Sample ID				CANAL	RETENTION POND	SWAMP	QC03_2007/07
Date Sampled				20/07/2007	19/07/2007	19/07/2007	19/07/2007
Sample Type				Primary Sample	Primary Sample	Primary Sample	Duplicate Sample
Area				AREA C -LMC	AREA F - NW Portion including Ballast Recycling Centre	Area G - NE Portion Including Rail Reclamation Area	Area G - NE Portion Including Rail Reclamation Area
Batch No.			**ADOPTED IL**	ES0709901_MRED	ES0709901_MRED	ES0709901_MRED	ES0709901_MRED
Fumigants							
1,2-Dibromomethane	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropylene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropylene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Monocyclic Aromatic Hydrocarbons							
1,2,4-Trimethylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Ethylbenzene	0.2	mg/kg		<0.5	<0.5	<0.5	<0.5
Isopropylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
m&p-Xylene	0.2	mg/kg		<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
n-Propylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
o-Xylene	0.2	mg/kg		<0.5	<0.5	<0.5	<0.5
p-Isopropyltoluene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
sec-Butylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Styrene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Toluene	0.2	mg/kg		<0.5	<0.5	<0.5	<0.5
Naphthalene							
Naphthalene	5	mg/kg		<5	<5	<5	<5
Oxygenated Compounds							
2-Butanone (MEK)	5	mg/kg		<5	<5	<5	<5
2-Hexanone (MBK)	5	mg/kg		<5	<5	<5	<5
4-Methyl-2-pentanone	5	mg/kg		<5	<5	<5	<5
Vinyl Acetate	5	mg/kg		<5	<5	<5	<5
Polynuclear Aromatic Hydrocarbons							
Acenaphthene	0.5	mg/kg	500	<0.5	<0.5	<0.8	<0.8
Acenaphthylene	0.5	mg/kg	640	<0.5	<0.5	<0.8	<0.8
Anthracene	0.5	mg/kg	1,100	<0.5	<0.5	<0.8	<0.8
Benzo(a)anthracene	0.5	mg/kg	1,600	<0.5	<0.5	<0.8	<0.8
Benzo(a)pyrene	0.5	mg/kg	1,600	<0.5	<0.5	<0.8	<0.8
Benzo(b)fluoranthene	0.5	mg/kg		**0.6**	<0.5	<0.8	<0.8
Benzo(g,h,i)perylene	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8
Benzo(k)fluoranthene	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8
Chrysene	0.5	mg/kg	2800	<0.5	<0.5	<0.8	<0.8
Dibenzo(a,h)anthracene	0.5	mg/kg	260	<0.5	<0.5	<0.8	<0.8
Fluoranthene	0.5	mg/kg	5100	**0.7**	<0.5	<0.8	**1**
Fluorene	0.5	mg/kg	540	<0.5	<0.5	<0.8	<0.8
Indeno(1,2,3,cd)pyrene	0.5	mg/kg		<0.5	<0.5	<0.8	<0.8
Naphthalene	5	mg/kg	2100	<0.5	<0.5	<0.8	<0.8
Phenanthrene	0.5	mg/kg	1500	<0.5	<0.5	<0.8	<0.8
Pyrene	0.5	mg/kg	2600	**0.8**	<0.5	**0.8**	**1.1**
Total PAHs	0.5	mg/kg	45000	**2.1**	**0**	**0.8**	**2.1**
Sulfonated Compounds							
Carbon disulfide	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Trihalomethanes							
Bromochloromethane	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Bromoform	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Chloroform	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5
Moisture Content							
Moisture Content	1	%		**44.7**	**40**	**59.3**	**63.1**

(1) ANZECC/ARMCANZ 2000 Sediment Quality Guidelines (Trigger Values)

Results Exceed Adopted Investigation Levels

Table 8a
Chullora Railway Workshops
Historic Soil Analytical Results - Metals and Metalloids

				Metals and Metalloids							
Sample ID	**Depth**	**Date**	**Sampled By**	**Arsenic (As)**	**Cadmium (Cd)**	**Chromium (Cr)**	**Copper (Cu)**	**Lead (Pb)**	**Nickel (Ni)**	**Zinc (Zn)**	**Mercury (Hg)**
LOR	**-**			**1.0**	**0.1**	**1.0**	**1.0**	**1.0**	**1.0**	**2.0**	**0.5**
Adopted IL	**-**			500	100	500	5000	1500	3000	35000	75
Area A: Bogie Maintenance Centre (BMC)											
110-SO-01	0.2-0.4	Sep-99	D & M	1.9	0.4	152	42.5	6.9	133	107	nd
110-SO-02	1.5-2.0	Sep-99	D & M	9.4	nd	12.6	20.4	12.1	3.3	16	nd
111-SO-01	0.1-0.3	Sep-99	D & M	3	nd	10	16.3	9	2.8	13	nd
111-SO-02	1.6-2.0	Sep-99	D & M	3.8	nd	5.1	13.1	13.5	0.6	4	nd
112-SO-01	0.7-0.9	Sep-99	D & M	4.1	nd	7.7	33.9	21.2	4	21	nd
112-SO-03	2.3-2.5	Sep-99	D & M	12.4	nd	7.9	39.6	17.2	29.2	111	nd
113-SO-01	0.5-0.6	Sep-99	D & M	3.6	0.1	4.7	90.8	20.4	8	26	nd
113-SO-02	1.5-1.6	Sep-99	D & M	10.2	nd	33.8	3.2	14	nd	nd	nd
114-SO-01	0.2-0.3	Sep-99	D & M	5.9	0.8	10.8	32.3	33.7	9.3	19	nd
114-SO-02	0.8-1.1	Sep-99	D & M	9.3	nd	3.2	6.5	7.5	0.7	2	nd
115-SO-01	0.2-0.5	Sep-99	D & M	4	0.2	5.1	23.3	40.3	8.6	26	nd
115-SO-02	1.1-1.5	Sep-99	D & M	4.4	nd	8.3	30.1	12.3	2.6	17	nd
116-SO-01	0.8-0.9	Sep-99	D & M	4.6	0.2	9.8	159	81.8	15	61	nd
116-SO-02	1.7-1.8	Sep-99	D & M	8	nd	26.8	5.2	14.5	nd	nd	nd
117-SO-01p	0.1-0.5	Sep-99	D & M	4.8	0.2	4.3	20	20.8	2	7	nd
117-SO-01d	0.1-0.5	Sep-99	D & M	4	nd	5.6	20.6	11.4	0.9	6	nd
117-SO-02	0.7-0.1	Sep-99	D & M	7.1	0.1	4.7	23.4	17.9	4.4	7	nd
123-SO-01	0.5-0.7	Sep-99	D & M	17	0.2	11.6	47.4	63	3.5	100	nd
123-SO-02	1.5-1.7	Sep-99	D & M	13.4	nd	34	18.5	22.2	1.9	12	nd
124-SO-01	0.2-0.4	Sep-99	D & M	10.7	0.3	15.8	65.4	105	8.3	156	0.12
124-SO-02	0.6-0.8	Sep-99	D & M	14.1	nd	33.4	6.2	21.1	1.1	11	0.08
125-SO-01	0.2-0.4	Sep-99	D & M	16.6	0.2	5.4	94.8	57.6	7.6	65	nd
126-SO-01	0.0-0.1	Sep-99	D & M	7.1	nd	15.7	12.3	13.5		2	0.16
126-SO-02	1.6-2.0	Sep-99	D & M	5.5	0.2	5.1	40.2	31	15.1	53	0.09
202-SO-01	0.7-1.0	Sep-99	D & M	3.9	nd	6.1	24	18.2	3.8	6	nd
202-SO-02	1.45-2.0	Sep-99	D & M	4.5	nd	7.4	16.5	13.5	1	3	nd
304A	1.4-1.5	Jun-00	D & M	10	nd	34	9.2	15	1.4	3	na
304B	2.0-2.1	Jun-00	D & M	2.4	nd	3.8	14	7.2	nd	2	na
305A	1.2-1.3	Jun-00	D & M	8	nd	12	25	15	3.2	13	na
305B	4.4-4.5	Jun-00	D & M	2.2	nd	12	11	15	7.6	19	na
306A	1.4-1.5	Jun-00	D & M	0.6	nd	58	90	2.8	130	52	na
306B	2.4-2.5	Jun-00	D & M	2.8	nd	6.8	22	8.6	2.6	9	na
307A	1.4-1.5	Jun-00	D & M	6	nd	6.6	16	12	0.8	4	na
307B	5.3-5.4	Jun-00	D & M	15	nd	30	22	12	2	12	na
308A	1.4-1.5	Jun-00	D & M	3	nd	5.2	14	12	0.9	5	na
308B	2.3-2.4	Jun-00	D & M	4	nd	5.6	9.8	9.8	0.7	3	na
Area B: Diesel Engine Maintenance Centre (DEMC)											
107a-SO-01	0.8-0.9	Sep-99	D & M	8.1	nd	7.2	43.9	14.7	24.4	68	nd
107a-SO-02	2.5-2.7	Sep-99	D & M	12.8	nd	5.8	10.8	8.5	nd	1	nd
107b-SO-01	0.15-0.3	Sep-99	D & M	10.3	0.9	7.6	1400	150	7.5	43	nd
107b-SO-02	3.7-3.8	Sep-99	D & M	4.8	nd	14.2	10.1	14.7	1.3	6	nd
108-SO-01p	0.3-0.5	Sep-99	D & M	6.3	0.7	5.3	437	84.6	7.7	61	nd
108-SO-01d	0.3-0.5	Sep-99	D & M	7	0.8	4.5	566	107	12.3	75	nd
108-SO-02	0.7-1.0	Sep-99	D & M	7.5	nd	7.6	77.2	29.7	1.6	8	nd
109-SO-01p	0.15-0.3	Sep-99	D & M	7.5	0.2	14.3	655	162	33	67	nd
109-SO-01d	0.15-0.3	Sep-99	D & M	7.9	0.3	15.1	690	89.8	22.3	75	nd
109-SO-02	1.0-1.55	Sep-99	D & M	5.2	nd	10.5	120	23.5	12.8	28	nd
118-SO-01	0.2-0.5	Sep-99	D & M	3.1	0.1	5.5	24.4	15	1.6	9	nd
118-SO-02	1.0-1.5	Sep-99	D & M	5.3	nd	9	19.1	8.8	nd	nd	nd
119-SO-01	0.1-0.45	Sep-99	D & M	7.1	nd	7.3	27.2	14.7	0.9	4	nd
119-SO-02	0.7-1.0	Sep-99	D & M	5.4	1.2	8.2	394	80.6	10.3	63	nd
120-SO-01	0.2-0.5	Sep-99	D & M	6.8	0.3	10	114	54.3	12	68	nd
120-SO-01d	0.2-0.5	Sep-99	D & M	6.9	0.3	12	155	93.9	13.6	73	nd
120-SO-02	1.0-1.5	Sep-99	D & M	5.1	nd	7.3	36.7	11.2	4	26	nd
121-SO-01	0.3-0.6	Sep-99	D & M	3.2	0.1	8.7	40.2	9.7	22.5	25	nd
121-SO-02	1.2-1.6	Sep-99	D & M	6.6	nd	6.3	49.3	7.9	2	8	nd
122-SO-01p	0.8-0.9	Sep-99	D & M	4.8	nd	10.8	28.4	16.1	0.6	3	nd
122-SO-01d	0.8-0.9	Sep-99	D & M	3	nd	6.7	23.8	9.9	0.8	4	nd
122-SO-02	1.9-2.0	Sep-99	D & M	6.6	nd	20.5	6.1	14.3	1.2	3	nd
SS4-SO-01	0.0-0.3	Sep-99	D & M	2.1	0.2	8.3	21.8	24.1	4.2	31	3.2
SS5-SO-01	0.0-0.2	Sep-99	D & M	5.9	0.4	12.3	180	87	7.5	127	0.11
SS6-SO-01	0.0-0.2	Sep-99	D & M	2.4	0.3	8.8	18.4	34	4	31	2.2
311A	1.3-1.4	Jun-00	D & M	5.6	nd	12	110	38	4.4	26	na
311B	3.3-3.4	Jun-00	D & M	4	nd	16	6.4	14	2	8	na
312A	1.0-1.1	Jun-00	D & M	8.6	nd	10	38	13	6.6	33	na
312B	2.4-2.5	Jun-00	D & M	2.4	nd	6.6	30	7.6	2.4	17	na
313A	0.5-0.6	Jun-00	D & M	5.2	0.1	4.6	61	24	20	47	na
313B	3.9-4.0	Jun-00	D & M	6.2	nd	25	6.2	10	2.6	3	na
Area C: Locomotive Maintenance Centre (LMC)											
140-SO-01	0.0-0.5	Sep-99	D & M	13.3	0.3	14.4	77	50	9.3	50	nd
140-SO-02	1.4-1.8	Sep-99	D & M	10.5	0.3	15.7	70.1	43.5	21.1	88	nd
141-SO-01	0.2-0.4	Sep-99	D & M	5.2	0.3	10.5	49.7	99.9	5.1	43	nd
141-SO-02	0.4-0.5	Sep-99	D & M	4.7	nd	12.5	22.3	19.5	4.3	21	nd
142A-SO-01	0.1-0.4	Sep-99	D & M	0.7	0.2	11.4	45.4	7.9	76.6	42	nd
142B-SO-01	0.3-0.5	Sep-99	D & M	2.7	nd	7.2	15	14.4	1.3	6	nd
143-SO-01	0.4-0.5	Sep-99	D & M	9.6	nd	12.8	34	11.8	3.1	21	nd
143-SO-02	1.9-2.0	Sep-99	D & M	5.6	nd	14.7	13	15	0.8	4	nd
144-SO-01	0.1-0.5	Sep-99	D & M	7	0.7	16.1	39.2	136	7.3	145	nd
144-SO-02	0.7-1.0	Sep-99	D & M	11	nd	35.8	7.7	14.5	2	6	nd
145-SO-01p	0.8-1.0	Sep-99	D & M	3.3	nd	7.1	13.8	16.1	1.9	22	nd
145-SO-01d	0.8-1.0	Sep-99	D & M	13	nd	15	37	31	5	55	nd
145-SO-02	1.8-2.0	Sep-99	D & M	9.2	nd	31.9	18.9	75.7	2.3	11	nd
146-SO-01	0.5-0.7	Sep-99	D & M	6.5	0.4	8.9	230	231	22.9	143	nd
146-SO-02	1.8-2.0	Sep-99	D & M	6.2	nd	20.5	13.9	14	3.9	13	nd
147-SO-01	0.1-0.4	Sep-99	D & M	3.9	0.2	4.3	23.7	11.7	16	39	nd
147-SO-02	0.5-1.0	Sep-99	D & M	5.1	nd	10	14.4	11.7	2	11	nd

