	%	-	103%	113%
2-fluorobiphenyl (Surrogate)	LB003697	%	-	103%	113%
d14-p-terphenyl (Surrogate)	LB003697	%	-	96%	112%

METHOD

METHODOLOGY SUMMARY

AN006

Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.

AN006

Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05 .

AN006

Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05 .

AN320/AN321

Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.

AN320/AN321

Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.

AN420

(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	This analysis is not covered by the scope of accreditation.
^	Performed by outside laboratory.
LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting

QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Samples analysed as received.

Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



CLIENT DETAILS

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Project GEOTLCOV24303AA - Syd Ent Centre
Order Number 56199
Samples 4

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SGS Reference SE100711 R0
Report Number 0000003627
Date Reported 28/06/2011 2:37:11PM
Date Received 17 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Site : Sydney Entertainment Centre

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Yusuf Kuthpuddin.

SIGNATORIES

Dong Liang
Inorganics Metals Team Leader

Huong Crawford
Laboratory Manager

Ly Kim Ha
Organics Supervisor

Ravee Sivasubramaniam
Hygienist



ANALYTICAL REPORT

SE100711 R0

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est. %w/w
SE100711.001	BH14_2.5	Soil	68g Clay, Soil, Rocks	17 Jun 2011	No Asbestos Detected Organic Fibres Detected	

METHOD

METHODOLOGY SUMMARY

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	- Brown Asbestos	NA - Not Analysed
Chrysotile	- White Asbestos	LNR - Listed Not Required
Crocidolite	- Blue Asbestos	* - Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1 000 to 1 in 10 000 parts by weight, equivalent to 1 to 0.1 g/kg."

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australia Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia-May 2009.

Sampled by the client

Where reported: 'Asbestos Detected':

Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'No Asbestos Detected':

No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':

Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.

Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLCOV24303AA - Syd Ent Centre
Order Number 56199
Samples 4

LABORATORY DETAILS

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SGS Reference SE100711 R0
Report Number 0000003626
Date Reported 28 Jun 2011
Date Received 17 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Site : Sydney Entertainment Centre

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Yusuf Kuthpuдин.

SIGNATORIES

Dong Liang
Inorganics Metals Team Leader

Huong Crawford
Laboratory Manager

Ly Kim Ha
Organics Supervisor

Ravee Sivasubramaniam
Hygienist



ANALYTICAL REPORT

SE100711 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Depth Sample Date Sample Name	SE100711.001 Soil 2.5 17 Jun 2011 BH14_2.5	SE100711.002 Soil 5.5 17 Jun 2011 BH14_5.5	SE100711.003 Soil - 17 Jun 2011 QC	SE100711.004 Water - 17 Jun 2011 TB
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Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	<20	-
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
m/p-xylene	mg/kg	1	<1	<1	<1	-
o-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-
Total BTEX*	mg/kg	2.7	<2.7	<2.7	<2.7	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	71	91	79	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	<20	-
TRH C15-C28	mg/kg	50	<50	<50	<50	-
TRH C29-C36	mg/kg	50	<50	<50	<50	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	-	-
Acenaphthene	mg/kg	0.1	0.1	-	-	-
Fluorene	mg/kg	0.1	0.1	-	-	-
Phenanthrene	mg/kg	0.1	0.8	-	-	-
Anthracene	mg/kg	0.1	0.2	-	-	-
Fluoranthene	mg/kg	0.1	0.6	-	-	-
Pyrene	mg/kg	0.1	0.8	-	-	-
Benzo(a)anthracene	mg/kg	0.1	0.3	-	-	-
Chrysene	mg/kg	0.1	0.3	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	0.3	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	0.1	-	-	-
Benzo(a)pyrene	mg/kg	0.05	0.29	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	0.2	-	-	-
Total PAH	mg/kg	1.75	4.2	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	88	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	93	-	-	-
d14-p-terphenyl (Surrogate)	%	-	82	-	-	-



ANALYTICAL REPORT

SE100711 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Depth Sample Date Sample Name	SE100711.001 Soil 2.5 17 Jun 2011 BH14_2.5	SE100711.002 Soil 5.5 17 Jun 2011 BH14_5.5	SE100711.003 Soil - 17 Jun 2011 QC	SE100711.004 Water - 17 Jun 2011 TB
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Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	10.7	8.1	-	-
PHfox	pH Units	-	8.0	6.8	-	-
Reaction*	No unit	-	XXXX	XX	-	-
pH Difference*	pH Units	-10	2.7	1.3	-	-

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	7	6	6	-
Cadmium, Cd	mg/kg	0.3	0.5	0.5	<0.3	-
Chromium, Cr	mg/kg	0.3	18	14	14	-
Copper, Cu	mg/kg	0.5	120	9.4	36	-
Lead, Pb	mg/kg	1	170	19	38	-
Nickel, Ni	mg/kg	0.5	14	6.8	12	-
Zinc, Zn	mg/kg	0.5	340	130	94	-

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	1.0	0.06	0.08	-
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Fibre Identification in soil Method: AN602

FibreID						
Asbestos Detected	No unit	-	No	-	-	-

Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

Benzene	µg/L	0.5	-	-	-	<0.5
Toluene	µg/L	0.5	-	-	-	<0.5
Ethylbenzene	µg/L	0.5	-	-	-	<0.5
m/p-xylene	µg/L	1	-	-	-	<1
o-xylene	µg/L	0.5	-	-	-	<0.5
Total BTEX*	µg/L	3	-	-	-	<3
Total Xylenes*	µg/L	1.5	-	-	-	<1.5

Surrogates

Trifluorotoluene (Surrogate)	%	-	-	-	-	78
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-

Moisture Content Method: AN234

% Moisture	%	0.5	25	24	23	-
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Field pH for Acid Sulphate Soil Method: ME-(AU)-[ENV]AN104

Parameter	QC Reference	Units	LOR	LCS %Recovery
PHf	LB002904	pH Units	-	NA

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Mercury	LB002787	mg/kg	0.05	<0.05	115%

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Arsenic, As	LB002783	mg/kg	3	<3	102%
Cadmium, Cd	LB002783	mg/kg	0.3	<0.3	105%
Chromium, Cr	LB002783	mg/kg	0.3	<0.3	105%
Copper, Cu	LB002783	mg/kg	0.5	<0.5	105%
Lead, Pb	LB002783	mg/kg	1	<1	105%
Nickel, Ni	LB002783	mg/kg	0.5	<0.5	106%
Zinc, Zn	LB002783	mg/kg	0.5	<0.5	106%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Naphthalene	LB002703	mg/kg	0.1	<0.1	0%	113%
Acenaphthylene	LB002703	mg/kg	0.1	<0.1	0%	116%
Acenaphthene	LB002703	mg/kg	0.1	<0.1	42%	118%
Fluorene	LB002703	mg/kg	0.1	<0.1	9%	NA
Phenanthrene	LB002703	mg/kg	0.1	<0.1	14%	117%
Anthracene	LB002703	mg/kg	0.1	<0.1	27%	120%
Fluoranthene	LB002703	mg/kg	0.1	<0.1	57%	119%
Pyrene	LB002703	mg/kg	0.1	<0.1	22%	127%
Benzo(a)anthracene	LB002703	mg/kg	0.1	<0.1	31%	NA
Chrysene	LB002703	mg/kg	0.1	<0.1	43%	NA
Benzo(b)fluoranthene	LB002703	mg/kg	0.1	<0.1	68%	NA
Benzo(k)fluoranthene	LB002703	mg/kg	0.1	<0.1	63%	NA
Benzo(a)pyrene	LB002703	mg/kg	0.05	<0.05	41%	121%
Indeno(1,2,3-cd)pyrene	LB002703	mg/kg	0.1	<0.1	63%	NA
Dibenzo(a&h)anthracene	LB002703	mg/kg	0.1	<0.1	0%	NA
Benzo(ghi)perylene	LB002703	mg/kg	0.1	<0.1	42%	NA
Total PAH	LB002703	mg/kg	1.75	<1.8	38%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB002703	%	-	118%	8%	117%
2-fluorobiphenyl (Surrogate)	LB002703	%	-	105%	14%	107%
d14-p-terphenyl (Surrogate)	LB002703	%	-	121%	1%	105%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TRH C10-C14	LB002703	mg/kg	20	<20	0%	115%
TRH C15-C28	LB002703	mg/kg	50	<50	0%	113%
TRH C29-C36	LB002703	mg/kg	50	<50	0%	118%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C6-C9	LB002705	mg/kg	20	<20	88%
Benzene	LB002705	mg/kg	0.1	<0.1	69%
Toluene	LB002705	mg/kg	0.1	<0.1	69%
Ethylbenzene	LB002705	mg/kg	0.1	<0.1	67%
m/p-xylene	LB002705	mg/kg	1	<1	68%
o-xylene	LB002705	mg/kg	0.5	<0.5	68%
Total Xylenes	LB002705	mg/kg	0.3	<0.3	68%
Total BTEX*	LB002705	mg/kg	2.7	<2.7	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB002705	%	-	108%	126%

