Boonoo Boonoo Discharge and Monitoring Point 9

Date Sampled

Analyte	Unit	PQL	10/12/2013	3/3/2014	9/09/2014	4/12/2014	10/3/2015	15/09/2015	8/12/2015	15/03/2016	21/06/2016	8/11/2016	5/12/2016	28/03/2017	8/06/2017	7/09/2017
			Sample No. 13/2166	Sample No. 14/0376	Sample No. 14/552	Sample No. 14/2042	Sample No. 15/0422	Sample No. 15/1497	Sample No. 15/1980	Sample No. 16/0424	Sample No. 16/0996	Sample No. 16/1802	Sample No. 16/1969	Sample No. 17/0521	Sample No. 17/0935	Sample No. 17/1480
Water Level#	m	0.1			[NT]			ND	ND		NT	NT	NT	NT	NT	Flowing
Temperature - field	Deg. C	0.1	19.6	16.2	9			7.2	12.8		9.6	11.2	15.4	17.2	10.6	10.5
Dissolved Oxygen	mg/L	0.2	7	5.6	9.04			9.1	7.7		8.1	7.9	4.6	7.7	9.2	10.5
Alkalinity (as CaCO3)	mg/L	20	20	<20	<20			<20	<20		<20	<20	28	<20	<20	<20
Aluminium (Dissolved)	mg/L	0.005	0.657	0.4	0.73			0.31	0.33		2.2	0.59	0.15	0.85	0.22	0.21
Ammonia-N	mg/L	0.01	0.04	<0.01	0.02			0.01	0.02		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic (Dissolved)	mg/L	0.005	<0.005	<0.005	<0.005			<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cadmium (Dissolved)	mg/L	0.005	<0.005	<0.005	<0.005			<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	0.1	6.2	2.7	0.5			0.6	0.8		0.6	0.7	7.3	0.8	0.6	0.6
Chloride	mg/L	2	12.99	11.74	10.72			11	9		8	10	12	10	11	11
Chromium (Total)	mg/L	0.005	0.007	0.005	<0.005			<0.005	<0.005		<0.005	<0.005	0.009	0.01	<0.005	<0.005
Cobalt (Dissolved)	mg/L	0.005	<0.005	<0.005	<0.005			<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Electrical Conductivity	µS/cm	1	63.5	63.8	57.1			58	51		47	55.8	67.6	60.4	58.6	62.8
Copper (Dissolved)	mg/L	0.005	<0.005	<0.005	<0.005			<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Iron (Total)	mg/L	0.005	16.9	9.061	0.53			0.26	3.48		0.75	1.3	15.9	0.7	0.23	0.68
Lead (Dissolved)	mg/L	0.005	<0.005	<0.005	<0.005	Dry	Dry	<0.005	<0.005	Dry	0.005	<0.005	<0.005	<0.005	<0.005	0.019
Magnesium	mg/L	0.1	3.1	1.4	0.6			0.5	0.8		0.8	0.7	3.4	0.8	0.5	0.5
Manganese (Total)	mg/L	0.005	0.584	0.146	0.005			0.005	0.64		0.008	0.029	0.38	0.013	<0.005	0.017
Mercury*	ug/L	0.05	<0.05	<0.05	<0.05			<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Dissolved)	mg/L	0.005	<0.005	<0.005	<0.005			<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.006
Nitrogen - Nitrate-N	mg/L	0.05	0.11	<0.05	<0.05			0.05	<0.05		<0.05	<0.05	1.2	<0.05	0.05	<0.05
Nitrogen - Nitrite-N	mg/L	0.01	0.02	<0.01	<0.01			<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen - Total Kjeldahl	mg/L	0.1	8.1	3.3	0.5			0.3	2.9		1	1.1	0.3	0.9	0.2	0.5
pH	pH	0.1	6.1	6.2	6.25			6.5	6.4		5.5	6.2	6.3	5.9	6.4	6.7
Potassium	mg/L	0.1	3.2	2.2	1.4			1.1	1.5		1.8	1.3	4	3	1.3	1.2
Redox Potential#	mV	-500	260	229	352			242	186		339	271	343	360	261	217
Sodium	mg/L	0.15	10.9	9.6	9.6			10	9		7	9.5	12.6	8.9	10.4	11.6
Sulphate#	mg/L	2	<2	<2	<2			<2	<1		2	<1	2.5	<1	<1	<1