Table 8a
Chullora Railway Workshops
Historic Soil Analytical Results - Metals and Metalloids

Sample ID	Depth	Date	Sampled By	Metals and Metalloids							
				Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Lead (Pb)	Nickel (Ni)	Zinc (Zn)	Mercury (Hg)
LOR	-			1.0	0.1	1.0	1.0	1.0	1.0	2.0	0.5
Adopted IL	-			500	100	500	5000	1500	3000	35000	75
148-SO-01	0.4-0.5	Sep-99	D & M	6.1	0.7	14.2	64.1	63.8	13.1	87	nd
148-SO-02	2.5-3.0	Sep-99	D & M	3.4	nd	16.1	9.4	15.6	2.4	9	nd
149-SO-01	0.8-1.0	Sep-99	D & M	6	nd	6.4	13.2	9	2.4	20	nd
149-SO-02	1.9-2.0	Sep-99	D & M	9	nd	36.8	15.5	16.3	3.3	7	nd
205-SO-01p	0.4-0.5	Sep-99	D & M	112	2.3	52.5	1000	**2900**	80	771	0.1
205-SO-01d	0.4-0.5	Sep-99	D & M	104	2	69	1030	**2250**	64	698	0.34
205-SO-02	0.8-1.0	Sep-99	D & M	7.5	nd	12.9	69.8	26.4	15.5	97	nd
206-SO-01	0.2-0.3	Sep-99	D & M	21.7	3.7	16.9	305	659	20.1	838	nd
206-SO-02	0.9-1.0	Sep-99	D & M	5.5	nd	13.9	15.1	11.9	2.3	11	nd
314A	0.8-0.9	Jun-00	D & M	20	22	34	300	420	34	250	na
314B	2.3-2.4	Jun-00	D & M	6.4	1.2	13	68	93	11	67	na
315A	0.2-0.3	Jun-00	D & M	**610**	2.2	77	1200	670	120	2100	na
315B	1.8-1.9	Jun-00	D & M	4.2	nd	5.6	20	10	1.4	7	na
316A	1.1-1.2	Jun-00	D & M	9.2	nd	24	16	13	1.4	4	na
316B	3.2-3.3	Jun-00	D & M	1.6	nd	7.4	5.6	8	2.2	4	na
317A	1.0-1.1	Jun-00	D & M	10	nd	30	11	14	1.6	3	na
317B	2.3-2.4	Jun-00	D & M	9.4	nd	31	13	15	3.6	8	na
318A	0.8-0.9	Jun-00	D & M	7	nd	16	14	16	2.2	9	na
318B	1.3-1.4	Jun-00	D & M	2.6	nd	4.4	33	11	1.4	9	na
319A	1.0-1.1	Jun-00	D & M	9	0.5	12	**15000**	140	17	4700	na
319B	2.0-2.1	Jun-00	D & M	3.6	nd	7.6	17	8.4	1.2	12	na
320A	1.3-1.4	Jun-00	D & M	6.2	nd	17	20	15	2	8	na
320B	2.3-2.4	Jun-00	D & M	15	nd	34	18	14	3.2	5	na
BH06	0.2-0.4	Jun-01	URS	6	0.5	10	71	240	9	290	nd
BH06	0.4-0.6	Jun-01	URS	5	nd	nd	12	10	nd	nd	nd
BH06	1.2-1.4	Jun-01	URS	9	nd	18	12	12	nd	nd	nd
BH08	0.3-0.5	Jun-01	URS	7	nd	16	23	21	6	22	nd
BH08	1.6-1.8	Jun-01	URS	9	nd	21	16	10	4	7	nd
Area D: Electrical Maintenance Centre (EMC)											
136-SO-01p	0.1-0.5	Sep-99	D & M	1.1	0.1	6	29.9	12.1	5.8	19	nd
136-SO-01d	0.1-0.5	Sep-99	D & M	nd	nd	11	30	14	6	22	0.11
137-SO-01	0.0-0.5	Sep-99	D & M	1.3	nd	5.1	19.1	10.2	1.3	6	nd
138-SO-01	0.0-0.2	Sep-99	D & M	23.3	0.9	32.8	37.4	39.3	5.7	72	nd
138-SO-02	0.2-0.4	Sep-99	D & M	8.9	0.4	41	17.9	20.9	3	16	nd
139-SO-01p	0.2-0.5	Sep-99	D & M	14.2	1.4	35	108	169	31.4	212	nd
139-SO-01d	0.2-0.5	Sep-99	D & M	15	nd	49	115	116	43	203	nd
207-SO-01	0.4-0.5	Sep-99	D & M	9.2	nd	22.9	22.9	13.3	9.4	52	nd
207-SO-02	0.9-1.0	Sep-99	D & M	18.5	nd	14.7	18.6	14.1	3.7	25	nd
BH01	0.12-0.2	Jun-01	URS	7	0.9	nd	40	10	12	37	nd
BH01	0.5-0.7	Jun-01	URS	**1200**	nd	nd	69	29	21	210	0.30
BH02	0.4-0.5	Jun-01	URS	7	nd	12	92	53	25	92	nd
BH02	0.8-1.0	Jun-01	URS	6	nd	12	50	15	15	91	0.69
BH03	0.2-0.5	Jun-01	URS	5	nd	nd	22	27	8	56	nd
BH03	0.8-1.0	Jun-01	URS	8	nd	12	21	15	nd	14	nd
BH04	0.2-0.4	Jun-01	URS	20	nd	20	79	74	19	75	nd
BH04	0.8-1.0	Jun-01	URS	10	nd	20	47	33	41	64	0.06
BH04	1.3-1.5	Jun-01	URS	11	nd	18	27	14	3	23	nd
BH05	0.1-0.2	Jun-01	URS	nd	nd	14	68	43	110	54	nd
BH05	0.6-0.8	Jun-01	URS	nd	nd	5	12	9	nd	9	nd
BH07	0.3-0.4	Jun-01	URS	nd	nd	7	65	nd	79	30	nd
BH07	1.4-1.6	Jun-01	URS	nd	nd	nd	9	6	nd	nd	nd
BH07	3.0-3.2	Jun-01	URS	nd	nd	nd	8	nd	nd	7	nd
BH09	0.2-0.4	Jun-01	URS	8	nd	8	14	7	nd	<5	nd
BH09	0.9-1.1	Jun-01	URS	nd	nd	nd	12	8	nd	7	nd
BH10	0.2-0.3	Jun-01	URS	nd	nd	6	30	14	37	160	nd
BH10	0.5-0.7	Jun-01	URS	6	nd	10	58	12	69	170	0.13
MW12	0.5	11-Jan-05	ERM	7	0.2	28	9	14	1	7	0.08
MW12	2	11-Jan-05	ERM	3	<0.1	2	7	5	<1	<5	<0.05
MW13	0.5	11-Jan-05	ERM	10	<0.1	5	49	21	10	52	0.07
MW13	3	11-Jan-05	ERM	11	<0.1	4	10	7	<1	<5	<0.05
MW14	0.5	11-Jan-05	ERM	23	0.7	12	150	160	15	150	0.17
MW14	3	11-Jan-05	ERM	3	<0.1	3	17	10	2	9	0.05
MW15	1	11-Jan-05	ERM	6	<0.1	5	44	17	13	53	0.05
MW15	6	11-Jan-05	ERM	5	<0.1	9	16	16	12	37	0.06
MW7	0.5	12-Jan-05	ERM	9	0.1	9	66	31	26	77	0.06
MW7	4	12-Jan-05	ERM	7	0.2	3	46	23	11	75	0.12
MW8	0.5	12-Jan-05	ERM	5	0.1	8	40	29	17	74	0.06
MW8	1	12-Jan-05	ERM	4	0.1	8	34	13	35	130	0.09
MW10	0.5	12-Jan-05	ERM	8	0.1	11	25	18	9	19	0.05
MW10	3	12-Jan-05	ERM	3	<0.1	9	41	17	30	140	0.09
MW11	0.5	12-Jan-05	ERM	9	1.6	9	43	22	10	88	0.06
MW11	2	12-Jan-05	ERM	13	0.1	9	43	15	52	180	<0.05
BH1	0.4	12-Jan-05	ERM	3	<0.1	7	10	11	6	31	<0.05
BH1	1	12-Jan-05	ERM	12	0.1	9	40	18	33	180	0.09
BH2	0.5	12-Jan-05	ERM	27	0.5	7	45	25	15	130	0.13
BH2	1.4	12-Jan-05	ERM	5	<0.1	10	39	13	10	65	0.09
BH3	0.4	12-Jan-05	ERM	3	<0.1	7	28	9	11	79	0.07
BH4	0.2	12-Jan-05	ERM	4	0.8	10	85	41	62	91	0.23
BH4	0.7	12-Jan-05	ERM	<1	<0.1	5	6	5	1	7	<0.05
BH5	0.5	12-Jan-05	ERM	6	<0.1	8	68	10	13	91	<0.05
BH6	0.3	12-Jan-05	ERM	2	<0.1	5	16	8	10	42	0.1
MW1	0.2	13-Jan-05	ERM	4	0.1	7	46	11	14	100	0.1
MW1	1	13-Jan-05	ERM	4	0.1	8	41	11	30	160	0.08
MW2	0.5	13-Jan-05	ERM	5	1.4	7	67	72	13	48	0.07
MW4	0.5	13-Jan-05	ERM	4	0.2	7	67	100	9	36	0.06
MW4	1	13-Jan-05	ERM	5	<0.1	6	58	9	2	7	<0.05
MW5	0.3	13-Jan-05	ERM	5	5	4	49	25	7	120	0.09

Table 8a
Chullora Railway Workshops
Historic Soil Analytical Results - Metals and Metalloids

Sample ID	Depth	Date	Sampled By	Metals and Metalloids							
				Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Lead (Pb)	Nickel (Ni)	Zinc (Zn)	Mercury (Hg)
LOR	-			1.0	0.1	1.0	1.0	1.0	1.0	2.0	0.5
Adopted IL	-			500	100	500	5000	1500	3000	35000	75
MW5	0.5	13-Jan-05	ERM	8	0.2	6	35	12	2	43	0.05
BH8	0.25	13-Jan-05	ERM	9	<0.1	5	14	27	1	14	<0.05
BH8	1.7	13-Jan-05	ERM	11	<0.1	10	41	10	3	28	<0.05
BH10	0.65	13-Jan-05	ERM	7	<0.1	4	3	5	<1	<5	<0.05
BH11	0.2	13-Jan-05	ERM	20	2	14	220	150	26	300	0.15
BH11	0.65	13-Jan-05	ERM	4	<0.1	4	8	12	<1	<5	<0.05
BH12	0.2	13-Jan-05	ERM	29	1.7	24	130	440	14	180	0.14
BH12	0.8	13-Jan-05	ERM	<1	<0.1	1	4	6	<1	<5	<0.05
BH13	0.35	13-Jan-05	ERM	7	<0.1	5	60	6	4	36	<0.05
BH13	1.2	13-Jan-05	ERM	7	<0.1	17	15	14	1	6	0.06
BH15	0.3	13-Jan-05	ERM	10	<0.1	17	7	22	2	<5	0.05
BH15	1.5	13-Jan-05	ERM	7	<0.1	4	11	6	<1	<5	<0.05
MW3	0.5	14-Jan-05	ERM	7	0.1	7	39	16	22	110	0.06
MW3	2	14-Jan-05	ERM	7	0.2	5	35	11	23	68	0.08
MW6	0.5	14-Jan-05	ERM	10	0.2	3	60	5	6	45	0.22
MW6	1	14-Jan-05	ERM	13	0.3	3	57	11	9	70	0.17
MW9	0.5	14-Jan-05	ERM	6	<0.1	6	13	7	<1	5	<0.05
MW9	2	14-Jan-05	ERM	6	<0.1	4	43	10	<1	5	0.06
BH7	0.5	14-Jan-05	ERM	<1	<0.1	1	8	3	<1	<5	<0.05
BH7	1.4	14-Jan-05	ERM	18	<0.1	6	96	18	4	53	<0.05
BH9	0.4	14-Jan-05	ERM	9	<0.1	6	7	8	<1	<5	<0.05
BH14	0.4	14-Jan-05	ERM	23	0.2	13	84	58	17	97	0.06
BH14	1.4	14-Jan-05	ERM	25	0.4	13	56	50	8	100	0.1
Area E: Load Box and Refuelling Facility											
150-SO-01p	0.1-0.3	Sep-99	D & M	20.2	0.6	36.1	90.3	143	34.4	245	nd
150-SO-01d	0.1-0.3	Sep-99	D & M	22.6	0.8	43.7	112	182	57.5	269	nd
150-SO-02	1.0-1.3	Sep-99	D & M	6.1	nd	8.2	21.8	20.3	4.8	27	nd
151-SO-01p	0.4-0.5	Sep-99	D & M	6.2	1.8	5.5	70.2	118	35	124	nd
151-SO-01d	0.4-0.5	Sep-99	D & M	5	1	8	64	109	27	120	nd
152-SO-01	0.2-0.6	Sep-99	D & M	29.7	0.5	10.1	57.5	64.3	13.4	137	nd
MWCD3	6.3-6.5	14-Feb-04	Coffey	<1	<0.5	<5	18	9	6	60	0.11
MWCD4	2.8-3.0	14-Feb-04	Coffey	<1	0.6	22	6	18	3	7	<0.05
MWCS4	0.8-1.0	14-Feb-04	Coffey	5	<0.5	<5	18	13	2	27	<0.05
MWCS1	0.15-0.3	15-Feb-04	Coffey	25	<0.5	44	67	110	9	61	0.1
MWCS1	1.25-1.4	15-Feb-04	Coffey	6	<0.5	12	14	20	5	16	0.11
MWCD2	5.8-6.0	15-Feb-04	Coffey	22	<0.5	<5	67	15	5	19	0.12
MWCD1	0.15-0.3	16-Feb-04	Coffey	19	1.8	33	280	360	45	130	0.1
MWCD1	1.8-2.0	16-Feb-04	Coffey	<1	<0.5	19	8	14	2	8	<0.05
BH1	1.2	16-Mar-04	Coffey	11	0.1	6	67	90	8	100	0.01
BH1	4	16-Mar-04	Coffey	6	<0.1	10	11	17	<1	7	<0.05
BH1	6	16-Mar-04	Coffey	13	<0.1	2	21	6	3	17	0.16
BH2	0.5	16-Mar-04	Coffey	25	0.7	3	98	250	6	130	0.15
BH2	3	16-Mar-04	Coffey	6	<0.1	4	9	13	1	28	<0.05
BH2	6	16-Mar-04	Coffey	2	<0.1	2	83	17	3	22	0.16
BH3	0.5	16-Mar-04	Coffey	11	0.3	8	57	95	8	58	0.05
BH3	6	16-Mar-04	Coffey	12	<0.1	3	52	15	12	81	0.23
BH4	1.4	17-Mar-04	Coffey	13	0.1	7	26	49	3	68	0.54
BH5	6	17-Mar-04	Coffey	15	<0.1	3	58	12	6	35	0.14
Area F: North Western Portion, Including Ballast Recycling Centre											
101-SO-01	1.9-2.0	Sep-99	D & M	35.9	0.8	16.4	165	144	14.9	107	nd
101-SO-03	8.4-8.5	Sep-99	D & M	27.4	0.3	16.2	84.2	76.6	12.7	113	nd
101-SO-05	14.4-14.5	Sep-99	D & M	22.2	0.2	16.9	76.8	44.4	9.2	111	nd
102-SO-01	2.0-2.15	Sep-99	D & M	50.7	0.5	14	187	63.4	26.1	101	nd
102-SO-02	7.4-7.5	Sep-99	D & M	80.3	0.6	21.6	2.1	114	31.9	148	nd
102-SO-03	11.8-12.0	Sep-99	D & M	78.6	0.5	21.8	181	88.9	29.7	137	0.26
103-SO-01	0.9-1.0	Sep-99	D & M	93.8	0.6	23.3	132	183	13.1	337	0.16
103-SO-02	1.9-2.0	Sep-99	D & M	15.2	0.2	16	48.7	51.1	5.2	73	nd
104-SO-01	1.4-1.5	Sep-99	D & M	6.1	0.2	8.9	39.7	25.5	3.2	12	nd
104-SO-02	2.5-2.6	Sep-99	D & M	6.7	nd	7	98.4	10.6	1.1	7	nd
105-SO-01	0.5-0.6	Sep-99	D & M	3.9	0.2	6.3	89.1	26.1	22.1	72	nd
105-SO-02	1..5-1.6	Sep-99	D & M	12.5	nd	7.6	26.8	11.4	5.7	18	nd
106-SO-01	0.7-0.8	Sep-99	D & M	3.5	nd	7.7	40	18.1	1.2	10	nd
106-SO-02	1.9-2.0	Sep-99	D & M	6.7	nd	9.8	36	16.5	16.3	62	nd
201-SO-01	0.7-0.8	Sep-99	D & M	29	1.8	31.3	1200	513	47.6	301	0.1
201-SO-02	1.8-2.0	Sep-99	D & M	4.2	nd	6.9	37.2	19.6	1.6	10	nd
301B	2.3-2.4	Jun-00	D & M	2.4	nd	6.6	9.4	21	1	5	na
301C	3.3-3.4	Jun-00	D & M	20	nd	50	12	14	2.8	3	na
302A	0.5-0.6	Jun-00	D & M	97	nd	5.4	11	15	1.2	4	na
302B	4.4-4.5	Jun-00	D & M	1.8	nd	9.8	5.2	11	2	1	na
303A	0.5-0.6	Jun-00	D & M	64	nd	3	27	22	9.2	26	na
303B	3.8-4.0	Jun-00	D & M	9.2	nd	7.4	33	13	6.8	27	na
Area G: North Eastern Portion Including Former Rail Reclamation Area											
125-SO-03	1.3-1.5	Sep-99	D & M	9.8	nd	37.4	71.5	44.2	1.6	10	0.12
127-SO-01	0.2-0.5	Sep-99	D & M	6.6	nd	20.5	20.1	13.6		2	0.07
127-SO-02	0.7-1.0	Sep-99	D & M	19.5	2.4	8.9	80.3	89.3	17	250	0.08
128-SO-01	0.0-0.5	Sep-99	D & M	24.9	nd	4.1	24.7	8.7	0.5	7	nd
128-SO-02	0.8-1.0	Sep-99	D & M	20.1	0.3	8.4	59.1	77.7	16.7	111	nd
129-SO-01	0.0-0.4	Sep-99	D & M	4.5	nd	9.7	48.4	47.3	7.6	46	nd
129-SO-02	0.5-0.8	Sep-99	D & M	6.1	1.1	4.7	51.4	66	14.7	175	nd
130-SO-01	0.0-0.5	Sep-99	D & M	1.3	nd	6.9	28.9	18.7	0.8	6	nd
131-SO-01	0.1-0.5	Sep-99	D & M	13.8	0.3	5.1	61.5	55.5	20.2	84	nd
131-SO-02	0.7-1.0	Sep-99	D & M	35.9	0.9	32	86.4	139	18.7	140	0.1
132-SO-01	0.4-0.7	Sep-99	D & M	3.7	0.1	4.6	20	31.9	3.1	168	nd
132-SO-02	2.7-2.9	Sep-99	D & M	76.3	0.1	6.2	73.9	10.2	7.7	20	0.24
133-SO-01	0.0-0.5	Sep-99	D & M	9.1	0.4	6.4	84.3	20.1	31.9	176	nd
133-SO-02	0.8-1.0	Sep-99	D & M	22.5	0.1	10.5	52.6	28.2	19.5	59	nd
133-SO-03	1.6-2.0	Sep-99	D & M	22.4	0.3	29.9	66	84	29.3	98	nd