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Benzene	LB002798	µg/L	0.5	<0.5	99%
Toluene	LB002798	µg/L	0.5	<0.5	100%
Ethylbenzene	LB002798	µg/L	0.5	<0.5	99%
m/p-xylene	LB002798	µg/L	1	<1	97%
o-xylene	LB002798	µg/L	0.5	<0.5	101%
Total BTEX*	LB002798	µg/L	3	<3	NA
Total Xylenes*	LB002798	µg/L	1.5	<1.5	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB002798	%	-	76%	71%

METHOD

METHODOLOGY SUMMARY

- AN040 A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
- AN088 Orbital rolling for Organic pollutants are extracted from soil/sediment by transferring an appropriate mass of sample to a clear soil jar and extracting with 1:1 Dichloromethane/Acetone. Orbital Rolling method is intended for the extraction of semi-volatile organic compounds from soil/sediment samples, and is based somewhat on USEPA method 3570 (Micro Organic extraction and sample preparation). Method 3700.
- AN104 pH is determined on an extract of approximately 2g of as received sample in approximately 10 mL of deionised water with pH determined after standing 30 minutes.
- AN104 pHFox is determined on an extract of approximately 2g of as received sample with a few mLs of 30% hydrogen peroxide (adjusted to pH 4.5 to 5.5) with the extract reaction being rated from slight to extreme, with pH determined after reaction is complete and extract has cooled. Referenced to ASS Laboratory Methods Guidelines, method 23Af-Bf, 2004.
- AN234 The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
- AN312 Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
- AN403 Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
- AN403 Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403 The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
- AN420 (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
- AN433/AN434 VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
- AN602 Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

IS Insufficient sample for analysis.
LNR Sample listed, but not received.
* This analysis is not covered by the scope of accreditation.
^ Performed by outside laboratory.
LOR Limit of Reporting
↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance
QFL QC result is below the lower tolerance
- The sample was not analysed for this analyte
NVL Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLCOV24303AA - Additional
Order Number 56199
Samples 1

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SGS Reference SE100711B R0
Report Number 0000004775
Date Reported 04 Aug 2011
Date Received 17 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Site : Sydney Entertainment Centre

SIGNATORIES

Dong Liang
Inorganics Metals Team Leader

Edward Ibrahim
Business Manager



ANALYTICAL REPORT

SE100711B R0

Sample Number	SE100711B.001
Sample Matrix	Soil
Sample Depth	2.5
Sample Date	17 Jun 2011
Sample Name	BH14_2.5

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	9.8
pH 1:20 plus HCl	pH Units	-	2.0
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of Extraction Solution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.3

Metals in Soil (TCLP) by ICPOES Method: AN320/AN321

Lead, Pb	mg/L	0.02	0.036
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QC SUMMARY

SE100711B R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Metals in Soil (TCLP) by ICPOES Method: ME-(AU)-[ENV]AN320/AN321

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Lead, Pb	LB003711	mg/L	0.02	<0.020	NA

METHOD

METHODOLOGY SUMMARY

AN006

Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.

AN006

Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05 .

AN006

Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05 .

AN320/AN321

Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.

AN320/AN321

Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	This analysis is not covered by the scope of accreditation.
^	Performed by outside laboratory.
LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting

QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Order Number 89333-89335
Samples 11

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SGS Reference SE100735 R0
Report Number 0000003669
Date Reported 29/06/2011 3:09:51PM
Date Received 21 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

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ANALYTICAL REPORT

SE100735 R0

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est. %w/w
SE100735.001	BH5_1.5-1.6	Soil	350g Soil,clay,rocks	14 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100735.003	BH5_4-4.1	Soil	55g Clay,rocks	14 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100735.006	BH8_0.5-0.6	Soil	210g Soil,rocks	14 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100735.007	BH9_0.5-0.6	Soil	110g Soil,rocks	15 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100735.008	BH17_1-1.1	Soil	100g Soil,rocks	16 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100735.009	BH17_2-2.1	Soil	150g Clay	16 Jun 2011	No Asbestos Detected Organic Fibres Detected	

METHOD

METHODOLOGY SUMMARY

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	- Brown Asbestos	NA - Not Analysed
Chrysotile	- White Asbestos	LNR - Listed Not Required
Crocidolite	- Blue Asbestos	* - Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1 000 to 1 in 10 000 parts by weight, equivalent to 1 to 0.1 g/kg."

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australia Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia-May 2009.

Sampled by the client

Where reported: 'Asbestos Detected':

Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'No Asbestos Detected':

No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':

Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.

Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLOC24303AA-SMCEC
Order Number 89333-89335
Samples 11

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SGS Reference SE100735 R0
Report Number 0000003667
Date Reported 29 Jun 2011
Date Received 21 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

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ANALYTICAL REPORT

SE100735 R0

Sample Number	SE100735.001	Sample Matrix	Soil	Sample Date	14 Jun 2011	Sample Name	BH5_1.5-1.6	Sample Number	SE100735.002	Sample Matrix	Soil	Sample Date	14 Jun 2011	Sample Name	BH5_2.5-2.6	Sample Number	SE100735.003	Sample Matrix	Soil	Sample Date	14 Jun 2011	Sample Name	BH5_4-4.1	Sample Number	SE100735.004	Sample Matrix	Soil	Sample Date	15 Jun 2011	Sample Name	BH5_8.5m	Sample Number	SE100735.005	Sample Matrix	Soil	Sample Date	15 Jun 2011	Sample Name	BH5_14.5m
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Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iodomethane	mg/kg	5	-	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-xylene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



ANALYTICAL REPORT

SE100735 R0

Parameter	Units	LOR	Sample Number	SE100735.001	SE100735.002	SE100735.003	SE100735.004	SE100735.005
Sample Matrix	Soil		Sample Date	14 Jun 2011	14 Jun 2011	14 Jun 2011	15 Jun 2011	15 Jun 2011
Sample Name	BH5_1.5-1.6			BH5_2.5-2.6	BH5_4-4.1	BH5_8.5m	BH5_14.5m	

VOC's in Soil Method: AN433/AN434 (continued)

1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	<0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	<0.1	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	<0.1	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	<10	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	<0.5	-	-	-	-
Vinyl acetate	mg/kg	10	-	<10	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	<10	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	<5	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	<0.1	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	<0.5	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	91	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	112	-	-	-	-
d8-toluene (Surrogate)	%	-	-	95	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	83	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	<0.3	-	-	-	-
Total BTEX*	mg/kg	-	-	0	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-

Trihalomethanes

Chloroform	mg/kg	0.1	-	<0.1	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	<0.1	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	<0.1	-	-	-	-
Bromoform	mg/kg	0.1	-	<0.1	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	-	<20	-	-	-
Benzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Toluene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
Ethylbenzene	mg/kg	0.1	<0.1	-	<0.1	-	-	-
m/p-xylene	mg/kg	1	<1	-	<1	-	-	-
o-xylene	mg/kg	0.5	<0.5	-	<0.5	-	-	-
Total Xylenes	mg/kg	0.3	<0.3	-	<0.3	-	-	-
Total BTEX*	mg/kg	2.7	<2.7	-	<2.7	-	-	-



ANALYTICAL REPORT

SE100735 R0

Parameter	Units	LOR	Sample Number SE100735.001	Sample Matrix Soil	Sample Date 14 Jun 2011	Sample Name BH5_1.5-1.6	Sample Number SE100735.002	Sample Matrix Soil	Sample Date 14 Jun 2011	Sample Name BH5_2.5-2.6	Sample Number SE100735.003	Sample Matrix Soil	Sample Date 14 Jun 2011	Sample Name BH5_4-4.1	Sample Number SE100735.004	Sample Matrix Soil	Sample Date 15 Jun 2011	Sample Name BH5_8.5m	Sample Number SE100735.005	Sample Matrix Soil	Sample Date 15 Jun 2011	Sample Name BH5_14.5m
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Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434 (continued)

Surrogates

Trifluorotoluene (Surrogate)	%	-	101	-	103	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH C15-C28	mg/kg	50	<50	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-
TRH C29-C36	mg/kg	50	<50	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluorene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	mg/kg	0.1	0.2	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthracene	mg/kg	0.1	0.1	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	mg/kg	0.1	0.5	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	mg/kg	0.1	0.5	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	0.2	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1	0.2	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	0.5	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	0.4	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	0.24	-	0.24	-	-	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.1	0.1	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PAH	mg/kg	1.75	2.2	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	112	-	113	-	-	-	-	-	-	-	-	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	109	-	108	-	-	-	-	-	-	-	-	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	83	-	84	-	-	-	-	-	-	-	-	-	-	-	-	-

Field pH for Acid Sulphate Soil Method: AN104

pHf	pH Units	-	-	-	-	-	-	8.3	6.2
PHfox	pH Units	-	-	-	-	-	-	2.3	6.9
Reaction*	No unit	-	-	-	-	-	-	X	X
pH Difference*	pH Units	-10	-	-	-	-	-	6.0	-0.7