Total Organic Carbon*	mg/L	1	2	20	12			3	8		27	16	2	32	7	11
Total Suspended Solids	mg/L	1						18	540		17	117	3670	9	4	72
Zinc (Total)	mg/L	0.005	0.051	0.023	<0.005			<0.005	0.008		<0.005	<0.005	0.044	0.071	<0.005	0.007
PAHs in water*	µg/L	1	[ND]	[ND]	<5			<5	<5		ND	ND	ND	ND	ND	ND
TRH C10-C14*	µg/L	50	<50		<50			<50	<50		<50	<50	<50	ND	<50	ND
TRH C15-C28*	µg/L	100	250		<100			<100	<100		<100	<100	<100	ND	<100	ND
TRH C29-C36*	µg/L	100	<100		<100			<100	<100		<100	<100	<100	ND	<100	ND
TRH C10-C36*	µg/L	100		[ND]												
Alkalinity - Hydroxide	mg/L	0			0											
Chromium (VI)	mg/L	0.05						<0.05								
Mercury (Dissolved)*	µg/L	0.05														
OC/OP in Water*	ug/L	0.2	<0.2	<0.2	<0.2										<0.2	
	Date Obtained		11/12/2013	4/03/2014	10/09/2014	4/12/2014	30/03/2015	28/09/2015	8/12/2015	15/03/2016	21/06/2016	8/11/2016	5/12/2016	28/03/2017	8/06/2017	7/09/2017
	Date Published				23/09/2014	6/01/2015	7/04/2015	29/09/2015	21/12/2015	31/03/2016	5/07/2016	21/11/2016	20/12/2016	11/04/2017	26/06/2017	20/09/2017

Analyte	13/12/2017	3/04/2018	15/06/2018	28/09/2018	26/10/2018	19/06/2019	13/12/2019	1/04/2020	26/06/2020	1/04/2021	21/09/2021	13/12/2021	7/03/2022	30/05/2022
	Sample No. 17/2051	Sample No. 18/0542	Sample No. 18/0940	Sample No. 18/1489	Sample No. 18/1650	Sample No. 19/1019	Sample No. 19/2129	Sample No. 20/0583	Sample No. 20/0991	Sample No. 21/0474-9	Sample No. 21/1276-9	Sample No. 21/1866-8	9 (ALS)	Sample No 22/0688-
Water Level#		Flowing	Low Flow	Dry	NA	Dry	Dry	Dry	Dry		3.0m	1.5	3m	1.3m
Temperature - field		17.5	8.8	0	15	0	0	0	0	18.6	10.7	14	18	12.5
Dissolved Oxygen		8.7	8.8	0	8.4	0	0	0	0	7.6	7.5	5.2	9.3	nt
Alkalinity (as CaCO3)		<20	<20	0	<20	0	0	0	0	<20	<20	<20	16	<14
Aluminium (Dissolved)		0.27	0.19	0	1.27	0	0	0	0	1.19	0.032	0.051	0.02	0.094
Ammonia-N		0.06	0.01	0	0.03	0	0	0	0	0.02	<0.01	<0.01	0.02	0.17
Arsenic (Dissolved)		<0.005	<0.005	0	<0.005	0	0	0	0	<0.005	<0.005	<0.005	<0.001	<0005
Cadmium (Dissolved)		<0.005	<0.005	0	<0.005	0	0	0	0	<0.005	<0.005	<0.005	<0.0001	<0.0005
Calcium		0.4	0.9	0	0.9	0	0	0	0	0.8	1.8	1.1	<1	0.8
Chloride		9	13	0	11	0	0	0	0	9	21	15	15	15
Chromium (Total)		<0.005	<0.005	0	<0.005	0	0	0	0	<0.005	0.007	<0.005	0.002	<0.0005
Cobalt (Dissolved)		<0.005	<0.005	0	<0.005	0	0	0	0	<0.005	<0.005	<0.005	<0.001	0.0003
Electrical Conductivity		51.5	62.6	0	61.8	0	0	0	0	50.6	84.4	78.1	77	85
Copper (Dissolved)		<0.005	<0.005	0	<0.005	0	0	0	0	<0.005	<0.005	<0.005	<0.001	<0.0005
Iron (Total)		0.67	1.2	0	0.75	0	0	0	0	10.5	8.4	1.9	1.42	0.41
Lead (Dissolved)		<0.005	<0.005	0	0.005	0	0	0	0	<0.005	<0.005	<0.005	<0.001	0.001
Magnesium		0.5	0.8	0	0.6	0	0	0	0	2.1	1.6	0.9	<1	0.72
Manganese (Total)		0.01	0.021	0	0.008	0	0	0	0	0.11	0.073	0.045	0.055	0.038
Mercury*		<0.05	<0.05	0	<0.05	0	0	0	0	<0.05	<0.05	<0.05	<0.0001	<0.05
Nickel (Dissolved)		<0.005	<0.005	0	<0.005	0	0	0	0	<0.005	<0.005	<0.005	<.001	0.0009
