

**POLLUTION MONITORING DATA SUMMARY  
DENILQUIN WASTE DISPOSAL DEPOT**



Environment Protection Licence | 6188  
 Link to full licence on EPA website:  
<http://www.environment.nsw.gov.au/prpoeaapp/ViewPEOLlicence.aspx?DOCID=31285&SYSUID=1&LICID=6188>  
 Licensee: Edward River Council, PO Box 270 Denilquin NSW 2710  
 Address of facility: Hay Road, Denilquin NSW 2710

**Monitoring Point 1  
Location: Bore 5196**

Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022			
Alkalinity	mg/l	Yearly		200		250		260		240		2700		0		41		35		33		32		0.42		
Ammonia	mg/l	Every 6 months	0.07		0.1		0.12		0.08		0.09		0.07		<0.01		0.005		0.012		0.02		0.043		0.001	
Arsenic	mg/l	Yearly	<0.001			<0.001		<0.001		<0.001		<0.001		0		<0.01		<0.001		<0.01		<0.001		<0.001		
Cadmium	mg/l	Yearly	<0.01			<0.01		<0.01		<0.05		<0.01		0		<0.01		<0.01		<0.01		<0.001		<0.001		
Calcium	mg/l	Yearly		90		87		100		110		98		0		31		28		42		60				
Chloride	mg/l	Yearly		1000		990		1000		990		1100		0		350		390		530		720		<0.01		
Chromium	mg/l	Every 6 months	<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		0.01		<0.01		<0.01	
Fluoride	mg/l	Yearly		0.03		0.2		0.09		0.49		1.2		0		0.12		0.08		0.03		0.04		0.01		
Iron	mg/l	Yearly		<0.1		<0.1		<0.1		<0.1		<0.1		0		0.12		<0.1		<0.1		<0.1		<0.1		
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		0		<0.01		<0.01		<0.01		<0.01		<0.01		
Magnesium	mg/l	Yearly		140		130		130		130		140		0		38		40		61		87				
Manganese	mg/l	Yearly		0.75		0.87		0.81		1.2		1.1		0		0.39		<0.01		<0.01		0.018				
Mercury	mg/l	Yearly	<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	0.02		0.01		<0.01		<0.01		<0.01		0.02		<0.01		0.06		0.077		0.11		0.088		0.12	
pH	pH	Every 6 months	6.1		6.1		5.9		6.2		5.9		5.9		5.9		6.1		6.0		5.7		6.2		5.9	
Potassium	mg/l	Every 6 months	22		14		14		15		14		13		12		4.6		3.9		6.6		4.3		9.1	
Sodium	mg/l	Yearly		460		480		460		430		460		0		160		190		240		300		300		
Standing Water Level	metres	Every 6 months	82.33		82.15		82.27		82.01		82.195		81.955		81.865		82.04		81.925		81.98		81.888		81.770	
Sulphate	mg/l	Yearly		160		140		140		140		160		0		41		81.770		81.655		81.720		81.610		
Total Dissolved Solids	us/cm	Every 6 months	2400		2500		2900		2400		2200		2400		2700		2300		1500		880		2300		890	
Total organic Carbon	mg/l	Yearly																								0.7
E.coli	per100ml	Every 6 months																								0.6

**Monitoring Point 2  
Location: Bore 5197**

Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 29 September 2021	Measurement 22 March 2022			
Alkalinity	mg/l	Yearly		93		120		260		170		300		360		470		450		410		370				
Ammonia	mg/l	Every 6 months	<0.01		<0.01		<0.01		0.18		0.08		0.03		0.21		0.08		0.03		0.17		0.08		0.11	
Arsenic	mg/l	Yearly	<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		1.6		0.91		5.8		7		8.6		8.8	
Cadmium	mg/l	Yearly	<0.01		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001		<0.001	
Calcium	mg/l	Yearly		51		58		63		52		62		100		100		180		190		260				
Chloride	mg/l	Yearly		550		520		560		460		560		700		1500		1200		1400		1800		<0.01		
Chromium	mg/l	Every 6 months	<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		0.01		<0.01		<0.01	
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		<0.1		<0.1		0.17		0.17		<0.1		<0.1		0.13		0.11		
Iron	mg/l	Yearly		0.02		0.41		0.41		2.7		1.3		1.4		0.15		0.09		0.55		0.94				
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		
Magnesium	mg/l	Yearly		67		65		69		59		75		100		150		160		190		240				
Manganese	mg/l	Yearly		0.26		0.23		0.24		0.23		0.24		0.5		0.63		0.59		0.63		0.89				
Mercury	mg/l	Yearly	<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	0.13		0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.005		<0.005		0.007		0.013		0.011	
pH	pH	Every 6 months	6.4		6.3		6.2		6.3		6.1		6.1		6.4		6.2		6.2		6.4		6.4		6.3	
Potassium	mg/l	Every 6 months	17		11		12		11		12		13		12		14		13		17		23		25	
Sodium	mg/l	Yearly		250		260		300		240		320		340		480		540		590		780		780		
Standing Water Level	metres	Every 6 months	82.33		82.14		82.01		82.035		81.965		81.975		81.865		82.07		81.940		81.970		81.840		81.740	
Sulphate	mg/l	Yearly		95		96		100		95		98		130		180		200		230		320		320		
Total Dissolved Solids	us/cm	Every 6 months	1100		1400		1500		1300		1200		1400		1100		1300		1400		2100		1800		2700	
Total organic Carbon	mg/l	Yearly																								38
E.coli	per100ml	Every 6 months																								9.1