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	4	-	6	-	-	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	-	<0.3	-	-	-	-
Chromium, Cr	mg/kg	0.3	9.8	-	11	-	-	-	-
Copper, Cu	mg/kg	0.5	26	-	14	-	-	-	-
Lead, Pb	mg/kg	1	57	-	37	-	-	-	-
Nickel, Ni	mg/kg	0.5	13	-	5.7	-	-	-	-
Zinc, Zn	mg/kg	0.5	96	-	25	-	-	-	-



ANALYTICAL REPORT

SE100735 R0

Parameter	Units	LOR	Sample Number	SE100735.001	SE100735.002	SE100735.003	SE100735.004	SE100735.005
			Sample Matrix	Soil	Soil	Soil	Soil	Soil
			Sample Date	14 Jun 2011	14 Jun 2011	14 Jun 2011	15 Jun 2011	15 Jun 2011
			Sample Name	BH5_1.5-1.6	BH5_2.5-2.6	BH5_4-4.1	BH5_8.5m	BH5_14.5m

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.24	-	0.23	-	-	-
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	No	-	No	-	-	-
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Moisture Content Method: AN234

% Moisture	%	0.5	15	18	23	16	22	
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Parameter	Units	LOR	Sample Number	SE100735.006	SE100735.007	SE100735.008	SE100735.009	SE100735.010
			Sample Matrix	Soil	Soil	Soil	Soil	Soil
			Sample Date	14 Jun 2011	15 Jun 2011	16 Jun 2011	16 Jun 2011	16 Jun 2011
			Sample Name	BH8_0.5-0.6	BH9_0.5-0.6	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1

VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-	-



ANALYTICAL REPORT

SE100735 R0

Sample Number	SE100735.006	SE100735.007	SE100735.008	SE100735.009	SE100735.010
Sample Matrix	Soil	Soil	Soil	Soil	Soil
Sample Date	14 Jun 2011	15 Jun 2011	16 Jun 2011	16 Jun 2011	16 Jun 2011
Sample Name	BH8_0.5-0.6	BH9_0.5-0.6	BH17_1-1.1	BH17_2-2.1	BH17_5-5.1

Parameter

Units

LOR

VOC's in Soil Method: AN433/AN434 (continued)

Halogenated Aromatics

Chlorobenzene	mg/kg	0.1	-	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-	-

Monocyclic Aromatic Hydrocarbons

Benzene	mg/kg	0.1	-	-	-	-	-	-
Toluene	mg/kg	0.1	-	-	-	-	-	-
Ethylbenzene	mg/kg	0.1	-	-	-	-	-	-
m/p-xylene	mg/kg	0.2	-	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-	-
o-xylene	mg/kg	0.1	-	-	-	-	-	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-	-

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-	-	-	-	-	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-	-	-	-	-	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-	-	-	-	-	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-	-

Totals

Total Xylenes*	mg/kg	0.3	-	-	-	-	-	-
Total BTEX*	mg/kg	-	-	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-	-



ANALYTICAL REPORT

SE100735 R0

Parameter	Units	LOR	Sample Number SE100735.006	Sample Matrix Soil	Sample Date 14 Jun 2011	Sample Name BH8_0.5-0.6	Sample Number SE100735.007	Sample Matrix Soil	Sample Date 15 Jun 2011	Sample Name BH9_0.5-0.6	Sample Number SE100735.008	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_1-1.1	Sample Number SE100735.009	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_2-2.1	Sample Number SE100735.010	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_5-5.1
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VOC's in Soil Method: AN433/AN434 (continued)

Trihalomethanes

Chloroform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-xylene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7

Surrogates

Trifluorotoluene (Surrogate)	%	-	108	104	95	123	104
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	50	89	54	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH C29-C36	mg/kg	50	76	53	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.5	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	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	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	2.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Anthracene	mg/kg	0.1	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Fluoranthene	mg/kg	0.1	2.9	1.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pyrene	mg/kg	0.1	2.8	1.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Benzo(a)anthracene	mg/kg	0.1	1.6	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Chrysene	mg/kg	0.1	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Benzo(b)fluoranthene	mg/kg	0.1	2.0	1.3	0.1	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	mg/kg	0.1	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Benzo(a)pyrene	mg/kg	0.05	1.5	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Dibenzo(a&h)anthracene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Total PAH	mg/kg	1.75	16	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1



ANALYTICAL REPORT

SE100735 R0

Parameter	Units	LOR	Sample Number SE100735.006	Sample Matrix Soil	Sample Date 14 Jun 2011	Sample Name BH8_0.5-0.6	Sample Number SE100735.007	Sample Matrix Soil	Sample Date 15 Jun 2011	Sample Name BH9_0.5-0.6	Sample Number SE100735.008	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_1-1.1	Sample Number SE100735.009	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_2-2.1	Sample Number SE100735.010	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_5-5.1
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 (continued)

Surrogates

d5-nitrobenzene (Surrogate)	%	-	112	115	107	111	-
2-fluorobiphenyl (Surrogate)	%	-	108	112	103	107	-
d14-p-terphenyl (Surrogate)	%	-	85	84	82	83	-

Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	-	-	-	-	-	8.1
PHfox	pH Units	-	-	-	-	-	-	2.9
Reaction*	No unit	-	-	-	-	-	-	XX
pH Difference*	pH Units	-10	-	-	-	-	-	5.3

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	5	4	6	7	<3
Cadmium, Cd	mg/kg	0.3	0.8	0.3	0.6	0.6	<0.3
Chromium, Cr	mg/kg	0.3	12	12	14	11	9.5
Copper, Cu	mg/kg	0.5	39	30	72	46	7.3
Lead, Pb	mg/kg	1	130	66	240	140	15
Nickel, Ni	mg/kg	0.5	7.2	19	6.7	2.7	3.5
Zinc, Zn	mg/kg	0.5	190	93	340	110	19

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.27	0.12	4.9	0.44	0.07
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	No	No	No	No	-
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Moisture Content Method: AN234

% Moisture	%	0.5	8.1	9.0	24	23	18
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Parameter	Units	LOR	Sample Number SE100735.011	Sample Matrix Soil	Sample Date 16 Jun 2011	Sample Name BH17_8-8.1
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VOC's in Soil Method: AN433/AN434

Fumigants

2,2-dichloropropane	mg/kg	0.1	-
1,2-dichloropropane	mg/kg	0.1	-
cis-1,3-dichloropropene	mg/kg	0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-

Halogenated Aliphatics

Dichlorodifluoromethane (CFC-12)	mg/kg	1	-
Chloromethane	mg/kg	1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-
Bromomethane	mg/kg	1	-
Chloroethane	mg/kg	1	-
Trichlorofluoromethane	mg/kg	1	-
Iodomethane	mg/kg	5	-
1,1-dichloroethene	mg/kg	0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-
Allyl chloride	mg/kg	0.1	-
trans-1,2-dichloroethene	mg/kg	0.1	-
1,1-dichloroethane	mg/kg	0.1	-

Sample Number	SE100735.011
Sample Matrix	Soil
Sample Date	16 Jun 2011
Sample Name	BH17_8-8.1

Parameter	Units	LOR
cis-1,2-dichloroethene	mg/kg	0.1
Bromochloromethane	mg/kg	0.1
1,2-dichloroethane	mg/kg	0.1
1,1,1-trichloroethane	mg/kg	0.1
1,1-dichloropropene	mg/kg	0.1
Carbon tetrachloride	mg/kg	0.1
Dibromomethane	mg/kg	0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1
1,1,2-trichloroethane	mg/kg	0.1
1,3-dichloropropane	mg/kg	0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1
cis-1,4-dichloro-2-butene	mg/kg	1
1,1,2,2-tetrachloroethane	mg/kg	0.1
1,2,3-trichloropropane	mg/kg	0.1
trans-1,4-dichloro-2-butene	mg/kg	1
1,2-dibromo-3-chloropropane	mg/kg	0.1
Hexachlorobutadiene	mg/kg	0.1

VOC's in Soil Method: AN433/AN434 (continued)

Parameter	Units	LOR
cis-1,2-dichloroethene	mg/kg	0.1
Bromochloromethane	mg/kg	0.1
1,2-dichloroethane	mg/kg	0.1
1,1,1-trichloroethane	mg/kg	0.1
1,1-dichloropropene	mg/kg	0.1
Carbon tetrachloride	mg/kg	0.1
Dibromomethane	mg/kg	0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1
1,1,2-trichloroethane	mg/kg	0.1
1,3-dichloropropane	mg/kg	0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1
cis-1,4-dichloro-2-butene	mg/kg	1
1,1,2,2-tetrachloroethane	mg/kg	0.1
1,2,3-trichloropropane	mg/kg	0.1
trans-1,4-dichloro-2-butene	mg/kg	1
1,2-dibromo-3-chloropropane	mg/kg	0.1
Hexachlorobutadiene	mg/kg	0.1

