



Cudgen Lakes Sand Quarry

Environmental Monitoring - Surface Water

Project Approval (PA):	05_0103B
Environmental Protection Licence (EPL):	12385
Licensee:	Gales-Kingscliff Pty Limited
Licensee Address:	20 Ginahgulla Road Bellevue Hill, NSW 2023
Premises:	Cudgen Lakes Altona Drive Cudgen, NSW 2487
Licensee Website:	http://www.galeskingscliff.com.au/
Licensee Website - Monitoring Results:	https://www.galeskingscliff.com.au/reports
EPA Public Register:	https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers
Monitoring Month:	Oct-25
Report prepared on:	25/11/2025
Originator:	R.W. Corkery & Co. Pty Limited

Monitoring Requirements - Surface Water

EPL 12385 Requirements

Monitoring Points - Water and Land

EPL Condition	EPA Identification Number	Site ID	Type of Monitoring Point	Type of Discharge Point	Location Description*
P1.2	1	EPL 1	Water Quality Monitoring Point	Water Quality Monitoring Point	Dredge Pond South Spillway West
	2	EPL 2	Water Quality Monitoring Point	Water Quality Monitoring Point	Dredge Pond South Spillway East

* See 'Monitoring Map' tab.

Limit Conditions

EPL Condition	EPA Identification Number	Site ID	Pollutant	Units of Measure	50 Percentile Concentration Limit	90 Percentile Concentration Limit	3DGM Concentration Limit	100 Percentile Concentration Limit	Monitoring Frequency	Sampling Method
L2.4	1 & 2	EPL1 & EPL2	Oil & Grease	Visible	N/A	N/A	N/A	nil	Special Frequency 1*	Visual Inspection
			pH	pH	N/A	N/A	N/A	6.5 - 8.5	Special Frequency 1*	Probe
			Total Suspended Solids (TSS)	milligrams per litre (mg/L)	N/A	N/A	N/A	50	Special Frequency 1*	Grab Sample

*Special Frequency 1: sampling once <24 hours prior to; and, sampling the discharge daily during, each discharge event arising from rainfall of less than 82.5mm falling in total over a period of up to five days duration.

Management Plan Requirements - Soil and Water Management Plan

Version: May 2021

Note: The Soil and Water Management Plan (SWMP) fulfils the requirement for a Surface Water Monitoring Program under Condition 21 of Schedule 3 of PA 05_0103.

Water Quality Objectives - Dredge Pond

Parameters	Units of Measure	Objective	Comment
pH	pH	6.5 - 9.0	Upper objective value reflects upper limit of recorded data.~
Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)	6192	Objective value reflects upper limit of recorded data.~
Dissolved Oxygen (DO)	milligrams per litre (mg/L)	>6*	Original objective value retained.**
Turbidity	NTU	<20	Original objective value retained.**
Sodium (Na)	milligrams per litre (mg/L)	813	Objective value reflects upper limit of recorded data.~
Magnesium (Mg)	milligrams per litre (mg/L)	119	Objective value reflects upper limit of recorded data.~
Potassium (K)	milligrams per litre (mg/L)	<40	Original objective value retained.**
Chloride (Cl)	milligrams per litre (mg/L)	1390	Objective value reflects upper limit of recorded data.~
Sulfate (SO4)	milligrams per litre (mg/L)	<800	Original objective value retained.**
Bicarbonate (HCO3)	milligrams per litre (mg/L)	<400	Original objective value retained.**
Aluminium (Al)	milligrams per litre (mg/L)	<0.5	Original objective value retained.**
Arsenic (As)	milligrams per litre (mg/L)	<0.42	Derived from Australian and New Zealand Guidelines for Fresh and Marine Water Quality – 90% protection for freshwater species.
Filterable Iron (Fe)	milligrams per litre (mg/L)	<20	Original objective value retained.**
Ammonia (NH3)	milligrams per litre (mg/L)	<20	Original objective value retained.**

*Applicable to surface samples only (i.e. monitoring points DP1, DP2, DP3).

**Objective value as specified in the original conditions for PA 05_0103.

~ Data recorded between September 2015 and April 2019.

Monitoring Points - Parameters, Locations & Frequency

Occurrence	Frequency	Parameters	Units of Measure	Measurement Type	Sampling Method	Location ID		
Operational Periods ¹	Twice Daily (prior to dredging & at cessation)	Standing Surface Water Level (Dredge Pond)	m AHD	Field	Calibrated height gauge, water level sensor or calibrated water level monitor	On Dredge		
	Weekly	Temperature	degrees Celsius (°C)	Field	Probe	DP1, DP2, DP3, DP4		
		pH	pH					
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)					
		Oxygen Reduction Potential (ORP)	millivolts (mV)					
		Turbidity	NTU					
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)					
	Monthly	Oil and Grease	Present / Absent	Visual Inspection	Visual	DP1, DP2, DP3, DP4		
		Total Phosphorous (P)	milligrams per litre (mg/L)	Laboratory	Grab Sample			
		Total Nitrogen (N)	milligrams per litre (mg/L)					
		Orthophosphate (Reactive Phosphorous)	milligrams per litre (mg/L)					
		Ammonia Nitrogen	milligrams per litre (mg/L)					
		NOx Nitrogen	milligrams per litre (mg/L)					
		Oil and Grease	Present / Absent	Visual Inspection	Visual			
		Weather - Cloud Cover	Sunny / Overcast					
		Weather - Rain	Raining / Dry					
		Water Colour and Appearance	Cloudy / Clear					
		Odour	Present / Absent					
		Frothing	Present / Absent					
		Floating Debris	Present / Absent					
		Nuisance Organisms (e.g. Macrophytes, Phytoplankton Scum,	Present / Absent					
		6-Monthly (Summer & Winter)	Chlorophyll a	mg/m ³	Laboratory		Grab Sample (Composite)	Composite of DP1, DP2, DP3 & DP4
			Total Algal Cell Count	cells/mL				
			Total Algal Biovolume	mm ³ /L				
			Potentially Toxic Cyanobacteria Cell Count	cells/mL				
	Potentially Toxic Cyanobacteria Biovolume		mm ³ /L					
	Toxins (cytotoxic cylindrospermopsin)		micrograms per litre (µg/L)					
	Quarterly	Major Cations*	milligrams per litre (mg/L)	Laboratory	Grab Sample	DP1, DP2, DP3, DP4		
		Major Anions**	milligrams per litre (mg/L)					
		Filterable Iron	milligrams per litre (mg/L)					
		Aluminium	milligrams per litre (mg/L)					
		Arsenic	milligrams per litre (mg/L)					
	6-Monthly (Summer & Winter)	Temperature	degrees Celsius (°C)	Field	Probe	DP1-1, DP1-2, etc. (at 1m depth and then every 2m depth interval to the pond base)		
		pH	pH					
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)					
		Oxygen Reduction Potential (ORP)	millivolts (mV)					
		Turbidity	NTU					
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)					
		Oil and Grease	Present / Absent	Visual Inspection	Visual			
		Major Cations*	milligrams per litre (mg/L)	Laboratory	Grab Sample			
		Major Anions**	milligrams per litre (mg/L)					
		Filterable Iron	milligrams per litre (mg/L)					
Aluminium		milligrams per litre (mg/L)						
Arsenic		milligrams per litre (mg/L)						
Total Phosphorous (P)		milligrams per litre (mg/L)						
Total Nitrogen (N)		milligrams per litre (mg/L)						
Orthophosphate (Reactive Phosphorous)		milligrams per litre (mg/L)						
Ammonia Nitrogen		milligrams per litre (mg/L)						
NOx Nitrogen		milligrams per litre (mg/L)						
Chlorophyll a		mg/m ³						
Total Algal Cell Count		cells/mL						
Total Algal Biovolume		mm ³ /L						
Potentially Toxic Cyanobacteria Cell Count		cells/mL						
Potentially Toxic Cyanobacteria Biovolume	mm ³ /L							
Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)							

Non-Operational Periods ²	Quarterly	Temperature	degrees Celsius (°C)	Field	Probe	DP1, DP2, DP3, DP4	
		pH	pH				
		Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)				
		Oxygen Reduction Potential (ORP)	millivolts (mV)				
		Turbidity	NTU				
		Dissolved Oxygen (DO)	milligrams per litre (mg/L)				
		Total Phosphorous (P)	milligrams per litre (mg/L)				
		Total Nitrogen (N)	milligrams per litre (mg/L)				
		Orthophosphate (Reactive Phosphorous)	milligrams per litre (mg/L)				
		Ammonia Nitrogen	milligrams per litre (mg/L)				
		NOx Nitrogen	milligrams per litre (mg/L)				
		Chlorophyll a	mg/m ³				
		Total Algal Cell Count	cells/mL				
		Total Algal Biovolume	mm ³ /L				
		Potentially Toxic Cyanobacteria Cell Count	cells/mL				
		Potentially Toxic Cyanobacteria Biovolume	mm ³ /L				
		Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)				
	Oil and Grease	Present / Absent	Visual Inspection	Visual			
	Weather - Cloud Cover	Sunny / Overcast					
	Weather - Rain	Raining / Dry					
	Water Colour and Appearance	Cloudy / Clear					
	Odour	Present / Absent					
	Frothing	Present / Absent					
	Floating Debris	Present / Absent					
	Nuisance Organisms (e.g. Macrophytes, Phytoplankton Scum,	Present / Absent					
	Temperature	degrees Celsius (°C)			Field		Probe
	pH	pH					
	Electrical Conductivity (EC)	micro Siemens per centimetre (µS/cm)					
	Oxygen Reduction Potential (ORP)	millivolts (mV)					
	Turbidity	NTU					
	Dissolved Oxygen (DO)	milligrams per litre (mg/L)					
	Oil and Grease	Present / Absent	Visual Inspection	Visual			
	Major Cations*	milligrams per litre (mg/L)	Laboratory	Grab Sample			
Major Anions**	milligrams per litre (mg/L)						
Filterable Iron	milligrams per litre (mg/L)						
Aluminium	milligrams per litre (mg/L)						
Arsenic	milligrams per litre (mg/L)						
Total Phosphorous (P)	milligrams per litre (mg/L)						
Total Nitrogen (N)	milligrams per litre (mg/L)						
Orthophosphate (Reactive Phosphorous)	milligrams per litre (mg/L)						
Ammonia Nitrogen	milligrams per litre (mg/L)						
NOx Nitrogen	milligrams per litre (mg/L)						
Chlorophyll a	mg/m ³						
Total Algal Cell Count	cells/mL						
Total Algal Biovolume	mm ³ /L						
Potentially Toxic Cyanobacteria Cell Count	cells/mL						
Potentially Toxic Cyanobacteria Biovolume	mm ³ /L						
Toxins (cytotoxic cylindrospermopsin)	micrograms per litre (µg/L)						

¹ Operational Periods = periods during which extraction and/or processing of material, and/or the placement of fines and/or VENM material, is occurring at the Quarry.

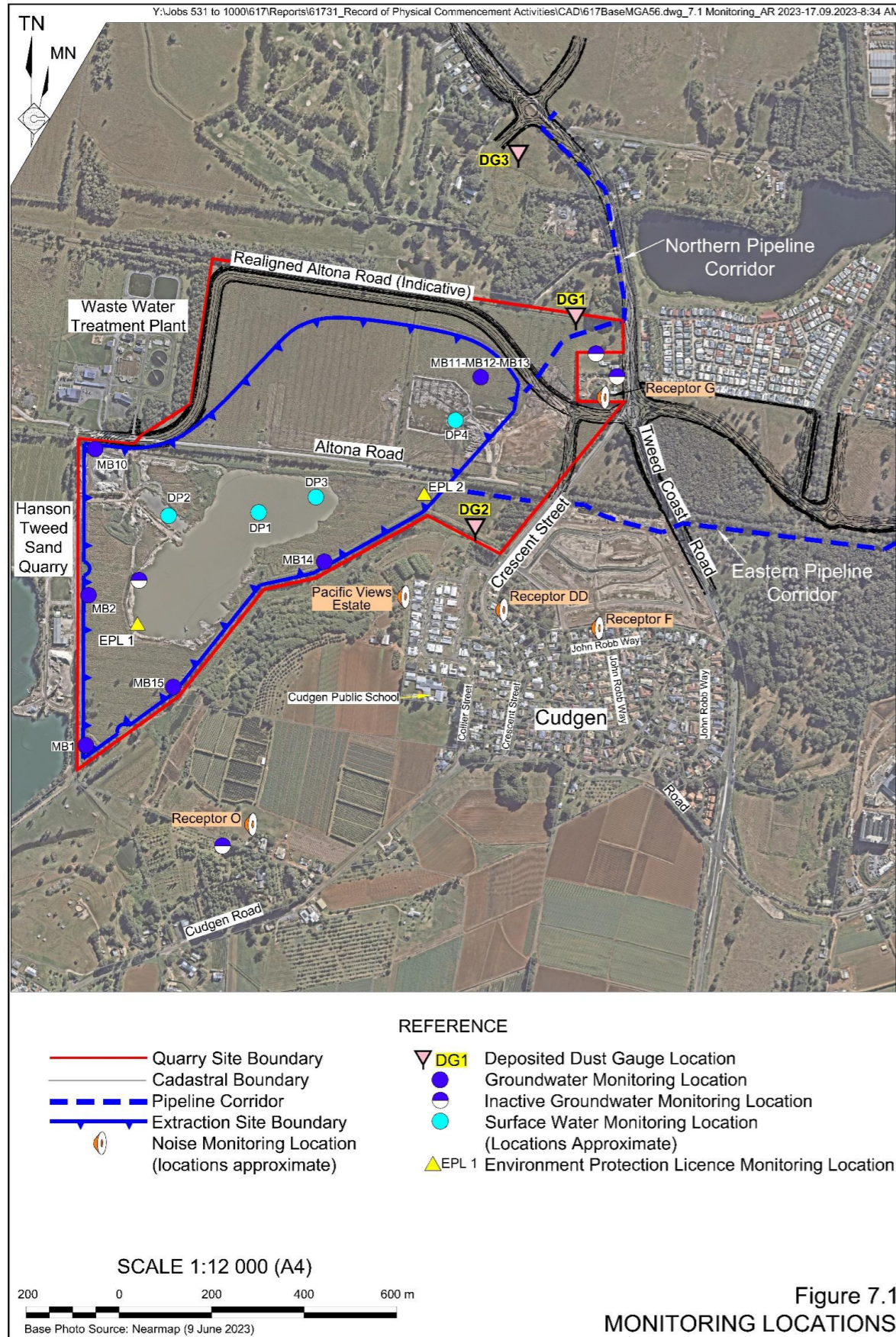
² Non-Operational Periods = periods during which no extraction, processing, fines placement or VENM placement activities are occurring. Note: for surface water monitoring purposes, non-operational periods also include periods during which transportation activities alone occur.