Table 8a
Chullora Railway Workshops
Historic Soil Analytical Results - Metals and Metalloids

Sample ID	Depth	Date	Sampled By	Metals and Metalloids							
				Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Lead (Pb)	Nickel (Ni)	Zinc (Zn)	Mercury (Hg)
LOR	-			1.0	0.1	1.0	1.0	1.0	1.0	2.0	0.5
Adopted IL	-			500	100	500	5000	1500	3000	35000	75
133-SO-04	2.2-2.5	Sep-99	D & M	27.4	0.4	33.9	78.3	70	24.9	94	nd
134A-SO-01	0.0-0.5	Sep-99	D & M	23.6	0.3	27.6	78.9	63.2	25.2	92	nd
134A-SO-01d	0.0-0.5	Sep-99	D & M	53.9	0.8	19.7	98.1	63.2	35	94	nd
134A-SO-02	0.6-1.0	Sep-99	D & M	42	nd	24	91	56	26	87	0.1
134B-SO-01	0.0-0.5	Sep-99	D & M	24.4	0.7	30.7	154	84	22.4	86	nd
135-SO-01	0.0-0.4	Sep-99	D & M	45.9	0.5	15.6	126	70.4	20.1	112	nd
135-SO-02	0.6-1.0	Sep-99	D & M	44.8	0.5	25.2	95.5	84.3	12.9	74	nd
135-SO-03	1.6-2.0	Sep-99	D & M	52.6	0.6	17.8	145	79.9	19.5	96	nd
135-SO-04	5.6-6.0	Sep-99	D & M	9.2	0.2	11.9	54	30.8	25	75	nd
203-SO-01	0.9-1.0	Sep-99	D & M	5.7	nd	26.2	7.1	12.4	2.6	7	nd
203-SO-02	3.9-4.0	Sep-99	D & M	22.2	nd	9.2	40.1	13.6	4.6	11	nd
204-SO-01	0.6-1.0	Sep-99	D & M	162	0.7	22.2	165	246	20	251	0.11
204-SO-02	1.1-1.5	Sep-99	D & M	6.2	0.1	11.8	49.4	21.2	68.1	263	nd
309A	1.0-1.1	Jun-00	D & M	18	0.1	15	32	24	5.2	51	na
309B	2.3-2.4	Jun-00	D & M	9.6	nd	41	8.4	13	3.8	14	na
310A	1.0-1.1	Jun-00	D & M	6.8	nd	12	7.8	10	0.8	1	na
310B	2.0-2.1	Jun-00	D & M	5.8	nd	5.8	9.4	20	1	4	na
Area H: South Eastern Portion											
153-SO-01	0.9-1.0	Sep-99	D & M	9.9	nd	3.5	18.4	655	9.9	12	nd
153-SO-02	1.8-2.0	Sep-99	D & M	1.9	nd	3.2	11.6	8.7	0.6	5	nd
403A	1.1-1.2	Jun-00	D & M	3.6	nd	12	17	11	3.2	20	na

Notes:
* LOR increased due to matrix interference
All units in mg/kg
"--" and "na" = not analysed
nd = not detected
p = primary sample d = duplicate sample
Results Exceed Adopted Investigation Levels

Table 8b
Chullora Railway Workshops
Historic Soil Analytical Results - Additional Metals

Sample ID	Depth	Date	Sampled By	Additional Metals				
				Antimony	Beryllium	Selenium	Silver	Thallium
				Sb	Be	Se	Ag	Tl
Adopted IL					100			
Area D: Electrical Maintenance Centre (EMC)								
MW1	0.2	13-Jan-05	ERM	<1	2	<2	0.4	<1
MW1	1	13-Jan-05	ERM	<1	2	<2	>0.1	<1
MW2	0.5	13-Jan-05	ERM	7	1	<2	5.9	<1
MW3	0.5	14-Jan-05	ERM	<1	1	<2	>0.1	<1
MW3	2	14-Jan-05	ERM	<1	1	<2	0.2	<1
MW4	0.5	13-Jan-05	ERM	2	<1	<2	>0.1	<1
MW4	1	13-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW5	0.3	13-Jan-05	ERM	<1	1	<2	2.1	<1
MW5	0.5	13-Jan-05	ERM	<1	<1	<2	0.5	<1
MW6	0.5	14-Jan-05	ERM	<1	2	<2	>0.1	<1
MW6	1	14-Jan-05	ERM	<1	2	<2	>0.1	<1
MW7	0.5	12-Jan-05	ERM	1	1	<2	>0.1	<1
MW7	4	12-Jan-05	ERM	<1	<1	<2	0.1	<1
MW8	0.5	12-Jan-05	ERM	<1	1	<2	0.1	<1
MW8	1	12-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW9	0.5	14-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW9	2	14-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW10	0.5	12-Jan-05	ERM	<1	<1	<2	0.4	<1
MW10	3	12-Jan-05	ERM	<1	2	<2	0.1	<1
MW11	0.5	12-Jan-05	ERM	<1	1	<2	0.7	<1
MW11	2	12-Jan-05	ERM	<1	2	<2	0.2	<1
MW12	0.5	11-Jan-05	ERM	<1	<1	<2	0.7	<1
MW12	2	11-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW13	0.5	11-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW13	3	11-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW14	0.5	11-Jan-05	ERM	6	<1	<2	0.1	<1
MW14	3	11-Jan-05	ERM	<1	<1	<2	>0.1	<1
MW15	1	11-Jan-05	ERM	<1	2	<2	>0.1	<1
MW15	6	11-Jan-05	ERM	<1	<1	<2	0.3	<1
BH1	0.4	12-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH1	1	12-Jan-05	ERM	<1	1	<2	>0.1	<1
BH2	0.5	12-Jan-05	ERM	2	1	<2	>0.1	<1
BH2	1.4	12-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH3	0.4	12-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH4	0.2	12-Jan-05	ERM	3	1	<2	2.7	<1
BH4	0.7	12-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH5	0.5	12-Jan-05	ERM	<1	3	<2	>0.1	<1
BH6	0.3	12-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH7	0.5	14-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH7	1.4	14-Jan-05	ERM	<1	2	<2	>0.1	<1
BH8	0.25	13-Jan-05	ERM	<1	<1	<2	0.2	<1
BH8	1.7	13-Jan-05	ERM	<1	1	<2	>0.1	<1
BH9	0.4	14-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH10	0.65	13-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH11	0.2	13-Jan-05	ERM	4	<1	<2	0.4	<1
BH11	0.65	13-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH12	0.2	13-Jan-05	ERM	22	<1	<2	0.5	<1
BH12	0.8	13-Jan-05	ERM	<1	<1	<2	0.1	<1
BH13	0.35	13-Jan-05	ERM	<1	1	<2	>0.1	<1
BH13	1.2	13-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH14	0.4	14-Jan-05	ERM	2	1	<2	0.1	<1
BH14	1.4	14-Jan-05	ERM	2	2	<2	>0.1	<1
BH15	0.3	13-Jan-05	ERM	<1	<1	<2	>0.1	<1
BH15	1.5	13-Jan-05	ERM	<1	<1	<2	>0.1	<1

Notes:
* LOR increased due to matrix interference
All units in mg/kg
"--" and "na" = not analysed
nd = not detected
p = primary sample   d = duplicate sample

