

LLW(07) S2/261, March 2008, LLW Facilities Stage 2, Environmental  
Statement Addendum

Appendix 10f

Groundwater Quality Data Table 1, 2, 3, 4 and 5

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands

Date Sampled	Field Sample Name	Generic Screening Criteria DWS mg/l	Aluminium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Ammoniacal Nitrogen mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS SW mg/l	Arsenic mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	0.2	0.04	0.002	0.5	<0.05	0.05	0.025	0.059	0.002
02-Oct-07	GW05	0.2	0.024	0.002	0.5	<0.05	0.05	0.025	0.031	0.002
29-Jan-08	GW05	0.2	0.035	0.002	0.5	<0.05	0.05	0.025	0.045	0.002
01-May-07	GW20	0.2	0.053	0.002	0.5	1.9	0.05	0.025	0.011	0.002
03-Oct-07	GW20	0.2	0.12	0.002	0.5	2.2	0.05	0.025	0.009	0.002
29-Jan-08	GW20	0.2	0.033	0.002	0.5	2	0.05	0.025	0.007	0.002
01-May-07	GW22	0.2	0.032	0.002	0.5	<0.05	0.05	0.025	0.01	0.002
03-Oct-07	GW22	0.2	0.01	0.002	0.5	<0.05	0.05	0.025	0.007	0.002
30-Jan-08	GW22	0.2	0.022	0.002	0.5	<0.05	0.05	0.025	0.006	0.002

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Ba mg/l	Lower Limit of Detection (mg/l)	Beryllium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Boron Water Soluble mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS SW mg/l	Cadmium mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	0.19	0.02	<0.001	0.001	2	0.08	0.01	0.0025	<0.001	0.001
02-Oct-07	GW05	0.23	0.02	<0.001	0.001	2	<0.01	0.01	0.0025	<0.001	0.001
29-Jan-08	GW05	0.22	0.02	<0.001	0.001	2	0.1	0.01	0.0025	<0.001	0.001
01-May-07	GW20	0.2	0.02	<0.001	0.001	2	0.11	0.01	0.0025	<0.001	0.001
03-Oct-07	GW20	0.27	0.02	<0.001	0.001	2	0.3	0.01	0.0025	<0.001	0.001
29-Jan-08	GW20	0.2	0.02	<0.001	0.001	2	0.05	0.01	0.0025	<0.001	0.001
01-May-07	GW22	0.24	0.02	<0.001	0.001	2	0.07	0.01	0.0025	<0.001	0.001
03-Oct-07	GW22	0.29	0.02	<0.001	0.001	2	0.01	0.01	0.0025	<0.001	0.001
30-Jan-08	GW22	0.25	0.02	<0.001	0.001	2	0.05	0.01	0.0025	<0.001	0.001

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria DWS mg/l	Calcium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Chloride mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Chromium mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	250	62	1	250	230	0.05	0.005	<0.001	0.001
02-Oct-07	GW05	250	93	1	250	260	0.05	0.005	<0.001	0.001
29-Jan-08	GW05	250	96	1	250	250	0.05	0.005	<0.001	0.001
01-May-07	GW20	250	73	1	250	110	0.05	0.005	<0.001	0.001
03-Oct-07	GW20	250	150	1	250	95	0.05	0.005	<0.001	0.001
29-Jan-08	GW20	250	140	1	250	100	0.05	0.005	<0.001	0.001
01-May-07	GW22	250	64	1	250	190	0.05	0.005	<0.001	0.001
03-Oct-07	GW22	250	100	1	250	230	0.05	0.005	<0.001	0.001
30-Jan-08	GW22	250	99	1	250	240	0.05	0.005	<0.001	0.001

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS FW mg/l	Copper mg/l	Lower Limit of Detection (mg/l)	Cyanide - Complex mg/l	Lower Limit of Detection (mg/l)	Cyanide - Free mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW, SW mg/l	Iron mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	0.001	0.012	0.001	<0.05	0.05	<0.05	0.05	1	1.3	0.001
02-Oct-07	GW05	0.001	0.016	0.001	<0.05	0.05	<0.05	0.05	1	0.63	0.001
29-Jan-08	GW05	0.001	0.031	0.001	<0.05	0.05	<0.05	0.05	1	0.6	0.001
01-May-07	GW20	0.001	0.021	0.001	<0.05	0.05	<0.05	0.05	1	1.1	0.001
03-Oct-07	GW20	0.001	0.036	0.001	<0.05	0.05	<0.05	0.05	1	1.5	0.001
29-Jan-08	GW20	0.001	0.03	0.001	<0.05	0.05	<0.05	0.05	1	0.85	0.001
01-May-07	GW22	0.001	0.024	0.001	<0.05	0.05	<0.05	0.05	1	0.35	0.001
03-Oct-07	GW22	0.001	0.016	0.001	<0.05	0.05	<0.05	0.05	1	0.44	0.001
30-Jan-08	GW22	0.001	0.025	0.001	<0.05	0.05	<0.05	0.05	1	0.48	0.001