*Major Cations = Sodium, Calcium, Magnesium & Potassium

**Major Anions = Chloride, Sulfate & Bicarbonate

DP1-1, DP1-2, etc.
(at 1m depth and then every 2m depth interval to the pond base)

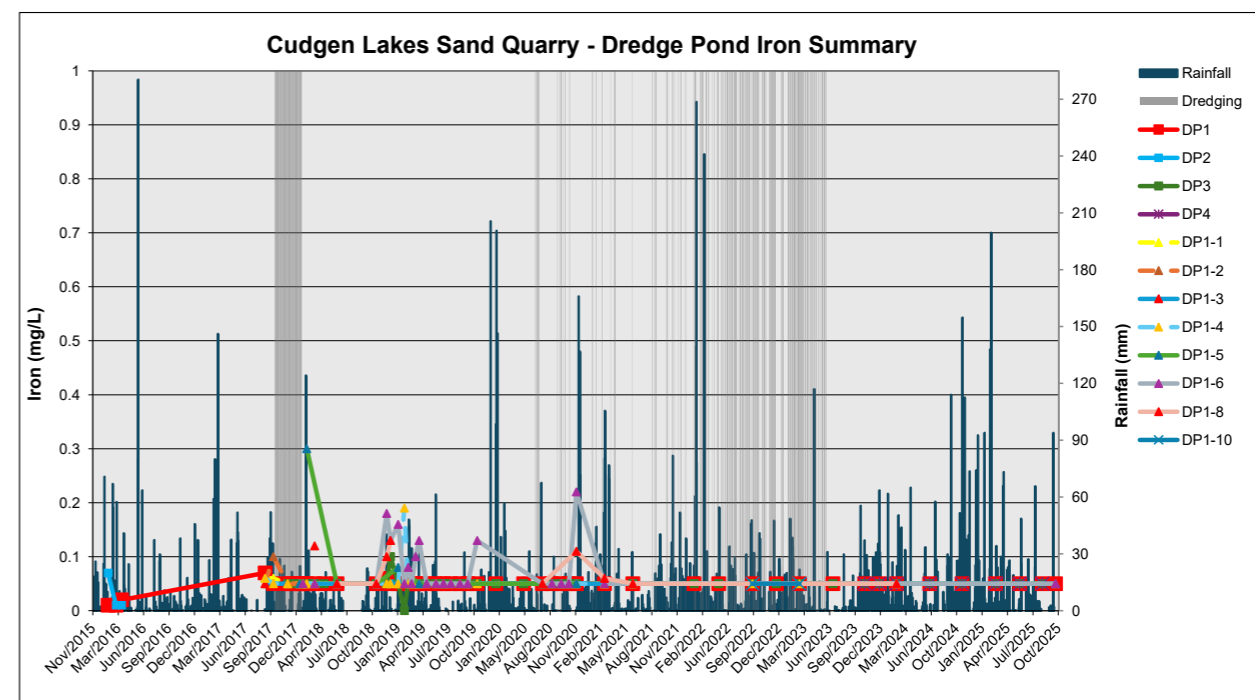
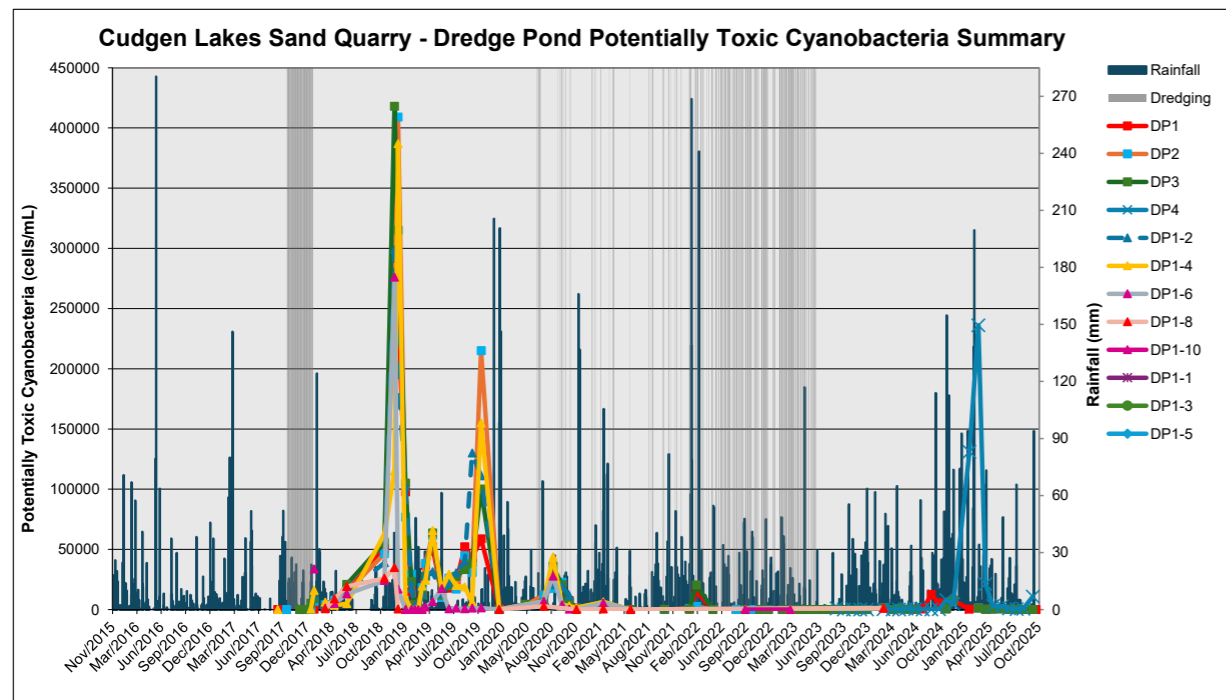
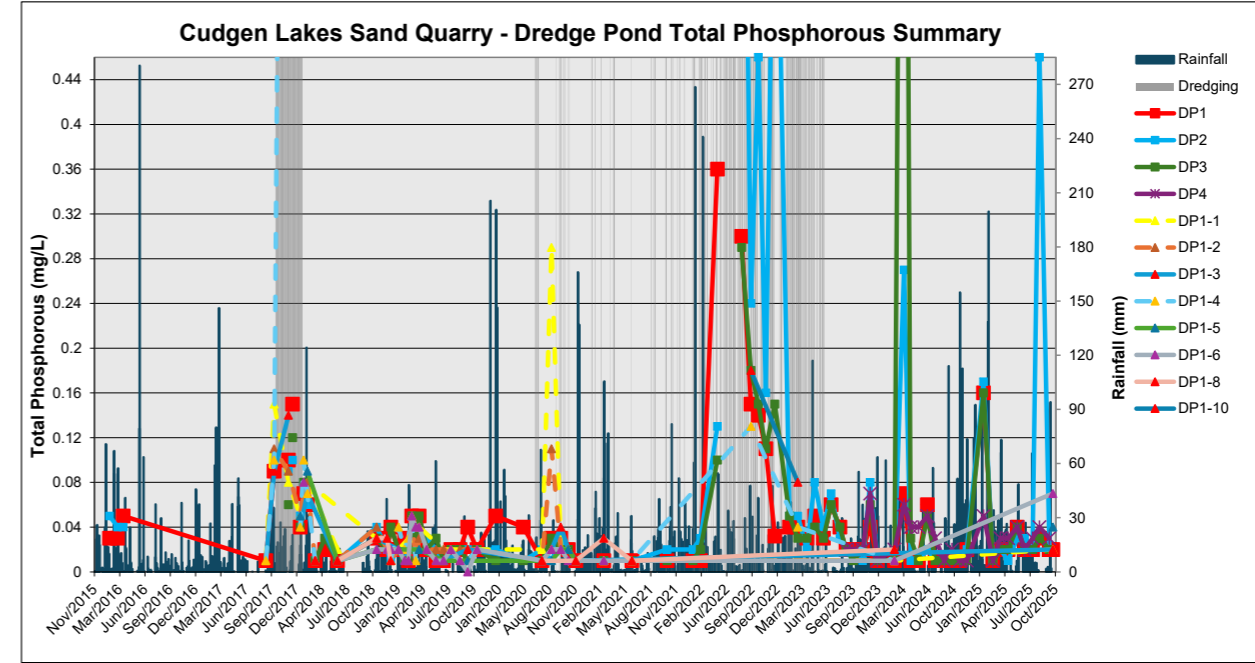
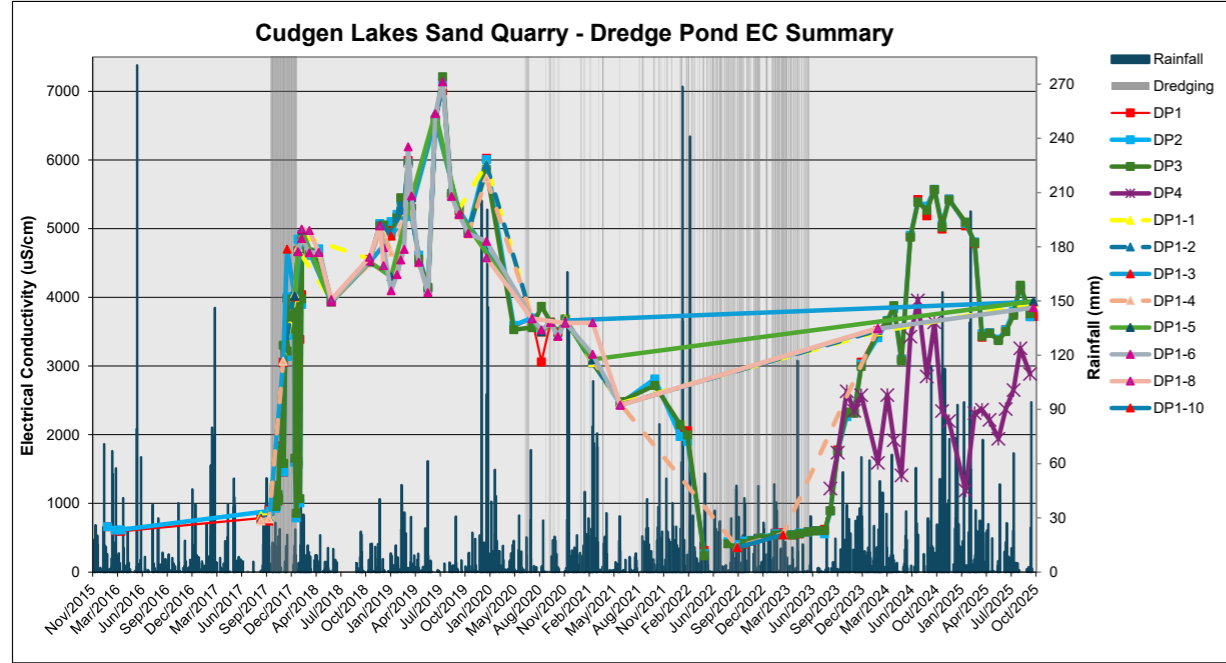
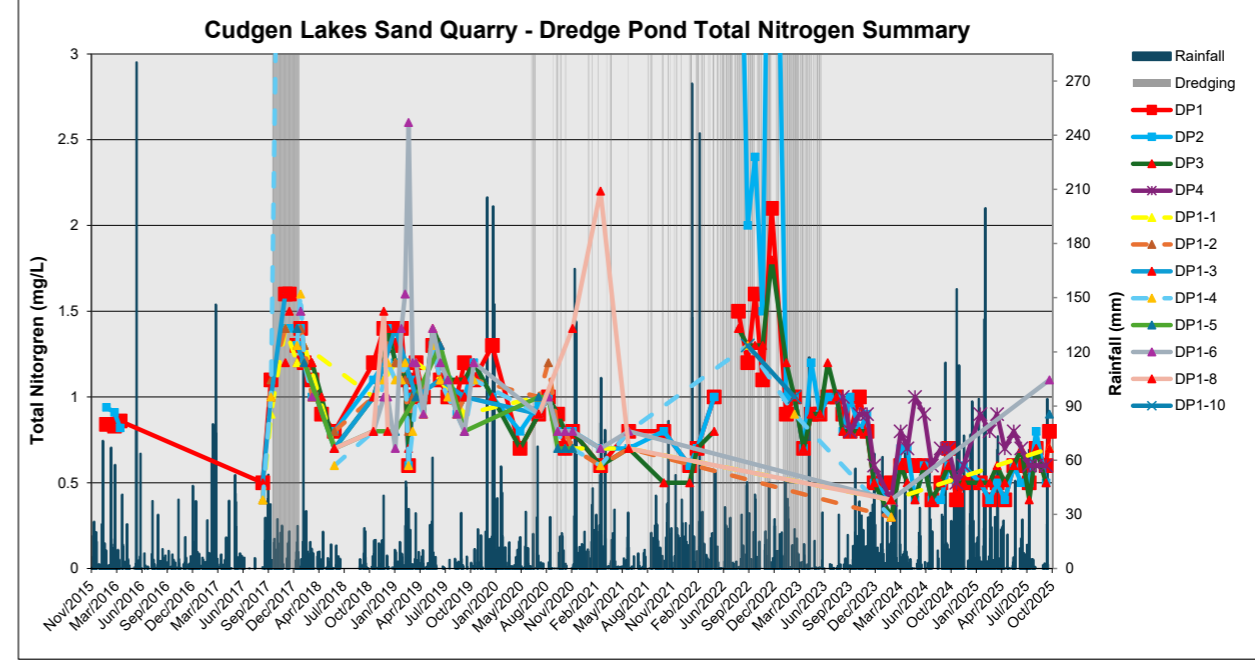
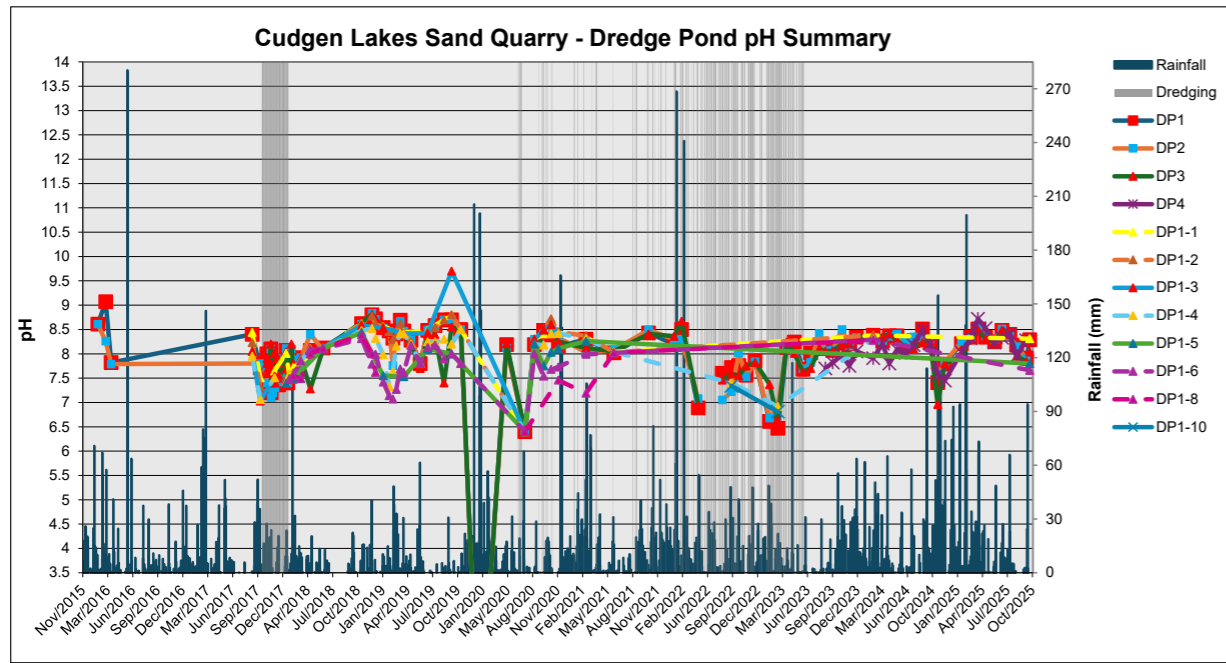
Monitoring Location Map - Surface Water



Monitoring Point Location Description

The three dredge pond monitoring locations are shown indicatively in the monitoring location map. The three locations include two edge locations (DP2 and DP3) and one in the approximate middle of the southern dredge pond (DP1) and northern dredge pond (DP4). All depth measurements are to be taken at location DP1 at a depth of 1m and then at 2m intervals to the current floor of the dredge pond. Given the changing size and shape of the dredge pond the precise location of each monitoring point will vary over time and will be selected by the monitoring consultant based upon the pond condition at the time of sampling.