Table 9
Chullora Railway Workshops
Historic Soil Analytical Results - TPH & BTEX

Sample ID	Depth	Date	Sampled By	Total Petroleum Hydrocarbon					Monocyclic Hydrocarbons			
				C6-C9	C10-C14	C15-C28	C29-C36	C10-C36	Benzene	Toluene	Ethylbenzene	Xylenes
LOR		-	-	**5**	**10**	**50**	**50**	**110**	**0.5**	**1**	**1**	**3**
Adopted IL				**65**				**1000**	**1**	**130**	**50**	25
Area A: Bogie Maintenance Centre (BMC)												
110-SO-01	0.2-0.4	Sep-99	D & M	nd	7	22	nd	29	nd	nd	nd	nd
110-SO-02	1.5-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
111-SO-01	0.1-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
111-SO-02	1.6-2.0	Sep-99	D & M	16	1800	1900	nd	**3700**	nd	nd	nd	nd
112-SO-01	0.7-0.9	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
112-SO-03	2.3-2.5	Sep-99	D & M	nd	611	1300	nd	**1911**	nd	nd	nd	nd
113-SO-01	0.5-0.6	Sep-99	D & M	nd	nd	50	nd	50	nd	nd	nd	nd
113-SO-02	1.5-1.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
114-SO-01	0.2-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
114-SO-02	0.8-1.1	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
115-SO-01	0.2-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
115-SO-02	1.1-1.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
116-SO-01	0.8-0.9	Sep-99	D & M	nd	nd	nd	71	71	nd	nd	nd	nd
116-SO-02	1.7-1.8	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
117-SO-01p	0.1-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
117-SO-01d	0.1-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
117-SO-02	0.7-0.1	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
123-SO-01	0.5-0.7	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
123-SO-02	1.5-1.7	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
124-SO-01	0.2-0.4	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
124-SO-02	0.6-0.8	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
125-SO-01	0.2-0.4	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
125-SO-02	1.3-1.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
125-SO-03	1.3-1.5	Sep-99	D & M	nd	35	nd	nd	35	**1**	nd	nd	nd
126-SO-01	0.0-0.1	Sep-99	D & M	nd	nd	nd	nd	nd	na	na	na	na
126-SO-02	1.6-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
202-SO-01	0.7-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
202-SO-02	1.45-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
304A	1.4-1.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
304B	2.0-2.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
305A	1.2-1.3	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
305B	4.4-4.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
306A	1.4-1.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
306B	2.4-2.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
307A	1.4-1.5	Jun-00	D & M	20	1600	1900	nd	**3500**	nd	nd	nd	nd
307B	5.3-5.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
308A	1.4-1.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
308B	2.3-2.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
Area B: Diesel Engine Maintenance Centre (DEMC)												
107a-SO-01	0.8-0.9	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
107a-SO-02	2.5-2.7	Sep-99	D & M	nd	68	154	nd	222	nd	nd	nd	nd
107b-SO-01	0.15-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
107b-SO-02	3.7-3.8	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
108-SO-01p	0.3-0.5	Sep-99	D & M	nd	nd	50	nd	50	nd	nd	nd	nd
108-SO-01d	0.3-0.5	Sep-99	D & M	nd	nd	50	nd	50	nd	nd	nd	nd
108-SO-02	0.7-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
109-SO-01p	0.15-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
109-SO-01d	0.15-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
109-SO-02	1.0-1.55	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
118-SO-01	0.2-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
118-SO-02	1.0-1.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
119-SO-01	0.1-0.45	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
119-SO-02	0.7-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
120-SO-01	0.2-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
120-SO-01d	0.2-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
120-SO-02	1.0-1.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
121-SO-01	0.3-0.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
121-SO-02	1.2-1.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
122-SO-01p	0.8-0.9	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
122-SO-01d	0.8-0.9	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
122-SO-02	1.9-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
SS4-SO-01	0.0-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
SS4-SO-02	0.4-0.55	Sep-99	D & M	na	na	na	na	na	na	na	na	na
SS5-SO-01	0.0-0.2	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
SS5-SO-02	0.2-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
SS6-SO-01	0.0-0.2	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
311A	1.3-1.4	Jun-00	D & M	nd	90	100	nd	190	nd	nd	nd	nd
311B	3.3-3.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
312A	1.0-1.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
312B	2.4-2.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
313A	0.5-0.6	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
313B	3.9-4.0	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
Area C: Locomotive Maintenance Centre (LMC)												
140-SO-01	0.0-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
140-SO-02	1.4-1.8	Sep-99	D & M	nd	nd	63	nd	63	nd	nd	nd	nd
141-SO-01	0.2-0.4	Sep-99	D & M	nd	179	318	nd	497	nd	nd	nd	nd
141-SO-02	0.4-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
142A-SO-01	0.1-0.4	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
142B-SO-01	0.3-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
143-SO-01	0.4-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
143-SO-02	1.9-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
144-SO-01	0.1-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
144-SO-02	0.7-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
145-SO-01p	0.8-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
145-SO-01d	0.8-1.0	Sep-99	D & M	nd	10	53	nd	63	nd	nd	nd	nd
145-SO-02	1.8-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd

Table 9
Chullora Railway Workshops
Historic Soil Analytical Results - TPH & BTEX

				Total Petroleum Hydrocarbon					Monocyclic Hydrocarbons			
Sample ID	**Depth**	**Date**	**Sampled By**	**C6-C9**	**C10-C14**	**C15-C28**	**C29-C36**	**C10-C36**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**
LOR		-	-	5	10	50	50	110	0.5	1	1	3
Adopted IL				65				1000	1	130	50	25
146-SO-01	0.5-0.7	Sep-99	D & M	nd	nd	158	nd	158	nd	nd	nd	nd
146-SO-02	1.8-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
147-SO-01	0.1-0.4	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
147-SO-02	0.5-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
148-SO-01	0.4-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
148-SO-02	2.5-3.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
149-SO-01	0.8-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
149-SO-02	1.9-2.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
205-SO-01p	0.4-0.5	Sep-99	D & M	**178**	59000	4800	2300	**66100**	nd	nd	nd	7
205-SO-01d	0.4-0.5	Sep-99	D & M	**300**	51000	3400	2700	**57100**	nd	nd	nd	7
205-SO-02	0.8-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
206-SO-01	0.2-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
206-SO-02	0.9-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
314A	0.8-0.9	Jun-00	D & M	nd	nd	70	140	210	nd	nd	nd	nd
314B	2.3-2.4	Jun-00	D & M	nd	10	nd	nd	nd	nd	nd	nd	nd
315A	0.2-0.3	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
315B	1.8-1.9	Jun-00	D & M	nd	70	50	nd	120	nd	nd	nd	nd
316A	1.1-1.2	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
316B	3.2-3.3	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
317A	1.0-1.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
317B	2.3-2.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
318A	0.8-0.9	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
318B	1.3-1.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
319A	1.0-1.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
319B	2.0-2.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
320A	1.3-1.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
320B	2.3-2.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
BH06	0.4-0.6	Jun-01	URS	nd	240	1500	960	**2700**	nd	nd	nd	nd
BH06	1.2-1.4	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
BH08	0.3-0.5	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
BH08	1.6-1.8	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
SB20	0.3-0.5	Jan-02	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
SB18	0.4-0.6	Jan-02	URS	**120**	640	1000	240	**1880**	nd	nd	nd	nd
SB19	1.2-1.4	Jan-02	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
Area D: Electrical Maintenance Centre (EMC)												
136-SO-01p	0.1-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
136-SO-01d	0.1-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
137-SO-01	0.0-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
138-SO-01	0.0-0.2	Sep-99	D & M	nd	18	35	nd	53	nd	nd	nd	nd
138-SO-02	0.2-0.4	Sep-99	D & M	nd	406	699	nd	**1105**	nd	nd	nd	nd
139-SO-01p	0.2-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
139-SO-01d	0.2-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
207-SO-01	0.4-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
207-SO-02	0.9-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
BH01	0.12-0.2	Jun-01	URS	9	nd	nd	nd	0	nd	nd	nd	nd
BH02	0.8-1.0	Jun-01	URS	nd	nd	80	nd	80	nd	nd	nd	nd
BH03	0.8-1.0	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
BH04	0.8-1.0	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
BH04	1.3-1.5	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
BH07	1.4-1.6	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
BH07	3.0-3.2	Jun-01	URS	nd	100	nd	nd	100	nd	nd	nd	nd
BH10	0.5-0.7	Jun-01	URS	nd	nd	nd	nd	0	nd	nd	nd	nd
SB15	0.4-0.6	Jan-02	URS	41	1300	160	nd	**1460**	0.2	1	1	3
MW12	0.5	11-Jan-05	ERM	<10	320	<100	<100	320	<0.5	<0.5	<0.5	<1.5
MW12	2	11-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW13	0.5	11-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW13	3	11-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW14	0.5	11-Jan-05	ERM	<10	<50	110	<100	110	<0.5	<0.5	<0.5	<1.5
MW14	3	11-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW15	1	11-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW15	6	11-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW7	0.5	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW7	4	12-Jan-05	ERM	<10	<50	310	<100	310	<0.5	<0.5	<0.5	<1.5
MW8	0.5	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW8	1	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW10	0.5	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW10	3	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW11	0.5	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW11	2	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH1	0.4	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH1	1	12-Jan-05	ERM	<10	90	<100	<100	90	<0.5	<0.5	<0.5	<1.5
BH2	0.5	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH2	1.4	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH3	0.4	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH4	0.2	12-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH4	0.7	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH5	0.5	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH6	0.3	12-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW1	0.2	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW1	1	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW2	0.5	13-Jan-05	ERM	<10	<50	<100	110	110	na	na	na	na
MW2	1	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW4	0.5	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW4	1	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW5	0.3	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW5	0.5	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5

Table 9
Chullora Railway Workshops
Historic Soil Analytical Results - TPH & BTEX

Sample ID	Depth	Date	Sampled By	Total Petroleum Hydrocarbon					Monocyclic Hydrocarbons			
				C6-C9	C10-C14	C15-C28	C29-C36	C10-C36	Benzene	Toluene	Ethylbenzene	Xylenes
LOR		-	-	5	10	50	50	110	0.5	1	1	3
Adopted IL				65				1000	1	130	50	25
BH8	0.25	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH8	1.7	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH10	0.65	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH11	0.2	13-Jan-05	ERM	<10	<50	100	120	220	<0.5	<0.5	<0.5	<1.5
BH11	0.65	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH12	0.2	13-Jan-05	ERM	<10	3150	1100	320	**4570**	<0.5	<0.5	<0.5	<1.5
BH12	0.8	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH13	0.35	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH13	1.2	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH15	0.3	13-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH15	1.5	13-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW3	0.5	14-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW3	2	14-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW6	0.5	14-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW6	1	14-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
MW9	0.5	14-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
MW9	2	14-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH7	0.5	14-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH7	1.4	14-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH9	0.4	14-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
BH14	0.4	14-Jan-05	ERM	<10	<50	<100	<100	ND	na	na	na	na
BH14	1.4	14-Jan-05	ERM	<10	<50	<100	<100	ND	<0.5	<0.5	<0.5	<1.5
Area E: Load Box and Refuelling Facility												
150-SO-01p	0.1-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
150-SO-01d	0.1-0.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
150-SO-02	1.0-1.3	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
151-SO-01p	0.4-0.5	Sep-99	D & M	nd	423	1800	67	**2290**	nd	nd	nd	nd
151-SO-01d	0.4-0.5	Sep-99	D & M	nd	380	1700	120	**2200**	nd	nd	nd	nd
151-SO-02	0.9-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
152-SO-01	0.2-0.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
152-SO-02	1.0-1.25	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
MWCD3	6.3-6.5	14-Feb-04	Coffey	<5	20	60	50	130	<0.2	<1	<1	ND
MWCD4	2.8-3.0	14-Feb-04	Coffey	<5	260	520	100	880	<0.2	<1	<1	ND
MWCS4	0.8-1.0	14-Feb-04	Coffey	<5	<10	<50	<50	ND	<0.2	<1	<1	ND
MWCS1	0.15-0.3	15-Feb-04	Coffey	<5	380	1000	220	**1600**	<0.2	<1	<1	ND
MWCS1	1.25-1.4	15-Feb-04	Coffey	<5	360	740	220	**1320**	<0.2	<1	<1	ND
MWCD2	5.8-6.0	15-Feb-04	Coffey	<5	<10	<50	<50	ND	<0.2	<1	<1	ND
MWCD1	0.15-0.3	16-Feb-04	Coffey	**110**	24000	45000	11000	**80000**	<0.2	<1	<1	ND
MWCD1	1.8-2.0	16-Feb-04	Coffey	<5	40	100	<50	140	<0.2	<1	<1	ND
BH1	1.2	16-Mar-04	RES	30	3270	12000	2080	**17350**	0.2	<0.5	<0.5	3
BH1	4	16-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
BH1	6	16-Mar-04	RES	<50	<50	120	<100	120	<0.2	<0.5	<0.5	<1
BH2	0.5	16-Mar-04	RES	<50	70	800	350	**1220**	<0.2	<0.5	<0.5	<1
BH2	3	16-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
BH2	6	16-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
BH3	0.5	16-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
BH3	6	16-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
BH4	1.4	17-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
BH4	6	17-Mar-04	RES	<50	<50	<100	<100	ND	<0.2	<0.5	<0.5	<1
MWCS5	0.9-1.0	07-Feb-06	Coffey	15	2360	3320	<100	**5680**	<0.2	<0.2	<0.2	0.5
MWCD5	5.0-5.2	07-Feb-06	Coffey	<2	<50	<100	<100	ND	<0.2	<0.2	<0.2	ND
MWCS5	1.5-1.6	07-Feb-06	Coffey	<2	<50	<100	<100	ND	<0.2	<0.2	<0.2	ND
MWCD6	1.8-2.0	07-Feb-06	Coffey	<2	<50	<100	<100	ND	<0.2	<0.2	<0.2	ND
MWCD6	3.0-3.1	07-Feb-06	Coffey	<2	<50	<100	<100	ND	<0.2	<0.2	<0.2	ND
MWCS7	1.5-1.6	07-Feb-06	Coffey	9	<50	<100	<100	ND	<0.2	<0.2	<0.2	ND
MWCS8	0.9-1.0	07-Feb-06	Coffey	<2	<50	<100	<100	ND	<0.2	<0.2	<0.2	ND
Area F: North Western Portion Including Ballast Recycling Centre												
101-SO-01	1.9-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
101-SO-03	8.4-8.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
101-SO-05	14.4-14.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
101-SO-06	17.9-18.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
102-SO-01	2.0-2.15	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
102-SO-02	7.4-7.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
102-SO-03	11.8-12.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
103-SO-01	0.9-1.0	Sep-99	D & M	nd	nd	230	114	344	nd	nd	nd	nd
103-SO-02	1.9-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
104-SO-01	1.4-1.5	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
104-SO-02	2.5-2.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
105-SO-01	0.5-0.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
105-SO-02	1..5-1.6	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
106-SO-01	0.7-0.8	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
106-SO-02	1.9-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
201-SO-01	0.7-0.8	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
201-SO-02	1.8-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
301B	2.3-2.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
301C	3.3-3.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
302A	0.5-0.6	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
302B	4.4-4.5	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
303A	0.5-0.6	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
303B	3.8-4.0	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd

Table 9
Chullora Railway Workshops
Historic Soil Analytical Results - TPH & BTEX

Sample ID	Depth	Date	Sampled By	Total Petroleum Hydrocarbon					Monocyclic Hydrocarbons			
				C6-C9	C10-C14	C15-C28	C29-C36	C10-C36	Benzene	Toluene	Ethylbenzene	Xylenes
LOR		-	-	5	10	50	50	110	0.5	1	1	3
Adopted IL				65				1000	1	130	50	25
Area G: North Eastern Portion Including Former Rail Reclamation Area												
127-SO-01	0.2-0.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
127-SO-02	0.7-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
128-SO-01	0.0-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	na	na	na	na
128-SO-02	0.8-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
129-SO-01	0.0-0.4	Sep-99	D & M	nd	51	211	nd	262	nd	nd	nd	nd
129-SO-02	0.5-0.8	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
130-SO-01	0.0-0.5	Sep-99	D & M	nd	nd	nd	nd	nd	na	na	na	na
131-SO-01	0.1-0.5	Sep-99	D & M	nd	nd	159	72	231	nd	nd	nd	nd
131-SO-02	0.7-1.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
132-SO-01	0.4-0.7	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
132-SO-02	2.7-2.9	Sep-99	D & M	45	88	214	nd	302	nd	nd	nd	nd
133-SO-01	0.0-0.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
133-SO-02	0.8-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
133-SO-03	1.6-2.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
133-SO-04	2.2-2.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
134A-SO-01	0.0-0.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
134A-SO-01d	0.0-0.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
134A-SO-02	0.6-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
134B-SO-01	0.0-0.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
135-SO-01	0.0-0.4	Sep-99	D & M	na	na	na	na	na	na	na	na	na
135-SO-02	0.6-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
135-SO-03	1.6-2.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
135-SO-04	5.6-6.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
203-SO-01	0.9-1.0	Sep-99	D & M	na	na	na	na	na	na	na	na	na
203-SO-02	3.9-4.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
204-SO-01	0.6-1.0	Sep-99	D & M	nd	nd	187	88	275	nd	nd	nd	nd
204-SO-02	1.1-1.5	Sep-99	D & M	na	na	na	na	na	na	na	na	na
309A	1.0-1.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
309B	2.3-2.4	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
310A	1.0-1.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
310B	2.0-2.1	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
Area H: South Eastern Portion												
153-SO-01	0.9-1.0	Sep-99	D & M	nd	nd	194	nd	194	nd	nd	nd	nd
153-SO-02	1.8-2.0	Sep-99	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd
403A	1.1-1.2	Jun-00	D & M	nd	nd	nd	nd	nd	nd	nd	nd	nd