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS FW mg/l	Lead mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Magnesium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Manganese mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	0.004	<0.003	0.003	50	18	1	0.05	0.33	0.001
02-Oct-07	GW05	0.004	<0.003	0.003	50	32	1	0.05	0.19	0.001
29-Jan-08	GW05	0.004	<0.003	0.003	50	32	1	0.05	0.29	0.001
01-May-07	GW20	0.004	<0.003	0.003	50	19	1	0.05	2.3	0.001
03-Oct-07	GW20	0.004	<0.003	0.003	50	44	1	0.05	20	0.001
29-Jan-08	GW20	0.004	<0.003	0.003	50	39	1	0.05	2.6	0.001
01-May-07	GW22	0.004	<0.003	0.003	50	16	1	0.05	0.45	0.001
03-Oct-07	GW22	0.004	<0.003	0.003	50	26	1	0.05	0.35	0.001
30-Jan-08	GW22	0.004	<0.003	0.003	50	24	1	0.05	0.39	0.001

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS SW mg/l	Mercury mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS SW mg/l	Nickel mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Nitrate mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	0.0003	<0.010	0.010	0.03	0.001	0.001	50	<0.05	0.05
02-Oct-07	GW05	0.0003	0.017	0.001	0.03	<0.001	0.001	50	<0.05	0.05
29-Jan-08	GW05	0.0003	<0.001	0.001	0.03	<0.001	0.001	50	0.28	0.05
01-May-07	GW20	0.0003	<0.010	0.010	0.03	0.006	0.001	50	<0.05	0.05
03-Oct-07	GW20	0.0003	0.058	0.001	0.03	0.002	0.001	50	0.09	0.05
29-Jan-08	GW20	0.0003	<0.001	0.001	0.03	0.004	0.001	50	0.19	0.05
01-May-07	GW22	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	0.06	0.05
03-Oct-07	GW22	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
30-Jan-08	GW22	0.0003	<0.001	0.001	0.03	<0.001	0.001	50	0.07	0.05
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Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Nitrite mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS mg/l	Potassium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Selenium mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	11	0.05	10	10	1	0.01	<0.004	0.004
02-Oct-07	GW05	7.7	0.05	10	7	1	0.01	<0.004	0.004
29-Jan-08	GW05	7.7	0.05	10	6	1	0.01	<0.004	0.004
01-May-07	GW20	11	0.05	10	8	1	0.01	<0.004	0.004
03-Oct-07	GW20	10	0.05	10	7	1	0.01	<0.004	0.004
29-Jan-08	GW20	9.7	0.05	10	6	1	0.01	<0.004	0.004
01-May-07	GW22	9.1	0.05	10	7	1	0.01	<0.004	0.004
03-Oct-07	GW22	7.9	0.05	10	4	1	0.01	<0.004	0.004
30-Jan-08	GW22	6.2	0.05	10	4	1	0.01	<0.004	0.004

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS FW mg/l	Sodium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Sulphate mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Total Cyanide mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	170	45	1	250	39	0.05	0.05	<0.05	0.05
02-Oct-07	GW05	170	140	1	250	38	0.05	0.05	<0.05	0.05
29-Jan-08	GW05	170	140	1	250	39	0.05	0.05	<0.05	0.05
01-May-07	GW20	170	28	1	250	28	0.05	0.05	<0.05	0.05
03-Oct-07	GW20	170	63	1	250	24	0.05	0.05	<0.05	0.05
29-Jan-08	GW20	170	52	1	250	23	0.05	0.05	<0.05	0.05
01-May-07	GW22	170	38	1	250	28	0.05	0.05	<0.05	0.05
03-Oct-07	GW22	170	110	1	250	31	0.05	0.05	<0.05	0.05
30-Jan-08	GW22	170	110	1	250	31	0.05	0.05	<0.05	0.05

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Vanadium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Zinc mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Chromium Hexavalent mg/l	Lower Limit of Detection (mg/l)	Ferric Iron (Fe III) mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	<0.001	0.001	0.008	0.017	0.001	0.005	<0.05	0.05	1.3	0.01
02-Oct-07	GW05	<0.001	0.001	0.008	0.01	0.001	0.005	<0.05	0.05	0.5	0.01
29-Jan-08	GW05	<0.001	0.001	0.008	0.02	0.001	0.005	<0.05	0.05	0.6	0.01
01-May-07	GW20	<0.001	0.001	0.008	0.017	0.001	0.005	<0.05	0.05	1.1	0.01
03-Oct-07	GW20	<0.001	0.001	0.008	0.011	0.001	0.005	<0.05	0.05	1.3	0.01
29-Jan-08	GW20	<0.001	0.001	0.008	0.018	0.001	0.005	<0.05	0.05	0.85	0.01
01-May-07	GW22	<0.001	0.001	0.008	0.02	0.001	0.005	<0.05	0.05	0.35	0.01
03-Oct-07	GW22	<0.001	0.001	0.008	0.01	0.001	0.005	<0.05	0.05	0.41	0.01
30-Jan-08	GW22	<0.001	0.001	0.008	0.011	0.001	0.005	<0.05	0.05	0.48	0.01