**Monitoring Point 3  
Location: Bore 5198**

Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022		
Alkalinity	mg/l	Yearly		13		14		35		22		13		11		10		14		19		18			
Ammonia	mg/l	Every 6 months	<0.01		0.24		0.36		0.42		0.3		0.13		0.01		0.13		<0.012		0.054		0.048		0.033
Arsenic	mg/l	Yearly	<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001
Cadmium	mg/l	Yearly	<0.01		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001		<0.001
Calcium	mg/l	Yearly		300		360		350		110		280		180		270		260		220		200			

Chloride	mg/l	Yearly		2600		2800		2800		890		2400		1600		2200		2200		2000		1800
Chromium	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		0.4		<0.1		0.13		<0.1		<0.1		<0.1		<0.1
Iron	mg/l	Yearly		0.1		0.17		0.05		3.8		0.21		11		0.17		0.16		0.51		0.33
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.01		<0.01		0.01		<0.01		<0.01		<0.01		<0.01
Magnesium	mg/l	Yearly		370		380		340		120		300		170		270		250		220		200
Manganese	mg/l	Yearly		0.53		0.62		0.7		0.55		0.62		0.44		0.5		0.56		0.43		0.29
Mercury	mg/l	Yearly		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001
Nitrate	mg/l	Every 6 months	0.14	0.06		0.05		0.03		0.03		0.03		0.06		0.03		0.009		0.007		0.014
pH	pH	Every 6 months	6.3	6.2	5.9	6.2	6	5.8	5.7	6.4	5.5	5.8	5.9	5.7	5.5	5.5	5.8	5.9	5.7	5.8	5.7	5.6
Potassium	mg/l	Every 6 months	22	21	22	24	24	23	24	10	23	23	19	18	21	23	27	24	22	23	22	21
Sodium	mg/l	Yearly		700		780		790		280		750		480		690		810		690		710
Standing Water Level	metres	Every 6 months	82.37	82.26	82.15	82.24	82.03	82.23	81.975	81.995	81.885	82.090	81.940	81.995	81.965	81.845	81.740	81.745	82.080	81.740	81.970	81.620
Sulphate	mg/l	Yearly		240		270		240		120		230		190		200		200		200		200
Total Dissolved Solids	us/cm	Every 6 months	3200	6100	7100	6300	5400	5400	6400	2300	6000	6400	3900	3900	4200	5100	4800	5200	5000	5000	4600	4300
Total organic Carbon	mg/l	Yearly						1.1		1.8		3.8		2.3		1.4		1.6		1.6		1.5
E.coli	per100ml	Every 6 months									<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1