617 - CUDGEN LAKES SAND QUARRY
Surface Water Quality Monitoring Summary



Site: DP1		Physical										Major Cations & Anions							Metals			Nutrients							Bacteria / Algae				
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives		-	-	6.5-9	<6192	>6		<20	10	<813	<119	<40	<1390	<800	<400	<0.5	<0.42	<20											-	-	<50000	<10	
Pre-Extraction	2015-11-30	Fine Sunny Approx 30mm rain previous week (BoM - Coolangatta)	24.5	8.47	591	6.12	148	8.8	4	2		24	11	7	120	20	57	0.19	0.002	0.01	0.04	0.02	0.81			0.81	0.02	0.02	860	860			
	2016-01-26	Fine, Clear, some algae, cattle & ducks	27.3	8.61	663	5.87	192	4.3	3.8	2	64	25	12	7	120	16	76	0.08	0.001	0.01	0.03	0.02	0.84			0.84	0.02	0.02	128	174			
	2016-02-25	Algae, ducks, low turbidity	25.8	9.07	601	6.04	104	1.7	2.1	4	69	26	12	8	120	15	58	0.04		0.01	0.03	0.02	0.83			0.83	0.02	0.02	4800	360			
	2016-03-17	Sample taken in 20cm of clear water. Surface chop caused by wind. Cattle surrounding dam. Water birds. Approx 80mm rain previous week (BoM - Coolangatta).	26.8	7.82	593	5.97	70	7	5.9	4	64	26	12	8	110	14	92	0.16	0.001	0.02	0.05	0.02	0.86			0.86	0.02	0.02	270	820			
	2017-09-04		26.2	8.4	786	9.24	132	5	0.9	5	132	33	21	8	236	57	98	0.06	0.001	0.07	0.01	0.01	0.5	0.01	0.02	0.5	0.02	0.02	40	10	5	2	
	2017-10-05		28.3	7.71	901	7.36	48.7	68	138	5	95	46	17	7	182	40	130	0.03	0.001	0.05	0.09	0.01	1.1	0.01	0.03	1.1	0.01	0.03	320	1180			
	2017-10-08	Algae/chlorophyll only to lab	27.2	7.81	886	6.83	61.2		156																						5	10	
2017-10-30	Commencement of extraction																																
2017-10-30	Daily monitoring requirement for first 2 weeks of dredging.	23.4	8.0	1056	4.23	224																											
2017-10-31	Daily monitoring requirement for first 2 weeks of dredging.	20.1	7.9	1069	4.28	210																											
2017-11-01	Daily monitoring requirement for first 2 weeks of dredging.	22.1	7.9	1061	4.25	216																											
2017-11-02	Daily monitoring requirement for first 2 weeks of dredging.	22.4	7.6	980	2.78	2.12																											
2017-11-03	Daily monitoring requirement for first 2 weeks of dredging.	20.2	7.7	1142	3.26	206																											
2017-11-06	Daily monitoring requirement for first 2 weeks of dredging.	22.4	7.6	1042	4.18	214																											
2017-11-07	Daily monitoring requirement for first 2 weeks of dredging.	22.1	7.3	1031	3.76	210																											
2017-11-08	Daily monitoring requirement for first 2 weeks of dredging.	21.9	8.0	1090	3.93	212																											
2017-11-09	Daily monitoring requirement for first 2 weeks of dredging.	21.7	7.7	1052	4.05	209																											
2017-11-10	Daily monitoring requirement for first 2 weeks of dredging.	21.5	7.9	1067	4.02	204																											
2017-11-13	Daily monitoring requirement for first 2 weeks of dredging.	21.1	7.4	1767	4.2	132																											
2017-11-14	Daily monitoring requirement for first 2 weeks of dredging.	21.7	8.1	1837	4	122																											
2017-11-15	Daily monitoring requirement for first 2 weeks of dredging.	21	7.2	1795	3.9	134																											
2017-11-21	Daily monitoring requirement for first 2 weeks of dredging.	21.5	7.4	1623	4.6	133																											
2017-11-28		27.3	7.4	3058	3.14	50.4	55	97	5	454	110	72	19	874	197	237	0.01	0.001	0.05	0.1	0.01	1.6	0.01	0.12	1.5	0.32	0.12	110	2160	5	6		
2017-11-30	Weekly monitoring requirement.	21.6	7.6	1455	4.8	143																											
2017-12-06	Weekly monitoring requirement.	22	7.8	3210	6.53	206																											
2017-12-13	Weekly monitoring requirement.	22.9	7.8	3150	3.95	147																											
2017-12-13	Birds on Dredge pond and surrounds	27	7.36	3991	0.2	107				563	121	89	22	992	261	234	0.01	0.001	0.05	0.15	0.01	1.6	0.01	0.01	1.6	0.16	0.01			5	28		
2017-12-20	Weekly monitoring requirement.	22.8	7.7	3550	4.15	157																											
2018-01-11	Birds on Dredge pond and surrounds	30.9	8.07	4012	2.17	-0.7	12	20.1	5	628	136	97	24	1090	270	240	0.01	0.002	0.05	0.04	0.01	1.3	0.01	0.01	1.3	0.02	0.01	110	90	825	13		
2018-01-12	Weekly monitoring requirement.	21.8	7.7	1610	4.16	172																											
2018-01-17	Weekly monitoring requirement.	20.9	7.4	797	3.43	116																											
2018-01-23	Weekly monitoring requirement.	21.8	7.7	1569	4.12	168																											
2018-01-24	Birds on Dredge pond and surrounds	27.4	7.54	4685	3.27	36.2				606	129	96	22	1240	296	223	0.01	0.002	0.05	0.07	0.01	1.4	0.01	0.02	1.4	0.21	0.02			355	24		
2018-01-31	Weekly monitoring requirement.	20.5	7.8	3391	5.73	161																											
2018-02-07	Birds on Dredge pond and surrounds	26.6	7.72	4915	5.21	30.9				693	137	103	24	1350	315	264	0.01	0.002	0.05	0.06	0.01	1.2	0.01	0.01	1.2	0.1	0.01	20	40		22		
2018-02-07	Weekly monitoring requirement.	19.1	7.8	4040	5.68	111																											
8/02/2018	Last day of first extraction campaign.																																
2018-03-08	Water Birds on Dredge Pond, no algae visible, slight brown/green tinge to pond water, level	25	7.92	4642	5.33	63				602	126	93	22	1180	307	237	0.04	0.002	0.05	0.01	0.01	1.1	0.01	0.01	1.1	0.02	0.01			1940	51		
2018-04-13	Birds on Dredge pond and surrounds. Algae numbers significantly reduced. Field measurements, algae counts and chlorophyll only for vertical profile samples in dredge pond.	26	8.07	4659	7.37	134				636	134	100	24	1120	263	245	0.02	0.002	0.05	0.02	0.01	0.9	0.01	0.01	0.9	0.01	0.1			6980	12		
2018-05-31	Aquatic Birds on dredge pond	19.6	8.12	3960	5.59	61				663	135	101	23	1290	313	270	0.02	0.002	0.05	0.01	0.01	0.8	0.01	0.03	0.8	0.06	0.03	20	50	14900	9		
2018-10-25		25.1	8.62	4553	6.59	80	5	15.2	5	671	121	100	22	1250	334	205	0.05	0.005	0.05	0.03	0.01	1.2	0.01	0.01	1.2	0.06	0.01	110	40	50300	13		
2018-12-03	S/W WIND TBC	27.6	8.8	5061	8.76	44.2	12	10.1		642	112	99	22	1310	301	188	0.03	0.001	0.06	0.02	0.01	1.4	0.01	0.02	1.4	0.02	0.02			284000	15		
2018-12-17		26.5	8.72	5048	9.92	13	7	11.3		686	107	99	24	1170	302	171	0.06	0.002	0.05	0.04	0.01	1.4	0.01	0.01	1.4	0.05	0.01			247000	31		
2019-01-15		29.4	8.54	4978	4.93	26.5	6	7.5	5	813	116	119	27	1320	298	148	0.02	0.002	0.05	0.02	0.01	1.3	0.01	0.01	1.3	0.05	0.01	270	410	97700	15		
2019-02-07	Aquatic Birds and Cattle. No algal scum on surface. No Oil and grease sampling. Hut mud DP1-8	28.8	8.47	5172	7.84	-43.6	18	10.3		691	94	98	22	1380	364	172	0.04	0.002	0.05	0.03	0.005	1.4	0.01	0.01	1.4	0.01	0.01			14900	10		
2019-02-21		27.8	8.32	5440	8.14	16.8	7	23.8		755	110	115	26	1380	328	161	0.03	0.002	0.05	0.01	0.001	1.1	0.01	0.01	1.1	0.06	0.01			5090	5		
2019-03-06	Cattle on site and near dredge pond. Aquatic birds on dredge pond. No visible algal scum	26.8	8.41	5352	8.93	-41.6	5																										

2022-06-22 Due to previous major flood events, ongoing rain and slow drainage, the site was deemed inaccessible to undertake sampling during June 2022.

Site: DP2		Physical										Major Cations & Anions							Metals			Nutrients							Bacteria / Algae							
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a				
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20											<20			<50000	<10	
Pre-Extraction	2015-11-30	No sample collected due to equipment failure. Fine Sunny Approx 30mm rain previous week (BoM - Coolangatta).																																		
	2016-01-26	Fine, clear, some algae, cattle & ducks	27.3	8.61	663	5.87	194	4.3	4.7	2	64	25	12	7	120	16	94	0.07	0.001	0.07	0.05	0.020	0.94				0.94	0.02	0.02	128	174					
	2016-02-25	Fine, clear, some algae, ducks	23.7	8.26	613	3.75	124	9	5.1	4	67	27	12	8	120	15	96	0.10	0.002	0.01	0.04	0.020	0.91				0.91	0.02	0.02	140	50					
	2016-03-17	Overcast, some algae, water birds, cattle	26.6	7.79	615	3.43	82	4.3	3.5	4	65	27	12	8	110	14	94	0.05	0.002	0.01	0.04	0.020	0.82				0.82	0.02	0.02	150	340					
	2017-10-08	Algae/chlorophyll only to lab	27.5	7.8	890	6.41	58.8		143																								5	9		
2017/2018	2017-10-30	Commencement of extraction																																		
	2017-10-30	Daily monitoring requirement for first 2 weeks of dredging.	23.3	7.7	932	4.25	230																													
	2017-10-31	Daily monitoring requirement for first 2 weeks of dredging.	20.3	7.7	1029	4.01	175																													
	2017-11-01	Daily monitoring requirement for first 2 weeks of dredging.	21.2	7.4	997	4.11	192																													
	2017-11-02	Daily monitoring requirement for first 2 weeks of dredging.	21.8	7.7	957	2.77	209																													
	2017-11-03	Daily monitoring requirement for first 2 weeks of dredging.	20.4	7.7	1158	2.96	204																													
	2017-11-06	Daily monitoring requirement for first 2 weeks of dredging.	22.4	7.6	1118	4.1	217																													
	2017-11-07	Daily monitoring requirement for first 2 weeks of dredging.	22	7.6	1098	3.8	211																													
	2017-11-08	Daily monitoring requirement for first 2 weeks of dredging.	21.9	7.6	1125	3.9	210																													
	2017-11-09	Daily monitoring requirement for first 2 weeks of dredging.	21.4	7.7	1065	3.98	204																													
	2017-11-10	Daily monitoring requirement for first 2 weeks of dredging.	21.6	7.8	1069	3.92	208																													
	2017-11-13	Daily monitoring requirement for first 2 weeks of dredging.	21.3	7.6	1762	4.1	134																													
	2017-11-14	Daily monitoring requirement for first 2 weeks of dredging.	21.5	8.1	1806	4.3	124																													
	2017-11-15	Daily monitoring requirement for first 2 weeks of dredging.	20.5	7.1	1769	4.3	178																													
	2017-11-21	Daily monitoring requirement for first 2 weeks of dredging.	21.4	7.2	1586	4.7	143																													
	2017-11-28							38		5	453	109	71	18	882	198	239	0.01	0.001	0.05	0.09	0.010	1.4	0.01	0.02	1.4	0.13	0.02	150	1180	5	9				
	2017-11-30	Weekly monitoring requirement.	21.6	7.3	1458	5	154																													
	2017-12-06	Weekly monitoring requirement.	22	7.9	3290	6.28	199																													
	2017-12-13	Weekly monitoring requirement.	22.7	7.8	3140	3.58	144																													
	2017-12-13		27	7.42	4010	0.19	131		88.9			565	122	90	22	996	261	228	0.01	0.001	0.05	0.1	0.010	1.4	0.01	0.01	1.4	0.12	0.01			5	40			
	2017-12-20	Weekly monitoring requirement.	23.3	7.7	3450	3.88	158																													
	2018-01-11		32	8.11	3998	6.8	-0.8	18	22.1	5	624	137	95	24	1080	274	241	0.01	0.002	0.05	0.05	0.010	1.3	0.01	0.01	1.3	0.01	0.01	130	120	1250	12				
	2018-01-12	Weekly monitoring requirement.	21.7	7.6	1600	4.1	271																													
	2018-01-17	Weekly monitoring requirement.	20.9	7.4	791	3.37	153																													
	2018-01-23	Weekly monitoring requirement.	21.7	7.6	1560	4.07	265																													
	2018-01-24		29.1	7.78	4849	4.88	41.2		34.4		613	130	99	23	1250	298	220	0.01	0.002	0.05	0.08	0.010	1.4	0.01	0.05	1.4	0.21	0.05			6830	24				
	2018-01-31	Weekly monitoring requirement.	22.3	8.1	1008	5.02	1322																													
	2018-02-07		27.3	7.88	4918	5.35	32.5		23.8	5	680	135	101	24	1340	305	260	0.02	0.002	0.05	0.06	0.010	1.2	0.01	0.02	1.2	0.04	0.02						25		
2018-02-07	Weekly monitoring requirement.	21.2	7.8	3900	5.66	206																														
2018-02-08	Last day of first extraction campaign.																																			
2018-03-08		25.3	7.92	4614	7.43	63		17.6		584	123	90	21	1180	292	236	0.03	0.002	0.05	0.01	0.010	1	0.01	0.04	1	0.02	0.04			4020	38					
2018-04-13		26.2	8.4	4708	8.15	178		104																												
2018-05-31		19.2	8.08	3929	4.98	61		7.1	5	628	127	95	22	1290	311	270	0.01	0.002	0.05	0.01	0.010	0.8	0.01	0.04	0.8	0.07	0.04	60	100	14300	8					
2018-10-25		25.1	8.61	4535	8.71	82	10	12	5	674	119	100	22	1210	335	190	0.05	0.005	0.05	0.04	0.010	1.1	0.01	0.01	1.1	0.03	0.01	80	110	46500	12					
2018-12-03		27.9	8.83	5076	9.26	60.1	12	11.4		694	118	108	24	1320	303	181	0.05	0.002	0.05	0.02	0.01	1.2	0.01	0.02	1.2	0.02	0.02			264000	18					
2018-12-17		26.3	8.71	5037	9.65	28	9	9.2		688	107	99	23	1300	294	174	0.04	0.002	0.05	0.01	0.01	1.4	0.01	0.01	1.4	0.01	0.01			409000	32					
2019-01-15		30.5	8.53	5105	5	39.5	6	10.7	5	694	97	104	23	1310	297	139	0.03	0.002	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.05	0.01	180	460	76800	13					
2019-02-07		29	8.46	5208	7.72	-7.8	5	4.6		772	116	119	27	1370	317	171	0.02	0.002	0.05	0.01	0.005	1.2	0.01	0.01	1.2	0.05	0.01			29500	12					
2019-02-21		27.8	7.76	5410	7.76	41.5	5	39.3		774	109	116	26	1380	330	158	0.03	0.002	0.05	0.02	0.001	1.2	0.01	0.01	1.2	0.02	0.01			3970	6					
2019-03-06		27	8.43	5367	8.98	11.8	5	2.1		739	112	113	25	1360	318	190	0.02	0.002	0.05	0.05	0.01	0.6	0.01													

