



DEW - Department of Environment and Water
ATTN: Claire Sims
81-95 Waymouth Street

SA 5000 AUSTRALIA

28/12/2022

Dear Claire

Please find attached the Final Analytical Report for

Customer Service Request: 143419-2022-CSR-4

Account: 143419

Project:

AWQC-176938 DEW - Healthy Coorong Healthy Basin - Non Routine Event 2- 22/23

AWQC Sample Receipt hours are Monday and Tuesday 8:30am to 8pm and Wednesday, Thursday and Friday 8:30am to 4:30pm.

Yours sincerely,

Scott Kraft
Customer Services Officer
Scott.Kraft@sawater.com.au
+61 8 7424 1250





FINAL REPORT: 352885

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Report Information

Project Name	AWQC-176938
Customer	DEW - Department of Environment and Water
CSR_ID	143419-2022-CSR-4

Analytical Results

Sampling Point	351213-EPA - Murray Mouth
Sampled Date	23/11/2022 1:35:00PM
Sample Received Date	24/11/2022 3:59:09PM
Sample Analysis Completed	16/12/2022 12:18:45PM
Sample ID	*2022-009-2590
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Algal Identification T0393(ADEL)			
Other Organisms		2560 cells/mL	
BLUE GREEN ALGAE			
Planktolyngbya		6890 cells/mL	
Cyanodictyon		16500 cells/mL	
CRYPTOPHYTES			
Chroomonas		19 cells/mL	
DIATOMS			
Aulacoseira		289 cells/mL	
Synedra		2 cells/mL	
Asterionella		8 cells/mL	
Cyclotella		712 cells/mL	
Fragilaria		1760 cells/mL	
Staurosira		808 cells/mL	
GREEN ALGAE			
Planctonema		4050 cells/mL	
Closterium		13 cells/mL	
Tetrastrum		1280 cells/mL	
Scenedesmus		1470 cells/mL	
Sphaerocystis		180 cells/mL	
Coelastrum		86 cells/mL	

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

BLUE GREEN ALGAE



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Analytical Results

Sampling Point	351213-EPA - Murray Mouth
Sampled Date	23/11/2022 1:35:00PM
Sample Received Date	24/11/2022 3:59:09PM
Sample Analysis Completed	16/12/2022 12:18:45PM
Sample ID	*2022-009-2590
Status	Endorsed
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Algal Biovolume T0393(ADEL)

23/11/2022

Planktolyngbya	0.03 mm3/L
Cyanodictyon	<0.01 mm3/L

CRYPTOPHYTES

Chroomonas	<0.01 mm3/L
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DIATOMS

Aulacoseira	0.83 mm3/L
Synedra	<0.01 mm3/L
Asterionella	<0.01 mm3/L
Cyclotella	0.36 mm3/L
Fragilaria	1.13 mm3/L
Staurosira	0.15 mm3/L

GREEN ALGAE

Closterium	0.07 mm3/L
Scenedesmus	0.37 mm3/L
Sphaerocystis	0.05 mm3/L
Coelastrum	<0.01 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.03 mm3/L
# Total Diatom Biovolume	2.47 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total	34100 cells/mL
Blue Green Algae - Total	23400 cells/mL
Diatoms - Total	3580 cells/mL



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Algal Count - Total T0393(ADEL)

23/11/2022

Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	7080 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	49.1 µg/L
Phaeophytin a	0.1	33.1 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	82 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	227 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	16.1 µg/L	
# Nitrate + Nitrite as NO3	2.3	71.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.89 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	71.461 µg/L	
Phosphorus-Filterable Reactive as P	0.5	23.9 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.253 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	3.71 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.87 mg/L	



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Analytical Results

Sampling Point	351213-EPA - Murray Mouth
Sampled Date	23/11/2022 1:35:00PM
Sample Received Date	24/11/2022 3:59:09PM
Sample Analysis Completed	16/12/2022 12:18:45PM
Sample ID	*2022-009-2590
Status	Endorsed
Collection Type	Customer Collected

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	9.8 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	17.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		67 mg/L	
Bicarbonate		82 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	974 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	540 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	140 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			25/11/2022
Suspended Solids	1.0	67 mg/L	



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Analytical Results

Sampling Point	353179-EPA - Tauwichee Barrage Upstream
Sampled Date	23/11/2022 2:20:00PM
Sample Received Date	24/11/2022 3:59:35PM
Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2593
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