Nitrogen - Nitrate-N		<0.05	<0.05	0	0.06	0	0	0	0	0.14	0.24	0.07	0.02	<0.2
Nitrogen - Nitrite-N		<0.01	<0.01	0	<0.01	0	0	0	0	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen - Total Kjeldahl		1.1	1.3	0	0.3	0	0	0	0	2.4	0.8	0.4	0.4	
pH		6.6	6	0	6.1	0	0	0	0	5.6	5.4	5.4	6.5	5.4
Potassium		0.7	1	0	1.6	0	0	0	0	4.4	3.1	2.2	2	1.6
Redox Potential#		259	176	0	233	0	0	0	0	391	254	251	233	85
Sodium		9.5	10.2	0	10.4	0	0	0	0	10	12.9	81.3	12	10
Sulphate#		<1	1.2	0	1.8	0	0	0	0	11.7	8	6.3	<1	1
Total Organic Carbon*		5	12	0	6	0	0	0	0	17	2	3	4	2
Total Suspended Solids		52	119	0	18	0	0	0	0	2184	698	618	470	4
Zinc (Total)		<0.005	0.007	0	0.009	0	0	0	0	0.58	0.11	0.038	0.03	0.012
PAHs in water*		ND	ND	0	ND	0	0	0	0	ND	ND	ND	nd	nd
TRH C10-C14*		ND	<50	0	ND	0	0	0	0	ND	<50	ND	<100	<50
TRH C15-C28*		ND	<100	0	ND	0	0	0	0					
TRH C29-C36*		ND	<100	0	ND	0	0	0	0					
TRH C10-C36*				0	<100			0	0					
Alkalinity - Hydroxide				0										
Chromium (VI)				0				0	0					
Mercury (Dissolved)*				0				0	0					
OC/OP in Water*				0				0	0	N/A	N/A	NA	nd	ND
Date Obtained	13/12/2017	3/04/2018	15/06/2018	28/09/2018	26/10/2018	19/06/2019	13/12/2019	1/04/2020	26/06/2020	1/04/2021	7/09/2021	13/12/2021	7/03/2022	30/05/2022
Date Published	22/12/2017	12/04/2018	29/06/2018	16/10/2018	9/11/2018	10/07/2019	8/01/2020	14/04/2020	10/07/2020	15/04/2021	21/09/2021	4/01/2022	18/03/2022	21/06/2022

Analyte	20/09/2022	7/12/2022	31/03/2023	30/06/2023	4/09/2023	11/12/2023	4/03/2024	24/06/2024	9/09/2024	2/12/2024	3/03/2025	29/05/2025	8/09/2025	Min Since	Mean Since	Max Since
	Sample No. 22/1156-2	Sample No. 4/9	Sample No. 4/9	Sample No. 4/9	Sample No. 3	Sample No. 4	Sample No. 3									
Water Level#	1.5m			2.6	2.8	3		10.8		1.5	1.7	1.55	1.4	2.8000	5.5333	10.8000
Temperature - field	12.1		17.4	11.1	9.3	14.5		14.9		13.2	15.4	13.3	13	9.3000	12.9000	14.9000
Dissolved Oxygen	7.2	7	7	7.8	7.5	9.9	7.8	7.36	6.34	6.45	8.72	6.32	7.63	6.3400	7.7800	9.9000
Alkalinity (as CaCO3)	<14	<14	<14	<14	<14	<14	<14	7	12	5	5	5	7	7.0000	9.5000	12.0000
Aluminium (Dissolved)	0.085	0.0054	0.0049	0.17		1.3	<0.05	0.038	0.054	0.298	0.06	0.067	0.102	0.0380	0.4640	1.3000
Ammonia-N	0.11	0.087	0.038	0.028	<0.02	<0.02	<0.02	0.014	0.047	0.55	0.077	<0.005	0.01	0.0140	0.1720	0.5500
Arsenic (Dissolved)	0.00015	0.00012	0.00026	0.00032		<0.02	<0.02	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	0.0000	#DIV/0!	0.0000
Cadmium (Dissolved)	5	0.00021	0.000072	0.001		<0.002	<0.002	<0.01	<0.01					0.0000	#DIV/0!	0.0000
Calcium	5	3.2	2.2	1.9	1.9	1.4	1.4	1.56	1.59	1.66	2.25	2.11	4.51	1.4000	1.5700	1.9000
Chloride	91	70	65	54	62	47	46	30.9	0	41.9	69.1	5.8	94.4	0.0000	37.1800	62.0000
Chromium (Total)	<0.0005	0.0075	<0.0005	0.0014		0.03	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	0.0300	0.0300	0.0300
Cobalt (Dissolved)	0.0003	0.0025	0.0013	0.0013		<0.05	<0.05	<0.05	<0.05					0.0000	#DIV/0!	0.0000