Site: DP3		Physical							Major Cations & Anions							Metals				Nutrients							Bacteria / Algae							
Sample Date	Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a		
Objectives		-	-	6.5-9.0	<6192	>6		<20	10	<813		<119	<40	1390	<800	<400	<0.5	<0.42	<20								<20	<1000/10	<230/100	<50000	<10			
Pre-Extraction	2017-10-08	Algae/Chlorophyll only to lab		27.3	7.87	898	7.17	63.4																						5	7			
2017/2018	2017-10-30	Commencement of extraction																																
	2017-10-30	Daily monitoring requirement for first 2 weeks of dredging.		23.5	7.8	956	4.8	225																										
	2017-10-31	Daily monitoring requirement for first 2 weeks of dredging.		19.4	7.9	1266	4.83	184																										
	2017-11-01	Daily monitoring requirement for first 2 weeks of dredging.		20.5	7.9	1170	4.83	195																										
	2017-11-02	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1119	2.17	211																										
	2017-11-03	Daily monitoring requirement for first 2 weeks of dredging.		20.7	7.7	1202	3.46	205																										
	2017-11-06	Daily monitoring requirement for first 2 weeks of dredging.		22.5	7.6	1117	4.1	219																										
	2017-11-07	Daily monitoring requirement for first 2 weeks of dredging.		22	7.6	1098	3.82	209																										
	2017-11-08	Daily monitoring requirement for first 2 weeks of dredging.		21.9	7.6	1128	3.88	212																										
	2017-11-09	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.6	1043	3.94	210																										
	2017-11-10	Daily monitoring requirement for first 2 weeks of dredging.		21.7	7.8	1073	3.97	211																										
	2017-11-13	Daily monitoring requirement for first 2 weeks of dredging.		21.1	7.6	1783	4.2	136																										
	2017-11-14	Daily monitoring requirement for first 2 weeks of dredging.		21.7	8.2	1784	4.8	120																										
	2017-11-15	Daily monitoring requirement for first 2 weeks of dredging.		21.3	7.4	1790	4.1	132																										
	2017-11-21	Daily monitoring requirement for first 2 weeks of dredging.		21.4	7.7	1752	5.3	136																										
	2017-11-28	Daily monitoring requirement for first 2 weeks of dredging.		30.5	8.02	3304	8.66	28.6	16	11.7	5	456	104	73	18	845	192	241	0.02	0.001	0.05	0.06	0.010	1.20	0.01	0.01	1.2	0.02	0.01	260	1620	5	3	
	2017-11-30	Weekly monitoring requirement.		21.7	7.4	1584	4.9	129																										
	2017-12-06	Weekly monitoring requirement.		22	7.9	3260	6.31	199																										
	2017-12-13	Weekly monitoring requirement.		22.6	7.8	3220	3.67	153																										
	2017-12-13	Weekly monitoring requirement.		28.7	7.89	3977	0.19	92		31.4		562	120	89	22	994	249	225	0.01	0.001	0.05	0.12	0.010	1.50	0.01	0.01	1.5	0.21	0.01		5	25		
	2017-12-20	Weekly monitoring requirement.		23.3	7.5	3540	3.57	161																										
	2018-01-11	Weekly monitoring requirement.		30.8	8.04	3935	2.14	-0.5	14	25.5	5	612	135	95	24	1090	272	240	0.01	0.002	0.05	0.04	0.010	1.20	0.01	0.01	1.2	0.01	0.01	130	260	5200	16	
	2018-01-12	Weekly monitoring requirement.		21.7	7.7	1660	4.3	180																										
	2018-01-17	Weekly monitoring requirement.		20.8	7.5	857	3.4	145																										
	2018-01-23	Weekly monitoring requirement.		21.7	7.7	1620	4.21	178																										
	2018-01-24	Weekly monitoring requirement.		27.4	7.53	4665	2.75	5.3	53.7			592	127	94	22	1260	300	224	0.01	0.002	0.05	0.08	0.010	1.50	0.01	0.06	1.4	0.23	0.06		9200	13		
	2018-01-31	Weekly monitoring requirement.		23.3	8.2	1068	2.55	168																										
	2018-02-07	Depth 4.7m		26.4	7.52	4786	4.83	28		26.3	5	681	136	101	25	1350	307	266	0.01	0.002	0.05	0.08	0.010	1.30	0.01	0.01	1.3	0.14	0.01			25		
2018-02-07	Weekly monitoring requirement.		20.9	7.8	3980	5.08	201																											
2018-02-08	Last day of first extraction campaign.																																	
2018-03-08			25.1	7.91	4661	5.15	49		11.4		613	127	93	22	1190	249	241	0.02	0.002	0.05	0.01	0.010	1.20	0.01	0.06	1.1	0.01	0.06			1400	48		
2018-04-13			26.2	7.28	4564	7.17	166		0.7		609	131	97	22	1160	322	246	0.02	0.002	0.05	0.03	0.010	1.00	0.01	0.01	1	0.02	0.01			4970	10		
2018-05-31			19.6	8.09	3959	6.08	53		7.9	5	633	127	96	22	1300	311	273	0.01	0.002	0.05	0.01	0.010	0.70	0.01	0.03	0.7	0.06	0.03	50	80	20900	8		
2018-10-25			24.9	8.65	4541	6.87	79	10	14.8	5	690	121	101	22	1200	323	194	0.05	0.005	0.05	0.03	0.010	1.00	0.01	0.01	1	0.04	0.01	120	50	55600	13		
2018-12-03			27.5	8.81	5042	9.25	116	14	12.4		656	110	100	22	1320	300	180	0.04	0.001	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.06	0.01			418000	18		
2018-12-17			26.5	8.72	5054	9.71	18	6	10.8		686	107	99	23	1180	300	170	0.04	0.002	0.1	0.04	0.01	1.4	0.01	0.01	1.4	0.05	0.01			315000	32		
2019-01-15			28.9	8.5	4938	4.94	69.5	13	7.3	5	679	96	103	23	1320	302	137	0.03	0.001	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.05	0.01	90	150	105000	16		
2019-02-07			28.3	8.44	5156	7.62	-70.5	ND	3.1		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	0.005	1.2	0.01	0.02	1.2	0.05	0.02			23200	8		
2019-02-21			28	8.36	5452	8.02	28.8	5	31.6		767	111	115	26	1390	331	154	0.03	0.002	0.05	0.01	0.001	1.1	0.01	0.01	1.1	0.01	0.01			3960	5		
2019-03-06			26.7	8.36	5335	9.04	16.2	5	0.6		721	110	110	24	1380	320	188	0.02	0.002	0.05	0.05	0.006	0.7	0.01	0.01	0.7	0.02	0.01			1040	7		
2019-03-21			27.7	8.46	5954	5.74	-94.8	5	3.21		745	110	112	26	1290	293	162	0.03	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.01	0.01			12100	9		
2019-04-03			25	8.44	5291	4.91	197	10	7.8	5	746	126	114	24	1240	302	170	0.02	0.002	0.05	0.05	0.002	1.1	0.01	0.01	1.1	0.05	0.01	330	270	27500	9		
2019-05-01			23.2	8.19	4553	7.72	-62	5	6.1		800	127	119	25	1300	294	188	0.01	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.04	0.01			63600	10		
2019-06-05			18.4	7.7	4147	7.4	73	6	-9.7		710	128	110	24	1270	306	224	0.01	0.002	0.05	0.03	0.002	1.4	0.02	0.04	1.3	0.36	0.06			11900	11		
2019-07-03			19.7	8.39	6587	7.05	87	5	1.8	5	733	125	108	24	1280	249	224	0.01	0.001	0.05	0.01	0.001	1.3	0.02										

Site: DP4		Physical										Major Cations & Anions						Metals			Nutrients							Bacteria / Algae				
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a
Objectives		-	-	6.5-9.0	<6192	>6			<20		<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20											<50000	<10
2023/2024	2023-07-31	New northern dredge pond location Cloudy, Turbid		20.31	7.92	686	5.25	-56.8	116		62	63	16	6	101	94	107	0.01	0.001	0.05	0.04	0.001	1.1	0.01	0.32	0.8	0.06	0.32			5	2
	2023-08-23	Cloudy, Turbid		22.55	7.7	1218	3.99	-54.4	71.3												0.02	0.001	1	0.01	0.31	0.7	0.11	0.31			900	2
	2023-09-20	Cloudy/Turbid, Frothing on bank		23.65	7.82	1740	9.77	-56.9	22.9												0.02	0.001	0.8	0.05	0.23	0.5	0.09	0.28			5	1
	2023-10-25	Clear		26.27	7.97	2632	9.47	-68.5	20.1		296	136	58	16	604	320	180	0.01	0.001	0.05	0.02	0.001	0.9	0.03	0.26	0.6	0.07	0.29			5	4
	2023-11-22	Cloudy, Turbid	0	26.43	7.75	2347	9.52	-54.3	13.7												0.07	0.001	0.9			0.7	0.04	0.24			5	5
	2023-12-19	Cloudy, Turbid	-3.5	30.2	8.05	2574	6.78	-75.7	12.4		337	141	63	16	625	334	186	0.01	0.001	0.05	0.01	0.004	0.6	0.01	0.01	0.6	0.01	0.01			5	12
	2024-02-21	Cloudy, Turbid		28.15	7.91	1591	6.73	-53.1	17.5		202	114	37	11	399	234	134	0.15	0.001	0.05	0.02	0.002	0.4	0.01	0.01	0.4	0.01	0.01			125	4
	2024-03-28	Cloudy, Turbid		23.81	8.21	2578	4.55		17.6												0.06	0.001	0.8	0.01	0.01	0.8	0.01	0.01			5	8
	2024-04-22	Cloudy, Turbid		22.51	7.8	1920	5.05	-53.8	47.5												0.04	0.004	0.7	0.01	0.01	0.7	0.06	0.01			5	7
2024-05-21	Cloudy, Turbid		19.25	8.09	1408	8.7	-63.8	12.6												0.04	0.004	1	0.01	0.01	1	0.02	0.01			750	9	
2024-06-24	Clear	-1	17.42	8.02	3428	9.57	-61.2	10.6		437	150	73	18	546	355	200	0.01	0.001	0.05	0.05	0.001	0.9	0.01	0.01	0.9	0.02	0.9			295	6	
2024/2025	2024-07-23	Cloudy	4	16.3	8.18	3956	8.22	-72.6	4.6												0.03	0.009	0.6	0.02	0.01	0.6	0.01	0.90			5	2
	2024-08-26	Cloudy		23.9	8.49	2850	7.63	-109.1	9.1												0.01	0.001	0.7	0.01	0.01	0.7	0.02	0.01			5	2
	2024-09-24	Cloudy	-1	23.91	8.21	3638	7.81	-94.5	8.4												0.02	0.003	0.7	0.01	0.01	0.7	0.03	0.01			80	4
	2024-10-23	Cloudy	-0.1	24.6	7.58	2346	9.51	115.7	5.63		279	90	49	13	565	202	128	0.07	0.001	0.05	0.01	0.001	0.5	0.01	0.01	0.5	0.01	0.01			7940	10
	2024-11-19	Cloudy	-0.2	25.6	7.45	2199	7.12	92.4	9.3												0.01	0.003	0.6	0.01	0.01	0.6	0.03	0.01			4680	8
	2025-01-21	Slightly Cloudy		29.6	8.03	1189	6.01	-60.6	9.2												0.05	0.001	0.9	0.01	0.01	0.9	0.03	0.01			131000	2
	2025-02-25	Slightly Cloudy	0.1	27.4	8.32	2313	5.95	-68.9	9.9		305	78	50	12	642	184	120	0.01	0.001	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.01	0.01			236000	2
	2025-03-25	Slightly Cloudy		26.0	8.72	2364	6.67	-94.8	9.9												0.03	0.003	0.9	0.01	0.09	0.8	0.01	0.09			21200	28
	2025-04-23	Slightly Cloudy	0.45	24.5	8.53	2217	6.89	-84.6	10.3												0.03	0.001	0.7	0.01	0.02	0.7	0.03	0.02			3060	7
2025-05-27	Clear	-0.1	22.6	8.23	1941	7.13	-72.7	26.6		235	81	35	11	516	160	126	0.01	0.001	0.05	0.04	0.001	0.8	0.04	0.01	0.8	0.02	0.01			2760	3	
2025-06-24	Clear	0	19.2	8.33	2375	5.40	-79.2	24.7												0.02	0.001	0.7	0.01	0.02	0.7	0.01	0.02			855	15	
2025/2026	2025-07-24	Clear		17.7	8.41	2652	6.64	-82.5	6.8												0.03	0.002	0.6	0.01	0.01	0.6	0.01	0.01			240	24
	2025-08-19	Clear	0.2	17.4.3	7.95	3259	5.22	-70.9	0.2		411	100	60	17	873	246	176	0.01	0.001	0.05	0.04	0.003	0.6	0.02	0.01	0.6	0.02	0.01			645	6
	2025-09-25	Slightly Cloudy	0.35	21.8	8.28	2885	9.95	90.5	1.1												0.03	0.003	0.6	0.01	0.01	0.6	0.03	0.01			10700	2

