





**Monitoring Point 6**  
Location: Bore S201

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
Alkalinity	mg/l	Yearly		230		180		220		140		18		40		150	
Ammonia	mg/l	Every 6 months	0.2	0.1	0.12	0.21	0.47	0.13	0	0.56	0.38	<0.02	0.7	<0.01	0.02	<0.01	0.59
Arsenic	mg/l	Yearly		<0.001		<0.001		<0.001		0.011		0.007		<0.001		0.001	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01	
Calcium	mg/l	Yearly		95		170		380		370		390		28		480	
Chloride	mg/l	Yearly		1100		1700		3200		3000		3400		180		2200	
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	0.02	<0.01	<0.01	<0.01
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		0.17		0.17		0.96		0.23	
Iron	mg/l	Yearly		0.09		0.69		0.23		1.4		16		36		2	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		0.07		0.06		<0.01	
Magnesium	mg/l	Yearly		97		160		310		340		380		20		510	
Manganese	mg/l	Yearly		0.23		0.45		0.23		1.2		0.41		0.42		0.27	
Mercury	mg/l	Yearly		<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	0.05	0	0.03	<0.01	<0.01	<0.01	<0.01	0.51	<0.01	<0.005
pH	pH	Every 6 months	6.8	6.7	6.7	6.5	6.6	6.7	0	6.4	6.4	6.4	6.2	7	6.3	6.5	6
Potassium	mg/l	Every 6 months	16	12	17	21	22	21	0	18	29	22	25	14	7.3	28	20
Sodium	mg/l	Yearly		610		800		1300		1200		1400		93		1600	
Standing Water Level	metres	Every 6 months	82.52	82.47	82.35	82.44	82.2	82.03	0	82.165	82.045	82.300	82.095	82.130	82.030	81.98	82.015
Sulfate	mg/l	Yearly		200		270		580		730		680		73		960	
Total Dissolved Solids	us/cm	Every 6 months	2300	2500	4900	3900	6400	6500	0	7300	6000	9000	9600	540	1700	10000	8800
Total organic Carbon	mg/l	Yearly						5.5		3.8		15		4.5		4.1	
E.coli	per100ml	Every 6 months									200	6	<1	<1	9	<1	<1

**Monitoring Point 7**  
Location: Bore S202

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
Alkalinity	mg/l	Yearly		140		130		190		300		450		700		640	
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	14	5.8	12	2.1
Arsenic	mg/l	Yearly		0.002		0.002		0.012		0.007		0.002		<0.001		<0.001	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01	
Calcium	mg/l	Yearly		44		53		53		70		70		140		340	
Chloride	mg/l	Yearly		490		560		590		550		640		780		940	
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
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		0.18		0.14		0.18		0.2	
Iron	mg/l	Yearly		0.55		1.5		1.2		8		1.3		0.94		0.42	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		<0.01		<0.01		<0.01	
Magnesium	mg/l	Yearly		63		70		62		79		96		150		150	
Manganese	mg/l	Yearly		0.27		0.23		0.2		0.37		0.31		0.41		0.46	
Mercury	mg/l	Yearly		<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
pH	pH	Every 6 months	6.4	6.4	6.6	6.5	6.5	6.4	0	6.3	6.4	6.2	6.4	6.4	6.3	6.6	6.3
Potassium	mg/l	Every 6 months	16	9.9	11	12	11	10	0	10	14	11	12	19	14	20	12
Sodium	mg/l	Yearly		280		320		330		320		390		400		420	
Standing Water Level	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	81.975
Sulfate	mg/l	Yearly		140		190		190		140		120		86		120	
Total Dissolved Solids	us/cm	Every 6 months	1300	1200	1200	1400	1300	1300	0	1400	1700	1600	2200	1900	1900	2600	2200
Total organic Carbon	mg/l	Yearly						2.9		7.4		5.2		2.1		18	
E.coli	per100ml	Every 6 months									<1	<1	<1	<1	<1	<1	210

**Monitoring Point 8**  
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
Alkalinity	mg/l	Yearly		79		76		110		84		91		27		96	
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
Arsenic	mg/l	Yearly		<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	
Calcium	mg/l	Yearly		170		200		290		230		220		61		285	
Chloride	mg/l	Yearly		2000		2400		3200		3100		3100		30		4700	
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
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		<0.1		<0.1		0.87		<0.1	
Iron	mg/l	Yearly		0.14		0.45		0.29		1.2		0.51		0.18		0.26	
Lead	mg/l	Yearly		<0.05		<0.05		<0.05		<0.05		0.01		<0.01		<0.01	
Magnesium	mg/l	Yearly		260		290		340		340		380		4.2		540	
Manganese	mg/l	Yearly		0.69		0.89		0.42		0.81		0.9		0.02		0.26	
Mercury	mg/l	Yearly		<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
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
Potassium	mg/l	Every 6 months	20	13	14	16	16	16	16	17	15	17	18	13	19	19	20
Sodium	mg/l	Yearly		830		1100		1600		1500		1700		23		2200	
Standing Water Level	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
Sulfate	mg/l	Yearly		460		580		820		820		950		12		1200	
Total Dissolved Solids	us/cm	Every 6 months	3900	4500	5900	5400	6200	6500	6700	7200	6400	8600	8000	120	9000	11000	11000
Total organic Carbon	mg/l	Yearly						1.9		2.1		14		2.1		2.3	
E.coli	per100ml	Every 6 months									<1	1	<1	<1	<1	<1	<1