Electrical Conductivity	320	260	240	190	190	170	170	155	157	0.171	0.212	0.249	0.349	155.0000	168.4000	190.0000
Copper (Dissolved)	0.002	0.0062	0.0047	0.018		<0.004	<0.004	0.001	0.001	0.004	0.003	0.003	0.002	0.0010	0.0010	0.0010
Iron (Total)	0.94	1.4	2.3	2.8		28	0.049	<0.05	0.011	0.404	<0.25	<0.25	0.358	0.0110	9.3533	28.0000
Lead (Dissolved)	0.005	0.0013	0.0017	0.003		<0.01	<0.01	0.002	0.001	0.001	0.003	0.005	0.01	0.0010	0.0015	0.0020
Magnesium	7.3	4.7	3.2	3.1	2.8	1.9	2.1	2.22	2.29	2.92	3.59	3.37	6.54	1.9000	2.2620	2.8000
Manganese (Total)	0.24	0.039	0.09	0.081		0.45	0.062	0.064	0.029	0.078	0.108	0.119	0.196	0.0290	0.1513	0.4500
Mercury*	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<.05	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	0.0000	#DIV/0!	0.0000
Nickel (Dissolved)	0.001	0.0012	0.0011	0.0023		<0.007	<0.007	<.01	<0.001	<0.001	<0.001	<0.001	<0.001	0.0000	#DIV/0!	0.0000
Nitrogen - Nitrate-N	<0.02	0.072	<0.02	0.072	0.036	0.088	0.77	0.982	0.753	0.633	0.04	0.012	<0.005	0.0360	0.5258	0.9820
Nitrogen - Nitrite-N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<.05	<0.005	0.012	0.012	<0.005	<0.005	0.0000	#DIV/0!	0.0000
Nitrogen - Total Kjeldahl						1.7		1.15	0.931	<0.01	0.203	0.148	0.181	0.1480	0.7188	1.7000
pH	5.5	4.9	4.9	5.3	5.3	5.2	5.5	5.31	5.62	5.09	5.11	4.86	5.13	5.2000	5.3860	5.6200
Potassium	4.1	3.9	3.2	2.9	2.6	2.9	1.4	2.39	2.52	3.85	4.16	3.45	4.58	1.4000	2.3620	2.9000
Redox Potential#	NT	229	267	272	227	234	60.2	200	214	258	224	283	243	60.2000	187.0400	234.0000
Sodium	40	32	26	27	21	21	19	22.8	25.2	29.2	39	35.2	47.3	19.0000	21.8000	25.2000
Sulphate#	<0.5	<0.5	0.72	1.1	1	1.1	1.7	4.24	<0.5	<9	<9	10.9	<9	1.0000	2.0100	4.2400
Total Organic Carbon*	1.8	15	2.5	3	1.2	9.2	3	1.76	1.37	2.3	2.24	2.75	3.12	1.2000	3.3060	9.2000
Total Suspended Solids	1.5	5800	310	680	230	11000	26	12	3	11	4	1	6	3.0000	2254.2000	11000.0000
Zinc (Total)	0.039	0.0043	0.0019	0.041		0.14	0.021	0.025	0.066	0.0232	<0.05	0.033	0.028	0.0210	0.0630	0.1400
PAHs in water*	ND	ND	ND	ND	<0.1	<0.1	<0.1	<.1	<.01	<1	<1	<1	<1	0.0000	#DIV/0!	0.0000
TRH C10-C14*	<50	<50	<50	<50	<50			<50	<.50					0.0000	#DIV/0!	0.0000
TRH C15-C28*														0.0000	#DIV/0!	0.0000
TRH C29-C36*														0.0000	#DIV/0!	0.0000
TRH C10-C36*														0.0000	#DIV/0!	0.0000
Alkalinity - Hydroxide												5		0.0000	#DIV/0!	0.0000
Chromium (VI)											<0.001	<0.001	<0.001	0.0000	#DIV/0!	0.0000
Mercury (Dissolved)*					<0.05	<0.05	<0.05	<.05	<0.05	<0.0005	< 0.0005	<0.0005	<0.0005	0.0000	#DIV/0!	0.0000
OC/OP in Water*	ND	ND	ND	ND	<0.2	<0.2	<0.2	<.02	<0.02	<1		<1	<1	0.0000	#DIV/0!	0.0000
Date Obtained	20/09/2022	7/12/2022	20/03/2023	6/06/2023	4/09/2023	11/12/2023	4/03/2024	24/06/2024	10/03/2025	16/12/2024		29/05/2025	12/09/2025			
Date Published	4/10/2022	12/12/2022	31/03/2023	30/06/2023	26/09/2023	22/12/2023	8/04/2024		24/03/2025	17/01/2025		16/06/2025	25/09/2025			