Notes:
* LOR increased due to matrix interference
All units in mg/kg
"--" and "na" = not analysed
nd = not detected
p = primary sample d = duplicate sample

Table 10
Chullora Railway Workshops
Historic Soil Analytical Results - PAHs and Total Phenolics

Sample ID	Depth	Date Sampled	Sampled By	Total PAHs (mg/kg)	Benzo(a) pyrene (mg/kg)	Total Phenolics (mg/kg)
Adopted IL				**100**	**5**	
Area A: Bogie Maintenance Centre (BMC)						
110-SO-01	0.2-0.4	Sep-99	D & M	0.52	nd	nd
111-SO-01	0.1-0.3	Sep-99	D & M	nd	nd	0.9
111-SO-02	1.6-2.0	Sep-99	D & M	3.7	nd	nd
112-SO-01	0.7-0.9	Sep-99	D & M	0.1	nd	nd
112-SO-03	2.3-2.5	Sep-99	D & M	4.2	nd	0.4
113-SO-01	0.5-0.6	Sep-99	D & M	1.3	0.05	0.2
113-SO-02	1.5-1.6	Sep-99	D & M	nd	nd	nd
114-SO-01	0.2-0.3	Sep-99	D & M	0.63	nd	nd
114-SO-02	0.8-1.1	Sep-99	D & M	nd	nd	nd
115-SO-01	0.2-0.5	Sep-99	D & M	0.73	nd	0.2
115-SO-02	1.1-1.5	Sep-99	D & M	0.05	nd	0.2
116-SO-01	0.8-0.9	Sep-99	D & M	1	0.05	nd
116-SO-02	1.7-1.8	Sep-99	D & M	nd	nd	nd
117-SO-01p	0.1-0.5	Sep-99	D & M	0.11	nd	0.2
117-SO-01d	0.1-0.5	Sep-99	D & M	nd	nd	0.4
117-SO-02	0.7-0.1	Sep-99	D & M	0.82	nd	nd
123-SO-01	0.5-0.7	Sep-99	D & M	0.17	nd	nd
123-SO-02	1.5-1.7	Sep-99	D & M	nd	nd	nd
124-SO-01	0.2-0.4	Sep-99	D & M	2.4	0.18	0.2
124-SO-02	0.6-0.8	Sep-99	D & M	nd	nd	nd
125-SO-01	0.2-0.4	Oct-99	D & M	4.7	0.39	nd
125-SO-02	1.3-1.5	Sep-99	D & M	nd	nd	1.1
125-SO-03	1.3-1.5	Sep-99	D & M	20.2	0.14	0.5
126-SO-01	0.0-0.1	Sep-99	D & M	1.6	0.11	nd
126-SO-02	1.6-2.0	Sep-99	D & M	0.12	0.11nd	0.2
202-SO-01	0.7-1.0	Sep-99	D & M	0.28	nd	nd
Area B: Diesel Engine Maintenance Centre (DEMC)						
107b-SO-01	0.15-0.3	Sep-99	D & M	1.1	0.07	2.3
107b-SO-02	3.7-3.8	Sep-99	D & M	na	na	na
108-SO-01p	0.3-0.5	Sep-99	D & M	1.8	0.15	0.2
108-SO-01d	0.3-0.5	Sep-99	D & M	6.1	0.48	nd
109-SO-01p	0.15-0.3	Sep-99	D & M	0.32	nd	0.2
109-SO-01d	0.15-0.3	Sep-99	D & M	1.4	0.17	0.3
109-SO-02	1.0-1.55	Sep-99	D & M	nd	nd	0.2
118-SO-01	0.2-0.5	Sep-99	D & M	0.1	nd	5.5
118-SO-02	1.0-1.5	Sep-99	D & M	nd	nd	0.2
119-SO-01	0.1-0.45	Sep-99	D & M	nd	nd	nd
119-SO-02	0.7-1.0	Sep-99	D & M	0.45	nd	nd
120-SO-01	0.2-0.5	Sep-99	D & M	3.1	0.24	1.2
120-SO-01d	0.2-0.5	Sep-99	D & M	2.2	0.18	0.8
120-SO-02	1.0-1.5	Sep-99	D & M	nd	nd	0.2
121-SO-01	0.3-0.6	Sep-99	D & M	2.4	0.22	0.1
121-SO-02	1.2-1.6	Sep-99	D & M	nd	nd	nd
122-SO-01p	0.8-0.9	Sep-99	D & M	nd	nd	1
122-SO-01d	0.8-0.9	Sep-99	D & M	nd	nd	0.2
122-SO-02	1.9-2.0	Sep-99	D & M	nd	nd	3.7
SS4-SO-01	0.0-0.3	Sep-99	D & M	nd	nd	0.6
SS5-SO-01	0.0-0.2	Sep-99	D & M	0.56	0.06	0.2
SS6-SO-01	0.0-0.2	Sep-99	D & M	nd	nd	0.2
Area C: Locomotive Maintenance Centre (LMC)						
140-SO-01	0.0-0.5	Sep-99	D & M	3.8	0.29	0.1
140-SO-02	1.4-1.8	Sep-99	D & M	1.1	0.09	nd
141-SO-01	0.2-0.4	Sep-99	D & M	0.55	nd	3.4
141-SO-02	0.4-0.5	Sep-99	D & M	nd	nd	nd
142A-SO-01	0.1-0.4	Sep-99	D & M	5.9	0.44	nd
143-SO-01	0.4-0.5	Sep-99	D & M	nd	nd	0.2
144-SO-01	0.1-0.5	Sep-99	D & M	0.99	0.06	nd
145-SO-01p	0.8-1.0	Sep-99	D & M	0.23	0.06	nd
145-SO-01d	0.8-1.0	Sep-99	D & M	nd	nd	nd
146-SO-01	0.5-0.7	Sep-99	D & M	1.8	0.09	nd
147-SO-01	0.1-0.4	Sep-99	D & M	0.69	nd	nd
148-SO-01	0.4-0.5	Sep-99	D & M	18.2	1.3	0.5
205-SO-01p	0.4-0.5	Sep-99	D & M	nd	nd	4.7
205-SO-01d	0.4-0.5	Sep-99	D & M	18.4	nd	2.6
206-SO-01	0.2-0.3	Sep-99	D & M	2.7	nd	0.3
Area D: Electrical Maintenance Centre (EMC)						
136-SO-01p	0.1-0.5	Sep-99	D & M	0.63	0.06	nd
136-SO-01d	0.1-0.5	Sep-99	D & M	nd	nd	nd
137-SO-01	0.0-0.5	Sep-99	D & M	nd	nd	nd
138-SO-01	0.0-0.2	Sep-99	D & M	0.83	0.05	0.3
138-SO-02	0.2-0.4	Sep-99	D & M	1.1	nd	nd
139-SO-01p	0.2-0.5	Sep-99	D & M	0.13	nd	0.2
139-SO-01d	0.2-0.5	Sep-99	D & M	nd	nd	nd
207-SO-01	0.4-0.5	Sep-99	D & M	nd	nd	0.3
BH01	0.12-0.2	Jun-01	URS	1.09	na	na
BH02	0.4-0.5	Jun-01	URS	2.32	na	na
BH03	0.2-0.5	Jun-01	URS	1.04	na	na
BH04	0.2-0.4	Jun-01	URS	1.24	na	na
MW12	0.5	11-Jan-05	ERM	na	0.6	na
MW13	3	11-Jan-05	ERM	na	nd	na
MW14	0.5	11-Jan-05	ERM	na	nd	na
MW15	1	11-Jan-05	ERM	na	nd	na
MW7	4	12-Jan-05	ERM	na	nd	na
MW8	0.5	12-Jan-05	ERM	na	nd	na
MW10	0.5	12-Jan-05	ERM	na	nd	na
MW11	2	12-Jan-05	ERM	na	nd	na
BH1	1	12-Jan-05	ERM	na	2.9	na
BH2	1.4	12-Jan-05	ERM	na	nd	na
BH3	0.4	12-Jan-05	ERM	na	nd	na
BH4	0.7	12-Jan-05	ERM	na	nd	na
BH5	0.5	12-Jan-05	ERM	na	nd	na
BH6	0.3	12-Jan-05	ERM	na	nd	na
MW1	1	13-Jan-05	ERM	na	nd	na
MW2	1	13-Jan-05	ERM	na	nd	na
MW4	0.5	13-Jan-05	ERM	na	nd	na
MW5	0.5	13-Jan-05	ERM	na	nd	na
BH8	0.25	13-Jan-05	ERM	na	nd	na
BH10	0.65	13-Jan-05	ERM	na	nd	na
BH11	0.2	13-Jan-05	ERM	na	0.5	na
BH12	0.2	13-Jan-05	ERM	na	0.7	na
BH13	1.2	13-Jan-05	ERM	na	nd	na
BH15	1.5	13-Jan-05	ERM	na	nd	na
MW6	0.5	14-Jan-05	ERM	na	nd	na
MW6	1	14-Jan-05	ERM	na	nd	na
BH7	1.4	14-Jan-05	ERM	na	nd	na
BH9	0.4	14-Jan-05	ERM	na	nd	na
BH14	1.4	14-Jan-05	ERM	na	nd	na

Table 10
Chullora Railway Workshops
Historic Soil Analytical Results - PAHs and Total Phenolics

Sample ID	Depth	Date Sampled	Sampled By	Total PAHs (mg/kg)	Benzo(a) pyrene (mg/kg)	Total Phenolics (mg/kg)
Adopted IL				**100**	**5**	
Area E: Load Box and Refuelling Facility						
150-SO-01p	0.1-0.3	Sep-99	D & M	3	0.24	nd
150-SO-01d	0.1-0.3	Sep-99	D & M	3.3	0.25	0.4
151-SO-01p	0.4-0.5	Sep-99	D & M	0.95	nd	nd
151-SO-01d	0.4-0.5	Sep-99	D & M	nd	nd	nd
152-SO-01	0.2-0.6	Sep-99	D & M	1.5	0.12	nd
MWCS1	0.15-0.3	15-Feb-04	Coffey	8.6	<5	na
MWCD1	0.15-0.3	16-Feb-04	Coffey	**160**	<5	na
BH1	1.2	16-Mar-04	Coffey	28.3	<5	na
BH1	4	16-Mar-04	Coffey	nd	<5	na
BH1	6	16-Mar-04	Coffey	nd	<5	na
BH2	0.5	16-Mar-04	Coffey	nd	<5	na
BH2	3	16-Mar-04	Coffey	nd	<5	na
BH2	6	16-Mar-04	Coffey	nd	<5	na
BH3	0.5	16-Mar-04	Coffey	4.9	<5	na
BH3	6	16-Mar-04	Coffey	0.5	<5	na
BH4	1.4	17-Mar-04	Coffey	nd	<5	na
BH4	6	17-Mar-06	Coffey	<5	<5	na
Area F: North Western Portion Including Ballast Recycling Centre						
104-SO-01	1.4-1.5	Sep-99	D & M	nd	nd	nd
104-SO-02	2.5-2.6	Sep-99	D & M	nd	nd	0.5
105-SO-01	0.5-0.6	Sep-99	D & M	0.49	nd	nd
105-SO-02	1..5-1.6	Sep-99	D & M	nd	nd	0.4
106-SO-01	0.7-0.8	Sep-99	D & M	nd	nd	0.6
106-SO-02	1.9-2.0	Sep-99	D & M	nd	nd	nd
201-SO-01	0.7-0.8	Sep-99	D & M	1.3	0.11	0.2
Area G: North Eastern Portion Including Former Rail Reclamation Area						
127-SO-01	0.2-0.5	Sep-99	D & M	2.33	0.12	nd
127-SO-02	0.7-1.0	Sep-99	D & M	nd	nd	nd
128-SO-01	0.0-0.5	Sep-99	D & M	4.93	0.42	nd
128-SO-02	0.8-1.0	Sep-99	D & M	0.23	nd	0.2
129-SO-01	0.0-0.4	Sep-99	D & M	2.1	0.09	nd
129-SO-02	0.5-0.8	Sep-99	D & M	nd	nd	0.2
130-SO-01	0.0-0.5	Sep-99	D & M	0.63	0.09	nd
131-SO-01	0.1-0.5	Sep-99	D & M	3.9	0.3	1.1
131-SO-02	0.7-1.0	Sep-99	D & M	0.43	nd	0.8
132-SO-01	0.4-0.7	Sep-99	D & M	0.21	nd	1
132-SO-02	2.7-2.9	Sep-99	D & M	2.3	0.18	nd
134A-SO-01	0.0-0.5	Sep-99	D & M	1.3	0.1	0.5
134A-SO-01d	0.0-0.5	Sep-99	D & M	nd	nd	nd
134A-SO-02	0.6-1.0	Sep-99	D & M	0.75	0.06	nd
135-SO-01	0.0-0.4	Sep-99	D & M	2.3	0.19	nd
135-SO-02	0.6-1.0	Sep-99	D & M	3.9	0.38	0.2
135-SO-03	1.6-2.0	Sep-99	D & M	4.1	0.36	0.6
135-SO-04	5.6-6.0	Sep-99	D & M	3	0.07	nd
203-SO-01	0.9-1.0	Sep-99	D & M	nd	nd	nd
203-SO-02	3.9-4.0	Sep-99	D & M	nd	nd	nd
204-SO-01	0.6-1.0	Sep-99	D & M	16.9	1.4	0.6
Area H: South Eastern Portion						
153-SO-01	0.9-1.0	Sep-99	D & M	1.6	0.06	0.6

Notes:
* LOR increased due to matrix interference
All units in mg/kg
"--" and "na" = not analysed
nd = not detected
p = primary sample d = duplicate sample
Results Exceed Adopted Investigation Levels

Table 11
Chullora Railway Workshops
Historic Soil Analytical Results - OCPs and OPPs