Halogenated Aromatics

Parameter	Units	0.1	-
Chlorobenzene	mg/kg	0.1	-
Bromobenzene	mg/kg	0.1	-
2-chlorotoluene	mg/kg	0.1	-
4-chlorotoluene	mg/kg	0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-

Monocyclic Aromatic Hydrocarbons

Parameter	Units	0.1	-
Benzene	mg/kg	0.1	-
Toluene	mg/kg	0.1	-
Ethylbenzene	mg/kg	0.1	-
m/p-xylene	mg/kg	0.2	-
Styrene (Vinyl benzene)	mg/kg	0.1	-
o-xylene	mg/kg	0.1	-
Isopropylbenzene (Cumene)	mg/kg	0.1	-
n-propylbenzene	mg/kg	0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-
tert-butylbenzene	mg/kg	0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-
sec-butylbenzene	mg/kg	0.1	-
p-isopropyltoluene	mg/kg	0.1	-
n-butylbenzene	mg/kg	0.1	-



ANALYTICAL REPORT

SE100735 R0

Sample Number SE100735.011
Sample Matrix Soil
Sample Date 16 Jun 2011
Sample Name BH17_8-1

Parameter	Units	LOR	
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VOC's in Soil Method: AN433/AN434 (continued)

Nitrogenous Compounds

Acrylonitrile	mg/kg	0.1	-
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Oxygenated Compounds

Acetone (2-propanone)	mg/kg	10	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.5	-
Vinyl acetate	mg/kg	10	-
MEK (2-butanone)	mg/kg	10	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-
2-hexanone (MBK)	mg/kg	5	-

Polycyclic VOCs

Naphthalene	mg/kg	0.1	-
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Sulphonated Compounds

Carbon disulfide	mg/kg	0.5	-
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Surrogates

Dibromofluoromethane (Surrogate)	%	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-
d8-toluene (Surrogate)	%	-	-
Bromofluorobenzene (Surrogate)	%	-	-

Totals

Total Xylenes*	mg/kg	0.3	-
Total BTEX*	mg/kg	-	-
Total VOC*	mg/kg	24	-

Trihalomethanes

Chloroform	mg/kg	0.1	-
Bromodichloromethane	mg/kg	0.1	-
Chlorodibromomethane	mg/kg	0.1	-
Bromoform	mg/kg	0.1	-

Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	1	<1
o-xylene	mg/kg	0.5	<0.5
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX*	mg/kg	2.7	<2.7

Surrogates

Trifluorotoluene (Surrogate)	%	-	103
Dibromofluoromethane (Surrogate)	%	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-
d8-toluene (Surrogate)	%	-	-
Bromofluorobenzene (Surrogate)	%	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	50	<50
TRH C29-C36	mg/kg	50	<50



ANALYTICAL REPORT

SE100735 R0

Sample Number	SE100735.011
Sample Matrix	Soil
Sample Date	16 Jun 2011
Sample Name	BH17_8-1

Parameter	Units	LOR
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TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 (continued)

Surrogates

TRH (Surrogate)	%	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	-
Acenaphthylene	mg/kg	0.1	-
Acenaphthene	mg/kg	0.1	-
Fluorene	mg/kg	0.1	-
Phenanthrene	mg/kg	0.1	-
Anthracene	mg/kg	0.1	-
Fluoranthene	mg/kg	0.1	-
Pyrene	mg/kg	0.1	-
Benzo(a)anthracene	mg/kg	0.1	-
Chrysene	mg/kg	0.1	-
Benzo(b)fluoranthene	mg/kg	0.1	-
Benzo(k)fluoranthene	mg/kg	0.1	-
Benzo(a)pyrene	mg/kg	0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-
Dibenzo(a&h)anthracene	mg/kg	0.1	-
Benzo(ghi)perylene	mg/kg	0.1	-
Total PAH	mg/kg	1.75	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	-
2-fluorobiphenyl (Surrogate)	%	-	-
d14-p-terphenyl (Surrogate)	%	-	-

Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	7.5
PHfox	pH Units	-	3.7
Reaction*	No unit	-	XX
pH Difference*	pH Units	-10	3.8

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	16
Cadmium, Cd	mg/kg	0.3	0.5
Chromium, Cr	mg/kg	0.3	13
Copper, Cu	mg/kg	0.5	8.6
Lead, Pb	mg/kg	1	13
Nickel, Ni	mg/kg	0.5	2.5
Zinc, Zn	mg/kg	0.5	27

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	<0.05
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Fibre Identification in soil Method: AN602

FibreID

Asbestos Detected	No unit	-	-
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ANALYTICAL REPORT

SE100735 R0

Sample Number	SE100735.011
Sample Matrix	Soil
Sample Date	16 Jun 2011
Sample Name	BH17_8-8.1

Parameter	Units	LOR
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Moisture Content Method: AN234

% Moisture	%	0.5	17
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QC SUMMARY

SE100735 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Field pH for Acid Sulphate Soil Method: ME-(AU)-[ENV]AN104

Parameter	QC Reference	Units	LOR	LCS %Recovery
PHf	LB002905	pH Units	-	NA

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB002933	mg/kg	0.05	<0.05	0 - 6%	111%	89%

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002929	mg/kg	3	<3	0%	99%	
Cadmium, Cd	LB002929	mg/kg	0.3	<0.3	8%	100%	
Chromium, Cr	LB002929	mg/kg	0.3	<0.3	2%	99%	
Copper, Cu	LB002929	mg/kg	0.5	<0.5	4%	103%	
Lead, Pb	LB002929	mg/kg	1	<1	0%	98%	83%
Nickel, Ni	LB002929	mg/kg	0.5	<0.5	8%	100%	
Zinc, Zn	LB002929	mg/kg	0.5	<0.5	8%	97%	

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Naphthalene	LB002808	mg/kg	0.1	<0.1	0%	89%
Acenaphthylene	LB002808	mg/kg	0.1	<0.1	0%	95%
Acenaphthene	LB002808	mg/kg	0.1	<0.1	0%	96%
Fluorene	LB002808	mg/kg	0.1	<0.1	0%	NA
Phenanthrene	LB002808	mg/kg	0.1	<0.1	59%	92%
Anthracene	LB002808	mg/kg	0.1	<0.1	0%	96%
Fluoranthene	LB002808	mg/kg	0.1	<0.1	59%	89%
Pyrene	LB002808	mg/kg	0.1	<0.1	63%	92%
Benzo(a)anthracene	LB002808	mg/kg	0.1	<0.1	42%	NA
Chrysene	LB002808	mg/kg	0.1	<0.1	67%	NA
Benzo(b)fluoranthene	LB002808	mg/kg	0.1	<0.1	97%	NA
Benzo(k)fluoranthene	LB002808	mg/kg	0.1	<0.1	117%	NA
Benzo(a)pyrene	LB002808	mg/kg	0.05	<0.05	59%	89%
Indeno(1,2,3-cd)pyrene	LB002808	mg/kg	0.1	<0.1	0%	NA
Dibenzo(a&h)anthracene	LB002808	mg/kg	0.1	<0.1	0%	NA
Benzo(ghi)perylene	LB002808	mg/kg	0.1	<0.1	18%	NA
Total PAH	LB002808	mg/kg	1.75	<1.8	44%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB002808	%	-	105%	2%	110%
2-fluorobiphenyl (Surrogate)	LB002808	%	-	101%	1%	104%
d14-p-terphenyl (Surrogate)	LB002808	%	-	79%	0%	81%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TRH C10-C14	LB002808	mg/kg	20	<20	0%	110%
TRH C15-C28	LB002808	mg/kg	50	<50	0%	115%
TRH C29-C36	LB002808	mg/kg	50	<50	0%	108%

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434
Fumigants

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2,2-dichloropropane	LB002813	mg/kg	0.1	<0.1	NA
1,2-dichloropropane	LB002813	mg/kg	0.1	<0.1	NA
cis-1,3-dichloropropene	LB002813	mg/kg	0.1	<0.1	NA
trans-1,3-dichloropropene	LB002813	mg/kg	0.1	<0.1	NA
1,2-dibromoethane (EDB)	LB002813	mg/kg	0.1	<0.1	NA