Reporting Period (2025/2026)	Average	0.3	19.8	8.21	2932	7.27	-21.0	0.0	2.7	0.0	411	100	60.0	17	873.0	246	176.0	0.01	0.001	0.05	0.03	0.00	0.60	0.01	0.01	0.60	0.02	0.01	0.0	0.0	3862	11
	Maximum	0.4	21.8	8.41	3259	9.95	90.5	0.0	6.8	0.0	411	100	60	17	873	246	176	0.01	0.001	0.05	0.04	0.00	0.60	0.02	0.01	0.60	0.03	0.01	0.0	0.0	10700	24
Minimum	0.2	17.7	7.95	2652	5.22	-82.5	0.0	0.2	0.0	411	100	60	17	873	246	176	0.01	0.001	0.05	0.03	0.00	0.60	0.01	0.01	0.60	0.01	0.01	0.0	0.0	240	2	
All Results	Average	-0.1	23.5	8.08	2332	7.18	-49.6	0.0	19.9	0.0	284.9	106	49.0	13	541.2	236.6	150.8	0.03	0.001	0.05	0.03	0.00	0.75	0.01	0.06	0.69	0.03	0.14	0.0	0.0	16851	7
	Maximum	4.0	30.2	8.72	3956	9.95	115.7	0.0	116.0	0.0	437	150	73	18	873	355	200	0.15	0.001	0.05	0.07	0.01	1.10	0.05	0.32	1.00	0.11	0.90	0.0	0.0	236000	28
	80 th Percentile	0.4	26.4	8.33	2878	9.50	-53.8	0.0	24.3	0.0	411	141	63	17	642	334	186	0.07	0.001	0.05	0.04	0.00	0.90	0.02	0.09	0.80	0.06	0.29	0.0	0.0	7288	10
	Median (50 th Percentile)	0.0	23.9	8.05	2347	6.89	-66.2	0.0	10.6	0.0	296	100	50	13	565	234	134	0.01	0.001	0.05	0.03	0.00	0.70	0.01	0.01	0.70	0.02	0.01	0.0	0.0	295	5
	20 th Percentile	-1.0	19.3	7.80	1621	5.28	-82.5	0.0	7.1	0.0	202	78	35	11	399	160	120	0.01	0.001	0.05	0.01	0.00	0.60	0.01	0.01	0.60	0.01	0.01	0.0	0.0	5	2
Minimum	-3.5	16.3	7.45	686	3.99	-109.1	0.0	0.2	0.0	62	63	16	6	101	94	107	0.01	0.001	0.05	0.01	0.00	0.40	0.01	0.01	0.40	0.01	0.01	0.0	0.0	5	1	

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored

NV - Not visible

Site: DP1-1		Physical										Major Cations & Anions							Metals			Nutrients							Bacteria / Algae				
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mv	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20									<20	<1000/100	<230/100	<50000	<10
Pre - Extraction	2017-09-04		21.5	8.44	824	7.01	121	5	3.9		129	33	20	8	236	56	98	0.05	0.001	0.06	0.01	0.01	0.4	0.01	0.01	0.4	0.02	0.01	10	10	5	1	
	2017-10-05		24	7.51	819	4.51	54.4	62	149		98	46	17	7	179	39	128	0.07	0.001	0.06	0.15	0.01	0.9	0.01	0.03	0.9	0.16	0.03	480	840			
2017/2018	2017-10-30	Commencement of extraction																															
	2017-11-28		26.9	7.65	3066	3.11	19.4	53	85		456	110	72	18	877	281	237	0.01	0.001	0.05	0.08	0.01	1.4	0.01	0.01	1.4	0.29	0.01	180	100			
	2018-01-11		30.6	8.01	3997	2.16	-2	10	22.1	5	624	135	96	24	1100	224	239	0.01	0.002	0.05	0.05	0.01	1.2	0.01	0.01	1.2	0.02	0.01	60	120			
	2018-01-24		27.5	7.51	4693	2.88	37.3		53.6																								
	2018-05-31		19.5	8.12	3959	5.19	61		6.9	5	627	128	95	22	1280	290	274	0.01	0.002	0.05	0.02	0.01	0.7	0.01	0.03	0.7	0.06	0.03	40	80	16800	8	
	2018-02-07		26.4	7.72	4894	5.17	27.8		17.8	5	766	153	114	27	1350	308	263	0.01	0.002	0.05	0.08	0.01	1.3	0.01	0.01	1.3	0.11	0.01	90	80			
	2018-02-08	Last day of first extraction campaign.																															
2018 / 2019	2018-10-25		24.9	8.62	4559	5.93	80	7	13.8	5	680	121	102	22	1220	334	193	0.05	0.005	0.05	0.03	0.01	1	0.01	0.01	1	0.05	0.01	90	50			
	2019-01-15		28.9	8.56	4899	4.85	13.5	5	8	5	693	98	104	24	1320	288	139	0.03	0.002	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.05	0.01	190	370			
	2019-04-03		24.6	8.44	5300	4.84	96.9	8	7.5	5	735	125	112	24	1240	298	173	0.03	0.002	0.05	0.04	0.002	1.2	0.01	0.01	1.2	0.04	0.01	340	160			
2019 / 2020	2019-07-03		18.7	8.49	6553	5.75	85	5	4.4	5	729	125	110	24	1270	248	221	0.01	0.001	0.05	0.02	0.001	1.1	0.01	0.12	1	0.13	0.13	100	140			
	2019-10-02		24.2	8.8	5286	6.5	65.9	5	7.7	5	758	131	115	25	1380	315	189	0.01	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.01	0.01	10	10			
	2020-01-15	Aquatic birds present. Cattle present. Low water level. pH meter calibration issue - spurious data																															
2020/2021	2020-07-07	Clear	16.8	6.4	3694	9.1	121	5	2.6	5	602	87	90	20	1020	195	183	0.01	0.002	0.05	0.02	0.007	1	0.01	0.04	1	0.104	0.04	120	10			
	2020-08-12	Clear	18	8.3	3490	10.5	90	5	6.6	5	552	91	85	19	1020	185	162	0.01	0.001	0.05	0.29	0.001	1	0.01	0.04	1	0.04	0.05	20	10			
	2020-09-16		21.4	8.41	3640	10.71	94.5	6	60.1	5	565	87	83	18	1080	193	149	0.03	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.01	0.01	10	10			
	2020-10-14		24.5	8.63	3510	9.78	67.6	5	15.3	5	566	98	83	20	1040	230	139	0.03	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.02	0.01				6	
	2020-11-11		24.6	8.44	3691	9.5	77.4	5	2.4		534	86	80	18	1050	238	145	0.03	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	70	240			
	2021-02-24	Clear	26.7	8.34	3053	8.56	20.5	5	4.8		439	78	66	16	905	195	126	0.03	0.002	0.05	0.01	0.007	0.7	0.01	0.01	0.7	0.01	0.01	220	180			
	2021-06-10	Clear	17.5	8.04	2456	8.79	53.1	5	3.75		400	72	58	14	767	166	136	0.01	0.002	0.05	0.01	0.001	0.7	0.02	0.04	0.6	0.18	0.06	20	40			
2021/2022	N/A																																
2022/2023	2022-08-31	Cloudy, Very Turbid	18.59	7.64	353	6.79	212.4		428		53	24	7	3	88	30	50	0.01	0.001	0.05	0.16	0.004	1.1	0.01	0.43	0.7	0.01	0.43			5	10	
	2023-02-23	Cloudy, Turbid	27	6.5	568	7.5	200.3		57.64		49	43	7	4	84	42	71	0.01	0.001	0.05	0.04	0.001	1	0.01	0.41	0.6	0.02	0.41			5	4	
2023/2024	2024-02-21	Clear	29.53	8.38	3499	5.49	-81.8		4.9		492	152	73	20	891	326	160	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01			1240	2	
2025/2026	2025-10-08	Clear	24.38	8.31	3908	3.56	135.3		2.9		576	103	84	22	1140	258	92	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.03	0.01			5	1	

Reporting Period (2025/2026)	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum
All Results	Average	24.4	8.31	3908	3.56	135.3	0.0	2.9	0.0	576	103	84	22	1140	258	92	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.03	0.01	0	0	5	1					
	Maximum	24.4	8.31	3908	3.56	135.3	0.0	2.9	0.0	576	103	84	22	1140	258	92	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.03	0.01	0	0	5	1					
	Minimum	24.4	8.31	3908	3.56	135.3	0.0	2.9	0.0	576	103	84	22	1140	258	92	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.03	0.01	0	0	5	1					
	Average	24.1	8.04	3732	6.49	70.1	12	42.1	5	538	101	81	19	987	227	165	0.02	0.002	0.05	0.05	0.005	1.0	0.01	0.06	0.9	0.06	0.06	141	159	3611	5					
	Maximum	30.6	8.80	6553	10.71	212.4	62	428.0	5	838	153	121	28	1410	334	274	0.07	0.005	0.06	0.29	0.010	1.4	0.02	0.43	1.4	0.29	0.43	480	840	16800	10					
80 th Percentile	27.5	8.50	4899	9.10	121.0	9	57.6	5	730	129	110	24	1288	309	224	0.03	0.002	0.05	0.08	0.010	1.2	0.01	0.04	1.2	0.11	0.05	244	246	10576	9						
Median (50 th Percentile)	24.6	8.31	3693	6.22	72.5	5	7.6	5	566	98	84	20	1050	238	160	0.01	0.002	0.05	0.02	0.002	1.0	0.01	0.01	0.9	0.03	0.01	90	90	5	4						
20 th Percentile	18.7	7.61	2456	4.51	20.5	5	3.8	5	346	67	50	13	661	144	120	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	18	10	5	1						
Minimum	16.8	6.40	353	2.16	-81.8	5	2.4	5	49	24	7	3	84	30	50	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01	10	10	5	1						

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data. NLM = No Longer Monitored