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Ferrous Iron (Fe II) mg/l	Lower Limit of Detection (mg/l)	Phosphate mg/l	Lower Limit of Detection (mg/l)	Sulphide mg/l	Lower Limit of Detection (mg/l)	Alkalinity mg/l	Lower Limit of Detection (mg/l)	pH
01-May-07	GW5	<0.01	0.01	<1	1	<0.05	0.05	320	10	7.8
02-Oct-07	GW05	0.13	0.01	<1	1	<0.05	0.05	340	10	7.3
29-Jan-08	GW05	<0.01	0.01	<1	1	<0.05	0.05	320	10	7.4
01-May-07	GW20	<0.01	0.01	<1	1	<0.05	0.05	480	10	7.6
03-Oct-07	GW20	0.22	0.01	<1	1	<0.05	0.05	460	10	7.1
29-Jan-08	GW20	<0.01	0.01	<1	1	<0.05	0.05	450	10	7.1
01-May-07	GW22	<0.01	0.01	<1	1	<0.05	0.05	300	10	7.7
03-Oct-07	GW22	0.03	0.01	<1	1	<0.05	0.05	260	10	7.2
30-Jan-08	GW22	<0.01	0.01	3	1	<0.05	0.05	240	10	7.2

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Chemical Oxygen Demand mg/l	Lower Limit of Detection (mg/l)	Dissolved Oxygen mg/l	Lower Limit of Detection (mg/l)	Suspended Solids mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	TPH (C10-C40) mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	34	5	9	1	400	10	0.01	<0.01	0.01
02-Oct-07	GW05	19	5	7.6	1	100	10	0.01	<0.01	0.01
29-Jan-08	GW05	42	5	9.5	1	60	10	0.01	0.23	0.01
01-May-07	GW20	39	5	9.1	1	170	10	0.01	<0.01	0.01
03-Oct-07	GW20	35	5	7.4	1	520	10	0.01	0.01	0.01
29-Jan-08	GW20	22	5	7.6	1	51	10	0.01	0.06	0.01
01-May-07	GW22	22	5	9	1	340	10	0.01	<0.01	0.01
03-Oct-07	GW22	23	5	5.3	1	86	10	0.01	0.01	0.01
30-Jan-08	GW22	9	5	8.3	1	81	10	0.01	0.04	0.01

Table 1 Shallow Groundwater (GW5, 20, 22) Inorganic and Organic Determinands cont

Date Sampled	Field Sample Name	Fraction Organic Carbon %	Lower Limit of Detection (%)	Total Organic Carbon mg/l	Lower Limit of Detection (mg/l)
01-May-07	GW5	5.1	0.1	4	1
02-Oct-07	GW05	6.8	0.1	5	1
29-Jan-08	GW05	4.7	0.1	4	1
01-May-07	GW20	6	0.1	8	1
03-Oct-07	GW20	8.2	0.1	9	1
29-Jan-08	GW20	6.5	0.1	9	1
01-May-07	GW22	3.2	0.1	2	1
03-Oct-07	GW22	5.2	0.1	3	1
30-Jan-08	GW22	4.1	0.1	2	1

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands

Date Sampled	Field Sample Name	Generic Screening Criteria DWS mg/l	Aluminium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Ammoniacal Nitrogen mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS SW mg/l	Arsenic mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	0.2	0.007	0.002	0.5	<0.05	0.05	0.025	0.004	0.002
01-May-07	LLW2_Z1	0.2	0.024	0.002	0.5	<0.05	0.05	0.025	0.004	0.002
02-Oct-07	LLW2_Z1	0.2	0.022	0.002	0.5	<0.05	0.05	0.025	<0.002	0.002
30-Jan-08	LLW2_Z1	0.2	0.096	0.002	0.5	<0.05	0.05	0.025	0.002	0.002
01-May-07	LLW2_Z2	0.2	0.025	0.002	0.5	<0.05	0.05	0.025	0.009	0.002
02-Oct-07	LLW2_Z2	0.2	0.042	0.002	0.5	<0.05	0.05	0.025	0.004	0.002
30-Jan-08	LLW2_Z2	0.2	0.007	0.002	0.5	<0.05	0.05	0.025	0.004	0.002
02-May-07	LLW2_Z3	0.2	0.15	0.002	0.5	<0.05	0.05	0.025	0.004	0.002
02-May-07	LLW3_Z1	0.2	0.014	0.002	0.5	<0.05	0.05	0.025	0.008	0.002
02-Oct-07	LLW3_Z1	0.2	0.029	0.002	0.5	<0.05	0.05	0.025	0.005	0.002
30-Jan-08	LLW3_Z1	0.2	0.017	0.002	0.5	<0.05	0.05	0.025	0.005	0.002
03-May-07	LLW3_Z2	0.2	0.092	0.002	0.5	<0.05	0.05	0.025	0.002	0.002
02-Oct-07	LLW3_Z2	0.2	0.018	0.002	0.5	<0.05	0.05	0.025	<0.002	0.002
30-Jan-08	LLW3_Z2	0.2	0.022	0.002	0.5	<0.05	0.05	0.025	0.002	0.002
02-May-07	LLW3_Z3	0.2	0.016	0.002	0.5	<0.05	0.05	0.025	0.002	0.002