**Monitoring Point 4**  
Location: Bore 5204

			5204																				
Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022
Alkalinity	mg/l	Yearly		770		630		610		160		520		400		400		460		390		430	
Ammonia	mg/l	Every 6 months	15	18	19	20	14	15	15	3.5	16	20	17	16	17	15	15	17	11	18	20	21	18
Arsenic	mg/l	Yearly		<0.001		0.001		0.002		0.002		0.002		0.001		0.002		0.002		0.004		0.002	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001	
Calcium	mg/l	Yearly		140		140		140		46		160		220		240		240		260		310	
Chloride	mg/l	Yearly		840		820		820		970		1200		1200		1200		1200		1200		1200	
Chromium	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		0.74		0.14		0.1		0.14		<0.1		<0.1		<0.1	
Iron	mg/l	Yearly		0.17		0.33		0.33		1.1		1.3		15		0.92		1.3		1.9		2	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		0.01		<0.01		<0.01		<0.01		<0.01		<0.01	
Magnesium	mg/l	Yearly		140		130		130		41		130		200		230		230		270		290	
Manganese	mg/l	Yearly		0.82		0.81		0.74		0.93		1.0		1.1		1.1		1.2		1.3		1.6	
Mercury	mg/l	Yearly		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	<0.01	0.02	0.05	<0.01	0.06	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	0.08	<0.01	<0.001	<0.005	0.014	<0.005	0.047	0.041	<0.005	0.02
pH	pH	Every 6 months	6.4	6.5	6.8	6.5	6.6	6.5	6.5	6.6	6.4	6.4	6.3	6.2	6.3	6.5	6.2	6.3	6.5	6.4	6.5	6.4	6.6
Potassium	mg/l	Every 6 months	39	23	22	25	22	21	20	6.9	22	21	22	23	23	23	25	26	27	26	25	24	25
Sodium	mg/l	Yearly		480		500		510		160		600		610		710		700		1000		990	
Standing Water Level	metres	Every 6 months	82.36	82.2	82.18	82.29	82.11	82.145	82.195	82.205	82.03	82.285	82.090	82.060	81.995	81.94	81.860	81.845	81.710	81.815	81.700	81.720	81.635
Sulphate	mg/l	Yearly		110		130		160		75		230		360		360		400		420		420	
Total Dissolved Solids	us/cm	Every 6 months	2400	2300	2400	2200	2200	2400	2500	750	3000	3300	3600	3900	4100	4500	4500	4600	4800	5900	5800	6400	
Total organic Carbon	mg/l	Yearly						17		6		54		14		13		18		14		14	
E.coli	per100ml	Every 6 months									<1	<1	<1	<1	<1	<1	<1	<1	370	<1	1	<1	<1

**Monitoring Point 5**  
Location: Bore 5200

			5200																				
Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022
Alkalinity	mg/l	Yearly		80		87		120		100		110		110		120		140		160		180	
Ammonia	mg/l	Every 6 months	0.02	0.38	0.38	<0.01	0.42	0.37	0.65	0.3	0.25	<0.02	0.25	0.02	<0.01	0.21	0.24		<0.012	<0.02	0.029	<0.02	<0.02
Arsenic	mg/l	Yearly		<0.001		<0.001		<0.001		0.002		0.002		<0.001		0.006		<0.001		<0.001		<0.001	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001	
Calcium	mg/l	Yearly		210		220		260		290		310		340		340		340		320		320	
Chloride	mg/l	Yearly		4200		4800		5400		6000		6300		5900		7100		7400		7500		7500	
Chromium	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		<0.1		<0.1		0.18		<0.1		<0.1		<0.1		<0.1	
Iron	mg/l	Yearly		<0.01		0.23		0.13		0.693		31		31		2.9		0.11		0.61		0.16	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01	
Magnesium	mg/l	Yearly		490		540		610		700		710		580		790		790		780		790	
Manganese	mg/l	Yearly		0.02		0.03		0.04		0.07		0.04		0.12		0.06		0.07		0.08		0.074	
Mercury	mg/l	Yearly		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		0.0004		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	0.57	0.49	0.4	0.29	0.31	0.24	0.3	0.17	0.21	0.12	0.17	0.03	0.06	0.02	0.020	0.005	<0.005	0.009	0.005	<0.005	<0.005
pH	pH	Every 6 months	6.3	6.1	6.4	6	6	6.1	6.0	5.9	6.1	6.0	5.9	5.8	6.1	5.8	6.1	5.9	6.1	6	6	6	6.2
Potassium	mg/l	Every 6 months	23	15	15	15	15	14	15	14	12	13	14	12	12	12	13	13	12	13	13	12	12
Sodium	mg/l	Yearly		2100		2700		3000		290		3200		3200		3400		3800		4100		3700	
Standing Water Level	metres	Every 6 months	82.49	82.44	82.31	82.45	82.16	82.045	82.155	82.165	82.05	82.250	82.135	82.170	82.040	82.025	81.930	81.945	81.855	81.945	81.795	81.815	81.720
Sulphate	mg/l	Yearly		1000		1000		1300		1300		1300		1300		1300		1700		1700		1700	
Total Dissolved Solids	us/cm	Every 6 months	9400	9300	11000	10000	10000	11000	12000	13000	10000	14000	13000	12000	15000	16000	16000	17000	17000	17000	16000	16000	16000
Total organic Carbon	mg/l	Yearly						2.2		2.3		16		<1		2.6		3		3.1		3	
E.coli	per100ml	Every 6 months									<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1