**Monitoring Point 12**  
Location: Bore 9423

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
Alkalinity	mg/l	Yearly		780		680		670		530		440		25		280	
Ammonia	mg/l	Every 6 months	7.3	6.7	8.4	8.7	6.9	7	7.9	5.1	6.9	8.9	7	0.06	6.9	6.5	6.6
Arsenic	mg/l	Yearly		0.001		<0.001		0.002		0.004		<0.001		<0.001		<0.002	
Cadmium	mg/l	Yearly		<0.01		<0.01		<0.01		<0.05		<0.01		<0.01		<0.01	
Calcium	mg/l	Yearly		140		150		150		150		160		6		260	
Chloride	mg/l	Yearly		820		820		220		930		1200		19		1800	
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
Fluoride	mg/l	Yearly		<0.1		<0.1		<0.1		0.15		0.12		0.9		0.11	
Iron	mg/l	Yearly		0.39		0.71		0.47		0.33		0.42		0.18		0.82	
Lead	mg/l	Yearly		<0.05		<0.01		<0.05		<0.05		<0.05		<0.01		<0.01	
Magnesium	mg/l	Yearly		140		140		130		140		170		2.8		230	
Manganese	mg/l	Yearly		0.75		0.83		0.67		0.84		0.98		<0.01		1.2	
Mercury	mg/l	Yearly		<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	<0.01	<0.01	0.02	0.19	0.02	<0.01	0.04	<0.01	<0.01	0.048
pH	pH	Every 6 months	6.4	6.5	6.7	6.4	6.5	6.4	6.4	6.6	6.3	6.3	6.2	6.7	6.2	6.2	6.2
Potassium	mg/l	Every 6 months	35	20	20	23	21	19	21	19	21	21	21	1.4	23	24	24
Sodium	mg/l	Yearly		490		500		500		470		570		18		680	
Standing Water Level	metres	Every 6 months	82.35	80.06	81.95	82.05	81.71	81.795	82.07	82.13	82.03	82.255	82.100	82.145	82.020	81.995	81.890
Sulfate	mg/l	Yearly		91		100		120		150		230		17		370	
Total Dissolved Solids	us/cm	Every 6 months	2300	2400	2400	2300	2200	2400	2500	2400	2900	3400	3500	97	4300	4800	4800
Total organic Carbon	mg/l	Yearly						16		17		56		1.5		8.2	
E.coli	per100ml	Every 6 months									<1	<1	<1	<1	<1	<1	<1

**Monitoring Point 4**  
Location: Bore 5199

This bore is no longer active. A request has been submitted to NSW Office of Environment and Heritage to delete this monitoring point from the licence and to add 2 new monitoring points, being bores 5204 and 9423. Results for the 2 new bores are included with this data.

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
Alkalinity	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia	mg/l	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calcium	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium	mg/l	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate	mg/l	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pH	pH	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/l	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Standing Water Level	metres	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/l	Yearly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	us/cm	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E.coli	per100ml	Every 6 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**BROWN PARK**

Above 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
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
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	0.0
Nitrogen as N	mg/l	Every 6 months	1.1	0.98	1	0.84	0.69	0.76	0.96
pH	pH								
Phosphorous as P	mg/l	Every 6 months	0.12	0.27	0.11	0.15	0.074	0.14	0.061
Potassium	mg/l								
Sodium	mg/l								
Sulfate	mg/l								
Total Dissolved Solids	us/cm	Every 6 months	99	85	73	46	80	61	82
Turbidity	NTU	Every 6 months	70	100	16	45	35	87	57
E.coli	per100ml	Every 6 months	190	770	1200	63	5	37	2700

**BROWN PARK**  
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
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
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	0.0
Nitrogen as N	mg/l	Every 6 months							4.4	0.97	0.84	2.2	0.34	0.59	1.1
pH	pH														
Phosphorous as P	mg/l	Every 6 months							0.094	0.27	0.12	0.79	0.12	0.12	0.17
Potassium	mg/l														
Sodium	mg/l														
Sulfate	mg/l														
Total Dissolved Solids	us/cm	Every 6 months							720	83	73	180	68	72	85
Turbidity	NTU	Every 6 months							18	91	13	19	25	56	45
E.coli	per100ml	Every 6 months							20	590	250	300	6	26	>24000

**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
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
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	0.1
Nitrogen as N	mg/l	Every 6 months							16	1.1	1.2	0.98	1.5	1.3	0.98
pH	pH														
Phosphorous as P	mg/l	Every 6 months							3.4	0.46	0.18	0.17	0.17	0.19	0.26
Potassium	mg/l														
Sodium	mg/l														
Sulfate	mg/l														
Total Dissolved Solids	us/cm	Every 6 months							170	89	76	150	240	58	160
Turbidity	NTU	Every 6 months							500	95	40	49	120	110	240
E.coli	per100ml	Every 6 months							530	910	120	<10	99	39	540

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