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Ba mg/l	Lower Limit of Detection (mg/l)	Beryllium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Boron Water Soluble mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS SW mg/l	Cadmium mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	0.19	0.02	<0.001	0.001	2	0.04	0.01	0.0025	<0.001	0.001
01-May-07	LLW2_Z1	0.2	0.02	<0.001	0.001	2	0.05	0.01	0.0025	<0.001	0.001
02-Oct-07	LLW2_Z1	0.23	0.02	<0.001	0.001	2	<0.01	0.01	0.0025	<0.001	0.001
30-Jan-08	LLW2_Z1	0.21	0.02	<0.001	0.001	2	0.04	0.01	0.0025	<0.001	0.001
01-May-07	LLW2_Z2	0.17	0.02	<0.001	0.001	2	0.06	0.01	0.0025	<0.001	0.001
02-Oct-07	LLW2_Z2	0.21	0.02	<0.001	0.001	2	<0.01	0.01	0.0025	<0.001	0.001
30-Jan-08	LLW2_Z2	0.17	0.02	<0.001	0.001	2	0.04	0.01	0.0025	<0.001	0.001
02-May-07	LLW2_Z3	0.36	0.02	<0.001	0.001	2	0.09	0.01	0.0025	<0.001	0.001
02-May-07	LLW3_Z1	0.12	0.02	<0.001	0.001	2	0.06	0.01	0.0025	<0.001	0.001
02-Oct-07	LLW3_Z1	0.14	0.02	<0.001	0.001	2	<0.01	0.01	0.0025	<0.001	0.001
30-Jan-08	LLW3_Z1	0.13	0.02	<0.001	0.001	2	0.05	0.01	0.0025	<0.001	0.001
03-May-07	LLW3_Z2	0.11	0.02	<0.001	0.001	2	0.05	0.01	0.0025	<0.001	0.001
02-Oct-07	LLW3_Z2	0.13	0.02	<0.001	0.001	2	<0.01	0.01	0.0025	<0.001	0.001
30-Jan-08	LLW3_Z2	0.1	0.02	<0.001	0.001	2	0.05	0.01	0.0025	<0.001	0.001
02-May-07	LLW3_Z3	0.1	0.02	<0.001	0.001	2	0.14	0.01	0.0025	<0.001	0.001

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria DWS mg/l	Calcium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Chloride mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Chromium mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	250	70	1	250	100	0.05	0.005	<0.001	0.001
01-May-07	LLW2_Z1	250	62	1	250	120	0.05	0.005	<0.001	0.001
02-Oct-07	LLW2_Z1	250	90	1	250	130	0.05	0.005	<0.001	0.001
30-Jan-08	LLW2_Z1	250	96	1	250	120	0.05	0.005	0.002	0.001
01-May-07	LLW2_Z2	250	64	1	250	120	0.05	0.005	<0.001	0.001
02-Oct-07	LLW2_Z2	250	95	1	250	130	0.05	0.005	<0.001	0.001
30-Jan-08	LLW2_Z2	250	100	1	250	130	0.05	0.005	<0.001	0.001
02-May-07	LLW2_Z3	250	59	1	250	110	0.05	0.005	<0.001	0.001
02-May-07	LLW3_Z1	250	70	1	250	140	0.05	0.005	<0.001	0.001
02-Oct-07	LLW3_Z1	250	110	1	250	150	0.05	0.005	<0.001	0.001
30-Jan-08	LLW3_Z1	250	120	1	250	150	0.05	0.005	<0.001	0.001
03-May-07	LLW3_Z2	250	60	1	250	99	0.05	0.005	<0.001	0.001
02-Oct-07	LLW3_Z2	250	82	1	250	110	0.05	0.005	<0.001	0.001
30-Jan-08	LLW3_Z2	250	88	1	250	100	0.05	0.005	<0.001	0.001
02-May-07	LLW3_Z3	250	58	1	250	110	0.05	0.005	<0.001	0.001