Monitoring Point 7		5202																					
Location: Bore 5202																							
Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022
Alkalinity	mg/l	Yearly		140		130		190		300		450		700		640		620		590		580	
Ammonia	mg/l	Every 6 months	0.04	0.12	0.14	0.08	0.11	0.06	0	0.21	0.06	0.1	0.08	0.14	5.8	17	2.1	8.6		5.5	10	14	9.4
Arsenic	mg/l	Yearly		<0.002		<0.002		0.012		0.007		0.002		<0.001		<0.001		0.01		<0.004		<0.001	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001	
Calcium	mg/l	Yearly		44		53		70		70		140		140		140		140		140		180	
Chloride	mg/l	Yearly		490		560		590		550		640		780		940		930		970		1200	
Chromium	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		0.18		0.14		0.18		0.14		0.14		0.14		0.14	
Iron	mg/l	Yearly		0.55		1.2		8		5		1.3		0.94		0.42		1.8		0.98		1.6	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01	
Magnesium	mg/l	Yearly		63		70		62		79		96		130		150		140		150		180	
Manganese	mg/l	Yearly		0.27		0.23		0.2		0.37		0.31		0.41		0.46		0.51		1.3		1.5	
Mercury	mg/l	Yearly		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	0.012	<0.005	0.005	0.009	0.075
pH	pH	Every 6 months	6.4	6.4	6.6	6.5	6.4	6.4	6.3	6.4	6.4	6.4	6.3	6.4	6.3	6.6	6.3	6.4	6.6	6.5	6.4	6.6	6.6
Potassium	mg/l	Every 6 months	16	9.9	11	12	11	10	0	10	14	11	12	19	14	20	12	19	20	19	24	24	22
Sodium	mg/l	Yearly		280		320		330		320		390		400		420		490		500		520	
Standing Water Level Sulphate	metres	Every 6 months	82.44	82.24	82.28	82.27	82.24	82.055	82.15	82.165	82.11	82.265	82.120	82.150	82.055	81.99	81.970	81.870	81.870	81.955	81.820	81.820	81.745
Total Dissolved Solids	mg/l	Yearly		140		130		130		140		120		85		120		120		140		180	
Total Dissolved Solids	us/cm	Every 6 months	1300	1200	1200	1400	1300	1300	0	1400	1900	1700	1600	2200	1900	2600	2200	2500	2900	2800	2800	3200	2900
Total organic Carbon	mg/l	Yearly		2.9		2.9		2.9		7.4		5.2		21		18		19		18		15	
E.coli	per100ml	Every 6 months									<1	<1	<1	<1	<1	<1	210	1	<1	<1	1	<1	<1

Monitoring Point 8		2026																					
Location: Bore 2026																							
Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022
Alkalinity	mg/l	Yearly		79		76		110		84		91		27		95		96		110		110	
Ammonia	mg/l	Every 6 months	<0.01	0.06	0.19	0.1	0.15	0.21	0.1	0.46	0.4	0.02	0.53	<0.01	0.09	0.28	0.33	0.029	<0.012	<0.02	0.051	<0.02	<0.02
Arsenic	mg/l	Yearly		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001	
Calcium	mg/l	Yearly		170		200		280		230		220		6.1		280		260		260		260	
Chloride	mg/l	Yearly		2000		2400		3200		3100		3700		30		4700		4900		5100		5100	
Chromium	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		<0.1		<0.1		0.87		0.87		<0.1		<0.1		<0.1	<0.01
Iron	mg/l	Yearly		0.14		0.45		0.29		1.2		0.51		0.18		0.26		0.55		0.39		0.17	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01	<0.01
Magnesium	mg/l	Yearly		260		290		340		340		380		4.2		540		500		560		600	
Manganese	mg/l	Yearly		0.69		0.89		0.81		0.89		0.81		0.02		0.26		0.33		0.2		0.13	
Mercury	mg/l	Yearly		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	0.21	0.38	0.17	0.23	0.51	0.55	0.02	0.01	0.02	0.02	<0.01	0.02	<0.01	0.17	0.12	0.04	0.055	0.17	0.18	0.21	0.2
pH	pH	Every 6 months	6.2	6.2	6.1	6.1	6.3	6.1	6.1	5.9	6	6.2	6.1	7	5.8	6.0	6.1	6.3	6.0	6.1	6.1	6.0	6.0
Potassium	mg/l	Every 6 months	20	13	14	16	16	16	17	17	18	13	19	19	19	20	18	16	16	16	16	15	15
Sodium	mg/l	Yearly		830		1100		1600		1500		1700		23		2200		2400		2600		2600	
Standing Water Level Sulphate	metres	Every 6 months	82.52	82.5	82.38	82.44	82.26	82.25	82.22	82.22	82.14	82.355	82.210	82.250	82.030	82.075	81.980	81.985	81.855	82.010	81.840	81.775	81.770
Total Dissolved Solids	mg/l	Yearly		460		580		820		820		950		12		1200		1300		1300		1400	
Total Dissolved Solids	us/cm	Every 6 months	3900	4500	5900	5400	6200	6500	6700	7200	6400	8600	8000	120	9000	11000	11000	11000	11000	12000	12000	12000	12000
Total organic Carbon	mg/l	Yearly		1.9		1.9		2.1		2.1		1.4		2.1		2.3		2.1		2.2		2.1	
E.coli	per100ml	Every 6 months									<1	1	<1	<1	<1	<1	<1	3	<1	<1	1	<1	<1