Other Organisms	610 cells/mL
BLUE GREEN ALGAE	
Planktolyngbya	610 cells/mL
Cyanodictyon	56200 cells/mL
Cyanocatena	1700 cells/mL
CRYPTOPHYTES	
Cryptomonas	30 cells/mL
Chroomonas	210 cells/mL
DIATOMS	
Aulacoseira	162 cells/mL
Fragilaria	20 cells/mL
Cyclotella	28 cells/mL
Staurosira	80 cells/mL
GREEN ALGAE	
Planctonema	1000 cells/mL
Scenedesmus	240 cells/mL
Tetrastrum	240 cells/mL
Monoraphidium	170 cells/mL
Oocystis sp_1_(small_cells)	450 cells/mL
Crucigenia	1120 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

BLUE GREEN ALGAE	
Planktolyngbya	<0.01 mm3/L
Cyanodictyon	0.03 mm3/L
Cyanocatena	<0.01 mm3/L
CRYPTOPHYTES	
Cryptomonas	0.03 mm3/L



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Analytical Results

Sampling Point	353179-EPA - Tauwichee Barrage Upstream
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Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2593
Status	Endorsed
Collection Type	Customer Collected

Algal Biovolume T0393(ADEL)

23/11/2022

Chroomonas 0.01 mm3/L

DIATOMS

Aulacoseira 0.46 mm3/L

Fragilaria 0.01 mm3/L

Cyclotella 0.01 mm3/L

Staurosira 0.02 mm3/L

GREEN ALGAE

Scenedesmus 0.06 mm3/L

Monoraphidium 0.15 mm3/L

Oocystis sp_1_(small_cells) 0.08 mm3/L

Crucigenia 0.03 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

Total Algae Biovolume Not Calculated mm3/L

Total Blue_Green Algae Biovolume 0.03 mm3/L

Total Diatom Biovolume 0.50 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total 62300 cells/mL

Blue Green Algae - Total 58500 cells/mL

Diatoms - Total 290 cells/mL

Geosmin-MIB producing BGA - Total 0 cells/mL

Green Algae - Total 3220 cells/mL

Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 10.1°C



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Sample ID	*2022-009-2593
Status	Endorsed
Collection Type	Customer Collected

Chlorophyll a & Phaeophytin a T0380-02(ADEL)			24/11/2022
Chlorophyll a	0.1	27.5 µg/L	
Phaeophytin a	0.1	14.8 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	47 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	934 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	12.3 µg/L	
# Nitrate + Nitrite as NO3	2.3	54.5 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.87 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	90.298 µg/L	
Phosphorus-Filterable Reactive as P	0.5	30.2 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.194 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	3.92 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.86 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	10.1 mg/L	



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Analytical Results

Sampling Point	353179-EPA - Tauwichee Barrage Upstream
Sampled Date	23/11/2022 2:20:00PM
Sample Received Date	24/11/2022 3:59:35PM
Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2593
Status	Endorsed
Collection Type	Customer Collected

Total Organic Carbon T0158-07(ADEL)		05/12/2022
Total Organic Carbon	1	14.2 mg/L

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		69 mg/L	
Bicarbonate		84 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	3460 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	1940 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		7.9 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	66 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			25/11/2022
Suspended Solids	1.0	46 mg/L	



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Analytical Results

Sampling Point	353177-EPA - Tauwichee Barrage DS
Sampled Date	23/11/2022 2:20:00PM
Sample Received Date	24/11/2022 3:59:22PM
Sample Analysis Completed	16/12/2022 12:18:47PM
Sample ID	*2022-009-2594
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

Other Organisms	240 cells/mL
BLUE GREEN ALGAE	
Planktolyngbya	140 cells/mL
Cyanodictyon	11700 cells/mL
Cyanocatena	2800 cells/mL
CRYPTOPHYTES	
Chroomonas	320 cells/mL
DIATOMS	
Aulacoseira	22 cells/mL
Fragilaria	10 cells/mL
Staurosira	70 cells/mL
Cyclotella	40 cells/mL
GREEN ALGAE	
Planctonema	586 cells/mL
Closterium small_spp	14 cells/mL
Oocystis sp_1_(small_cells)	520 cells/mL
Scenedesmus	240 cells/mL
Crucigenia	880 cells/mL
Monoraphidium	100 cells/mL
Tetrastrum	440 cells/mL
Pediastrum	150 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

BLUE GREEN ALGAE	
Planktolyngbya	<0.01 mm3/L
Cyanodictyon	<0.01 mm3/L
Cyanocatena	<0.01 mm3/L
CRYPTOPHYTES	



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Analytical Results

Sampling Point	353177-EPA - Tauwitschere Barrage DS
Sampled Date	23/11/2022 2:20:00PM
Sample Received Date	24/11/2022 3:59:22PM
Sample Analysis Completed	16/12/2022 12:18:47PM
Sample ID	*2022-009-2594
Status	Endorsed
Collection Type	Customer Collected

Algal Biovolume T0393(ADEL)