Sample ID	Depth	Date Sampled	Sampled By	Total OCPs (mg/kg)	Total OPPs (mg/kg)
Area A: Bogie Maintenance Centre (BMC)					
125-SO-01	0.2-0.4	Oct-99	D & M	nd	nd
Area B: Diesel Engine Maintenance Centre (DEMC)					
SS4-SO-01	0.0-0.3	Sep-99	D & M	1*	nd
SS5-SO-01	0.0-0.2	Sep-99	D & M	0.2*	nd
SS6-SO-01	0.0-0.2	Sep-99	D & M	2.6*	nd
Area C: Locomotive Maintenance Centre (LMC)					
148-SO-01	0.4-0.5	Sep-99	D & M	nd	nd
149-SO-01	0.8-1.0	Sep-99	D & M	nd	nd
Area D: Electrical Maintenance Centre (EMC)					
MW1	0.2	13-Jan-05	ERM	nd	nd
MW1	1	13-Jan-05	ERM	nd	nd
MW2	1	13-Jan-05	ERM	nd	nd
MW4	0.5	13-Jan-05	ERM	nd	nd
MW5	0.5	13-Jan-05	ERM	nd	nd
MW6	0.5	14-Jan-05	ERM	nd	nd
MW7	4	12-Jan-05	ERM	nd	nd
MW8	0.5	12-Jan-05	ERM	nd	nd
MW8	1	12-Jan-05	ERM	nd	nd
MW10	0.5	12-Jan-05	ERM	nd	nd
MW11	2	12-Jan-05	ERM	nd	nd
MW12	0.5	11-Jan-05	ERM	nd	nd
MW13	0.5	11-Jan-05	ERM	nd	nd
MW13	3	11-Jan-05	ERM	nd	nd
MW14	0.5	11-Jan-05	ERM	nd	nd
MW14	3	11-Jan-05	ERM	nd	nd
MW15	1	11-Jan-05	ERM	nd	nd
BH1	0.4	12-Jan-05	ERM	nd	nd
BH1	1	12-Jan-05	ERM	nd	nd
BH2	0.5	12-Jan-05	ERM	nd	nd
BH2	1.4	12-Jan-05	ERM	nd	nd
BH3	0.4	12-Jan-05	ERM	nd	nd
BH4	0.7	12-Jan-05	ERM	nd	nd
BH5	0.5	12-Jan-05	ERM	nd	nd
BH6	0.3	12-Jan-05	ERM	nd	nd
BH7	1.4	14-Jan-05	ERM	nd	nd
BH8	0.25	13-Jan-05	ERM	nd	nd
BH8	1.7	13-Jan-05	ERM	nd	nd
BH9	0.4	14-Jan-05	ERM	nd	nd
BH10	0.65	13-Jan-05	ERM	nd	nd
BH11	0.2	13-Jan-05	ERM	nd	nd
BH12	0.2	13-Jan-05	ERM	nd	nd
BH13	1.2	13-Jan-05	ERM	nd	nd
BH14	1.4	14-Jan-05	ERM	nd	nd
BH15	0.3	13-Jan-05	ERM	nd	nd
BH15	1.5	13-Jan-05	ERM	nd	nd
Area F: North Western Portion Including Ballast Recycling Centre					
102-SO-01	2.0-2.15	Sep-99	D & M	nd	nd
104-SO-01	1.4-1.5	Sep-99	D & M	nd	nd
105-SO-01	0.5-0.6	Sep-99	D & M	nd	nd
106-SO-01	0.7-0.8	Sep-99	D & M	nd	nd
Area G: North Eastern Portion Including Former Rail Reclamation Area					
127-SO-01	0.2-0.5	Sep-99	D & M	nd	nd
128-SO-01	0.0-0.5	Sep-99	D & M	nd	nd
129-SO-02	0.5-0.8	Sep-99	D & M	nd	nd
130-SO-01	0.0-0.5	Sep-99	D & M	nd	nd
131-SO-01	0.1-0.5	Sep-99	D & M	nd	nd
132-SO-01	0.4-0.7	Sep-99	D & M	nd	nd
133-SO-01	0.0-0.5	Sep-99	D & M	nd	nd
135-SO-01	0.0-0.4	Sep-99	D & M	nd	nd

Notes:

* OCP detected Dieldrin adopted guideline level 50mg/kg for Aldrin+Dieldrin

All units in mg/kg

"--" and "na" = not analysed

nd = not detected

p = primary sample d = duplicate sample

Results Exceed Adopted Investigation Levels

Table 12a
Chullora Railway Workshops
Historic Soil Analytical Results - VCHs

Sample Location	Depth	Sampled By		Volatile Chlorinated Hydrocarbons																									
				Vinyl chloride	Chloroethane	Trichlorodifluoromethane	1,1-Dichloroethene	Methylene chloride	trans-1,2-Dichloroethene	1,1-Dichloroethane	cis-1,2-Dichloroethene	Chloroform	1,1,1-Trichloroethane	Carbon tetrachloride	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	trans-1,3-Dichloropropylene	cis-1,3-Dichloropropylene	1,1,2-Trichloroethane	Tetrachloroethene	Dibromochloromethane	Chlorobenzene	Bromoform	1,1,2,2-Tetrachloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,2-Dichlorobenzene
Area C: Locomotive Maintenance Depot (LMC)																													
SB15	1.3-1.5	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB18	0.3-0.4	URS	08-Jan-02	*<1	*<1	*<1	*<1	*<1	*<1	*<1	10	*<1	*<1	*<1	*<1	16	*<1	*<1	*<1	*<1	*<1	730	*<1	*<1	*<1	*<1	*<1	*<1	*<1
SB19	0.2-0.4	URS	08-Jan-02	nd	nd	nd	nd	nd	nd	nd	0.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	nd	nd	nd
SB20	0.3-0.4	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Area D: Electrical Maintenance Centre (EMC)																													
SB01	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB02	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB03	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	nd	nd	nd
SB04	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB05	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.4	nd	nd	nd	nd	nd	nd	nd
SB06	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.6	nd	nd	nd	nd	nd	0.5	nd	nd	nd	nd	nd	nd	nd
SB07	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	nd	nd	nd
SB08	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1	nd	nd	nd	nd	nd	nd	nd
SB09	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.4	nd	nd	nd	nd	nd	nd	nd
SB10	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB12	0.2-0.4	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	0.3	4.8	nd	nd	nd	nd	0.5	nd	nd	nd	nd	nd	0.2	nd	nd	nd	nd	nd	0.2	0.7
SB13	0.2-0.3	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.9	nd	nd	nd	nd	nd	nd	nd
SB14	0.3-0.5	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB16	2.9-3.1	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
SB17	0.3-0.5	URS	07-Jan-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	nd	0.1	nd	nd	nd	nd	nd	nd	nd

Notes:

* LOR increased due to matrix interference

All units in mg/kg

"--" and "na" = not analysed

nd = not detected

p = primary sample   d = duplicate sample

Results Exceed Adopted Investigation Levels

Table 12b
Chullora Railway Workshops
Historic Soil Analytical Results - SVOCs and VOCs

Sample ID	Depth	Date Sampled	Sampled By	Total SVOCs (mg/kg)	Total VOCs (mg/kg)
Area D: Electrical Maintenance Centre (EMC)					
BH01	0.12-0.2	Jun-01	URS	-	nd
BH07	1.4-1.6	Jun-01	URS	18	430
MW12	0.5	11-Jan-05	ERM	0.6	2
MW13	3	11-Jan-05	ERM	nd	0.7
MW14	0.5	11-Jan-05	ERM	nd	1.6
MW15	1	11-Jan-05	ERM	nd	nd
MW7	4	12-Jan-05	ERM	nd	nd
MW8	0.5	12-Jan-05	ERM	nd	nd
MW10	0.5	12-Jan-05	ERM	nd	nd
MW11	2	12-Jan-05	ERM	nd	nd
BH1	1	12-Jan-05	ERM	2.9	2.3
BH2	1.4	12-Jan-05	ERM	nd	nd
BH3	0.4	12-Jan-05	ERM	nd	nd
BH4	0.7	12-Jan-05	ERM	nd	nd
BH5	0.5	12-Jan-05	ERM	nd	nd
BH6	0.3	12-Jan-05	ERM	nd	nd
MW1	1	13-Jan-05	ERM	nd	nd
MW2	1	13-Jan-05	ERM	nd	nd
MW4	0.5	13-Jan-05	ERM	nd	nd
MW5	0.5	13-Jan-05	ERM	nd	1.7
BH8	0.25	13-Jan-05	ERM	nd	nd
BH10	0.65	13-Jan-05	ERM	nd	nd
BH11	0.2	13-Jan-05	ERM	0.5	4.4
BH12	0.2	13-Jan-05	ERM	0.7	2.1
BH13	1.2	13-Jan-05	ERM	nd	nd
BH15	1.5	13-Jan-05	ERM	nd	8.8
MW6	0.5	14-Jan-05	ERM	nd	nd
MW6	1	14-Jan-05	ERM	nd	nd
BH7	1.4	14-Jan-05	ERM	nd	nd
BH9	0.4	14-Jan-05	ERM	nd	nd
BH14	1.4	14-Jan-05	ERM	nd	1.5

Notes:
* LOR increased due to matrix interference
All units in mg/kg
"--" and "na" = not analysed
nd = not detected
p = primary sample d = duplicate sample

Table 13
Chullora Railway Workshops
Historic Soil Analytical Results - PCBs

Sample ID	Depth	Date	Sampled By	Total PCBs (mg/kg)
Adopted IL				**50**
Area D: Electrical Maintenance Centre (EMC)				
MW1	0.2	13-Jan-05	ERM	nd
MW6	0.5	14-Jan-05	ERM	nd
MW8	1	12-Jan-05	ERM	nd
MW12	0.5	11-Jan-05	ERM	nd
MW13	0.5	11-Jan-05	ERM	nd
BH1	0.4	12-Jan-05	ERM	nd
BH2	0.5	12-Jan-05	ERM	nd
BH3	0.4	12-Jan-05	ERM	nd
BH4	0.7	12-Jan-05	ERM	nd
BH5	0.5	12-Jan-05	ERM	nd
BH6	0.3	12-Jan-05	ERM	nd
BH7	1.4	14-Jan-05	ERM	nd
BH8	1.7	13-Jan-05	ERM	nd
BH10	0.65	13-Jan-05	ERM	nd
BH14	1.4	14-Jan-05	ERM	nd
BH15	0.3	13-Jan-05	ERM	nd

Notes:

* LOR increased due to matrix interference

All units in mg/kg

"--" and "na" = not analysed

nd = not detected

p = primary sample d = duplicate sample

Appendix A Purge and Sampling Data Sheets

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: MW01 UMC

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date ___/___/___

Developed by:

Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

19/07/07

Date 18/7/7

Developed by: NR

Well head condition: OK

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time	9.30	
Bore Depth (mbTOC)	3.0m	3.0m
- SWL (mbTOC)	8.74	
x L/m	1.2	
= Bore Vol	52	

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments 19/- could not get sample

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
9.40am	42		3.15	11.50	6.4	57	17.7	L Brown turbid [illegible]				

14/07/07

Sampling

20/7/07

Date 20/07/07

Sampled by:

	Start	End
Time	9am	
SWL		

Sampling Method Bailer / Other

Container type and size

Sample ID	TPH/BTEX VHC 2x40ml Vial(G) H2SO4 Maroon	TPH, Phenols, PAH, OCOP 1L (G) Nil Yellow	Metals 250 ml (P) HNO3 Red	Ferrous Fe 250 ml (P) HCL White	Water Qual 250 ml (P) Nil Green	TOC, SO4 250 ml (P) HCL White	TOC, SO4 40 ml Vial(G) Nil White	Methane 40 ml Vial(G) Nil White	Other	Total
Primary MW01	✓	✓	–							
Duplicate ~~2608~~	–									
Triplicate										

Comments Well - V20 low recovery overnight

Vials / ~~metals~~ / Amber 3/4 filled / metals

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: MW2

Project No 43217612 | Project Name CHULLORA RAILWAY SHOP | Location CHULLORA

Development

Date ___/___/___
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate ___ L/min
Volume Removed ___ L/min
PSH Level ___ mbTOC
Comments

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 18/7/07
Developed by: NK
Well head condition: OK

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time	9.30	10.00
Bore Depth (mbTOC)	4.8	4.8
- SWL (mbTOC)	1.378	4.41
x L/m	3.5	
= Bore Vol	12	

Development Method Bailer / ~~Footvalve / Other~~
Discharge Rate — L/min
Volume Removed 14 L/min
PSH Level — mbTOC
Comments Well purged 14L

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
9.35	10	-	4.0	5.30mS	7.46	170	16.4	Brown Grey Turbid Odour	-			
9.40	14	-	3.85	6.17mS	7.50	157	18.4	Brown Turbid	-			

Sampling

Date 18/07/07
Sampled by: NK

Sampling Method Bailer / ~~Other~~

	Start	End
Time	13.10	
SWL		

Container type and size

Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
	Maroon	Yellow	Red	White	Green	White	White	White		
Primary: MW2_180707										
Duplicate										
Triplicate										

Comments Well Sampled

URS **BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET**

BORE ID: MW Ø2

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date __/__/__
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 18/08/07
Developed by: NR
Well head condition: OK

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	1.98	1.98
- SWL (mbTOC)	1.98	—
x L/m	—	
= Bore Vol	—	

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments WELL DRY OR BLOCKED AT 2m

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
	DRY											

Sampling

NOT SAMPLED

Date 18/01/01 Sampling Method Bailer / Other
Sampled by:

	Start	End
Time		
SWL		

Container type and size

Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4	TOC, SO4	Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
	Maroon	Yellow	Red	White	Green	White	White	White		
Primary										
Duplicate										
Triplicate										

Comments DRY - Well NOT SAMPLED

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: MW03

Project No **43217612** Project Name **CHULLORA RAILWAY SHOP** Location **CHULLORA**

Development

Date ___/___/___
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses / OVA Monitoring - PID (ppm) / LEL (%)

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 18/07/07
Developed by: NK
Well head condition: OK

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	5.20	
- SWL (mbTOC)	4.05	
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses / OVA Monitoring - PID (ppm) / LEL (%)

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
10:30	4L		3.98	15.55mS	7.28	-76	17.5	Brown dark Rusted				

Sampling

Date 18/07/07
Sampled by:

	Start	End
Time	13.45	14.00
SWL		

Sampling Method Bailer / Other

Container type and size

Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
	Maroon	Yellow	Red	White	Green	White	White	White		
Primary: MW03_18/07/07										
Duplicate										
Triplicate										

Comments Well Sampled

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: MW12

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date __/__/__
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 18/07/07
Developed by: NK
Well head condition: OK

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	5.00	4.00
- SWL (mbTOC)	3.90	4.77
x L/m	1.1	
= Bore Vol	4L	

Development Method Bailer / ~~Footvalve / Other~~
Discharge Rate — L/min
Volume Removed 8 L/min
PSH Level mbTOC
Comments well purged dry after 8L