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Dichlorodifluoromethane (CFC-12)	LB002813	mg/kg	1	<1	NA
Chloromethane	LB002813	mg/kg	1	<1	NA
Vinyl chloride (Chloroethene)	LB002813	mg/kg	0.1	<0.1	NA
Bromomethane	LB002813	mg/kg	1	<1	NA
Chloroethane	LB002813	mg/kg	1	<1	NA
Trichlorofluoromethane	LB002813	mg/kg	1	<1	NA
Iodomethane	LB002813	mg/kg	5	<5	NA
1,1-dichloroethene	LB002813	mg/kg	0.1	<0.1	70%
Dichloromethane (Methylene chloride)	LB002813	mg/kg	0.5	<0.5	NA
Allyl chloride	LB002813	mg/kg	0.1	<0.1	NA
trans-1,2-dichloroethene	LB002813	mg/kg	0.1	<0.1	NA
1,1-dichloroethane	LB002813	mg/kg	0.1	<0.1	NA
cis-1,2-dichloroethene	LB002813	mg/kg	0.1	<0.1	NA
Bromochloromethane	LB002813	mg/kg	0.1	<0.1	NA
1,2-dichloroethane	LB002813	mg/kg	0.1	<0.1	95%
1,1,1-trichloroethane	LB002813	mg/kg	0.1	<0.1	NA
1,1-dichloropropene	LB002813	mg/kg	0.1	<0.1	NA
Carbon tetrachloride	LB002813	mg/kg	0.1	<0.1	NA
Dibromomethane	LB002813	mg/kg	0.1	<0.1	NA
Trichloroethene (Trichloroethylene -TCE)	LB002813	mg/kg	0.1	<0.1	87%
1,1,2-trichloroethane	LB002813	mg/kg	0.1	<0.1	NA
1,3-dichloropropane	LB002813	mg/kg	0.1	<0.1	NA
Tetrachloroethene (Perchloroethylene,PCE)	LB002813	mg/kg	0.1	<0.1	NA
1,1,1,2-tetrachloroethane	LB002813	mg/kg	0.1	<0.1	NA
cis-1,4-dichloro-2-butene	LB002813	mg/kg	1	<1	NA
1,1,2,2-tetrachloroethane	LB002813	mg/kg	0.1	<0.1	NA
1,2,3-trichloropropane	LB002813	mg/kg	0.1	<0.1	NA
trans-1,4-dichloro-2-butene	LB002813	mg/kg	1	<1	NA
1,2-dibromo-3-chloropropane	LB002813	mg/kg	0.1	<0.1	NA
Hexachlorobutadiene	LB002813	mg/kg	0.1	<0.1	NA

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Chlorobenzene	LB002813	mg/kg	0.1	<0.1	111%
Bromobenzene	LB002813	mg/kg	0.1	<0.1	NA
2-chlorotoluene	LB002813	mg/kg	0.1	<0.1	NA
4-chlorotoluene	LB002813	mg/kg	0.1	<0.1	NA
1,3-dichlorobenzene	LB002813	mg/kg	0.1	<0.1	NA
1,4-dichlorobenzene	LB002813	mg/kg	0.1	<0.1	NA
1,2-dichlorobenzene	LB002813	mg/kg	0.1	<0.1	NA
1,2,4-trichlorobenzene	LB002813	mg/kg	0.1	<0.1	NA
1,2,3-trichlorobenzene	LB002813	mg/kg	0.1	<0.1	NA

Monocyclic Aromatic Hydrocarbons

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Benzene	LB002813	mg/kg	0.1	<0.1	89%
Toluene	LB002813	mg/kg	0.1	<0.1	105%
Ethylbenzene	LB002813	mg/kg	0.1	<0.1	103%
m/p-xylene	LB002813	mg/kg	0.2	<0.2	112%
Styrene (Vinyl benzene)	LB002813	mg/kg	0.1	<0.1	NA
o-xylene	LB002813	mg/kg	0.1	<0.1	105%
Isopropylbenzene (Cumene)	LB002813	mg/kg	0.1	<0.1	NA
n-propylbenzene	LB002813	mg/kg	0.1	<0.1	NA
1,3,5-trimethylbenzene	LB002813	mg/kg	0.1	<0.1	NA
tert-butylbenzene	LB002813	mg/kg	0.1	<0.1	NA
1,2,4-trimethylbenzene	LB002813	mg/kg	0.1	<0.1	NA
sec-butylbenzene	LB002813	mg/kg	0.1	<0.1	NA
p-isopropyltoluene	LB002813	mg/kg	0.1	<0.1	NA
n-butylbenzene	LB002813	mg/kg	0.1	<0.1	NA

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acrylonitrile	LB002813	mg/kg	0.1	<0.1	NA

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetone (2-propanone)	LB002813	mg/kg	10	<10	NA
MTBE (Methyl-tert-butyl ether)	LB002813	mg/kg	0.5	<0.5	NA
Vinyl acetate	LB002813	mg/kg	10	<10	NA
MEK (2-butanone)	LB002813	mg/kg	10	<10	NA
MIBK (4-methyl-2-pentanone)	LB002813	mg/kg	1	<1	NA
2-hexanone (MBK)	LB002813	mg/kg	5	<5	NA

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB002813	mg/kg	0.1	<0.1	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbon disulfide	LB002813	mg/kg	0.5	<0.5	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Dibromofluoromethane (Surrogate)	LB002813	%	-	95%	93%
d4-1,2-dichloroethane (Surrogate)	LB002813	%	-	111%	106%
d8-toluene (Surrogate)	LB002813	%	-	95%	92%
Bromofluorobenzene (Surrogate)	LB002813	%	-	84%	99%

Totals

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Total Xylenes*	LB002813	mg/kg	0.3	<0.3	NA
Total BTEX*	LB002813	mg/kg	-	0	NA

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Chloroform	LB002813	mg/kg	0.1	<0.1	72%
Bromodichloromethane	LB002813	mg/kg	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433/AN434 (continued)

			MB	LCS
				%Recovery
Chlorodibromomethane	LB002813	mg/kg	0.1	<0.1
Bromoform	LB002813	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C9	LB002813	mg/kg	20	<20	0%	98%	125%
Benzene	LB002813	mg/kg	0.1	<0.1	0%	67%	121%
Toluene	LB002813	mg/kg	0.1	<0.1	0%	68%	124%
Ethylbenzene	LB002813	mg/kg	0.1	<0.1	0%	70%	128%
m/p-xylene	LB002813	mg/kg	1	<1	0%	68%	128%
o-xylene	LB002813	mg/kg	0.5	<0.5	0%	72%	126%
Total Xylenes	LB002813	mg/kg	0.3	<0.3	0%	69%	127%
Total BTEX*	LB002813	mg/kg	2.7	<2.7	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Trifluorotoluene (Surrogate)	LB002813	%	-	127%	5 - 10%	122%	99%

METHOD

METHODOLOGY SUMMARY

- AN040 A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
- AN088 Orbital rolling for Organic pollutants are extracted from soil/sediment by transferring an appropriate mass of sample to a clear soil jar and extracting with 1:1 Dichloromethane/Acetone. Orbital Rolling method is intended for the extraction of semi-volatile organic compounds from soil/sediment samples, and is based somewhat on USEPA method 3570 (Micro Organic extraction and sample preparation). Method 3700.
- AN104 pH is determined on an extract of approximately 2g of as received sample in approximately 10 mL of deionised water with pH determined after standing 30 minutes.
- AN104 pHFox is determined on an extract of approximately 2g of as received sample with a few mLs of 30% hydrogen peroxide (adjusted to pH 4.5 to 5.5) with the extract reaction being rated from slight to extreme, with pH determined after reaction is complete and extract has cooled. Referenced to ASS Laboratory Methods Guidelines, method 23Af-Bf, 2004.
- AN234 The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
- AN312 Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
- AN403 Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
- AN403 Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403 The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
- AN420 (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
- AN433/AN434 VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
- AN602 Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

IS Insufficient sample for analysis.
LNR Sample listed, but not received.
* This analysis is not covered by the scope of accreditation.
^ Performed by outside laboratory.
LOR Limit of Reporting
↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance
QFL QC result is below the lower tolerance
- The sample was not analysed for this analyte
NVL Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLOC24303AA - Additional
Order Number 89333-89335
Samples 1

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SGS Reference SE100735B R0
Report Number 0000004777
Date Reported 04 Aug 2011
Date Received 21 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Site : SMCEC

SIGNATORIES

Dong Liang
Inorganics Metals Team Leader

Edward Ibrahim
Business Manager



ANALYTICAL REPORT

SE100735B R0

Sample Number	SE100735B.008
Sample Matrix	Soil
Sample Date	16 Jun 2011
Sample Name	BH17_1-1.1

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	8.9
pH 1:20 plus HCl	pH Units	-	1.7
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of Extraction Solution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.1

Mercury in Soil by TCLP Extract Method: AN311/AN312

Mercury	mg/L	0.0001	<0.0001
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QC SUMMARY

SE100735B R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Mercury in Soil by TCLP Extract Method: ME-(AU)-[ENV]AN311/AN312

Parameter	QC Reference	Units	LOR	LCS %Recovery
Mercury	LB003713	mg/L	0.0001	NA

METHOD

METHODOLOGY SUMMARY

AN006

Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.

AN006

Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05 .

AN006

Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05 .

AN311/AN312

Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.

FOOTNOTES

IS Insufficient sample for analysis.

LNR Sample listed, but not received.

* This analysis is not covered by the scope of accreditation.

^ Performed by outside laboratory.

LOR Limit of Reporting

↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance

QFL QC result is below the lower tolerance

- The sample was not analysed for this analyte

NVL Not Validated

Samples analysed as received.

Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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SGS Reference SE100739 R0
Report Number 0000003603
Date Reported 27/06/2011 7:00:37PM
Date Received 22 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Yusuf Kuthpuдин.