23/11/2022

Chroomonas 0.02 mm3/L

DIATOMS

Aulacoseira 0.06 mm3/L
Fragilaria <0.01 mm3/L
Staurosira 0.01 mm3/L
Cyclotella 0.02 mm3/L

GREEN ALGAE

Oocystis sp_1_(small_cells) 0.09 mm3/L
Scenedesmus 0.06 mm3/L
Crucigenia 0.03 mm3/L
Monoraphidium 0.09 mm3/L
Pediastrum 0.18 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

Total Algae Biovolume Not Calculated mm3/L
Total Blue_Green Algae Biovolume <0.03 mm3/L
Total Diatom Biovolume 0.09 mm3/L
Total Green Algae Biovolume Not Calculated mm3/L
Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total 18000 cells/mL
Blue Green Algae - Total 14600 cells/mL
Diatoms - Total 142 cells/mL
Geosmin-MIB producing BGA - Total 0 cells/mL
Green Algae - Total 2930 cells/mL
Toxin producing BGA - Total 0 cells/mL



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Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	11.2 µg/L
Phaeophytin a	0.1	8.28 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	60 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	1100 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	49.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	217 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.17 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	175.214 µg/L	
Phosphorus-Filterable Reactive as P	0.5	58.6 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.144 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	4.10 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.12 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022



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Sampled Date	23/11/2022 2:20:00PM
Sample Received Date	24/11/2022 3:59:22PM
Sample Analysis Completed	16/12/2022 12:18:47PM
Sample ID	*2022-009-2594
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	9.9 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	12.5 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		71 mg/L	
Bicarbonate		86 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	3980 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	2240 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.0 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	50 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			25/11/2022
Suspended Solids	1.0	50 mg/L	



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Analytical Results

Sampling Point	31522-EPA - Mark Point
Sampled Date	23/11/2022 3:15:00PM
Sample Received Date	24/11/2022 3:58:21PM
Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2589
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

Other Organisms	180 cells/mL
BLUE GREEN ALGAE	
Merismopedia	160 cells/mL
CRYPTOPHYTES	
Cryptomonads	110 cells/mL
DIATOMS	
Aulacoseira	16 cells/mL
Cyclotella small_spp	3300 cells/mL
GREEN ALGAE	
Planctonema	246 cells/mL
Closterium small_spp	10 cells/mL
Oocystis sp_1_(small_cells)	210 cells/mL
Monoraphidium	120 cells/mL
Crucigenia	1240 cells/mL
Stichococcus	220 cells/mL
Scenedesmus	140 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

BLUE GREEN ALGAE	
Merismopedia	0.04 mm3/L
CRYPTOPHYTES	
Cryptomonads	0.04 mm3/L
DIATOMS	
Aulacoseira	0.05 mm3/L
Cyclotella small_spp	0.11 mm3/L
GREEN ALGAE	
Monoraphidium	0.04 mm3/L
Crucigenia	0.16 mm3/L



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Analytical Results

Sampling Point	31522-EPA - Mark Point
Sampled Date	23/11/2022 3:15:00PM
Sample Received Date	24/11/2022 3:58:21PM
Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2589
Status	Endorsed
Collection Type	Customer Collected

Algal Biovolume T0393(ADEL)

23/11/2022

Scenedesmus	0.02 mm3/L
# Algal Biovolume Comment	Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.
# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	<0.01 mm3/L
# Total Diatom Biovolume	0.21 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total	5770 cells/mL
Blue Green Algae - Total	160 cells/mL
Diatoms - Total	3320 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	2190 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	19.0 µg/L
Phaeophytin a	0.1	4.36 µg/L

Inorganic Chemistry - Nutrients

LOR

Result

Test Start Date

Sample temperature at time of receipt 10.1°C

Ammonia as N (ADEL)

28/11/2022

# Ammonia as N	1	22 µg/L
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Chloride T0104-02(ADEL)

28/11/2022



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Analytical Results

Sampling Point	31522-EPA - Mark Point
Sampled Date	23/11/2022 3:15:00PM
Sample Received Date	24/11/2022 3:58:21PM
Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2589
Status	Endorsed
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Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	2190 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	115 µg/L	
# Nitrate + Nitrite as NO3	2.3	509 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		0.99 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	78.936 µg/L	
Phosphorus-Filterable Reactive as P	0.5	26.4 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.082 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	4.36 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	0.87 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	9.2 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	11.4 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		79 mg/L	
Bicarbonate		97 mg/L	



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Analytical Results

Sampling Point	31522-EPA - Mark Point
Sampled Date	23/11/2022 3:15:00PM
Sample Received Date	24/11/2022 3:58:21PM
Sample Analysis Completed	16/12/2022 12:18:48PM
Sample ID	*2022-009-2589
Status	Endorsed
Collection Type	Customer Collected