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS FW mg/l	Copper mg/l	Lower Limit of Detection (mg/l)	Cyanide - Complex mg/l	Lower Limit of Detection (mg/l)	Cyanide - Free mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW, SW mg/l	Iron mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	0.001	0.004	0.001	<0.05	0.05	<0.05	0.05	1	0.84	0.001
01-May-07	LLW2_Z1	0.001	0.016	0.001	<0.05	0.05	<0.05	0.05	1	0.47	0.001
02-Oct-07	LLW2_Z1	0.001	0.011	0.001	<0.05	0.05	<0.05	0.05	1	0.64	0.001
30-Jan-08	LLW2_Z1	0.001	0.054	0.001	<0.05	0.05	<0.05	0.05	1	14	0.001
01-May-07	LLW2_Z2	0.001	0.008	0.001	<0.05	0.05	<0.05	0.05	1	1.4	0.001
02-Oct-07	LLW2_Z2	0.001	0.016	0.001	<0.05	0.05	<0.05	0.05	1	1.4	0.001
30-Jan-08	LLW2_Z2	0.001	0.006	0.001	<0.05	0.05	<0.05	0.05	1	0.47	0.001
02-May-07	LLW2_Z3	0.001	0.011	0.001	<0.05	0.05	<0.05	0.05	1	0.15	0.001
02-May-07	LLW3_Z1	0.001	0.01	0.001	<0.05	0.05	<0.05	0.05	1	1	0.001
02-Oct-07	LLW3_Z1	0.001	0.025	0.001	<0.05	0.05	<0.05	0.05	1	1.2	0.001
30-Jan-08	LLW3_Z1	0.001	0.016	0.001	<0.05	0.05	<0.05	0.05	1	0.33	0.001
03-May-07	LLW3_Z2	0.001	0.006	0.001	<0.05	0.05	<0.05	0.05	1	0.32	0.001
02-Oct-07	LLW3_Z2	0.001	0.015	0.001	<0.05	0.05	<0.05	0.05	1	0.65	0.001
30-Jan-08	LLW3_Z2	0.001	0.026	0.001	<0.05	0.05	<0.05	0.05	1	0.59	0.001
02-May-07	LLW3_Z3	0.001	0.006	0.001	<0.05	0.05	<0.05	0.05	1	0.66	0.001

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS FW mg/l	Lead mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Magnesium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Manganese mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	0.004	<0.003	0.003	50	19	1	0.05	0.17	0.001
01-May-07	LLW2_Z1	0.004	0.007	0.003	50	18	1	0.05	0.09	0.001
02-Oct-07	LLW2_Z1	0.004	<0.003	0.003	50	30	1	0.05	0.077	0.001
30-Jan-08	LLW2_Z1	0.004	<0.003	0.003	50	31	1	0.05	0.25	0.001
01-May-07	LLW2_Z2	0.004	<0.003	0.003	50	17	1	0.05	0.15	0.001
02-Oct-07	LLW2_Z2	0.004	<0.003	0.003	50	27	1	0.05	0.14	0.001
30-Jan-08	LLW2_Z2	0.004	<0.003	0.003	50	27	1	0.05	0.13	0.001
02-May-07	LLW2_Z3	0.004	<0.003	0.003	50	20	1	0.05	0.024	0.001
02-May-07	LLW3_Z1	0.004	<0.003	0.003	50	14	1	0.05	0.56	0.001
02-Oct-07	LLW3_Z1	0.004	<0.003	0.003	50	18	1	0.05	0.47	0.001
30-Jan-08	LLW3_Z1	0.004	<0.003	0.003	50	19	1	0.05	0.51	0.001
03-May-07	LLW3_Z2	0.004	<0.003	0.003	50	15	1	0.05	0.11	0.001
02-Oct-07	LLW3_Z2	0.004	<0.003	0.003	50	18	1	0.05	0.18	0.001
30-Jan-08	LLW3_Z2	0.004	<0.003	0.003	50	18	1	0.05	0.2	0.001
02-May-07	LLW3_Z3	0.004	<0.003	0.003	50	14	1	0.05	0.21	0.001

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS SW mg/l	Mercury mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS SW mg/l	Nickel mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Nitrate mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	0.0003	<0.010	0.010	0.03	0.002	0.001	50	0.14	0.05
01-May-07	LLW2_Z1	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
02-Oct-07	LLW2_Z1	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
30-Jan-08	LLW2_Z1	0.0003	<0.001	0.001	0.03	0.002	0.001	50	<0.05	0.05
01-May-07	LLW2_Z2	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	0.5	0.05
02-Oct-07	LLW2_Z2	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
30-Jan-08	LLW2_Z2	0.0003	<0.001	0.001	0.03	<0.001	0.001	50	<0.05	0.05
02-May-07	LLW2_Z3	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
02-May-07	LLW3_Z1	0.0003	<0.010	0.010	0.03	0.002	0.001	50	0.1	0.05
02-Oct-07	LLW3_Z1	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
30-Jan-08	LLW3_Z1	0.0003	<0.001	0.001	0.03	<0.001	0.001	50	0.06	0.05
03-May-07	LLW3_Z2	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
02-Oct-07	LLW3_Z2	0.0003	<0.010	0.010	0.03	<0.001	0.001	50	<0.05	0.05
30-Jan-08	LLW3_Z2	0.0003	<0.001	0.001	0.03	<0.001	0.001	50	<0.05	0.05
02-May-07	LLW3_Z3	0.0003	<0.010	0.010	0.03	0.001	0.001	50	1.3	0.05