Monitoring Point 9		2027																					
Location: Bore 2027																							
Pollutant	Unit	Monitoring frequency required by licence	Measurement 26 March 2012	Measurement 17 Sept 2012	Measurement 8th April 2013	Measurement 26 Sep 2013	Measurement 31 March 2014	Measurement 20 October 2014	Measurement 31 March 2015	Measurement 9 October 2015	Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022
Alkalinity	mg/l	Yearly		29		31		58		42		42		28		47		53		57		64	
Ammonia	mg/l	Every 6 months	0.13	0.14	0.29	0.08	0.37	0.44	0.21	0.58	0.41	0.41	0.45	<0.01	0.07	2	0.36	0.038	<0.012	<0.02	0.02	<0.02	<0.02
Arsenic	mg/l	Yearly		<0.001		<0.001		<0.001		<0.001		<0.001		<0.001		0.002		<0.001		<0.001		<0.001	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.001	
Calcium	mg/l	Yearly		280		260		280		290		270		21		330		330		330		330	
Chloride	mg/l	Yearly		2700		3300		3800		4100		4500		250		5600		6000		6300		6400	
Chromium	mg/l	Every 6 months	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		<0.1		<0.1		0.83		<0.1		<0.1		<0.1		<0.1	<0.01
Iron	mg/l	Yearly		0.2		0.18		0.12		0.15		0.11		0.04		0.13		0.1		0.01		0.14	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		<0.01		<0.01		<0.01		<0.01		<0.01	<0.01
Magnesium	mg/l	Yearly		1.4		330		380		440		480		41		660		690		750		750	
Manganese	mg/l	Yearly		340		340		0.83		1		0.72		0.11		0.55		0.44		0.09		0.28	
Mercury	mg/l	Yearly		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001		<0.0001	
Nitrate	mg/l	Every 6 months	0.07	<0.01	<0.01	<0.01	0.01	<0.01	0.02	0.08	0.08	0.02	0.03	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
pH	pH	Every 6 months	5.7	5.5	5.5	5.5	5.5	5.6	5.6	5.5	5.7	5.6	5.6	5.6	5.5	5.6	5.6	5.8	5.6	5.6	5.8	5.6	5.6
Potassium	mg/l	Every 6 months	40	27	26	28	27	28	25	27	23	26	25	26	25	26	26	23	24	24	24		



Pollutant	Unit	Monitoring frequency required by licence								Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022	
Alkalinity	mg/l																						
Ammonia	mg/l																						
Arsenic	mg/l																						
Cadmium	mg/l																						
Calcium	mg/l																						
Chloride	mg/l																						
Chromium	mg/l																						
Conductivity at 25C	uS/cm	Every 6 months								160	140	120	77	130	100	140	92	81	110	86	87	110	
Fluoride	mg/l																						
Iron	mg/l																						
Lead	mg/l																						
Magnesium	mg/l																						
Manganese	mg/l																						
Mercury	mg/l																						
Nitrate	mg/l	Every 6 months								0.025	0.03	<0.01	<0.01	<0.01	0.18	0.025	0.084	0.2	0.1	0.0	<0.005	<0.005	
Nitrogen as N	mg/l	Every 6 months								1.1	0.98	1	0.84	0.69	0.76	0.96	0.7	0.41	0.8	0.62	0.84	0.69	
pH	pH																						
Phosphorous as P	mg/l	Every 6 months								0.12	0.27	0.11	0.15	0.074	0.14	0.061	0.11	0.11	0.13	0.16	0.095	0.110	
Potassium	mg/l																						
Sodium	mg/l																						
Sulphate	mg/l																						
Total Dissolved Solids	us/cm	Every 6 months								99	85	73	46	80	61	82	55	49	64	51	52	64	
Turbidity	NTU	Every 6 months								70	100	16	45	35	87	57	96	50	64	60	58	37	
E.coli	per100ml	Every 6 months								190	770	1200	63	5	37	2700	110	63	470	220	52	27	