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	7230 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	4150 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		7.9 pH units	
Temperature at which pH is measured		22.7 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	15 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			25/11/2022
Suspended Solids	1.0	4 mg/L	



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Analytical Results

Sampling Point	31523-EPA - Long Point
Sampled Date	23/11/2022 4:10:00PM
Sample Received Date	24/11/2022 3:58:31PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2576
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

05/12/2022

Other Organisms	60 cells/mL
BLUE GREEN ALGAE	
Planktolyngbya	580 cells/mL
Cyanodictyon	3120 cells/mL
CRYPTOPHYTES	
Cryptomonas	70 cells/mL
DIATOMS	
Nitzschia	2 cells/mL
Cyclotella small_spp	29200 cells/mL
Nitzschia small_spp	30 cells/mL
DINOFLAGELLATES	
Oxyrrhis	10 cells/mL
GREEN ALGAE	
Closterium	2 cells/mL
Planctonema	198 cells/mL
Scenedesmus	450 cells/mL
Pediastrum	30 cells/mL
Crucigenia	2350 cells/mL
Monoraphidium	525 cells/mL
Schroederia	20 cells/mL
Stichococcus	2800 cells/mL
Tetrastrum	267 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

BLUE GREEN ALGAE	
Planktolyngbya	0.47 mm3/L
Cyanodictyon	<0.01 mm3/L
CRYPTOPHYTES	



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Sampling Point	31523-EPA - Long Point
Sampled Date	23/11/2022 4:10:00PM
Sample Received Date	24/11/2022 3:58:31PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2576
Status	Endorsed
Collection Type	Customer Collected

Algal Biovolume T0393(ADEL)

23/11/2022

Cryptomonas 0.04 mm3/L

DIATOMS

Nitzschia <0.01 mm3/L

Cyclotella small_spp 0.01 mm3/L

Nitzschia small_spp <0.01 mm3/L

GREEN ALGAE

Scenedesmus 1.43 mm3/L

Pediastrum 0.11 mm3/L

Crucigenia 0.08 mm3/L

Monoraphidium 0.07 mm3/L

Schroederia <0.01 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

Total Algae Biovolume Not Calculated mm3/L

Total Blue_Green Algae Biovolume <0.02 mm3/L

Total Diatom Biovolume 1.43 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total 39700 cells/mL

Blue Green Algae - Total 3700 cells/mL

Diatoms - Total 29200 cells/mL

Geosmin-MIB producing BGA - Total 0 cells/mL

Green Algae - Total 6640 cells/mL

Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 10.1°C



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Analytical Results

Sampling Point	31523-EPA - Long Point
Sampled Date	23/11/2022 4:10:00PM
Sample Received Date	24/11/2022 3:58:31PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2576
Status	Endorsed
Collection Type	Customer Collected

Chlorophyll a & Phaeophytin a T0380-02(ADEL)			24/11/2022
Chlorophyll a	0.1	37.5 µg/L	
Phaeophytin a	0.1	8.71 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	34 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	1430 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	1.8 µg/L	
# Nitrate + Nitrite as NO3	2.3	7.97 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.15 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	46.046 µg/L	
Phosphorus-Filterable Reactive as P	0.5	15.4 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.102 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	3.26 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.15 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	10.4 mg/L	



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Analytical Results

Sampling Point	31523-EPA - Long Point
Sampled Date	23/11/2022 4:10:00PM
Sample Received Date	24/11/2022 3:58:31PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2576
Status	Endorsed
Collection Type	Customer Collected

Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	13.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		84 mg/L	
Bicarbonate		94 mg/L	
Carbonate		4 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	4700 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	2660 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.6 pH units	
Temperature at which pH is measured		22.4 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	32 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	20 mg/L	



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Analytical Results

Sampling Point	53032-EPA - Noonameena
Sampled Date	23/11/2022 4:50:00PM
Sample Received Date	24/11/2022 3:59:48PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2596
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

CRYPTOPHYTES

Cryptomonas	46 cells/mL
Chroomonas	140 cells/mL

DIATOMS

Cyclotella	2 cells/mL
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Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

CRYPTOPHYTES

Cryptomonas	0.05 mm3/L
Chroomonas	<0.01 mm3/L

DIATOMS

Cyclotella	<0.01 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	0.05 mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	<0.01 mm3/L
# Total Green Algae Biovolume	0.00 mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total	188 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	2 cells/mL



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Analytical Results

Sampling Point	53032-EPA - Nooneameena
Sampled Date	23/11/2022 4:50:00PM
Sample Received Date	24/11/2022 3:59:48PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2596
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)	23/11/2022
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	0 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C	
Chlorophyll a & Phaeophytin a T0380-02(ADEL)	24/11/2022
Chlorophyll a	0.1 1.46 µg/L
Phaeophytin a	0.1 1.13 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	25 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	5040 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	80.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	354 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.17 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	13.754 µg/L	
Phosphorus-Filterable Reactive as P	0.5	4.6 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.048 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	3.04 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.09 mg/L	