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Nitrite mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS mg/l	Potassium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Selenium mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	11	0.05	10	7	1	0.01	<0.004	0.004
01-May-07	LLW2_Z1	7.9	0.05	10	6	1	0.01	<0.004	0.004
02-Oct-07	LLW2_Z1	7.5	0.05	10	3	1	0.01	<0.004	0.004
30-Jan-08	LLW2_Z1	6	0.05	10	10	1	0.01	<0.004	0.004
01-May-07	LLW2_Z2	7.8	0.05	10	6	1	0.01	<0.004	0.004
02-Oct-07	LLW2_Z2	7	0.05	10	3	1	0.01	<0.004	0.004
30-Jan-08	LLW2_Z2	7.4	0.05	10	4	1	0.01	<0.004	0.004
02-May-07	LLW2_Z3	8.5	0.05	10	4	1	0.01	<0.004	0.004
02-May-07	LLW3_Z1	9.8	0.05	10	6	1	0.01	<0.004	0.004
02-Oct-07	LLW3_Z1	8.3	0.05	10	3	1	0.01	0.004	0.004
30-Jan-08	LLW3_Z1	8.2	0.05	10	4	1	0.01	<0.004	0.004
03-May-07	LLW3_Z2	9.3	0.05	10	5	1	0.01	<0.004	0.004
02-Oct-07	LLW3_Z2	6.7	0.05	10	3	1	0.01	<0.004	0.004
30-Jan-08	LLW3_Z2	6.7	0.05	10	3	1	0.01	<0.004	0.004
02-May-07	LLW3_Z3	9	0.05	10	6	1	0.01	<0.004	0.004

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Generic Screening Criteria EQS FW mg/l	Sodium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Sulphate mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	Total Cyanide mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	170	37	1	250	32	0.05	0.05	<0.05	0.05
01-May-07	LLW2_Z1	170	31	1	250	22	0.05	0.05	<0.05	0.05
02-Oct-07	LLW2_Z1	170	58	1	250	21	0.05	0.05	<0.05	0.05
30-Jan-08	LLW2_Z1	170	60	1	250	19	0.05	0.05	<0.05	0.05
01-May-07	LLW2_Z2	170	31	1	250	21	0.05	0.05	<0.05	0.05
02-Oct-07	LLW2_Z2	170	63	1	250	19	0.05	0.05	<0.05	0.05
30-Jan-08	LLW2_Z2	170	63	1	250	22	0.05	0.05	<0.05	0.05
02-May-07	LLW2_Z3	170	28	1	250	16	0.05	0.05	<0.05	0.05
02-May-07	LLW3_Z1	170	37	1	250	32	0.05	0.05	<0.05	0.05
02-Oct-07	LLW3_Z1	170	82	1	250	33	0.05	0.05	<0.05	0.05
30-Jan-08	LLW3_Z1	170	86	1	250	32	0.05	0.05	<0.05	0.05
03-May-07	LLW3_Z2	170	30	1	250	27	0.05	0.05	<0.05	0.05
02-Oct-07	LLW3_Z2	170	57	1	250	28	0.05	0.05	<0.05	0.05
30-Jan-08	LLW3_Z2	170	59	1	250	27	0.05	0.05	<0.05	0.05
02-May-07	LLW3_Z3	170	33	1	250	32	0.05	0.05	<0.05	0.05

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Vanadium mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Zinc mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria EQS FW mg/l	Chromium Hexavalent mg/l	Lower Limit of Detection (mg/l)	Ferric Iron (Fe III) mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	<0.001	0.001	0.008	0.011	0.001	0.005	<0.05	0.05	0.84	0.01
01-May-07	LLW2_Z1	<0.001	0.001	0.008	0.016	0.001	0.005	<0.05	0.05	0.47	0.01
02-Oct-07	LLW2_Z1	<0.001	0.001	0.008	0.003	0.001	0.005	<0.05	0.05	0.59	0.01
30-Jan-08	LLW2_Z1	<0.001	0.001	0.008	0.015	0.001	0.005	<0.05	0.05	14	0.01
01-May-07	LLW2_Z2	<0.001	0.001	0.008	0.018	0.001	0.005	<0.05	0.05	1.4	0.01
02-Oct-07	LLW2_Z2	<0.001	0.001	0.008	0.007	0.001	0.005	<0.05	0.05	1.2	0.01
30-Jan-08	LLW2_Z2	<0.001	0.001	0.008	0.005	0.001	0.005	<0.05	0.05	0.47	0.01
02-May-07	LLW2_Z3	<0.001	0.001	0.008	0.045	0.001	0.005	<0.05	0.05	0.15	0.01
02-May-07	LLW3_Z1	<0.001	0.001	0.008	0.011	0.001	0.005	<0.05	0.05	1	0.01
02-Oct-07	LLW3_Z1	<0.001	0.001	0.008	0.015	0.001	0.005	<0.05	0.05	0.94	0.01
30-Jan-08	LLW3_Z1	<0.001	0.001	0.008	0.028	0.001	0.005	<0.05	0.05	0.33	0.01
03-May-07	LLW3_Z2	<0.001	0.001	0.008	0.008	0.001	0.005	<0.05	0.05	0.32	0.01
02-Oct-07	LLW3_Z2	<0.001	0.001	0.008	0.009	0.001	0.005	<0.05	0.05	0.55	0.01
30-Jan-08	LLW3_Z2	<0.001	0.001	0.008	0.029	0.001	0.005	<0.05	0.05	0.59	0.01
02-May-07	LLW3_Z3	<0.001	0.001	0.008	0.011	0.001	0.005	<0.05	0.05	0.66	0.01