SIGNATORIES

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Inorganics Metals Team Leader

Edward Ibrahim
Business Manager

Ly Kim Ha
Organics Supervisor

Ravee Sivasubramaniam
Hygienist



ANALYTICAL REPORT

SE100739 R0

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est. %w/w
SE100739.001	BH15_(1.0-1.1m)	Soil	45g. Soil, Rocks	21 Jun 2011	No Asbestos Detected Organic Fibres Detected	
SE100739.002	BH15_(2.5-2.6m)	Soil	42g. Clay, Soil, Rocks	21 Jun 2011	No Asbestos Detected Organic Fibres Detected	

METHOD

METHODOLOGY SUMMARY

AN602

Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	- Brown Asbestos	NA - Not Analysed
Chrysotile	- White Asbestos	LNR - Listed Not Required
Crocidolite	- Blue Asbestos	* - Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1 000 to 1 in 10 000 parts by weight, equivalent to 1 to 0.1 g/kg."

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australia Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia-May 2009.

Sampled by the client

Where reported: 'Asbestos Detected':

Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'No Asbestos Detected':

No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':

Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.

Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLCOV24303AA
Order Number 92503
Samples 4

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SGS Reference SE100739 R0
Report Number 0000003602
Date Reported 27 Jun 2011
Date Received 22 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Yusuf Kuthpuдин.

SIGNATORIES

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Inorganics Metals Team Leader

Edward Ibrahim
Business Manager

Ly Kim Ha
Organics Supervisor

Ravee Sivasubramaniam
Hygienist



ANALYTICAL REPORT

SE100739 R0

Sample Number	SE100739.001	SE100739.002	SE100739.003	SE100739.004
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	21 Jun 2011	21 Jun 2011	21 Jun 2011	21 Jun 2011
Sample Name	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH15_(4.0-4.1m)	BH15_(7.5-7.6m)

Parameter	Units	LOR				
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Volatile Petroleum Hydrocarbons in Soil Method: AN433/AN434

TRH C6-C9	mg/kg	20	<20	<20	-	-
Benzene	mg/kg	0.1	<0.1	<0.1	-	-
Toluene	mg/kg	0.1	<0.1	<0.1	-	-
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
m/p-xylene	mg/kg	1	<1	<1	-	-
o-xylene	mg/kg	0.5	<0.5	<0.5	-	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	-	-
Total BTEX*	mg/kg	2.7	<2.7	<2.7	-	-

Surrogates

Trifluorotoluene (Surrogate)	%	-	60	76	-	-
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403

TRH C10-C14	mg/kg	20	<20	<20	-	-
TRH C15-C28	mg/kg	50	<50	<50	-	-
TRH C29-C36	mg/kg	50	<50	<50	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420

Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	-	-
Acenaphthene	mg/kg	0.1	<0.1	<0.1	-	-
Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
Phenanthrene	mg/kg	0.1	0.1	<0.1	-	-
Anthracene	mg/kg	0.1	<0.1	<0.1	-	-
Fluoranthene	mg/kg	0.1	0.2	<0.1	-	-
Pyrene	mg/kg	0.1	0.3	<0.1	-	-
Benzo(a)anthracene	mg/kg	0.1	0.2	<0.1	-	-
Chrysene	mg/kg	0.1	0.1	<0.1	-	-
Benzo(b)fluoranthene	mg/kg	0.1	0.1	<0.1	-	-
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
Benzo(a)pyrene	mg/kg	0.05	0.06	<0.05	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
Dibenzo(a&h)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
Total PAH	mg/kg	1.75	<1.8†	<1.8†	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	77	79	-	-
2-fluorobiphenyl (Surrogate)	%	-	77	77	-	-
d14-p-terphenyl (Surrogate)	%	-	79	91	-	-



ANALYTICAL REPORT

SE100739 R0

Sample Number	SE100739.001	SE100739.002	SE100739.003	SE100739.004
Sample Matrix	Soil	Soil	Soil	Soil
Sample Date	21 Jun 2011	21 Jun 2011	21 Jun 2011	21 Jun 2011
Sample Name	BH15_(1.0-1.1m)	BH15_(2.5-2.6m)	BH15_(4.0-4.1m)	BH15_(7.5-7.6m)

Parameter	Units	LOR				
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Field pH for Acid Sulphate Soil Method: AN104

PHf	pH Units	-	-	-	8.4	7.2
PHfox	pH Units	-	-	-	6.9	6.9
Reaction*	No unit	-	-	-	XX	XX
pH Difference*	pH Units	-10	-	-	1.5	0.3

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: AN040/AN320

Arsenic, As	mg/kg	3	6	11	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	0.5	-	-
Chromium, Cr	mg/kg	0.3	12	31	-	-
Copper, Cu	mg/kg	0.5	61	79	-	-
Lead, Pb	mg/kg	1	110	300	-	-
Nickel, Ni	mg/kg	0.5	3.7	14	-	-
Zinc, Zn	mg/kg	0.5	100	100	-	-

Mercury in Soil Method: AN312

Mercury	mg/kg	0.05	0.74	2.2	-	-
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Fibre Identification in soil Method: AN602

FibreID						
Asbestos Detected	No unit	-	No	No	-	-

Moisture Content Method: AN234

% Moisture	%	0.5	16	32	23	16
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Field pH for Acid Sulphate Soil Method: ME-(AU)-[ENV]AN104

Parameter	QC Reference	Units	LOR	DUP %RPD	LCS %Recovery
PHf	LB002906	pH Units	-	1%	NA
PHfox	LB002906	pH Units	-	3%	

Mercury in Soil Method: ME-(AU)-[ENV]AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB002898	mg/kg	0.05	<0.05	19%	109%	91%

Metals in Soil by ICPOES from EPA 200.8 Digest (SYDNEY) Method: ME-(AU)-[ENV]AN040/AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB002896	mg/kg	3	<3	8%	99%	90%
Cadmium, Cd	LB002896	mg/kg	0.3	<0.3	0%	101%	95%
Chromium, Cr	LB002896	mg/kg	0.3	<0.3	19%	102%	97%
Copper, Cu	LB002896	mg/kg	0.5	<0.5	5%	103%	98%
Lead, Pb	LB002896	mg/kg	1	<1	1%	100%	76%
Nickel, Ni	LB002896	mg/kg	0.5	<0.5	4%	99%	93%
Zinc, Zn	LB002896	mg/kg	0.5	<0.5	1%	99%	41%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Naphthalene	LB002805	mg/kg	0.1	<0.1	0%	122%
Acenaphthylene	LB002805	mg/kg	0.1	<0.1	NVL	117%
Acenaphthene	LB002805	mg/kg	0.1	<0.1	0%	123%
Fluorene	LB002805	mg/kg	0.1	<0.1	0%	NA
Phenanthrene	LB002805	mg/kg	0.1	<0.1	18%	117%
Anthracene	LB002805	mg/kg	0.1	<0.1	0%	122%
Fluoranthene	LB002805	mg/kg	0.1	<0.1	4%	119%
Pyrene	LB002805	mg/kg	0.1	<0.1	0%	128%
Benzo(a)anthracene	LB002805	mg/kg	0.1	<0.1	0%	NA
Chrysene	LB002805	mg/kg	0.1	<0.1	18%	NA
Benzo(b)fluoranthene	LB002805	mg/kg	0.1	<0.1	26%	NA
Benzo(k)fluoranthene	LB002805	mg/kg	0.1	<0.1	0%	NA
Benzo(a)pyrene	LB002805	mg/kg	0.05	<0.05	0%	121%
Indeno(1,2,3-cd)pyrene	LB002805	mg/kg	0.1	<0.1	0%	NA
Dibenzo(a&h)anthracene	LB002805	mg/kg	0.1	<0.1	0%	NA
Benzo(ghi)perylene	LB002805	mg/kg	0.1	<0.1	0%	NA
Total PAH	LB002805	mg/kg	1.75	<1.8	0%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB002805	%	-	118%	3%	113%
2-fluorobiphenyl (Surrogate)	LB002805	%	-	107%	14%	112%
d14-p-terphenyl (Surrogate)	LB002805	%	-	93%	3%	82%

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TRH C10-C14	LB002805	mg/kg	20	<20	0%	105%
TRH C15-C28	LB002805	mg/kg	50	<50	0%	103%
TRH C29-C36	LB002805	mg/kg	50	<50	0%	115%



QC SUMMARY

SE100739 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery	MS %Recovery
TRH C6-C9	LB002810	mg/kg	20	<20	130%	117%
Benzene	LB002810	mg/kg	0.1	<0.1	93%	118%
Toluene	LB002810	mg/kg	0.1	<0.1	95%	123%
Ethylbenzene	LB002810	mg/kg	0.1	<0.1	95%	126%
m/p-xylene	LB002810	mg/kg	1	<1	96%	125%
o-xylene	LB002810	mg/kg	0.5	<0.5	92%	125%
Total Xylenes	LB002810	mg/kg	0.3	<0.3	95%	125%
Total BTEX*	LB002810	mg/kg	2.7	<2.7	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery	MS %Recovery
Trifluorotoluene (Surrogate)	LB002810	%	-	85%	75%	61%