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Analytical Results

Sampling Point	53032-EPA - Nooneameena
Sampled Date	23/11/2022 4:50:00PM
Sample Received Date	24/11/2022 3:59:48PM
Sample Analysis Completed	16/12/2022 12:18:50PM
Sample ID	*2022-009-2596
Status	Endorsed
Collection Type	Customer Collected

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	9.1 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	9.7 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		102 mg/L	
Bicarbonate		111 mg/L	
Carbonate		6 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	16800 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	10100 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.5 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	3.5 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	<1 mg/L	



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Analytical Results

Sampling Point	31524-EPA - Bonneys
Sampled Date	23/11/2022 5:10:00PM
Sample Received Date	24/11/2022 3:58:43PM
Sample Analysis Completed	16/12/2022 12:18:51PM
Sample ID	*2022-009-2591
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

BLUE GREEN ALGAE

Phormidium 24 cells/mL

CRYPTOPHYTES

Cryptomonas 6 cells/mL

DIATOMS

Melosira 4 cells/mL

Cocconeis 10 cells/mL

PENNALES 20 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

BLUE GREEN ALGAE

Phormidium <0.01 mm3/L

CRYPTOPHYTES

Cryptomonas <0.01 mm3/L

DIATOMS

Melosira <0.01 mm3/L

PENNALES <0.01 mm3/L

Algal Biovolume Comment
Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

Total Algae Biovolume Not Calculated mm3/L

Total Blue_Green Algae Biovolume <0.01 mm3/L

Total Diatom Biovolume Not Calculated mm3/L

Total Green Algae Biovolume 0.00 mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L



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Analytical Results

Sampling Point	31524-EPA - Bonneys
Sampled Date	23/11/2022 5:10:00PM
Sample Received Date	24/11/2022 3:58:43PM
Sample Analysis Completed	16/12/2022 12:18:51PM
Sample ID	*2022-009-2591
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total	64 cells/mL
Blue Green Algae - Total	24 cells/mL
Diatoms - Total	34 cells/mL
Geosmin-MIB producing BGA - Total	24 cells/mL
Green Algae - Total	0 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	3.33 µg/L
Phaeophytin a	0.1	5.41 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	57 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	8660 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	125 µg/L	
# Nitrate + Nitrite as NO3	2.3	554 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.83 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	8.372 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.8 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.115 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022



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Analytical Results

Sampling Point	31524-EPA - Bonneys
Sampled Date	23/11/2022 5:10:00PM
Sample Received Date	24/11/2022 3:58:43PM
Sample Analysis Completed	16/12/2022 12:18:51PM
Sample ID	*2022-009-2591
Status	Endorsed
Collection Type	Customer Collected

Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	2.87 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.70 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	10.1 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	12.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		119 mg/L	
Bicarbonate		138 mg/L	
Carbonate		4 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	24600 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	15400 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.4 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	15 NTU	



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Analytical Results

Sampling Point	31524-EPA - Bonneys
Sampled Date	23/11/2022 5:10:00PM
Sample Received Date	24/11/2022 3:58:43PM
Sample Analysis Completed	16/12/2022 12:18:51PM
Sample ID	*2022-009-2591
Status	Endorsed
Collection Type	Customer Collected

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	10 mg/L	



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Analytical Results

Sampling Point	31512-EPA - McGrath Flat North
Sampled Date	23/11/2022 5:45:00PM
Sample Received Date	24/11/2022 3:57:54PM
Sample Analysis Completed	16/12/2022 12:18:52PM
Sample ID	*2022-009-2583
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

DIATOMS

Pennate diatoms	10 cells/mL
Chaetoceros	365 cells/mL
Tabellaria	50 cells/mL

DINOFLAGELLATES

Oxyrrhis	10 cells/mL
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GREEN ALGAE

Chlorella	9170 cells/mL
Unicellular green algae	9670 cells/mL
Phytoflagellates	500 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

23/11/2022

DIATOMS

Tabellaria	0.10 mm3/L
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GREEN ALGAE

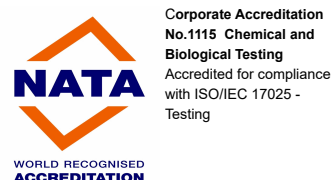
Chlorella	0.41 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	Not Calculated mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C





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Analytical Results

Sampling Point	31512-EPA - McGrath Flat North
Sampled Date	23/11/2022 5:45:00PM
Sample Received Date	24/11/2022 3:57:54PM
Sample Analysis Completed	16/12/2022 12:18:52PM
Sample ID	*2022-009-2583
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)