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Ferrous Iron (Fe II) mg/l	Lower Limit of Detection (mg/l)	Phosphate mg/l	Lower Limit of Detection (mg/l)	Sulphide mg/l	Lower Limit of Detection (mg/l)	Alkalinity mg/l	Lower Limit of Detection (mg/l)	pH
03-May-07	LLW1_Z2	<0.01	0.01	<1	1	<0.05	0.05	460	10	7.8
01-May-07	LLW2_Z1	<0.01	0.01	<1	1	<0.05	0.05	300	10	7.8
02-Oct-07	LLW2_Z1	0.05	0.01	<1	1	<0.05	0.05	310	10	7.4
30-Jan-08	LLW2_Z1	<0.01	0.01	<1	1	<0.05	0.05	320	10	7.3
01-May-07	LLW2_Z2	<0.01	0.01	<1	1	<0.05	0.05	310	10	7.9
02-Oct-07	LLW2_Z2	0.21	0.01	<1	1	<0.05	0.05	280	10	7.6
30-Jan-08	LLW2_Z2	<0.01	0.01	<1	1	<0.05	0.05	280	10	7.4
02-May-07	LLW2_Z3	<0.01	0.01	<1	1	<0.05	0.05	330	10	7.9
02-May-07	LLW3_Z1	<0.01	0.01	<1	1	<0.05	0.05	340	10	7.7
02-Oct-07	LLW3_Z1	0.26	0.01	<1	1	<0.05	0.05	300	10	7.3
30-Jan-08	LLW3_Z1	<0.01	0.01	<1	1	<0.05	0.05	300	10	7.2
03-May-07	LLW3_Z2	<0.01	0.01	<1	1	<0.05	0.05	320	10	7.7
02-Oct-07	LLW3_Z2	0.1	0.01	<1	1	<0.05	0.05	250	10	7.5
30-Jan-08	LLW3_Z2	<0.01	0.01	<1	1	<0.05	0.05	270	10	7.3
02-May-07	LLW3_Z3	<0.01	0.01	<1	1	<0.05	0.05	280	10	7.8

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Chemical Oxygen Demand mg/l	Lower Limit of Detection (mg/l)	Dissolved Oxygen mg/l	Lower Limit of Detection (mg/l)	Suspended Solids mg/l	Lower Limit of Detection (mg/l)	Generic Screening Criteria DWS mg/l	TPH (C10-C40) mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	34	5	8.9	1	63	10	0.01	<0.01	0.01
01-May-07	LLW2_Z1	26	5	8.9	1	47	10	0.01	<0.01	0.01
02-Oct-07	LLW2_Z1	12	5	2	1	27	10	0.01	<0.01	0.01
30-Jan-08	LLW2_Z1	23	5	8.3	1	37	10	0.01	0.05	0.01
01-May-07	LLW2_Z2	8	5	8.9	1	49	10	0.01	<0.01	0.01
02-Oct-07	LLW2_Z2	18	5	2.7	1	29	10	0.01	<0.01	0.01
30-Jan-08	LLW2_Z2	70	5	8.2	1	39	10	0.01	0.04	0.01
02-May-07	LLW2_Z3	23	5	8.9	1	130	10	0.01	<0.01	0.01
02-May-07	LLW3_Z1	28	5	8.9	1	200	10	0.01	<0.01	0.01
02-Oct-07	LLW3_Z1	18	5	2.1	1	45	10	0.01	0.01	0.01
30-Jan-08	LLW3_Z1	11	5	8.3	1	41	10	0.01	0.11	0.01
03-May-07	LLW3_Z2	21	5	8.9	1	53	10	0.01	0.01	0.01
02-Oct-07	LLW3_Z2	13	5	4	1	26	10	0.01	<0.01	0.01
30-Jan-08	LLW3_Z2	13	5	8.1	1	35	10	0.01	0.05	0.01
02-May-07	LLW3_Z3	21	5	8.9	1	37	10	0.01	<0.01	0.01

Table 2 Deeper Groundwater (LLW1, 2, 3) Organic and Inorganic Determinands cont

Date Sampled	Field Sample Name	Fraction Organic Carbon %	Lower Limit of Detection (%)	Total Organic Carbon mg/l	Lower Limit of Detection (mg/l)
03-May-07	LLW1_Z2	5.9	0.1	7	1
01-May-07	LLW2_Z1	3.6	0.1	3	1
02-Oct-07	LLW2_Z1	4.9	0.1	3	1
30-Jan-08	LLW2_Z1	3.8	0.1	3	1
01-May-07	LLW2_Z2	3.9	0.1	3	1
02-Oct-07	LLW2_Z2	5.2	0.1	3	1
30-Jan-08	LLW2_Z2	3.7	0.1	3	1
02-May-07	LLW2_Z3	2.7	0.1	2	1
02-May-07	LLW3_Z1	5.1	0.1	4	1
02-Oct-07	LLW3_Z1	6.2	0.1	4	1
30-Jan-08	LLW3_Z1	6.2	0.1	5	1
03-May-07	LLW3_Z2	4.4	0.1	3	1
02-Oct-07	LLW3_Z2	5.3	0.1	3	1
30-Jan-08	LLW3_Z2	5	0.1	4	1
02-May-07	LLW3_Z3	4.4	0.1	3	1

