

Water Analysis 2007 to 2009 - Croescaarneinon - Groundwater - EAWML30077(053/89)

	Sampling Date	G/W WQS	02.03.07	22.5.07	24.8.07	13.12.07	26.03.08	16.07.08	30.10.08	16.03.09	MEAN
Units	Determinands										
pH Units	pH	5.5 to 9.5	8.3	7.3	8.3	7.2	7.4	7.2	7.3	7.1	7.5
uS/cm	Conductivity @ 20c	400	514	485	460	455	468	496	384	556	477.3
mg/l O	Oxygen (Dissolved) DO	.	7.4	2	2.4	<0.5	nr	5	nr	nr	2.1
mg/l O	BOD total+ATU	.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
mg/l O	COD (Total)	.	<20	nr	nr	nr	nr	nr	nr	nr	0.0
mg/l CaCO3	Alkalinity total		167	167	178	187	170	178	150	177	171.8
mg/l N	Ammoniacal Nitrogen	0.05	1.1	1.4	<0.3	<0.3	<0.3	0.3	0.7	<0.3	0.44
mg/l N	Total Oxidised Nitrogen	.	nr	8.2	6.3	6.7	4.7	4.1	5.5	4.6	5.0
mg/l	Chloride	25	33	27	20	19	33	30	12	71	31
mg/l	Sulphate	25	7	20	20	20	17	21	21	16	18
mg/l	Total Organic Carbon TOC		3.1	2.8	2.3	2.8	3	2.6	<4	2.2	2.4
mg/l	Cadmium	0.005	<0.0005	<0.0005	<0.0005	0.002	<0.0005	<0.0005	<0.0003	0.002	0.0005
mg/l	Chromium	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.001	0.002	0.0004
mg/l	Lead	0.05	0.009	0.007	0.25	0.05	<0.005	<0.005	0.01	0.02	0.04
mg/l	Copper	0.005	<0.005	0.009	0.006	0.012	0.01	<0.005	0.008	0.004	0.006
mg/l	Nickel	0.05	<0.005	<0.005	<0.005	<0.005	<0.005		0.002	<0.0009	0.0003
mg/l	Zinc	0.1	0.014	0.023	0.029	0.03	0.01	<0.005	0.04	0.01	0.02
mg/l	Iron	0.05	0.11	0.06	0.41	0.67	0.49	<0.05	0.76	0.53	0.38
mg/l	Manganese	0.05	nr	0.021	0.098	0.06	0.024	0.042	0.078	0.023	0.04
mg/l	Sodium	20	22	21	22	27	35	19	8.46	20	22
mg/l	Potassium	10	10	9.5	12	12	11	11	7.23	11	10
mg/l	Calcium	100	55	51	57	58	55	57	56	64	57
mg/l	Magnesium	30	18	16	19	18	19	18	20	19	18
Temperature	Degrees C		10	12	10	10	11	13	12	11.4	11.2
Metres	Depth		2	1.6	1.6	1.6	1.5	1.6	0.8	1.5	1.5
Metres	Total Depth		2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6

MEAN Average result based on actual figures (not less than <).

L/F Comp. Landfill Completion criteria (as WMP26A).

G/W WQS Water Quality Standard based upon Water Supply Regulations

Results in bold indicate result which exceeds at least one of the reference standards.

WQS EC Directive (75/440/EEC, G-guide)

() Sample points as sampling plan

nr no result

10

Water Analysis 2007 to 2009 - Croescarneion Farm - Surface water - EAWML30077(053/89)

	Sampling Date	S/W.WQS	2.02.2007	22.5.07	24.8.07	13.12.07	26.03.08	16.07.08	30.10.08	16.03.09	MEAN
Units	Determinands										
pH Units	pH	5.5-9 G	7.9	8.1	8.5	7.8	8.1	8.1	7	7.8	7.9
uS/cm	Conductivity @ 20c	1000 G	446	537	431	410	411	462	490	413	450.0
mg/l O	Oxygen (Dissolved) DO		8.4	2.1	3.2	9.3	nr	2.9	nr	4.5	3.8
mg/l O	COD (Total)	30 G	<20	21	22	26	40	<20	<20	<20	13.6
mg/l N	Ammoniacal Nitrogen	4	0.6	0.6	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.2
mg/l	Chloride	200 G	16	15	12	14	13	14	32	13	16.1
Temperature	Degrees C		10	12	7	7	10	14	10	9	9.9

- MEAN Average result based on actual figures (not less than <).
- S/W EQS Surface water water quality standard - G-guidance value
- Results in bold indicate result which exceeds at least one of the reference standards.
- WQS EC Directive (75/440/EEC, G-guide)
- () Sample points as sampling plan