23/11/2022

Algae - Total	19800 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	425 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	19300 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	4.90 µg/L
Phaeophytin a	0.1	1.56 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	56 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	17200 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	<0.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	<2.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.81 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	3.887 µg/L	
Phosphorus-Filterable Reactive as P	0.5	1.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.055 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	<0.05 mg/L	



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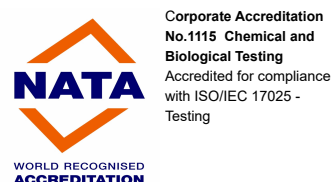
Sampling Point	31512-EPA - McGrath Flat North
Sampled Date	23/11/2022 5:45:00PM
Sample Received Date	24/11/2022 3:57:54PM
Sample Analysis Completed	16/12/2022 12:18:52PM
Sample ID	*2022-009-2583
Status	Endorsed
Collection Type	Customer Collected

TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.81 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	13.4 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	14.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		140 mg/L	
Bicarbonate		170 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	46700 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	32300 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.2 pH units	
Temperature at which pH is measured		22.2 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	4.7 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			





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Analytical Results

Sampling Point	31512-EPA - McGrath Flat North
Sampled Date	23/11/2022 5:45:00PM
Sample Received Date	24/11/2022 3:57:54PM
Sample Analysis Completed	16/12/2022 12:18:52PM
Sample ID	*2022-009-2583
Status	Endorsed
Collection Type	Customer Collected

Suspended Solids T0160-01(ADEL)

28/11/2022

Suspended Solids	1.0	2 mg/L
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Analytical Results

Sampling Point	31528-EPA - Salt Creek Outlet
Sampled Date	24/11/2022 8:00:00AM
Sample Received Date	24/11/2022 3:57:16PM
Sample Analysis Completed	16/12/2022 12:18:53PM
Sample ID	*2022-009-2592
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Chlorella	669000 cells/mL
Unicellular green algae small_spp	884000 cells/mL
Phytoflagellates small_spp	94500 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	30.1 mm3/L
Unicellular green algae small_spp	12.5 mm3/L
Phytoflagellates small_spp	7.39 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	50.0 mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	50.0 mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	1650000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	1650000 cells/mL



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Analytical Results

Sampling Point	31528-EPA - Salt Creek Outlet
Sampled Date	24/11/2022 8:00:00AM
Sample Received Date	24/11/2022 3:57:16PM
Sample Analysis Completed	16/12/2022 12:18:53PM
Sample ID	*2022-009-2592
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)	24/11/2022
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C	
Chlorophyll a & Phaeophytin a T0380-02(ADEL)	24/11/2022
Chlorophyll a	0.1 28.2 µg/L
Phaeophytin a	0.1 9.54 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	34 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	34300 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	3.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	13.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		3.63 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	<1.5 µg/L	
Phosphorus-Filterable Reactive as P	0.5	<0.5 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.140 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	2.22 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	3.63 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Analytical Results

Sampling Point	31528-EPA - Salt Creek Outlet
Sampled Date	24/11/2022 8:00:00AM
Sample Received Date	24/11/2022 3:57:16PM
Sample Analysis Completed	16/12/2022 12:18:53PM
Sample ID	*2022-009-2592
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	17.5 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	22.4 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		219 mg/L	
Bicarbonate		267 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	81900 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	65300 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	9.8 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	8 mg/L	



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Analytical Results

Sampling Point	31511-EPA - 3.2km South Salt Creek
Sampled Date	24/11/2022 8:15:00AM
Sample Received Date	24/11/2022 3:57:42PM
Sample Analysis Completed	21/12/2022 2:56:30PM
Sample ID	*2022-009-2580
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

DINOFLAGELLATES

Heterocapsa	14 cells/mL
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GREEN ALGAE

Chlorella	600000 cells/mL
Unicellular green algae	527000 cells/mL
Phytoflagellates	10500 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	27.0 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	1140000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	1140000 cells/mL



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Analytical Results

Sampling Point	31511-EPA - 3.2km South Salt Creek
Sampled Date	24/11/2022 8:15:00AM
Sample Received Date	24/11/2022 3:57:42PM
Sample Analysis Completed	21/12/2022 2:56:30PM
Sample ID	*2022-009-2580
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)	24/11/2022
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C	
Chlorophyll a & Phaeophytin a T0380-02(ADEL)	24/11/2022
Chlorophyll a	0.1 21.6 µg/L
Phaeophytin a	0.1 7.54 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	38 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	35500 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	2.3 µg/L	
# Nitrate + Nitrite as NO3	2.3	10.2 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		3.69 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	3.887 µg/L	
Phosphorus-Filterable Reactive as P	0.5	1.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.143 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	2.12 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	3.69 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Analytical Results