**BROWN PARK**

Below Filter

below filter

Pollutant	Unit	Monitoring frequency required by licence								Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022	
Alkalinity	mg/l																						
Ammonia	mg/l																						
Arsenic	mg/l																						
Cadmium	mg/l																						
Calcium	mg/l																						
Chloride	mg/l																						
Chromium	mg/l																						
Conductivity at 25C	uS/cm	Every 6 months								1200	140	120	290	110	120	140	110	93	120	120	480	110	
Fluoride	mg/l																						
Iron	mg/l																						
Lead	mg/l																						
Magnesium	mg/l																						
Manganese	mg/l																						
Mercury	mg/l																						
Nitrate	mg/l	Every 6 months								0.21	0.04	<0.01	0.12	0.03	0.08	0.009	0.084	0.2	0.037	0.005	<0.005	<0.005	
Nitrogen as N	mg/l	Every 6 months								4.4	0.97	0.84	2.2	0.34	0.59	1.10	0.72	0.53	0.76	0.83	2.5	0.73	
pH	pH																						
Phosphorous as P	mg/l	Every 6 months								0.094	0.27	0.12	0.79	0.12	0.12	0.17	0.11	0.13	0.16	0.047	0.660	0.110	
Potassium	mg/l																						
Sodium	mg/l																						
Sulphate	mg/l																						
Total Dissolved Solids	us/cm	Every 6 months								720	83	73	180	68	72	85	65	56	75	69	290	68	
Turbidity	NTU	Every 6 months								18	91	13	19	25	56	45	71	44	34	19	30	18	
E.coli	per100ml	Every 6 months								20	590	250	300	6	26	>24000	70	290	110	31	490	160	

**WETLANDS**

Harfleur St

wetlands

Pollutant	Unit	Monitoring frequency required by licence								Measurement 11th April 2016	Measurement 14th Nov 2016	Measurement 12th April 2017	Measurement 9th Sep 2017	Measurement 28th April 2018	Measurement 31st October 2018	Measurement 25th March 2019	Measurement 9 Sept 2019	Measurement 6 April 2020	Measurement 13 October 2020	Measurement 13 April 2021	Measurement 28 September 2021	Measurement 22 March 2022	
Alkalinity	mg/l																						
Ammonia	mg/l																						
Arsenic	mg/l																						
Cadmium	mg/l																						
Calcium	mg/l																						
Chloride	mg/l																						
Chromium	mg/l																						
Conductivity at 25C	uS/cm	Every 6 months								280	150	130	250	400	97	270	110	87	98	110	120	160	
Fluoride	mg/l																						
Iron	mg/l																						
Lead	mg/l																						
Magnesium	mg/l																						
Manganese	mg/l																						
Mercury	mg/l																						
Nitrate	mg/l	Every 6 months								0.031	<0.01	<0.01	<0.01	<0.01	0.02	0.089	<0.005	0.14	0.033	0.005	<0.005	<0.005	
Nitrogen as N	mg/l	Every 6 months								36	1.1	1.2	0.98	1.5	1.3	0.98	0.70	0.33	0.56	0.48	0.79	0.75	
pH	pH																						
Phosphorous as P	mg/l	Every 6 months								3.4	0.46	0.18	0.17	0.17	0.19	0.26	0.12	0.12	0.16	0.16	0.085	0.006	
Potassium	mg/l																						
Sodium	mg/l																						
Sulphate	mg/l																						
Total Dissolved Solids	us/cm	Every 6 months								170	89	76	150	240	58	160	65	52	58	64	70	99	
Turbidity	NTU	Every 6 months								500	95	40	49	120	110	240	100	74	89	180	96	33	
E.coli	per100ml	Every 6 months								530	910	120	<10	99	39	540	160	75	<10	160	10	36	

.... End of report ....