Site: DP1-2		Physical									Major Cations & Anions								Metals			Nutrients								Bacteria / Algae			
Sample Date	Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
																																	Objectives
Pre-Extraction	2017-09-04		20.1	8.23	787	6.86	126	5	1.9		134	33	21	8	237	57	97	0.04	0.001	0.05	0.01	0.01	0.4	0.01	0.02	0.4	0.02	0.02	40	10	5	2	
	2017-10-05		23	7.32	798	3.32	63.8	46	166		96	46	17	7	176	44	131	0.11	0.001	0.1	0.11	0.01	1.1	0.01	0.02	1.1	0.17	0.02	450	1010			
2017/2018	2017-10-30	Commencement of extraction																															
	2017-11-28		26.8	7.53	3048	3.21	19	53	99		454	108	72	18	878	198	238	0.01	0.001	0.05	0.09	0.01	1.4	0.01	0.01	1.4	0.3	0.01	60	130			
	2018-01-11		28.3	7.49	4114	2.17	-0.9	13	23.2	5	648	136	100	24	1130	281	242	0.01	0.002	0.05	0.05	0.01	1.4	0.01	0.01	1.4	0.31	0.01	30	50	5	8	
	2018-01-24		27.4	7.5	4679	2.31	33		70.2		685	146	110	26	1250	301	223	0.01	0.002	0.05	0.07	0.01	1.4	0.01	0.01	1.4	0.12	0.01			12700	30	
	2018-02-07		26.2	7.61	4903	6.96	21		23.6	5	693	138	102	25	1350	311	265	0.01	0.002	0.05	0.08	0.01	1.3	0.01	0.02	1.3	0.12	0.02	40	60			
	2018-02-08	Last day of first extraction campaign																															
	2018-03-08		24.8	7.89	4658	3.29	61		14.9		600	125	92	22	1180	229	240	0.03	0.002	0.05	0.01	0.01	1	0.01	0.02	1	0.01	0.02			2360	29	
	2018-04-13		24.9	8.11	4663	6.7	113		7.1																						5160	7	
2018-05-31		19.4	8.12	3944	5.95	61		7.8	5	634	128	96	22	1270	290	270	0.01	0.002	0.05	0.01	0.01	0.8	0.01	0.05	0.7	0.07	0.05	40	90	14200	8		
2018/2019	2018-10-25		24.7	8.61	4524	6.54	79	8	15.2	5	673	119	100	22	1230	329	196	0.05	0.005	0.05	0.04	0.01	1	0.01	0.01	1	0.03	0.01	120	50	38800	13	
	2018-12-03		27.3	8.78	5056	8.53	67.7	13	9.6		643	110	99	22	1320	306	180	0.03	0.001	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.09	0.01			299000	16	
	2018-12-17		26.2	8.61	5022	8.78	-11	9	9.6		686	106	99	23	1170	282	175	0.04	0.002	0.05	0.01	0.01	1.3	0.01	0.01	1.3	0.12	0.01			199000	32	
	2019-01-15		29	8.55	4913	7.26	1.8	6	9.5	5	693	97	104	23	1310	300	135	0.03	0.002	0.05	0.02	0.01	1.2	0.01	0.01	1.2	0.04	0.01	180	170	102000	16	
	2019-02-07		28.4	8.46	5153	7.75	-77.5	9	6.1		776	117	118	27	1350	314	162	0.02	0.002	0.05	0.02	0.005	1.2	0.01	0.01	1.2	0.02	0.01			17600	12	
	2019-02-21		23.7	8.29	5351	7.98	-4.8	5	22.5		766	110	114	26	1380	345	154	0.03	0.002	0.05	0.01	0.001	1.1	0.01	0.01	1.1	0.05	0.01			3430	6	
	2019-03-06		26.1	8.38	5268	8.95	-7.5	5	2.4		733	113	111	25	1360	321	189	0.02	0.002	0.05	0.05	0.005	0.8	0.01	0.01	0.8	0.01	0.01			955	7	
	2019-03-21		27.8	8.63	5968	5.77	-106	8	3.22		732	110	111	25	1290	287	161	0.03	0.002	0.05	0.01	0.001	1	0.01	0.01	1	0.01	0.01			13100	9	
	2019-04-03		24.9	8.43	5300	4.23	92	13	6.7	5	721	124	111	24	1240	301	177	0.03	0.001	0.05	0.03	0.001	1	0.01	0.01	1	0.04	0.01	120	110	29300	11	
	2019-05-01		23.1	8.25	4518	8.14	19.6	5	4.5		726	120	110	24	1290	286	189	0.01	0.002	0.05	0.02	0.003	1	0.01	0.01	1	0.04	0.01			31400	13	
2019-06-05		17.9	7.8	4096	6.8	57.7	5	-9.8		724	133	115	26	1270	302	225	0.01	0.002	0.05	0.02	0.003	1.3	0.02	0.04	1.2	0.36	0.06			13200	12		
2019 / 2020	2019-07-03		18.5	8.47	6558	5.65	85	5	1.6	5	706	123	106	24	1260	252	224	0.03	0.001	0.05	0.02	0.001	1.1	0.02	0.11	1	0.14	0.13	90	60	22000	11	
	2019-07-31		17.9	8.54	7123	5.65	109.2	5	5.2		733	129	113	24	1340	312	217	0.01	0.001	0.05	0.02	0.001	1.1	0.01	0.11	1	0.01	0.11			30500	8	
	2019-09-03		19.7	8.7	5468	7.3	127	5	7.3		780	127	120	25	1340	333	188	0.01	0.001	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.02	0.01			40300	8	
	2019-10-02		24	8.8	5278	6	65.5	6	7.4	5	761	131	114	25	1370	308	190	0.01	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.01	0.01	40	20	130000	10	
	2019-11-06	Aquatic birds present. Cattle present. Low water	22.7	8.5	4942	8.7	117.1	13	3.9		735	105	109	25	1320	319	186	0.02	0.002	0.05	0.02	0.001	1.1	0.01	0.01	1.1	0.03	0.01			111000	13	
2020/2021	2020-01-15	Aquatic birds present. Cattle present. Low water level. pH meter calibration issue - spurious data	27.4	12.6*	5934	7.9	90.1	5	4.3		831	121	123	28	1410	315	162	0.01	0.002	0.05	0.01	0.002	1	0.01	0.01	1	0.03	0.01	350	460	5	8	
	2020-07-07	Clear.	16.8	6.4	3692	9.1	119	5	3	5	586	86	88	20	1010	217	175	0.01	0.002	0.05	0.01	0.004	1	0.01	0.04	1	0.24	0.04	80	10	7160		
	2020-08-12	Clear	17	8.3	3494	10.4	90	5	7.6	5	544	87	82	18	1030	182	170	0.01	0.002	0.05	0.11	0.001	1.2	0.01	0.04	1.1	0.04	0.05	20	10	20600	12	
	2020-09-16		21	8.5	3633	10.72	95.7	5	33.5	5	570	88	84	19	1080	193	149	0.01	0.001	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.02	0.01	10	10	19600	9	
	2020-10-14		23.5	8.72	3496	9.78	68.1	5	13.5	5	578	100	85	20	1040	231	142	0.02	0.002	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.01	0.01			11600	6	
	2020-11-11		23.7	8.45	3675	9.49	76.6	5	2.9		551	88	82	19	1060	236	144	0.03	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	40	120	1260	6	
	2021-02-24	Clear	26.6	8.37	3084	8.92	35.2	5	4.6		441	78	66	16	910	197	126	0.03	0.002	0.05	0.01	0.001	0.6	0.01	0.01	0.6	0.01	0.01	120	120	6260	5	
	2021-06-10	Clear	17.3	8.03	2438	8.77	57.5		3.92		397	71	58	14	787	164	134	0.01	0.002	0.05	0.01	0.001	0.7	0.02	0.04	0.6	0.18	0.06	40	20	5	2	
2021/2022	N/A																																
2022/2023	2022-08-31	Cloudy, Very Turbid	17.69	7.44	367	6.77	208.1		448		51	24	7	3	89	31	49	0.01	0.001	0.05	0.15	0.002	1.2	0.01	0.45	0.8	0.01	0.45			5	10	
	2023-02-23	Cloudy, Turbid	26.4	7.1	553	7.24	220.4		44.56		50	43	8	4	86	42	71	0.01	0.001	0.05	0.04	0.002	1	0.01	0.38	0.6	0.01	0.38			5	3	
2023/2024	2024-02-21	Clear	28.81	8.38	3520	4.04	-82.1		5.4		454	140	67	19	910	318	162	0.01	0.001	0.05	0.01	0.001	0.3	0.01	0.01	0.3	0.01	0.01			1240	2	
Reporting Period (2023/2024)	Average	-	28.8	8.38	3520	4.04	-82.1	ND	5.4	ND	454	140	67	19	910	318	162	0.01	0.001	0.05	0.01	0.001	0.3	0.01	0.01	0.3	0.01	0.01	ND	ND	1240	2	
	Maximum	-	28.8	8.3																													

Site: DP1-3		Physical										Major Cations & Anions						Metals			Nutrients							Bacteria / Algae					
Sample Date	Comments / Flow	Water level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mol/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10
Pre-Extraction	4/09/2017		19.1	8.05	769	6.02	125	6	3.4		130	33	21	8	236	57	96	0.04	0.001	0.05	0.01	0.01	0.5	0.02	0.01	0.5	0.02	0.03	20	20	5	2	
	5/10/2017		22.8	7.03	743	3.12	76.6	48	163		96	48	17	7	174	43	134	0.01	0.001	0.05	0.09	0.01	1	0.01	0.02	1	0.19	0.02	400	770			
2017/2018	30/10/2017	Commencement of extraction																															
	28/11/2017		27.1	7.54	3053	3.09	18.1	88	113		456	110	72	18	881	221	244	0.01	0.001	0.05	0.14	0.01	1.6	0.01	0.09	1.5	0.3	0.09	170	120			
	13/12/2017		27.6	7.56	4703	2.49	31.1																										
	11/01/2018		27.9	7.45	4008	1.07	-14	12	24.2	5	640	133	99	24	1120	277	253	0.01	0.002	0.05	0.04	0.01	1.3	0.01	0.01	1.3	0.3	0.01	10	10			
	7/02/2018		27.7	7.53	4916	4.54	26		39.5	5	682	133	100	24	1370	309	262	0.01	0.002	0.05	0.07	0.01	1.2	0.01	0.02	1.2	0.21	0.02	10	30			
8/02/2018	Last day of first extraction campaign.																																
31/05/2018		19.3	8.12	3927	8.59	60.7			5	634	128	96	22	1270	284	270	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.08	0.03	30	90	25500	8		
2018 / 2019	25/10/2018		22.3	8.58	4510	7.17	84	11	11.7	5	687	122	102	22	1240	330	200	0.05	0.005	0.05	0.03	0.01	1	0.01	0.01	1	0.02	0.01	40	10			
	15/01/2019		28.8	8.53	4894	4.5	24.1	8	9.8	5	698	98	105	24	1310	301	138	0.03	0.002	0.05	0.02	0.01	1.4	0.01	0.01	1.4	0.05	0.01	220	140			
	3/04/2019		24.9	8.42	5308	4.53	83	8	6.2	5	745	127	115	25	1200	288	181	0.03	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.04	0.01	190	190			
2019 / 2020	3/07/2019		18.2	8.42	6577	5.41	85	5	5.4	5	721	124	110	24	1270	252	227	0.01	0.001	0.05	0.01	0.001	1.1	0.02	0.11	1	0.14	0.13	40	90			
	2/10/2019		23.3	9.7	5262	6	59.8	5	5.5	5	765	132	115	25	1380	306	190	0.02	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.02	0.01	30	10			
2020/2021	7/07/2020	Clear.	16.7	6.4	3691	9	117	5	3.1	5	609	90	91	21	1020	199	178	0.02	0.002	0.05	0.01	0.004	0.9	0.01	0.04	0.9	0.19	0.04	70	10			
	12/08/2020	Clear	17.1	8.3	3494	10.4	89	5	8.2	5	537	89	83	18	1020	182	166	0.01	0.002	0.05	0.02	0.001	1	0.02	0.03	1	0.05	0.05	40	20			
	16/09/2020		20.8	8.49	3624	10.78	97.3	5	27.63	5	573	89	86	19	1090	191	151	0.01	0.001	0.05	0.04	0.002	0.8	0.01	0.01	0.8	0.01	0.01	170	910			
	14/10/2020		23.4	8.6	3501	9.26	89.6	5	13.8	5	562	92	83	20	1040	227	140	0.03	0.002	0.05	0.02	0.002	0.8	0.01	0.01	0.8	0.01	0.01	40	80			
11/11/2020		23.2	8.42	3662	9.08	81.8	5	3		548	88	82	19	1060	236	147	0.03	0.002	0.05	0.01	0.005	0.8	0.01	0.01	0.8	0.01	0.01	40	80				
2021/2022	N/A																																
2022/2023	N/A																																
2025/2026	2025-10-08	Clear	22.93	8.04	3933	2.4	139.6		15.4		556	100	81	21	1130	258	77	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.03	0.7	0.04	0.03			5	1	

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data

Pre-Extraction	Average	-	21.0	7.54	756	4.57	100.8	27	83.2	ND	113	41	19	8	205	50	115	0.03	0.001	0.05	0.05	0.010	0.8	0.02	0.02	0.8	0.11	0.03	210	395	5	2
	Maximum	-	22.8	8.05	769	6.02	125.0	48	163.0	ND	130	48	21	8	236	57	134	0.04	0.001	0.05	0.09	0.010	1.0	0.02	0.02	1.0	0.19	0.03	400	770	5	2
	Minimum	-	27.1	7.45	3053	1.07	-14.0	12	24.2	5	456	110	72	18	881	221	244	0.01	0.001	0.05	0.04	0.010	1.2	0.01	0.01	1.2	0.21	0.01	10	10	-	-
Reporting Period (2021/2022)	Average	-	22.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	Maximum	-	22.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	Minimum	-	22.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
All Results	Average	-	23.0	8.07	3920	6.18	66.7	15	29.2	5	568	102	86	20	1043	231	186	0.02	0.002	0.05	0.04	0.006	1.0	0.01	0.03	1.0	0.10	0.03	99	167	12753	5
	Maximum	-	28.8	9.70	6577	10.78	125.0	88	163.0	5	765	133	115	25	1380	330	270	0.05	0.005	0.05	0.14	0.010	1.6	0.02	0.11	1.5	0.30	0.13	400	910	25500	8
	80 th Percentile	-	27.6	8.55	5054	9.15	92.7	12	37.1	5	712	130	108	24	1294	304	249	0.03	0.002	0.05	0.06	0.010	1.3	0.02	0.04	1.3	0.20	0.05	186	180	ID	ID
	Median (50 th Percentile)	-	23.1	8.30	3927	6.00	81.8	6	9.8	5	622	104	94	22	1105	244	180	0.02	0.002	0.05	0.02	0.008	1.0	0.01	0.01	1.0	0.05	0.02	40	80	12753	5
	20 th Percentile	-	18.9	7.50	3318	3.11	25.2	5	3.8	5	488	88	76	18	937	186	139	0.01	0.001	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.01	0.01	22	10	ID	ID
Minimum	-	16.7	6.40	743	1.07	-14.0	5	3.0	5	96	33	17	7	174	43	96	0.01	0.001	0.05	0.01	0.001	0.5	0.01	0.01	0.5	0.01	0.01	10	10	5	2	