Sampling Point	31511-EPA - 3.2km South Salt Creek
Sampled Date	24/11/2022 8:15:00AM
Sample Received Date	24/11/2022 3:57:42PM
Sample Analysis Completed	21/12/2022 2:56:30PM
Sample ID	*2022-009-2580
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	18.8 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	23.4 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		212 mg/L	
Bicarbonate		258 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	83800 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	67300 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	8.7 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	<1 mg/L	



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Analytical Results

Sampling Point	31517-EPA - 1.8km West Salt Creek
Sampled Date	24/11/2022 8:15:00AM
Sample Received Date	24/11/2022 3:57:02PM
Sample Analysis Completed	16/12/2022 12:18:53PM
Sample ID	*2022-009-2581
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Chlorella	323000 cells/mL
Unicellular green algae	432000 cells/mL
Phytoflagellates	38000 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	14.5 mm3/L
# Algal Biovolume Comment	Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.
# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	793000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	793000 cells/mL
Toxin producing BGA - Total	0 cells/mL



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Analytical Results

Sampling Point	31517-EPA - 1.8km West Salt Creek
Sampled Date	24/11/2022 8:15:00AM
Sample Received Date	24/11/2022 3:57:02PM
Sample Analysis Completed	16/12/2022 12:18:53PM
Sample ID	*2022-009-2581
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	30.3 µg/L
Phaeophytin a	0.1	11.6 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	31 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	34600 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	2.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	8.86 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		3.69 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	2.093 µg/L	
Phosphorus-Filterable Reactive as P	0.5	0.7 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.146 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	2.15 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	3.69 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022



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Analytical Results

Sampling Point	31517-EPA - 1.8km West Salt Creek
Sampled Date	24/11/2022 8:15:00AM
Sample Received Date	24/11/2022 3:57:02PM
Sample Analysis Completed	16/12/2022 12:18:53PM
Sample ID	*2022-009-2581
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	17.7 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	24.7 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		217 mg/L	
Bicarbonate		265 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	82400 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	65800 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	9.4 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	13 mg/L	



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Analytical Results

Sampling Point	315191-EPA - Morella Creek @ guage
Sampled Date	24/11/2022 8:30:00AM
Sample Received Date	24/11/2022 3:58:35PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2585
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

DIATOMS

Synedra	97 cells/mL
Pennate diatoms	30 cells/mL

GREEN ALGAE

Chlorella	220000 cells/mL
Chodatella_(Lagerheimia)	30 cells/mL
Phytoflagellates	50 cells/mL
Monoraphidium sp_2_(short)	17300 cells/mL
Oocystis sp_1_(small_cells)	2150 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

DIATOMS

Synedra	0.07 mm3/L
---------	------------

GREEN ALGAE

Chlorella	9.90 mm3/L
Oocystis sp_1_(small_cells)	0.37 mm3/L
Monoraphidium sp_2_(short)	0.91 mm3/L

# Algal Biovolume Comment	Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.
# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	Not Calculated mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L



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Analytical Results

Sampling Point	315191-EPA - Morella Creek @ guage
Sampled Date	24/11/2022 8:30:00AM
Sample Received Date	24/11/2022 3:58:35PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2585
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	240000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	127 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	240000 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	4.91 µg/L
Phaeophytin a	0.1	1.78 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	30 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	4240 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	<0.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	<2.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		1.25 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	9.867 µg/L	
Phosphorus-Filterable Reactive as P	0.5	3.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.046 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022



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Analytical Results

Sampling Point	315191-EPA - Morella Creek @ guage
Sampled Date	24/11/2022 8:30:00AM
Sample Received Date	24/11/2022 3:58:35PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2585
Status	Endorsed
Collection Type	Customer Collected

Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	16.7 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	1.25 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	10.0 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	11.9 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		372 mg/L	
Bicarbonate		372 mg/L	
Carbonate		40 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	14100 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	8380 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.8 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	2.6 NTU	



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Analytical Results

Sampling Point	315191-EPA - Morella Creek @ guage
Sampled Date	24/11/2022 8:30:00AM
Sample Received Date	24/11/2022 3:58:35PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2585
Status	Endorsed
Collection Type	Customer Collected

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	<1 mg/L	



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Analytical Results

Sampling Point	31515-EPA - Snipe Point
Sampled Date	24/11/2022 8:40:00AM
Sample Received Date	24/11/2022 3:56:45PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2578
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

CRYPTOPHYTES

Cryptomonads	304 cells/mL
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DINOFLAGELLATES

Heterocapsa	38 cells/mL
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GREEN ALGAE

Chlorella	404000 cells/mL
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Unicellular green algae	634000 cells/mL
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Phytoflagellates	37300 cells/mL
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Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