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
10.40	4		3.55	14.60mS	6.12	87	18.7	Grey/Brown · Turbid Sl ~~[illegible]~~				
10.50	8L		3.11	16.08mS	6.22	91	19.3	" "				

Sampling

Date 18/7/7
Sampled by:

	Start	End
Time	13.30	
SWL		

Sampling Method Bailer / Other

Container type and size

	Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4	TOC, SO4	Methane	Other	Total
		2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
		H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
		Maroon	Yellow	Red	White	Green	White	White	White		
Primary	MW12_18/07/07										
Duplicate	~~[illegible]~~										
Triplicate											

Comments ~~[illegible]~~ taken

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URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: ~~A~~ 107 a

Not 107b

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date __/__/__
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%): Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 17 / 7 / 07
Developed by: NK
Well head condition: OK

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time	15:30	
Bore Depth (mbTOC)	5.80	
- SWL (mbTOC)	1.50	
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed 50L L/min
PSH Level mbTOC
Comments

17/07

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%): Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
15.30	10	-	2.01	610	7.21	13	17.1	Brown Turbid				
	20	-	1.06	607	7.22	11	17.1	" "				
	30	-	1.26	644 ul	7.32	-41	16.4	"				
	40		1.1	641 ul	7.36	-39	16.7	"				
16.00	50		0.91	650	7.33	-47	16.4	"				

Sampling

Date 18 / 7 / 07 Sampling Method Bailer / Other
Sampled by:

19/08

	Start	End
Time		
SWL		

Container type and size

	Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4	TOC, SO4	Methane	Other	Total
		2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
		H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
		Maroon	Yellow	Red	White	Green	White	White	White		
Primary	107a 18/07/07										
Duplicate											
Triplicate											

Comments Well Sampled

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: 121

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date __/__/__

Developed by:

Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 17/04/07

Developed by: NK

Well head condition: OK. old

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	4.3	
- SWL (mbTOC)	0.69	
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments DRY APPROX 14 L

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
11.15	10	-	5.53	5576	7.88	89	16.2	Brown turbid Sl Sheen Sl Odour				
11.30	14	-	5.41	5546	7.84	70	17.3	" " " "				

Sampling

Date 17/07/07

Sampled by: NK

Sampling Method Bailer / Other

Container type and size

	Start	End
Time		
SWL		

	Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
		2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
		H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
		Maroon	Yellow	Red	White	Green	White	White	White		
Primary											
Duplicate											
Triplicate											

Comments TPH/BTEX/metals/PAH/VOC

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URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: 205 *

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Both Sample for client

Development

Date ___/___/___

Developed by:

Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)

OVA Monitoring - PID (ppm) / LEL (%)

Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 6/7/7

Developed by: OA NR

Well head condition: NR

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	3.60	3.60
- SWL (mbTOC)	2.61	
x L/m	4 L/m	
= Bore Vol	4L	

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)
12.15pm	2L	-	3.7	3.0ms	5.59	162	14.6	Clear Brown

OVA Monitoring - PID (ppm) / LEL (%)

Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Sampling

Date 20/07/07

Sampled by:

Sampling Method Bailer / Other

	Start	End
Time	9.20am	9.20a
SWL	-	-

Container type and size

Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4	TOC, SO4	Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
	Maroon	Yellow	Red	White	Green	White	White	White		
Primary: 205-20/07/07										
Duplicate										
Triplicate										

Comments Very low recovery - sediment/silt in water from base of well. Maybe 1 L removed.

URS **BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET**

BORE ID: 207

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date ___/___/___
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 18/07/07
Developed by: NR
Well head condition: OK

\# Access stairs to unused carpark up top

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	10.00	
- SWL (mbTOC)	6.02	
x L/m	4.	
= Bore Vol	16 L	

Development Method Bailer / ~~Footvalve / Other~~
Discharge Rate – L/min
Volume Removed 13 L/min
PSH Level – mbTOC
Comments DRY after 13 L

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
11.45	10	–	4.19	8.81 mS	7.61	80	21.0	Brown turbid				
12.00	13	–	.37	12.28 mS	7.82	80	20.9	" "				

Sampling

Date 18/07/07
Sampled by: NR

Sampling Method Bailer / Other

	Start	End
Time	PM	
SWL	–	

Container type and size

	Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4	TOC, SO4	Methane	Other	Total
		2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
		H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
		Maroon	Yellow	Red	White	Green	White	White	White		
Primary	207.18/07/07										
Duplicate											
Triplicate											

Comments Well Sample

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: 306

Project No 43217612 | Project Name CHULLORA RAILWAY SHOP | Location CHULLORA

Development

N/A

Date ___/___/___
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 17/07/07
Developed by: NK
Well head condition: ok - OLD

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time	9.50	10.20
Bore Depth (mbTOC)	3.9	3.1
- SWL (mbTOC)	1.285	1.29
x L/m	2.7	
= Bore Vol	10 L	x3

Development Method Dedicated ~~Bailer~~ / Footvalve / ~~Other~~
Discharge Rate – L/min
Volume Removed 30 L L/min
PSH Level – mbTOC
Comments Dedicated Footvalve in well

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
10.00am	5		5.95	608us	8.70	195	17.8	Brown Turbid No odour				
10.05	10		4.65	607	8.30	186	17.9	" "				
10.10	15		4.59	623	8.17	184	18.1	" "				
10.15	20		4.25	624	8.06	171	17.9	" "				
10.20	30		4.	620	8.17	N.C.	18.1	" "				

Sampling

14.20

Date 17/7/07
Sampled by: NK

Sampling Method Bailer ~~/ Other~~

	Start	End
Time	14.20	
SWL		

Container type and size

Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
	Maroon	Yellow	Red	White	Green	White	White	White		
Primary										
Duplicate										
Triplicate										

Comments Well Sampled

TPH/BTEX/metals
PAH/VOCs

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URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: ~~107D~~ 31? labelled 313 on map??

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development Date ___/___/___

Developed by:

Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments

wrong well

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging Date 17/7/07

Developed by: JK

Well head condition: OK

* require diff allen key

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	3.90	
- SWL (mbTOC)	1.25	
x L/m	~~2.2~~ 2.7	
= Bore Vol	12L	

Development Method Bailer / Footvalve / Other

Discharge Rate L/min

Volume Removed L/min

PSH Level mbTOC

Comments

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
14.00	7L		2.67	483	6.14	80	18.8	Brown turbid No odour				

Sampling Date ___/___/___ Sampling Method Bailer / Other

Sampled by:

	Start	End
Time		
SWL		

Container type and size

	Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
		2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
		H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
		Maroon	Yellow	Red	White	Green	White	White	White		
Primary											
Duplicate											
Triplicate											

Comments TPH/BTEX/metals/PAHs/OCPs OPPs

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URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: 317

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date __/__/__
Developed by:
Well head condition:

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Well Size	50 mm	100 mm
L/m	4	9

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

19/07/07

Date 18/7/07
Developed by: NK
Well head condition: BAD - BLOCKED w/ [illegible] Well Damaged

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method ~~Bailer /~~ Footvalve ~~/ Other~~
Discharge Rate — L/min
Volume Removed 5L L/min
PSH Level — mbTOC
Comments Well purged 5L. Well : cannot get SWL blocked 5L Footvalve

Monument damaged

Well Size	50 mm	100 mm
L/m	4	9

Field Analyses

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	OVA Monitoring - PID (ppm) / LEL (%) Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
15.00	5	-	2.0	806	6.84	90	18.4	Brown [illegible] Organic Matter [illegible] & sand/[illegible]				

Sampling

19/07/07

Date 19/7/07
Sampled by: NK

Sampling Method ~~Bailer / Other~~ Waterra

	Start	End
Time		
SWL		

Container type and size

Sample ID	TPH/BTEX VHC 2x40ml Vial(G) H2SO4 Maroon	TPH, Phenols, PAH, OCOP 1L (G) Nil Yellow	Metals 250 ml (P) HNO3 Red	Ferrous Fe 250 ml (P) HCL White	Water Qual 250 ml (P) Nil Green	TOC, SO4 250 ml (P) HCL White	TOC, SO4 40 ml Vial(G) Nil White	Methane 40 ml Vial(G) Nil White	Other	Total
Primary 317-190707										
Duplicate										
Triplicate										

Comments Well Sampled - Well Damaged

URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: MW2ES 15

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date ___/___/___
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

19/07/07

Date ___/___/___
Developed by: ϕx
Well head condition: Good

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)	1.09	
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level 4cm mbTOC
Comments 4cm of Product approx

1.03 PSH
1.07 S.WL

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
		NOT		SAMPLE								

4cm of PSH Black

Sampling

Date ___/___/___
Sampled by:

Sampling Method Bailer / Other

	Start	End
Time		
SWL		

Container type and size

Sample ID	TPH/BTEX VHC	TPH, Phenols, PAH, OCOP	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
	Maroon	Yellow	Red	White	Green	White	White	White		
Primary										
Duplicate										
Triplicate										

Comments NOT SAMPLED - 4cm of Product

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URS BORE DEVELOPMENT, PURGING AND GROUNDWATER SAMPLING DATA SHEET

BORE ID: ~~MWCD~~ TR Deep
MWCD 1

Project No 43217612 Project Name CHULLORA RAILWAY SHOP Location CHULLORA

Development

Date ___/___/___
Developed by:
Well head condition:

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)		
- SWL (mbTOC)		
x L/m		
= Bore Vol		

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed L/min
PSH Level mbTOC
Comments

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL

Purging

Date 19/___/___
19/07/07
Developed by: AR
Well head condition: Good

Well Size	50 mm	100 mm
L/m	4	9

	Start	End
Time		
Bore Depth (mbTOC)	6.7	
- SWL (mbTOC)	2.73	
x L/m	4	
= Bore Vol	16L	

Development Method Bailer / Footvalve / Other
Discharge Rate L/min
Volume Removed 42 L/min
PSH Level mbTOC
Comments DRY APPROX 42L

Field Analyses / **OVA Monitoring - PID (ppm) / LEL (%)**

Time	Vol Removed (L)	Dissolved Oxygen (%)	Dissolved Oxygen (ppm)	EC (uS/cm)	pH	Redox (mV)	T (C)	Comments (Color, turbidity)	Well Head PID / LEL	OBZ PID / LEL	Bucket PID / LEL	Ambient PID / LEL
10.50	10		1.84	4.63mS	5.60	187	22.6	D Brown turbid				
11.00	20		2.8	6.15	5.55	162	20.8	"				
11.10	30		2.9	7.0	5.48	154	20.9	"				
11.20	42		2.6	7.16	5.47	151	21.1	"				

AWCD1

ID:

Sampling

Date 19/7/07
Sampled by: AR

Sampling Method Bailer / Other

Container type and size

	Start	End
Time		
SWL		

Sample ID	TPH/BTEX VHC	~~TPH, Phenols,~~ PAH, ~~OCOP~~ TPH	Metals	Ferrous Fe	Water Qual	TOC, SO4		Methane	Other	Total
	2x40ml Vial(G)	1L (G)	250 ml (P)	250 ml (P)	250 ml (P)	250 ml (P)	40 ml Vial(G)	40 ml Vial(G)		
	H2SO4	Nil	HNO3	HCL	Nil	HCL	Nil	Nil		
MWCD1.	Maroon	Yellow	Red	White	Green	White	White	White		
Primary MWCD1-19/07/07	✓	✓	✓							
Duplicate QC01-19/07/07	✓	✓	✓							
Triplicate QC100 19/07/07	✓	✓	✓							

Comments Well Sample TPH/BTEX/METALS/PAH/VOCS
Extra Volume for QC 4 x vials extra

Appendix B Laboratory Reports and Chain of Custody Documentation

ALS Environmental

CERTIFICATE OF ANALYSIS

Client	: URS AUSTRALIA (NSW) PTY LTD	*Laboratory*	: Environmental Division Sydney	*Page*	: 1 of 20
Contact	: MR ANDREW HOLLOWAY	*Contact*	: Victor Kedicioglu	*Work Order*	: **ES0709901**
Address	: LEVEL 3, 116 MILLER STREET NORTH SYDNEY NSW AUSTRALIA 2060	*Address*	: 277-289 Woodpark Road Smithfield NSW Australia 2164		
E-mail	: andrew_holloway@urscorp.com	*E-mail*	: Victor.Kedicioglu@alsenviro.com		
Telephone	: 89255500	*Telephone*	: +61-2-8784 8555		
Facsimile	: 89255555	*Facsimile*	: +61-2-8784 8500		
Project	: 43217612	*Quote number*	: EN/001/07	*Date received*	: 20 Jul 2007
Order number	: - Not provided -			*Date issued*	: 28 Jul 2007
C-O-C number	: - Not provided -			*No. of samples*	- *Received* : 20
Site	: - Not provided -				*Analysed* : 19

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825

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This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatory	*Position*	*Department*
Celine Conceicao	Spectroscopist	Inorganics - NATA 825 (10911 - Sydney)
EDWANDY FADJAR	Senior Organic Chemist	Organics - NATA 825 (10911 - Sydney)
PHALAK INTHAKESONE	Organics Co-ordinator	Organics - NATA 825 (10911 - Sydney)

Comments

This report for the ALSE reference ES0709901 supersedes any previous reports with this reference. Results apply to the samples as submitted. All pages of this report have been checked and approved for release.

This report contains the following information:

- **Analytical Results for Samples Submitted**
- **Surrogate Recovery Data**

The analytical procedures used by ALS Environmental have been developed from established internationally-recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported herein. Reference methods from which ALSE methods are based are provided in parenthesis.

When moisture determination has been performed, results are reported on a dry weight basis. When a reported 'less than' result is higher than the LOR, this may be due to primary sample extracts/digestion dilution and/or insuffient sample amount for analysis. Surrogate Recovery Limits are static and based on USEPA SW846 or ALS-QWI/EN38 (in the absence of specified USEPA limits). Where LOR of reported result differ from standard LOR, this may be due to high moisture, reduced sample amount or matrix interference. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number, LOR = Limit of Reporting. * Indicates failed Surrogate Recoveries.

Specific comments for Work Order **ES0709901**

Samples were rerun (X 10) for ICPMS metal analysis due to matrix interference (hard to filter). LORs have been raised accordingly for ES0709901-010.
Chromium LOR raised due to matrix interference.
EP080: Sample TRIP SPIKE contains volatile compounds spiked into the sample containers prior to dispatch from the laboratory. BTEX compounds spiked at 20 ug/L.
EP074 and EP080: Sample 205_20/07/07 required dilution due to the presence of high level contaminants. LOR values have been adjusted accordingly.
EP068: Insufficient sample (107A_18/07/07) has been provided for standard analysis. Where applicable LOR values have been adjusted accordingly.