Site: DP1-4			Physical										Major Cations & Anions						Metals				Nutrients						Bacteria / Algae				
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20										<1000/100	<230/100	<50000	<10
Pre-E	2017-09-04		17.9	7.95	746	5.57	125	7	4.8		131	33	20	8	234	57	97	0.05	0.001	0.06	0.01	0.01	0.4	0.02	0.02	0.4	0.04	0.04			5	2	
	2017-10-05		22.7	7.06	777	1.79	81.1	61	166		90	46	17	6	173	43	134	0.01	0.001	0.05	0.1	0.01	1	0.01	0.02	1	0.2	0.02	290	850			
2017/2018	2017-10-30	Commencement of extraction																															
	2017-11-28		26.8	7.51	3072	2.85	17	2660	102		451	108	72	18	883	224	236	0.01	0.001	0.05	1.81	0.01	7.3	0.01	0.01	7.3	0.24	0.01	100	220			
	2017-12-13																																
	2018-01-11		28.1	7.42	4052	0.68	-20	7	22	5	636	134	100	24	1130	269	240	0.01	0.002	0.05	0.04	0.01	1.3	0.01	0.01	1.3	0.33	0.01	10	10	250	6	
	2018-01-24		27.8	7.59	4729	2.49	23		101		681	146	108	25	1250	300	222	0.01	0.002	0.05	0.1	0.01	1.6	0.01	0.03	1.6	0.24	0.03			15900	22	
	2018-02-07		25.3	7.57	4981	4.57	24		58.7	5	710	140	106	26	1380	308	260	0.02	0.002	0.05	0.07	0.01	1.2	0.01	0.02	1.2	0.2	0.02	70	70			
	2018-02-08	Last day of first extraction campaign																															
	2018-03-08		24.3	7.85	4651	3.37	53		14.2		602	127	93	22	1190	285	238	0.03	0.002	0.05	0.01	0.01	1	0.01	0.01	1	0.01	0.01			6120	30	
	2018-04-13		24.9	8.1	4651	6.16	131		8.7																							3380	5
	2018-05-31		19.2	8.11	3931	5.65	60.3		7.7	5	629	129	95	22	1270	286	261	0.01	0.002	0.05	0.01	0.01	0.6	0.01	0.02	0.6	0.06	0.02	40	80	4980	8	
2018/2019	2018-10-25		21.1	8.48	4493	5.24	88	6	11.7	5	674	121	102	22	1250	332	210	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.04	0.01	20	10	62800	14	
	2018-12-03		25.8	8.52	5015	5.15	40.5	8	4.3		624	108	97	22	1310	305	201	0.03	0.001	0.05	0.02	0.01	1.1	0.01	0.01	1.1	0.06	0.01			115000	15	
	2018-12-17		25.2	8.32	4925	3.15	-54	8	3.8		690	110	100	24	1180	289	176	0.03	0.002	0.05	0.01	0.01	1.2	0.01	0.01	1.2	0.05	0.01			387000	30	
	2019-01-15		27.1	7.98	4657	0.33	-206.6	5	5.3	5	684	103	102	23	1290	301	190	0.02	0.002	0.05	0.04	0.01	1.1	0.01	0.01	1.1	0.05	0.01	10	20	9170	9	
	2019-02-07		23.4	7.33	4450	0.78	-209.4	14	33.4		710	128	103	22	1250	286	264	0.02	0.002	0.19	0.02	0.005	1.1	0.01	0.01	1.1	0.05	0.01			225	89	
	2019-02-21		24.8	7.63	5070	0.91	-219.7	5	39.5		765	111	114	25	1360	333	187	0.02	0.002	0.05	0.03	0.004	1.2	0.01	0.01	1.2	0.05	0.01			155	18	
	2019-03-06		24.6	8.16	5090	6.35	-103	5	3.1		731	112	110	24	1350	306	206	0.02	0.002	0.05	0.05	0.005	0.6	0.01	0.01	0.6	0.01	0.01			760	12	
	2019-03-21		26.8	8.42	5953	4.18	-34	5	3.22		752	111	113	26	1290	288	178	0.03	0.002	0.05	0.01	0.002	0.8	0.01	0.01	0.8	0.02	0.01			19500	6	
	2019-04-03		24.5	8.41	5301	4.46	74.4	5	7.5	5	748	128	114	24	1230	292	181	0.02	0.002	0.05	0.02	0.003	1	0.01	0.01	1	0.06	0.01	110	120	24200	10	
	2019-05-01		22.8	8.2	4491	7.64	7.9	5	4.6		783	131	121	26	1300	286	188	0.01	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.03	0.01			65600	11	
2019-06-05		17.8	7.8	4086	6.8	58.8	5	-9.8		714	128	112	25	1280	297	226	0.01	0.002	0.05	0.01	0.002	1.3	0.02	0.04	1.2	0.37	0.06			16600	10		
2019/2020	2019-07-03		18.2	8.25	6627	4.67	85	5	2.9	5	733	127	110	24	1280	260	229	0.01	0.001	0.05	0.01	0.001	1.1	0.02	0.12	1	0.17	0.14	100	430	29400	7	
	2019-07-31		17.5	8.25	7103	4.89	111.9	5	7.5		704	122	107	24	1340	311	231	0.01	0.001	0.05	0.02	0.001	1	0.01	0.14	0.9	0.04	0.14			20000	8	
	2019-09-03		18.4	8.3	5479	5.1	137.6	5	5.7		741	125	112	24	1340	328	216	0.01	0.001	0.05	0.01	0.002	0.9	0.01	0.01	0.9	0.02	0.01			18700	9	
	2019-10-02		20.5	8.2	5192	3.2	46.2	5	1.3	5	752	128	111	25	1330	296	230	0.01	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.01	0.01	10	10	6080	6	
	2019-11-06	Aquatic birds present. Cattle present. Low water level	22.5	8.5	4917	8.4	98.1	6	5.9		739	106	109	25	1310	318	190	0.02	0.002	0.05	0.02	0.001	1.1	0.01	0.01	1.1	0.01	0.01			155000	15	
	2020-01-15	pH meter calibration issue - spurious data.	26.7	10*	5738	7.7	89.2	5	4		833	123	124	28	1410	322	164	0.01	0.001	0.05	0.02	0.005	1	0.01	0.01	1	0.01	0.01	420	140	5	10	
	2020-07-07	Clear.	16.6	6.4	3695	9	115	5	2.8	5	605	88	91	20	1020	197	175	0.01	0.002	0.05	0.01	0.004	0.9	0.01	0.04	0.9	0.15	0.04	40	10	6860		
Reporting Period (2021/2022)	2020-08-12	Clear	16.8	8.2	3496	9.6	89	12	7.6	5	535	91	82	19	1020	182	166	0.01	0.002	0.05	0.02	0.001	1	0.01	0.04	0.9	0.06	0.05	50	10	43800	8	
	2020-09-16		19.4	8.18	3629	8.41	108.1	5	23.42	5	575	88	85	19	1080	191	174	0.01	0.001	0.05	0.02	0.001	0.8	0.01	0.01	0.8	0.06	0.01	20	80	4170	11	
	2020-10-14		21	8.41	3445	5.64	94.8	5	16.1	5	563	94	82	19	1030	224	171	0.01	0.002	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.01	0.01			2940	5	
	2020-11-11		22.9	8.42	3659	8.96	75.1	5	3.1		544	87	81	19	1050	232	146	0.03	0.002	0.05	0.01	0.003	0.7	0.01	0.01	0.7	0.04	0.01	20	50	1560	7	
	2021-02-24	Clear	25.7	8.31	3095	8.07	50.6	5	3.7		430	76	65	16	911	198	128	0.03	0.002	0.05	0.01	0.004	0.6	0.01	0.01	0.6	0.1	0.01	140	80	6390	7	
	2021-06-10	Clear	17.4	8.04	2448	8.73	62.8		3.88		390	69	56	14	758	163	138	0.01	0.002	0.05	0.01	0.001	0.8	0.02	0.04	0.7	0.23	0.06	10	70	5	3	
	2021/2022	N/A																															
2022/2023	2022-08-31	Cloudy, Very Turbid	16.98	7.4	370	6.73	206.1		371		52	25	7	3	92	30	49	0.01	0.001	0.05	0.13	0.002	1.3	0.01	0.48	0.8	0.02	0.48			5	10	
	2023-02-23	Cloudy, Turbid	26.2	6.92	556	6.92	243.9		65.64		48	43	7	4	85	42	71	0.01	0.001	0.05	0.04	0.002	0.9	0.01	0.39	0.5	0.02	0.39			5	2	
2023/2024	2024-02-21	Clear	27.9	8.31	3541	5.13	-77.2		8.3		483	145	71	20	912	325	163	0.01	0.001	0.05	0.01	0.001	0.3	0.01	0.01	0.3	0.01	0.01</					

Site: DP1-5		Physical										Major Cations & Anions						Metals			Nutrients							Bacteria / Algae				
Sample Date	Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20							<20		<1000/100	<230/100	<50000	<10
2017/2018	30/10/2017	Commencement of extraction																														
	11/01/2018		28.2	7.39	4020	0.47	-4.9	19	26.1	5	645	135	99	24	1120	229	245	0.01	0.002	0.05	0.05	0.01	1.4	0.01	0.01	1.4	0.35	0.01	40	50		
	24/01/2018		27.4	7.49	4671	2.74	36.7		84																							
	7/02/2018		25.5	7.48	4979	4.08	20		112	5	704	146	104	26	1370	309	268	0.11	0.002	0.3	0.09	0.01	1.2	0.01	0.02	1.2	0.18	0.02	60	60		
	8/02/2018	Last day of first extraction campaign.																														
31/05/2018		19.3	8.11	3936	5.07	59.4		6.5	5	626	127	95	22	1280	282	270	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.07	0.03	30	90	22300	8	
2018 / 2019	25/10/2018		20.5	8.44	4517	5.22	89	5	4.6	5	667	121	100	22	1250	338	214	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.03	0.01	10	30		
	15/01/2019		23.9	7.55	4302	0.36	-220	5	4.2	5	653	114	99	22	1270	290	232	0.01	0.002	0.08	0.02	0.01	0.8	0.01	0.01	0.8	0.05	0.01	20	150		
	3/04/2019		23.5	7.53	5451	0.59	-104.5	7	5.5	5	742	127	111	24	1240	293	180	0.03	0.002	0.05	0.02	0.001	1	0.01	0.01	1	0.04	0.01	120	100		
2019 / 2020	3/07/2019		17.9	8.1	6687	2.46	85	5	2.2	5	728	127	110	24	1320	257	232	0.01	0.001	0.05	0.01	0.001	1.3	0.02	0.1	1.2	0.29	0.12	330	360		
	2/10/2019		19.4	8	5221	1.5	36.4	5	2.6	5	764	132	117	25	1360	303	231	0.01	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.02	0.01	80	40		
2020/2021	7/07/2020	Clear.	16.7	6.4	3693	8.8	115	5	2.6	5	587	85	88	20	1020	196	174	0.01	0.002	0.05	0.01	0.004	1	0.01	0.04	1	0.14	0.04	50	20		
	12/08/2020	Clear	16.9	8.2	3499	9.5	89	5	7.8	5	544	89	82	19	1020	185	171	0.01	0.002	0.05	0.01	0.001	1	0.02	0.03	0.9	0.05	0.05	30	20		
	16/09/2020		18.1	7.75	3635	5.86	120	5	24.61	5	550	85	81	18	1080	192	177	0.01	0.001	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.01	0.02	10	20		
	14/10/2020		19.3	8.03	3442	2.56	47.8	5	20.5	5	569	95	84	19	1030	219	172	0.06	0.002	0.05	0.02	0.001	0.7	0.01	0.01	0.7	0.05	0.01				
	11/11/2020		22.1	8.11	3654	4.61	83	5	2.8		540	88	82	19	1040	231	159	0.02	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	20	100		
	24/02/2021	Clear	25.5	8.26	3095	7.48	52.2		5.1																							
2021/2022	N/A																															
2022/2023	N/A																															
2025/2026	2025-10-08	Slightly Turbid	21.71	7.8	3944	1.15	139.3		57.9		562	101	83	21	1110	257	75	0.01	0.001	0.05	0.04	0.001	0.9	0.01	0.08	0.8	0.07	0.08			5	2
Reporting Period (2025/2026)	Average	-	21.7	7.80	3944	1.15	139.3	0	57.9	0	562	101	83	21	1110	257	75	0.01	0.001	0.05	0.04	0.001	0.9	0.01	0.08	0.8	0.07	0.08	0	0	5	2
	Maximum	-	21.7	7.80	3944	1.15	139.3	0	57.9	0	562	101	83	21	1110	257	75	0.01	0.001	0.05	0.04	0.001	0.9	0.01	0.08	0.8	0.07	0.08	0	0	5	2
	Minimum	-	21.7	7.80	3944	1.15	139.3	0	57.9	0	562	101	83	21	1110	257	75	0.01	0.001	0.05	0.04	0.001	0.9	0.01	0.08	0.8	0.07	0.08	0	0	5	2
All Results	Average	-	21.6	7.79	4297	3.90	40.2	6	23.1	5	634	112	95	22	1179	256	200	0.03	0.002	0.07	0.02	0.004	0.9	0.01	0.03	0.9	0.10	0.03	67	87	11153	5
	Maximum	-	28.2	8.44	6687	9.50	139.3	19	112.0	5	764	146	117	26	1370	338	270	0.11	0.005	0.30	0.09	0.010	1.4	0.02	0.10	1.4	0.35	0.12	330	360	22300	8
	80 th Percentile	-	25.5	8.16	5124	6.83	104.6	6	45.2	5	728	132	110	24	1320	303	245	0.05	0.002	0.05	0.04	0.010	1.2	0.01	0.04	1.2	0.18	0.05	96	120	IS	IS
	Median (50 th Percentile)	-	21.1	7.90	3982	3.41	55.8	5	6.0	5	636	118	97	22	1180	257	197	0.01	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.8	0.05	0.02	35	55	11153	5
	20 th Percentile	-	18.0	7.48	3553	0.81	5.1	5	2.7	5	550	88	82	19	1030	196	171	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.02	0.01	16	20	IS	IS
Minimum	-	16.7	6.40	3095	0.36	-220.0	5	2.2	5	540	85	81	18	1020	185	75	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.01	0.01	10	20	5	2	