METHOD

METHODOLOGY SUMMARY

- AN040 A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
- AN088 Orbital rolling for Organic pollutants are extracted from soil/sediment by transferring an appropriate mass of sample to a clear soil jar and extracting with 1:1 Dichloromethane/Acetone. Orbital Rolling method is intended for the extraction of semi-volatile organic compounds from soil/sediment samples, and is based somewhat on USEPA method 3570 (Micro Organic extraction and sample preparation). Method 3700.
- AN104 pH is determined on an extract of approximately 2g of as received sample in approximately 10 mL of deionised water with pH determined after standing 30 minutes.
- AN104 pHFox is determined on an extract of approximately 2g of as received sample with a few mLs of 30% hydrogen peroxide (adjusted to pH 4.5 to 5.5) with the extract reaction being rated from slight to extreme, with pH determined after reaction is complete and extract has cooled. Referenced to ASS Laboratory Methods Guidelines, method 23Af-Bf, 2004.
- AN234 The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
- AN312 Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
- AN403 Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
- AN403 Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
- AN403 The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
- AN420 (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
- AN433/AN434 VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
- AN602 Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

IS Insufficient sample for analysis.
LNR Sample listed, but not received.
* This analysis is not covered by the scope of accreditation.
^ Performed by outside laboratory.
LOR Limit of Reporting
↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance
QFL QC result is below the lower tolerance
- The sample was not analysed for this analyte

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLCOV24303AA - Additional
Order Number 92503
Samples 1

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SGS Reference SE100739A R0
Report Number 0000004769
Date Reported 04 Aug 2011
Date Received 22 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

SIGNATORIES

Dong Liang
Inorganics Metals Team Leader

Edward Ibrahim
Business Manager



ANALYTICAL REPORT

SE100739A R0

Sample Number	SE100739A.002
Sample Matrix	Soil
Sample Date	21 Jun 2011
Sample Name	BH15_2.5-2.6

Parameter	Units	LOR
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TCLP (Toxicity Characteristic Leaching Procedure) Method: AN006

pH 1:20	pH Units	-	9.5
pH 1:20 plus HCl	pH Units	-	2.0
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of Extraction Solution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.3

Metals in Soil (TCLP) by ICPOES Method: AN320/AN321

Lead, Pb	mg/L	0.02	0.11
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QC SUMMARY

SE100739A R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Metals in Soil (TCLP) by ICPOES Method: ME-(AU)-[ENV]AN320/AN321

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Lead, Pb	LB003711	mg/L	0.02	<0.020	NA

METHOD

METHODOLOGY SUMMARY

AN006

Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.

AN006

Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05 .

AN006

Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05 .

AN320/AN321

Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.

AN320/AN321

Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	This analysis is not covered by the scope of accreditation.
^	Performed by outside laboratory.
LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting

QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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Project GEOTLCOV24303AA-Syd Entertainment Centre
Order Number 89576
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COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

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ANALYTICAL REPORT

SE100820 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
TRH C6-C9	µg/L	40	<40	-	<40	
Benzene	µg/L	0.5	<0.5	[102%]	<0.5	
Toluene	µg/L	0.5	<0.5	[100%]	<0.5	
Ethylbenzene	µg/L	0.5	<0.5	[98%]	<0.5	
m/p-xylene	µg/L	1	<1	[97%]	<1	
o-xylene	µg/L	0.5	<0.5	[98%]	<0.5	
Total BTEX*	µg/L	3	<3	[99%]	<3	
Total Xylenes*	µg/L	1.5	<1.5	[98%]	<1.5	

Surrogates

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
Trifluorotoluene (Surrogate)	%	-	73	68	69	
Dibromofluoromethane (Surrogate)	%	-	-	-	-	
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	
d8-toluene (Surrogate)	%	-	-	-	-	
Bromofluorobenzene (Surrogate)	%	-	-	-	-	

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
TRH C10-C14	µg/L	100	<100	-	-	-
TRH C15-C28	µg/L	200	<200	-	-	-
TRH C29-C36	µg/L	200	<200	-	-	-

Surrogates

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
TRH (Surrogate)	%	-	-	-	-	-

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
Naphthalene	µg/L	0.1	<0.1	-	-	-
Acenaphthylene	µg/L	0.1	<0.1	-	-	-
Acenaphthene	µg/L	0.1	<0.1	-	-	-
Fluorene	µg/L	0.1	<0.1	-	-	-
Phenanthrene	µg/L	0.1	<0.1	-	-	-
Anthracene	µg/L	0.1	<0.1	-	-	-
Fluoranthene	µg/L	0.1	<0.1	-	-	-
Pyrene	µg/L	0.1	<0.1	-	-	-
Benzo(a)anthracene	µg/L	0.1	<0.1	-	-	-
Chrysene	µg/L	0.1	<0.1	-	-	-
Benzo(b)fluoranthene	µg/L	0.1	<0.1	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	<0.1	-	-	-
Benzo(a)pyrene	µg/L	0.1	<0.1	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	-	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	<0.1	-	-	-
Benzo(ghi)perylene	µg/L	0.1	<0.1	-	-	-
Total PAH (18)*	µg/L	1	<1	-	-	-

Surrogates

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100820.001 Water 04 Jul 2011 BH1	SE100820.002 Water 04 Jul 2011 TS	SE100820.003 Water 04 Jul 2011 TB
d5-nitrobenzene (Surrogate)	%	-	106	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	101	-	-	-
d14-p-terphenyl (Surrogate)	%	-	80	-	-	-



ANALYTICAL REPORT

SE100820 R0

Parameter	Units	LOR	Sample Number SE100820.001	Sample Matrix Water	Sample Date 04 Jul 2011	Sample Name BH1	Sample Number SE100820.002	Sample Matrix Water	Sample Date 04 Jul 2011	Sample Name TS	Sample Number SE100820.003	Sample Matrix Water	Sample Date 04 Jul 2011	Sample Name TB
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Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	2	-	-
Cadmium, Cd	µg/L	0.1	0.2	-	-
Chromium, Cr	µg/L	1	7	-	-
Copper, Cu	µg/L	1	21	-	-
Lead, Pb	µg/L	1	9	-	-
Nickel, Ni	µg/L	1	3	-	-
Zinc, Zn	µg/L	1	530	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	<0.0001	-	-
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311/AN312

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Mercury	LB003152	mg/L	0.0001	<0.0001	110%

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Naphthalene	LB003126	µg/L	0.1	<0.1	107%
Acenaphthylene	LB003126	µg/L	0.1	<0.1	113%
Acenaphthene	LB003126	µg/L	0.1	<0.1	107%
Fluorene	LB003126	µg/L	0.1	<0.1	NA
Phenanthrene	LB003126	µg/L	0.1	<0.1	112%
Anthracene	LB003126	µg/L	0.1	<0.1	107%
Fluoranthene	LB003126	µg/L	0.1	<0.1	107%
Pyrene	LB003126	µg/L	0.1	<0.1	112%
Benzo(a)anthracene	LB003126	µg/L	0.1	<0.1	NA
Chrysene	LB003126	µg/L	0.1	<0.1	NA
Benzo(b)fluoranthene	LB003126	µg/L	0.1	<0.1	NA
Benzo(k)fluoranthene	LB003126	µg/L	0.1	<0.1	NA
Benzo(a)pyrene	LB003126	µg/L	0.1	<0.1	108%
Indeno(1,2,3-cd)pyrene	LB003126	µg/L	0.1	<0.1	NA
Dibenzo(a&h)anthracene	LB003126	µg/L	0.1	<0.1	NA
Benzo(ghi)perylene	LB003126	µg/L	0.1	<0.1	NA
Total PAH (18)*	LB003126	µg/L	1	<1	

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB003126	%	-	122%	107%
2-fluorobiphenyl (Surrogate)	LB003126	%	-	96%	117%
d14-p-terphenyl (Surrogate)	LB003126	%	-	95%	98%

Trace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Arsenic, As	LB003174	µg/L	1	<1	0%	105%
Cadmium, Cd	LB003174	µg/L	0.1	<0.1	13%	99%
Chromium, Cr	LB003174	µg/L	1	<1	11%	104%
Copper, Cu	LB003174	µg/L	1	<1	5%	107%
Lead, Pb	LB003174	µg/L	1	<1	7%	105%
Nickel, Ni	LB003174	µg/L	1	<1	0%	104%
Zinc, Zn	LB003174	µg/L	1	<1	1%	105%

TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C10-C14	LB003126	µg/L	100	<100	96%
TRH C15-C28	LB003126	µg/L	200	<200	93%
TRH C29-C36	LB003126	µg/L	200	<200	95%

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C6-C9	LB003180	µg/L	40	<40	126%
Benzene	LB003180	µg/L	0.5	<0.5	98%
Toluene	LB003180	µg/L	0.5	<0.5	99%
Ethylbenzene	LB003180	µg/L	0.5	<0.5	99%
m/p-xylene	LB003180	µg/L	1	<1	97%
o-xylene	LB003180	µg/L	0.5	<0.5	98%
Total BTEX*	LB003180	µg/L	3	<3	NA