Analytical Results

Analyte	CAS number	LOR	Units	RETENTION POND	SWAMP	CANAL	QC03_2007/07	
			Sample Matrix Type / Description :	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
			Sample Date / Time :	19 Jul 2007 15:00	19 Jul 2007 15:00	20 Jul 2007 15:00	19 Jul 2007 15:00	
			Laboratory Sample ID :	ES0709901-015	ES0709901-017	ES0709901-018	ES0709901-019	
EA055: Moisture Content								
Moisture Content (dried @ 103°C)		1.0	%	40.0	59.3	44.7	63.1	
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	33	41	12	47	
Cadmium	7440-43-9	1	mg/kg	<1	<1	3	<1	
Chromium	7440-47-3	2	mg/kg	13	29	54	31	
Copper	7440-50-8	5	mg/kg	117	274	138	305	
Lead	7439-92-1	5	mg/kg	51	238	166	252	
Nickel	7440-02-0	2	mg/kg	14	31	21	34	
Zinc	7440-66-6	5	mg/kg	100	355	565	390	
EG035T: Total Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	0.2	0.1	0.2	
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	<5	<5	
2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	<5	<5	
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	<5	<5	
2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	<5	<5	
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	

ALS Environmental

Analytical Results

Analyte	CAS number	LOR	Units	RETENTION POND	SWAMP	CANAL	QC03_2007/07	
Client Sample ID :				RETENTION POND	SWAMP	CANAL	QC03_2007/07	
Sample Matrix Type / Description :				SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
Sample Date / Time :				19 Jul 2007 15:00	19 Jul 2007 15:00	20 Jul 2007 15:00	19 Jul 2007 15:00	
Laboratory Sample ID :				ES0709901-015	ES0709901-017	ES0709901-018	ES0709901-019	
EP074D: Fumigants								
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	<5	<5	
Chloromethane	74-87-3	5	mg/kg	<5	<5	<5	<5	
Vinyl chloride	75-01-4	5	mg/kg	<5	<5	<5	<5	
Bromomethane	74-83-9	5	mg/kg	<5	<5	<5	<5	
Chloroethane	75-00-3	5	mg/kg	<5	<5	<5	<5	
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	<5	<5	
1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Bromochloromethane	74-97-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	

ALS Environmental

Analytical Results

Analyte	CAS number	LOR	Units	RETENTION POND	SWAMP	CANAL	QC03_2007/07	
Sample Matrix Type / Description :				SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
Sample Date / Time :				19 Jul 2007 15:00	19 Jul 2007 15:00	20 Jul 2007 15:00	19 Jul 2007 15:00	
Laboratory Sample ID :				ES0709901-015	ES0709901-017	ES0709901-018	ES0709901-019	
EP074F: Halogenated Aromatic Compounds								
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074H: Naphthalene								
Naphthalene	91-20-3	5	mg/kg	<5	<5	<5	<5	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.8	0.7	1.0	
Pyrene	129-00-0	0.5	mg/kg	<0.5	0.8	0.8	1.1	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.8	0.6	<0.8	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.8	<0.5	<0.8	
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction		10	mg/kg	<10	<10	<10	<10	
C10 - C14 Fraction		50	mg/kg	<50	<50	<50	<50	
C15 - C28 Fraction		100	mg/kg	<100	<100	640	<100	
C29 - C36 Fraction		100	mg/kg	<100	<100	940	<100	
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	

Analytical Results

Analyte	CAS number	LOR	Units	RETENTION POND	SWAMP	CANAL	QC03_2007/07	
			Client Sample ID :	RETENTION POND	SWAMP	CANAL	QC03_2007/07	
			Sample Matrix Type / Description :	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
			Sample Date / Time :	19 Jul 2007 15:00	19 Jul 2007 15:00	20 Jul 2007 15:00	19 Jul 2007 15:00	
			Laboratory Sample ID :	ES0709901-015	ES0709901-017	ES0709901-018	ES0709901-019	
EP080: BTEX								
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	93.0	101	108	105	
Toluene-D8	2037-26-5	0.1	%	83.3	96.6	101	101	
4-Bromofluorobenzene	460-00-4	0.1	%	88.0	93.2	100	94.8	
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	104	86.4	100	103	
2-Chlorophenol-D4	93951-73-6	0.1	%	106	82.9	100	97.7	
2.4.6-Tribromophenol	118-79-6	0.1	%	93.0	75.9	97.7	94.0	
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	102	81.6	97.9	95.2	
Anthracene-d10	1719-06-8	0.1	%	102	80.0	92.8	96.6	
4-Terphenyl-d14	1718-51-0	0.1	%	98.5	76.6	92.8	89.6	
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	80.9	84.2	89.4	87.4	
Toluene-D8	2037-26-5	0.1	%	83.9	85.5	89.1	89.4	
4-Bromofluorobenzene	460-00-4	0.1	%	82.9	85.7	89.7	87.2	

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Analytical Results

Analyte	CAS number	LOR	Units	306_17/07/07	121_17/07/07	MW2_18/07/07	MW03_18/07/07	107A_18/07/07
Sample Matrix Type / Description :				WATER	WATER	WATER	WATER	WATER
Sample Date / Time :				17 Jul 2007 15:00	17 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00
Laboratory Sample ID :				ES0709901-001	ES0709901-002	ES0709901-003	ES0709901-004	ES0709901-005
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	0.003	<0.001	0.017	<0.001
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	0.0002	<0.0001
Chromium	7440-47-3	0.001	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Copper	7440-50-8	0.001	mg/L	<0.001	0.003	0.002	0.010	0.004
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	<0.001	0.002	0.002	0.010	<0.001
Zinc	7440-66-6	0.005	mg/L	0.010	0.018	0.010	0.037	0.015
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	----	----	----	----	<1.1
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	----	----	----	----	<1.1
beta-BHC	319-85-7	0.5	µg/L	----	----	----	----	<1.1
gamma-BHC	58-89-9	0.5	µg/L	----	----	----	----	<1.1
delta-BHC	319-86-8	0.5	µg/L	----	----	----	----	<1.1
Heptachlor	76-44-8	0.5	µg/L	----	----	----	----	<1.1
Aldrin	309-00-2	0.5	µg/L	----	----	----	----	<1.1
Heptachlor epoxide	1024-57-3	0.5	µg/L	----	----	----	----	<1.1
trans-Chlordane	5103-74-2	0.5	µg/L	----	----	----	----	<1.1
alpha-Endosulfan	959-98-8	0.5	µg/L	----	----	----	----	<1.1
cis-Chlordane	5103-71-9	0.5	µg/L	----	----	----	----	<1.1
Dieldrin	60-57-1	0.5	µg/L	----	----	----	----	<1.1
4.4'-DDE	72-55-9	0.5	µg/L	----	----	----	----	<1.1
Endrin	72-20-8	0.5	µg/L	----	----	----	----	<1.1
beta-Endosulfan	33213-65-9	0.5	µg/L	----	----	----	----	<1.1
4.4'-DDD	72-54-8	0.5	µg/L	----	----	----	----	<1.1
Endrin aldehyde	7421-93-4	0.5	µg/L	----	----	----	----	<1.1
Endosulfan sulfate	1031-07-8	0.5	µg/L	----	----	----	----	<1.1
4.4'-DDT	50-29-3	2	µg/L	----	----	----	----	<2
Endrin ketone	53494-70-5	0.5	µg/L	----	----	----	----	<1.1
Methoxychlor	72-43-5	2	µg/L	----	----	----	----	<2
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	----	----	----	----	<1.1
Demeton-S-methyl	919-86-8	0.5	µg/L	----	----	----	----	<1.1
Monocrotophos	6923-22-4	2	µg/L	----	----	----	----	<2
Dimethoate	60-51-5	0.5	µg/L	----	----	----	----	<1.1
Diazinon	333-41-5	0.5	µg/L	----	----	----	----	<1.1

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Analytical Results

Analyte	CAS number	LOR	Units	306_17/07/07	121_17/07/07	MW2_18/07/07	MW03_18/07/07	107A_18/07/07
Sample Matrix Type / Description :				WATER	WATER	WATER	WATER	WATER
Sample Date / Time :				17 Jul 2007 15:00	17 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00
Laboratory Sample ID :				ES0709901-001	ES0709901-002	ES0709901-003	ES0709901-004	ES0709901-005
EP068B: Organophosphorus Pesticides (OP)								
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	----	----	----	----	<1.1
Parathion-methyl	298-00-0	2	µg/L	----	----	----	----	<2
Malathion	121-75-5	0.5	µg/L	----	----	----	----	<1.1
Fenthion	55-38-9	0.5	µg/L	----	----	----	----	<1.1
Chlorpyrifos	2921-88-2	0.5	µg/L	----	----	----	----	<1.1
Parathion	56-38-2	2	µg/L	----	----	----	----	<2
Pirimphos-ethyl	23505-41-1	0.5	µg/L	----	----	----	----	<1.1
Chlorfenvinphos	470-90-6	0.5	µg/L	----	----	----	----	<1.1
Bromophos-ethyl	4824-78-6	0.5	µg/L	----	----	----	----	<1.1
Fenamiphos	22224-92-6	0.5	µg/L	----	----	----	----	<1.1
Prothiofos	34643-46-4	0.5	µg/L	----	----	----	----	<1.1
Ethion	563-12-2	0.5	µg/L	----	----	----	----	<1.1
Carbophenothion	786-19-6	0.5	µg/L	----	----	----	----	<1.1
Azinphos Methyl	86-50-0	0.5	µg/L	----	----	----	----	<1.1
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	5	µg/L	<5	<5	<5	<5	<5
Toluene	108-88-3	5	µg/L	<5	<5	<5	<5	<5
Ethylbenzene	100-41-4	5	µg/L	<5	<5	<5	<5	<5
meta- & para-Xylene	108-38-3 106-42-3	5	µg/L	<5	<5	<5	<5	<5
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
ortho-Xylene	95-47-6	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Analyte	CAS number	LOR	Units	306_17/07/07	121_17/07/07	MW2_18/07/07	MW03_18/07/07	107A_18/07/07
Sample Matrix Type / Description				WATER	WATER	WATER	WATER	WATER
Sample Date / Time				17 Jul 2007 15:00	17 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00
Laboratory Sample ID				ES0709901-001	ES0709901-002	ES0709901-003	ES0709901-004	ES0709901-005
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	8	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	35	27	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	120	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	37	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	12	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Analyte	CAS number	LOR	Units	306_17/07/07	121_17/07/07	MW2_18/07/07	MW03_18/07/07	107A_18/07/07
			Sample Matrix Type / Description :	WATER	WATER	WATER	WATER	WATER
			Sample Date / Time :	17 Jul 2007 15:00	17 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00
			Laboratory Sample ID :	ES0709901-001	ES0709901-002	ES0709901-003	ES0709901-004	ES0709901-005
EP074F: Halogenated Aromatic Compounds								
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
EP074H: Naphthalene								
Naphthalene	91-20-3	7	µg/L	<7	<7	<7	<7	<7
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	----	<1.0	<1.0	<1.0	<1.0
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction		20	µg/L	<20	<20	<20	70	<20
C10 - C14 Fraction		50	µg/L	<50	80	<50	<50	<50
C15 - C28 Fraction		100	µg/L	<100	900	<100	<100	<100
C29 - C36 Fraction		50	µg/L	<50	170	<50	<50	<50

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Analytical Results

Analyte	CAS number	LOR	Units	306_17/07/07	121_17/07/07	MW2_18/07/07	MW03_18/07/07	107A_18/07/07
Sample Matrix Type / Description				WATER	WATER	WATER	WATER	WATER
Sample Date / Time				17 Jul 2007 15:00	17 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00	18 Jul 2007 15:00
Laboratory Sample ID				ES0709901-001	ES0709901-002	ES0709901-003	ES0709901-004	ES0709901-005
EP080: BTEX								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	----	----	76.7
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	----	----	73.2
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	114	114	115	112	118
Toluene-D8	2037-26-5	0.1	%	104	103	107	103	107
4-Bromofluorobenzene	460-00-4	0.1	%	109	107	114	109	113
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	47.3	39.9	47.2	40.0
2-Chlorophenol-D4	93951-73-6	0.1	%	----	91.0	77.8	87.6	81.5
2.4.6-Tribromophenol	118-79-6	0.1	%	----	98.3	71.3	78.4	71.6
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	84.3	69.7	81.6	75.0
Anthracene-d10	1719-06-8	0.1	%	----	70.7	70.0	78.1	70.4
4-Terphenyl-d14	1718-51-0	0.1	%	----	77.6	66.9	77.2	71.1
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	119	119	117	116	119
Toluene-D8	2037-26-5	0.1	%	102	102	108	103	107
4-Bromofluorobenzene	460-00-4	0.1	%	103	103	115	111	115

Analytical Results

Analyte	CAS number	LOR	Units	207_18/07/07	317_19/07/07	MWCD1_19/07/07	205_20/07/07	MW01_2007/07
Sample Matrix Type / Description				WATER	WATER	WATER	WATER	WATER
Sample Date / Time				18 Jul 2007 15:00	19 Jul 2007 15:00	19 Jul 2007 15:00	20 Jul 2007 15:00	20 Jul 2007 15:00
Laboratory Sample ID				ES0709901-006	ES0709901-007	ES0709901-008	ES0709901-009	ES0709901-010
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.003	<0.001	0.002	0.001	<0.010
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0001	<0.0001	<0.0010
Chromium	7440-47-3	0.001	mg/L	<0.005	<0.001	0.001	<0.001	<0.010
Copper	7440-50-8	0.001	mg/L	0.002	0.003	0.017	0.001	0.013
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.002	<0.001	<0.010
Nickel	7440-02-0	0.001	mg/L	0.004	0.002	0.027	0.002	<0.010
Zinc	7440-66-6	0.005	mg/L	0.022	0.145	0.086	0.035	<0.050
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	5	µg/L	<5	----	<5	<100	<5
Toluene	108-88-3	5	µg/L	<5	----	<5	<100	<5
Ethylbenzene	100-41-4	5	µg/L	<5	----	<5	<100	<5
meta- & para-Xylene	108-38-3 106-42-3	5	µg/L	<5	----	<5	<200	<5
Styrene	100-42-5	5	µg/L	<5	----	<5	<100	<5
ortho-Xylene	95-47-6	5	µg/L	<5	----	<5	<100	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	----	<5	<100	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	----	<5	<100	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	----	<5	<100	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	----	<5	<100	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	----	<5	<100	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	----	<5	<100	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	----	<5	<100	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	----	<5	<100	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	----	<50	<1000	<50
2-Butanone (MEK)	78-93-3	50	µg/L	<50	----	<50	<1000	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	----	<50	<1000	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	----	<50	<1000	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	----	<5	<100	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	----	<5	<100	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	----	<5	<100	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	----	<5	<200	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	----	<5	<200	<5