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data

Site: DP1-6		Physical										Major Cations & Anions							Metals			Nutrients								Bacteria / Algae			
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives		-	-	6.5-9.0	<6192	>6		<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10	
2017/2018	2017-10-30	Commencement of extraction																															
	2018-01-24		27.4	7.47	4667	2.09	34.4		95		605	131	97	23	1250	302	220	0.01	0.002	0.05	0.08	0.01	1.5	0.01	0.01	1.5	0.21	0.01			33600	21	
	2018-02-07		24.8	7.56	4858	1.11	23.1		10																								
	2018-02-08	Last day of first extraction campaign.																															
	2018-03-08		24.3	7.85	4651	3.37	53		14.2		630	133	96	23	1230	238	252	0.02	0.002	0.05	0.01	0.01	1	0.01	0.01	1	0.01	0.01			1220	39	
2018/2019	2018-04-13		24.9	8.09	4655	6.34	138		4.3												0.01	0.01	0.7	0.01	0.03	0.7	0.07	0.03		50	70	12900	8
	2018-05-31		19.4	8.1	3942	5.38	59		7.1	5	630	127	95	22	1280	283	271	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.07	0.03			24100	8	
	2018-10-25		19.6	8.31	4531	3.12	82	5	3.1	5	710	124	105	23	1270	344	220	0.05	0.005	0.05	0.02	0.01	0.8	0.01	0.01	0.8	0.03	0.01	70	20	24100	8	
	2018-12-03		21.6	7.79	5041	2.31	-130	10	2.3		637	122	100	22	1310	287	275	0.02	0.002	0.18	0.02	0.01	1	0.01	0.01	1	0.11	0.01			276000	8	
	2018-12-17		23.4	7.99	4724	1.5	-130	5	2.1		654	122	95	23	1140	276	225	0.02	0.001	0.13	0.02	0.01	1	0.01	0.01	1	0.04	0.01			16900	5	
	2019-01-15		21.8	7.42	4098	0.3	-276.5	5	2.3	5	648	121	98	22	1240	278	265	0.01	0.002	0.16	0.02	0.01	0.7	0.01	0.01	0.7	0.04	0.01	30	90	5	4	
	2019-02-07		20.2	7.14	4332	0.11	-268.3	19	2.3		731	148	114	25	1270	274	302	0.01	0.002	0.05	0.01	0.005	1.4	0.01	0.01	1.4	0.56	0.01			75	2	
	2019-02-21		20.6	7.07	4545	0.45	-219.7	5	1.6		728	137	111	25	1310	271	304	0.01	0.002	0.08	0.01	0.001	1.6	0.01	0.01	1.6	0.83	0.01			5	5	
	2019-03-06		21.3	7.27	4701	0.64	-313	5	3.4		692	133	107	23	1320	196	342	0.01	0.002	0.05	0.05	0.005	2.6	0.01	0.01	2.6	1.43	0.01			5	4	
	2019-03-21		24.4	7.69	6192	0.56	-53	5	3.37		751	120	115	26	1340	283	239	0.02	0.002	0.1	0.04	0.002	1.2	0.01	0.01	1.2	0.14	0.01			5	14	
	2019-04-03		24	7.62	5477	0.21	-38.7	9	12.2	5	733	132	113	24	1260	311	217	0.02	0.002	0.13	0.04	0.003	1.2	0.01	0.01	1.2	0.04	0.01	60	80	2110	46	
	2019-05-01		22.8	8.17	4511	7.4	-7.4	6	5.9		786	130	118	26	1310	287	187	0.02	0.002	0.05	0.02	0.001	0.9	0.01	0.01	0.9	0.03	0.01			6590	11	
	2019-06-05		17.7	7.8	4071	6.9	63.5	5	-9.7		722	130	113	25	1280	294	218	0.01	0.002	0.05	0.01	0.003	1.4	0.02	0.04	1.3	0.38	0.06			17400	10	
	2019-07-03		18.1	8.13	6676	2.41	86	5	1.6	5	724	125	110	24	1300	255	234	0.01	0.001	0.05	0.01	0.001	1.2	0.02	0.1	1.1	0.33	0.12	260	210	580	5	
	2019-07-31		17.5	8.18	7141	1.92	114.4	5	9.9		672	118	102	23	1320	313	232	0.01	0.001	0.05	0.02		1.1	0.01	0.12	1	0.19	0.12			1180	6	
2019-09-03		17.8	7.9	5473	2.7	153	5	2.7		730	123	110	23	1330	316	218	0.01	0.002	0.05	0.01	0.001	0.9	0.01	0.03	0.9	0.17	0.03			590	4		
2019-10-02		20.1	8	5207	1.46	5	5	1.3	5	736	129	112	24	1350	303	242	0.01	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.02	0.01	90	40	1180	2		
2019-11-06		18.8	7.8	4932	1.5	-154.9	5	-3.1		702	108	104	24	1250	281	256	0.01	0.002	0.13	0.02	0.001	1.2	0.01	0.01	1.2	0.42	0.01			1320	3		
2020-01-15	pH meter calibration issue - spurious data.	21.8	10.7*	4817	1.3	-162.4	5	12.9		791	124	119	27	1360	302	186	0.01	0.001	0.05	0.15	0.025	1.3	0.01	0.01	1.3	0.02	0.01	10	20	5	149		
2020/2021	2020-07-07	Clear.	16.7	6.4	3691	9	114	5	2.7	5	596	87	90	20	1020	194	175	0.01	0.002	0.05	0.01	0.002	0.9	0.01	0.03	0.9	0.14	0.03	50	10	6780		
	2020-08-12	Clear	17	8	3529	7.8	93	5	11.5	5	547	89	82	19	1020	188	168	0.02	0.002	0.05	0.02	0.001	1	0.03	0.02	1	0.15	0.05	10	20	27700	5	
	2020-09-16		17.5	7.54	3635	3.38	122.1	5	20.94	5	562	87	83	19	1080	192	177	0.01	0.001	0.05	0.02	0.001	0.8	0.02	0.01	0.8	0.09	0.02	10	10	3810	6	
	2020-10-14		18.3	7.68	3431	1.19	-99.8	5	16.1	5	526	90	79	18	1020	216	176	0.02	0.002	0.05	0.01	0.001	0.8	0.01	0.01	0.8	0.25	0.01			360	8	
	2020-11-11		19.3	7.73	3638	2.33	-109.5	5	5.2		541	86	82	19	1040	219	170	0.01	0.002	0.22	0.01	0.001	0.8	0.01	0.01	0.8	0.14	0.01	60	160	125	5	
	2021-02-24	Clear	25.1	7.99	3173	4.89	55.6	5	5.7		450	80	68	16	936	199	136	0.02	0.002	0.05	0.01	0.001	0.7	0.01	0.01	0.7	0.02	0.01	60	20	5380	7	
	2021-06-10	Clear	17.2	8.02	2431	8.51	63.1		3.95		403	72	58	15	774	168	134	0.01	0.001	0.05	0.01	0.001	0.8	0.02	0.04	0.7	0.2	0.06	10	60	5	1	
2021/2022	N/A																																
2022/2023	2022-08-31	Cloudy, Very Turbid	16.68	7.4	363	6.51	205.1		394		50	24	7	3	90	31	50	0.01	0.001	0.05	0.14	0.002	1.2	0.01	0.46	0.7	0.01	0.46			5	10	
	2023-02-23	Cloudy, Turbid	25.9	7.25	548	6.93	248.4		61.67		47	43	7	4	86	42	71	0.01	0.001	0.05	0.03	0.001	1	0.01	0.4	0.6	0.01	0.4			5	3	
2023/2024	2024-02-21	Clear	27.79	8.29	3543	4.74	-76.5		8.2		460	142	68	19	910	330	164	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01			1240	3	
2025/2026	2025-10-08	Turbid	21.52	7.66	3851	0.41	129		119		566	102	83	21	1120	259	76	0.01	0.001	0.05	0.07	0.001	1.1	0.01	0.09	1	0.03	0.09			5	4	
Reporting Period (2025/2026)	Average	-	27.8	8.29	3543	4.74	-76.5	NS	8.2	NS	460	142	68	19	910	330	164	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3	
	Maximum	-	27.8	8.29	3543	4.74	-76.5	NS	8.2	NS	460	142	68	19	910	330	164	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3	
	Minimum	-	27.8	8.29	3543	4.74	-76.5	NS	8.2	NS	460	142	68	19	910	330	164	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3	
All Results	Average	-	21.1	7.73	4288	3.39	-10.2	6	22.8	5	606	111	92	21	1123	249	211	0.01	0.002	0.07	0.03	0.005	1.1	0.01	0.05	1.0	0.20	0.05	59	62	14394	14	
	Maximum	-	27.8	8.31	7141	9.00	248.4	19	394.0	5	791	148	119	27	1360	344	342	0.05	0.005	0.22	0.15	0.025	2.6	0.03	0.46								

Site: DP1-8		Physical										Major Cations & Anions						Metals				Nutrients							Bacteria / Algae				
Sample Date	Comments / Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity µS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a	
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20								<20		<1000/100	<230/100	<50000	<10
2017/2018	2017-10-30	Commencement of extraction																															
	2018-02-07		25.7	7.55	4994	4.64	18		153																				40	80			
	2018-03-08		24.7	7.49	4973	0.72	15.3		7.4		633	134	97	23	1240	176	262	0.04	0.002	0.12	0.01	0.01	1.2	0.01	0.01	1.2	0.04	0.01			540	26	
	2018-04-13		25	8	4656	6.03	102		6.9																						8790	6	
	2018-02-08	Last day of first extraction campaign.																															
2018/2019	2018-05-31		19.6	8.11	3968	5.71	57		7.7	5	633	129	95	22	1270	306	271	0.01	0.002	0.05	0.01	0.01	0.7	0.01	0.03	0.7	0.06	0.03	110	170	19100	9	
	2018-10-25		26.1	8.39	4586	4.64	78	5	4.6	5	677	122	101	22	1260	333	221	0.05	0.005	0.05	0.03	0.01	0.8	0.01	0.01	0.8	0.01	0.01	10	90	26000	13	
	2018-12-03		22.8	8	5042	4.02	-111	8	5.2		633	116	99	22	1330	284	294	0.02	0.002	0.1	0.03	0.01	1.5	0.01	0.01	1.5	0.59	0.01			34800	8	
	2018-12-17		21.3	7.62	4463	0.64	-162	5	1.4		640	118	93	22	1120	264	259	0.02	0.001	0.13	0.01	0.01	0.8	0.01	0.01	0.8	0.01	0.01			405	2	
	2019-02-07																																
	2019-02-21	Hit Bottom																															
2019/2020	2020-01-15	pH meter calibration issue - spurious data.																															
	2020-07-07		19.6	9.9*	4577	1.1	-246.3	5	3.5		759	132	111	25	1290	229	258	0.01	0.001	0.05	0.04	0.015	2.4	0.01	0.01	2.4	1.22	0.01	60	270	5	6	
2020/2021	2020-11-11	Clear.	16.7	6.4	3692	8.8	116	5	3.2	5	608	88	91	20	1020	196	175	0.01	0.002	0.05	0.01	0.001	0.9	0.01	0.04	0.9	0.13	0.04	50	10	2680		
	2021-02-24	Clear	18	7.46	3625	1.79	-185.4	5	3.1		520	83	79	18	1060	212	207	0.01	0.002	0.11	0.01	0.002	1.4	0.01	0.01	1.4	0.17	0.01	40	190	5	2	
	2021-06-10	Clear	20.9	7.19	3632	0.9	-233.7	5	14.6		517	91	80	19	1050	178	218	0.02	0.004	0.06	0.03	0.003	2.2	0.01	0.01	2.2	1.3	0.01	120	280	390	34	
	2021-06-10	Clear	17.2	8.02	2434	8.57	62.6		3.97		402	71	58	15	774	170	139	0.01	0.002	0.05	0.01	0.001	0.7	0.02	0.04	0.6	0.2	0.06	10	20	5	1	
2022/2023	2022-08-31	Cloudy, Very Turbid		16.7	7.22	371	6.57	205.5		443	52	26	7	4	92	31	49	0.01	0.001	0.05	0.17	0.003	1.4	0.01	0.44	1	0.01	0.44			5	10	
	2023-02-23	Cloudy, Turbid		25.2	6.62	545	5.47	207.4		106.23	42	44	7	4	87	41	73	0.01	0.001	0.05	0.04	0.002	0.9	0.01	0.44	0.5	0.01	0.44			5	2	
2023/2024	2024-02-21	Clear		27.69	8.28	3552	4.37	-76.2		6.8	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01			1240	3	

Reporting Period (2023/2024)	Average	27.7	8.28	3552	4.37	-76.2	NS	6.8	NS	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3
	Maximum	27.7	8.28	3552	4.37	-76.2	NS	6.8	NS	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3
All Results	Minimum	27.7	8.28	3552	4.37	-76.2	NS	6.8	NS	466	139	69	18	905	331	167	0.01	0.001	0.05	0.02	0.001	0.4	0.01	0.01	0.4	0.02	0.01	NS	NS	1240	3
	Average	21.8	7.54	3674	4.26	-10.2	5	51.4	5	506	99	76	18	961	212	199	0.02	0.002	0.07	0.03	0.006	1.2	0.01	0.08	1.1	0.29	0.08	55	139	6712	9
	Maximum	27.7	8.39	5042	8.80	207.4	8	443.0	5	759	139	111	25	1330	333	294	0.05	0.005	0.13	0.17	0.015	2.4	0.02	0.44	2.4	1.30	0.44	120	280	34800	34
	80 th Percentile	25.6	8.04	4910	6.46	113.2	6	87.9	IS	647	132	99	22	1274	311	264	0.02	0.002	0.11	0.04	0.010	1.6	0.01	0.12	1.6	0.72	0.14	112	272	19100	16
	Median (50 th Percentile)	21.3	7.55	3968	4.64	18.0	5	6.8	5	608	116	91	20	1060	212	218	0.01	0.002	0.05	0.02	0.003	0.9	0.01	0.01	0.9	0.06	0.01	45	130	473	6
20 th Percentile	17.4	7.08	2658	0.94	-180.7	5	3.3	IS	332	66	48	13	638	144	126	0.01	0.001	0.05	0.01	0.001	0.7	0.01	0.01	0.6	0.01	0.01	10	18	5	2	
Minimum	16.7	6.40	371	0.64	-246.3	5	1.4	5	42	26	7	4	87	31	49	0.01	0.001	0.05	0.01	0.001	0.4	0.01	0.01	0.4	0.01	0.01	10	10	5	1	

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data

Site: DP1-10		Physical									Major Cations & Anions							Metals			Nutrients							Bacteria / Algae				
Sample Date	Comments/ Flow	Water Level m AHD	Temp °C	pH	Electrical Conductivity uS/cm	Dissolved Oxygen mg/L	Redox mV	Total Suspended Solids mg/L	Turbidity NTU	Oil & Grease mg/L	Sodium mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Chloride mg/L	Sulfate mg/L	Bicarbonate mg/L	Aluminium mg/L	Arsenic mg/L	Iron (filterable) mg/L	Total Phosphorous mg/L	Reactive Phosphorous mg/L	Total Nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	TKN mg/L	Ammonia mg/L	NOx mg/L	Faecal coliforms cells/ml	Enterococci cells/ml	Potentially Toxic Cyanobacteria	Chlorophyll a
Objectives		-	-	6.5-9.0	<6192	>6			<20	10	<813		<119	<40	<1390	<800	<400	<0.5	<0.42	<20							<20		<1000/100	<230/100	<50000	<10
2022/2023	31/08/2022	Cloudy, Very Turbid	16.95	7.34	359	6.5	215.1		514		54	27	8	4	90	31	50	0.01	0.001	0.05	0.18	0.004	1.3	0.01	0.44	0.9	0.01	0.44			5	10
	23/02/2023	Cloudy, Turbid	25.1	6.81	542	5.46	203.2		103.46		49	44	8	4	85	41	73	0.01	0.001	0.05	0.08	0.003	1	0.01	0.43	0.6	0.01	0.43			5	2

Reporting Period (2022/2023)	Average	-	21.0	7.08	451	5.98	209.2	NS	308.7	NS	52	36	8	4	88	36	62	0.01	0.001	0.05	0.13	0.004	1.2	0.01	0.44	0.8	0.01	0.44	NS	NS	5	6
	Maximum	-	25.1	7.34	542	6.50	215.1	NS	514.0	NS	54	44	8	4	90	41	73	0.01	0.001	0.05	0.18	0.004	1.3	0.01	0.44	0.9	0.01	0.44	NS	NS	5	10
All Results	Minimum	-	17.0	6.81	359	5.46	203.2	NS	103.5	NS	49	27	8	4	85	31	50	0.01	0.001	0.05	0.08	0.003	1.0	0.01	0.43	0.6	0.01	0.43	NS	NS	5	2
	Average	-	21.0	7.08	451	5.98	209.2	NS	308.7	NS	52	36	8	4	88	36	62	0.01	0.001	0.05	0.13	0.004	1.2	0.01	0.44	0.8	0.01	0.44	NS	NS	5	6
	Maximum	-	25.1	7.34	542	6.50	215.1	NS	514.0	NS	54	44	8	4	90	41	73	0.01	0.001	0.05	0.18	0.004	1.3	0.01	0.44	0.9	0.01	0.44	NS	NS	5	10
	80 th Percentile	-	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
Median (50 th Percentile)	-	21.0	7.08	451	5.98	209.2	NS	308.7	NS	52	36	8	4	88	36	62	0.01	0.001	0.05	0.13	0.004	1.2	0.01	0.44	0.8	0.01	0.44	NS	NS	5	6	
20 th Percentile	-	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS	IS
Minimum	-	17.0	6.81	359	5.46	203.2	NS	103.5	NS	49	27	8	4	85	31	50	0.01	0.001	0.05	0.08	0.003	1.0	0.01	0.43	0.6	0.01	0.43	NS	NS	5	2	

Red and bold values exceed the objective value for that analyte. IS - Insufficient data for statistical analysis. NS = No Sample Required. ND = No Data