QC SUMMARY

SE100820 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434 (continued)

	MB	LCS
	%Recovery	
Total Xylenes*	LB003180	µg/L

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB003180	%	-	81%	71%

METHOD

METHODOLOGY SUMMARY

AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN083	Separatory funnels are used for aqueous samples and extracted by transferring an appropriate volume (mass) of liquid into a separatory funnel and adding 3 serial aliquots of dichloromethane. Samples receive a single extraction at pH 7 to recover base / neutral analytes and two extractions at pH < 2 to recover acidic analytes. QC samples are prepared by spiking organic free water with target analytes and extracting as per samples.
AN311/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique, in accordance with USEPA 6020A.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433/AN434	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

IS Insufficient sample for analysis.
LNR Sample listed, but not received.
* This analysis is not covered by the scope of accreditation.
^ Performed by outside laboratory.
LOR Limit of Reporting
↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance
QFL QC result is below the lower tolerance
- The sample was not analysed for this analyte
NVL Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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ANALYTICAL REPORT



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COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

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ANALYTICAL REPORT

SE100882 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100882.001 Water 12 Jul 2011 BH12	SE100882.002 Water 12 Jul 2011 BH13	SE100882.003 Water 12 Jul 2011 DUP1	SE100882.004 Water 12 Jul 2011 TS	SE100882.005 Water 12 Jul 2011 TB
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Volatile Petroleum Hydrocarbons in Water Method: AN433/AN434

Parameter	Units	40	<40	<40	<40	-	<40
TRH C6-C9	µg/L	40	<40	<40	<40	-	<40
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	[95%]	<0.5
Toluene	µg/L	0.5	13	<0.5	<0.5	[98%]	<0.5
Ethylbenzene	µg/L	0.5	0.5	<0.5	<0.5	[100%]	<0.5
m/p-xylene	µg/L	1	3	<1	<1	[96%]	<1
o-xylene	µg/L	0.5	1.4	<0.5	<0.5	[96%]	<0.5
Total BTEX*	µg/L	3	18	<3	<3	[97%]	<3
Total Xylenes*	µg/L	1.5	4.0	<1.5	<1.5	[96%]	<1.5

Surrogates

Trifluorotoluene (Surrogate)	%	-	89	86	83	90	79
Dibromofluoromethane (Surrogate)	%	-	-	-	-	-	-
d4-1,2-dichloroethane (Surrogate)	%	-	-	-	-	-	-
d8-toluene (Surrogate)	%	-	-	-	-	-	-
Bromofluorobenzene (Surrogate)	%	-	-	-	-	-	-

TRH (Total Recoverable Hydrocarbons) in Water Method: AN403

TRH C10-C14	µg/L	100	<100	<100	<100	-	-
TRH C15-C28	µg/L	200	<200	<200	<200	-	-
TRH C29-C36	µg/L	200	<200	<200	<200	-	-

Surrogates

TRH (Surrogate)	%	-	-	-	-	-	-
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PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420

Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Benzo(b)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Dibenzo(a&h)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1	-	-
Total PAH (18)*	µg/L	1	<1	<1	<1	-	-

Surrogates

d5-nitrobenzene (Surrogate)	%	-	121	115	117		
2-fluorobiphenyl (Surrogate)	%	-	96	95	87		
d14-p-terphenyl (Surrogate)	%	-	110	108	110		



ANALYTICAL REPORT

SE100882 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE100882.001 Water 12 Jul 2011 BH12	SE100882.002 Water 12 Jul 2011 BH13	SE100882.003 Water 12 Jul 2011 DUP1	SE100882.004 Water 12 Jul 2011 TS	SE100882.005 Water 12 Jul 2011 TB
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Trace Metals (Dissolved) in Water by ICPMS Method: AN318

Arsenic, As	µg/L	1	<1	8	9	-	-	-
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	-	-	-
Chromium, Cr	µg/L	1	<1	<1	<1	-	-	-
Copper, Cu	µg/L	1	4	3	2	-	-	-
Lead, Pb	µg/L	1	<1	<1	<1	-	-	-
Nickel, Ni	µg/L	1	3	3	3	-	-	-
Zinc, Zn	µg/L	1	250	160	190	-	-	-

Mercury (dissolved) in Water Method: AN311/AN312

Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	-	-
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MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA', the results are less than the LOR and thus the RPD is not applicable.

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311/AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB003261	mg/L	0.0001	<0.0001	0%	102%	104%

PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery		
Naphthalene	LB003260	µg/L	0.1	<0.1	86%		
Acenaphthylene	LB003260	µg/L	0.1	<0.1	72%		
Acenaphthene	LB003260	µg/L	0.1	<0.1	83%		
Fluorene	LB003260	µg/L	0.1	<0.1	NA		
Phenanthrene	LB003260	µg/L	0.1	<0.1	84%		
Anthracene	LB003260	µg/L	0.1	<0.1	101%		
Fluoranthene	LB003260	µg/L	0.1	<0.1	85%		
Pyrene	LB003260	µg/L	0.1	<0.1	96%		
Benzo(a)anthracene	LB003260	µg/L	0.1	<0.1	NA		
Chrysene	LB003260	µg/L	0.1	<0.1	NA		
Benzo(b)fluoranthene	LB003260	µg/L	0.1	<0.1	NA		
Benzo(k)fluoranthene	LB003260	µg/L	0.1	<0.1	NA		
Benzo(a)pyrene	LB003260	µg/L	0.1	<0.1	95%		
Indeno(1,2,3-cd)pyrene	LB003260	µg/L	0.1	<0.1	NA		
Dibenzo(a&h)anthracene	LB003260	µg/L	0.1	<0.1	NA		
Benzo(ghi)perylene	LB003260	µg/L	0.1	<0.1	NA		
Total PAH (18)*	LB003260	µg/L	1	<1			

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB003260	%	-	124%	106%
2-fluorobiphenyl (Surrogate)	LB003260	%	-	114%	128%
d14-p-terphenyl (Surrogate)	LB003260	%	-	123%	106%

Trace Metals (Dissolved) in Water by ICPMS Method: ME-(AU)-[ENV]AN318

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB003264	µg/L	1	<1	1%	93%	106%
Cadmium, Cd	LB003264	µg/L	0.1	<0.1	0%	92%	90%
Chromium, Cr	LB003264	µg/L	1	<1	0%	90%	90%
Copper, Cu	LB003264	µg/L	1	<1	1%	87%	90%
Lead, Pb	LB003264	µg/L	1	<1	0%	102%	87%
Nickel, Ni	LB003264	µg/L	1	<1	1%	91%	84%
Zinc, Zn	LB003264	µg/L	1	<1	3%	92%	20%

TRH (Total Recoverable Hydrocarbons) in Water Method: ME-(AU)-[ENV]AN403

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TRH C10-C14	LB003260	µg/L	100	<100	11%	115%
TRH C15-C28	LB003260	µg/L	200	<200	6%	118%
TRH C29-C36	LB003260	µg/L	200	<200	5%	119%

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
TRH C6-C9	LB003281	µg/L	40	<40	114%
Benzene	LB003281	µg/L	0.5	<0.5	110%
Toluene	LB003281	µg/L	0.5	<0.5	115%
Ethylbenzene	LB003281	µg/L	0.5	<0.5	113%
m/p-xylene	LB003281	µg/L	1	<1	112%
o-xylene	LB003281	µg/L	0.5	<0.5	110%
Total BTEX*	LB003281	µg/L	3	<3	NA



QC SUMMARY

SE100882 R0

MB blank results are compared to the Limit of Reporting

LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared to the amount of analyte spiked into the sample.

DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Water Method: ME-(AU)-[ENV]AN433/AN434 (continued)

		MB	LCS		
		%	%Recovery		
Total Xylenes*		LB003281	µg/L	1.5	<1.5

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluorotoluene (Surrogate)	LB003281	%	-	83%	89%

METHOD

METHODOLOGY SUMMARY

AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN083	Separatory funnels are used for aqueous samples and extracted by transferring an appropriate volume (mass) of liquid into a separatory funnel and adding 3 serial aliquots of dichloromethane. Samples receive a single extraction at pH 7 to recover base / neutral analytes and two extractions at pH < 2 to recover acidic analytes. QC samples are prepared by spiking organic free water with target analytes and extracting as per samples.
AN311/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique, in accordance with USEPA 6020A.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependant on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433/AN434	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

IS Insufficient sample for analysis.
LNR Sample listed, but not received.
* This analysis is not covered by the scope of accreditation.
^ Performed by outside laboratory.
LOR Limit of Reporting
↑↓ Raised or Lowered Limit of Reporting

QFH QC result is above the upper tolerance
QFL QC result is below the lower tolerance
- The sample was not analysed for this analyte
NVL Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
<http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

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