Table 3: Shallow Groundwater (GW5, 20, 22) Radiological Data

Date Sampled	Field Sample Name	Generic Screening Criteria DWS Bq/l	Gross Alpha Activity Bq/kg	Lower Limit of Detection (Bq/kg)	+/- 2 Standard Deviation or Precision (Bq/kg)	Generic Screening Criteria DWS Bq/l	Gross Beta Activity Bq/kg	+/- 2 Standard Deviation or Precision (Bq/kg)
01-May-07	GW5	0.55	0.149		0.069	1.85	0.320	0.069
02-Oct-07	GW05	0.55	0.194		0.082	1.85	0.315	0.078
29-Jan-08	GW05	0.55	0.157		0.075	1.85	0.418	0.080
01-May-07	GW20	0.55	0.244		0.079	1.85	0.426	0.071
03-Oct-07	GW20	0.55	0.227		0.088	1.85	0.504	0.079
29-Jan-08	GW20	0.55	0.136		0.065	1.85	0.419	0.066
01-May-07	GW22	0.55	0.118		0.064	1.85	0.273	0.058
03-Oct-07	GW22	0.55	0.132		0.064	1.85	0.254	0.061
30-Jan-08	GW22	0.55	0.147		0.061	1.85	0.257	0.055

Table 4: Deep Groundwater (LLW1,2,3) Radiological Data

Date Sampled	Field Sample Name	Generic Screening Criteria DWS Bq/l	Gross Alpha Activity Bq/kg	Lower Limit of Detection (Bq/kg)	+/- 2 Standard Deviation or Precision (Bq/kg)	Generic Screening Criteria DWS Bq/l	Gross Beta Activity Bq/kg	+/- 2 Standard Deviation or Precision (Bq/kg)
03-May-07	LLW1_Z2	0.55	0.140		0.064	1.85	0.276	0.060
01-May-07	LLW2_Z1	0.55	0.071		0.048	1.85	0.193	0.047
02-Oct-07	LLW2_Z1	0.55	0.056		0.045	1.85	0.204	0.053
30-Jan-08	LLW2_Z1	0.55	0.106		0.055	1.85	0.240	0.054
01-May-07	LLW2_Z2	0.55	0.096		0.050	1.85	0.179	0.053
02-Oct-07	LLW2_Z2	0.55	0.154		0.057	1.85	0.192	0.052
30-Jan-08	LLW2_Z2	0.55	0.045		0.043	1.85	0.187	0.052
02-May-07	LLW2_Z3	0.55	0.054		0.040	1.85	0.199	0.056
02-May-07	LLW3_Z1	0.55	0.101		0.051	1.85	0.239	0.059
02-Oct-07	LLW3_Z1	0.55	0.136		0.064	1.85	0.263	0.059
30-Jan-08	LLW3_Z1	0.55	0.101		0.052	1.85	0.251	0.053
03-May-07	LLW3_Z2	0.55	<0.063	0.063		1.85	0.145	0.044
02-Oct-07	LLW3_Z2	0.55	0.066		0.045	1.85	0.175	0.046
30-Jan-08	LLW3_Z2	0.55	0.062		0.040	1.85	0.161	0.040
02-May-07	LLW3_Z3	0.55	0.044		0.042	1.85	0.237	0.053

Table 5: Summary of Radiological Analytical Results in Comparison to Generic Screening Criteria.

	MIN	MAX	No of samples above generic screening criteria	No of samples in dataset	Generic Screening Criteria	Comment
<b>Gross Alpha Activity Bq/kg</b>						
Shallow BHs (GW-5mbgl)	0.118	0.244	0	12	0.55 Bq/l	UK DWS
Deep BHs (Z1-20m)	0.056	0.136	0	6	0.55 Bq/l	UK DWS
Deep BHs (Z2-50m)	0.062	0.154	0	7	0.55 Bq/l	UK DWS
Deep BHs (Z3-150m)	0.044	0.054	0	2	0.55 Bq/l	UK DWS
Surface Water	0.036	0.061	0	14	0.55 Bq/l	UK DWS
<b>Gross Beta Activity Bq/kg</b>						
Shallow BHs (GW-5mbgl)	0.208	0.505	0	12	1.85 Bq/l	UK DWS
Deep BHs (Z1-20m)	0.193	0.263	0	6	1.85 Bq/l	UK DWS
Deep BHs (Z2-50m)	0.145	0.276	0	7	1.85 Bq/l	UK DWS
Deep BHs (Z3-150m)	0.199	0.237	0	2	1.85 Bq/l	UK DWS
Surface Water	0.333	0.722	0	14	1.85 Bq/l	UK DWS