CRYPTOPHYTES

Cryptomonads	0.06 mm3/L
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GREEN ALGAE

Chlorella	18.2 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
-------------------------	----------------------

# Total Blue_Green Algae Biovolume	0.00 mm3/L
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# Total Diatom Biovolume	0.00 mm3/L
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# Total Green Algae Biovolume	Not Calculated mm3/L
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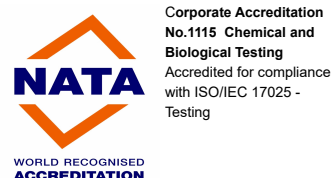
Total Toxic BGA Biovolume	0.00 mm3/L
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Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	1080000 cells/mL
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Analytical Results

Sampling Point	31515-EPA - Snipe Point
Sampled Date	24/11/2022 8:40:00AM
Sample Received Date	24/11/2022 3:56:45PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2578
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)

24/11/2022

Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	1080000 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	36.8 µg/L
Phaeophytin a	0.1	13.7 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	36 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	33800 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	2.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	11.1 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		3.69 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	<1.5 µg/L	
Phosphorus-Filterable Reactive as P	0.5	<0.5 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.144 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	1.94 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022



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Analytical Results

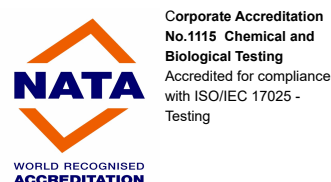
Sampling Point	31515-EPA - Snipe Point
Sampled Date	24/11/2022 8:40:00AM
Sample Received Date	24/11/2022 3:56:45PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2578
Status	Endorsed
Collection Type	Customer Collected

TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	3.69 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	18.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	22.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		216 mg/L	
Bicarbonate		263 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	82600 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	66000 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	10 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			





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Analytical Results

Sampling Point	31515-EPA - Snipe Point
Sampled Date	24/11/2022 8:40:00AM
Sample Received Date	24/11/2022 3:56:45PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2578
Status	Endorsed
Collection Type	Customer Collected

Suspended Solids T0160-01(ADEL)

28/11/2022

Suspended Solids	1.0	7 mg/L
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Analytical Results

Sampling Point	31519-EPA - Morella Basin at Outlet Regulator
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 3:58:18PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2584
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

BLUE GREEN ALGAE			
Merismopedia		800 cells/mL	
DIATOMS			
Synedra		40 cells/mL	
Nitzschia		10 cells/mL	
GREEN ALGAE			
Oocystis sp_1_(small_cells)		3420 cells/mL	
Chodatella_(Lagerheimia)		90 cells/mL	
Monoraphidium sp_2_(short)		16000 cells/mL	
Unicellular green algae		1000 cells/mL	
Chlorella		93000 cells/mL	

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

BLUE GREEN ALGAE			
Merismopedia		<0.01 mm3/L	
DIATOMS			
Synedra		0.03 mm3/L	
Nitzschia		0.01 mm3/L	
GREEN ALGAE			
Oocystis sp_1_(small_cells)		0.59 mm3/L	
Monoraphidium sp_2_(short)		0.84 mm3/L	
Chlorella		4.18 mm3/L	
# Algal Biovolume Comment		Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.	
# Total Algae Biovolume		Not Calculated mm3/L	





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Analytical Results

Sampling Point	31519-EPA - Morella Basin at Outlet Regulator
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 3:58:18PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2584
Status	Endorsed
Collection Type	Customer Collected

Algal Biovolume T0393(ADEL)

24/11/2022

# Total Blue_Green Algae Biovolume	<0.01 mm3/L
# Total Diatom Biovolume	0.04 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	114000 cells/mL
Blue Green Algae - Total	800 cells/mL
Diatoms - Total	50 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	114000 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	4.58 µg/L
Phaeophytin a	0.1	0.84 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	22 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	4160 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	<0.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	<2.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		0.97 mg/L	



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Analytical Results

Sampling Point	31519-EPA - Morella Basin at Outlet Regulator
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 3:58:18PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2584
Status	Endorsed
Collection Type	Customer Collected

Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	15.847 µg/L	
Phosphorus-Filterable Reactive as P	0.5	5.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.011 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	17.0 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	0.97 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	9.4 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	11.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		370 mg/L	
Bicarbonate		370 mg/L	
Carbonate		40 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	13900 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	8250 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.8 pH units	



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Analytical Results

Sampling Point	31519-EPA - Morella Basin at Outlet Regulator
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 3:58:18PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2584
Status	Endorsed
Collection Type	Customer Collected

pH T0010-01(ADEL)			25/11/2022
Temperature at which pH is measured		22.4 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	2.2 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	<1 mg/L	



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Analytical Results

Sampling Point	531012-EPA - Sth Policeman Point
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 4:00:02PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2595
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Chlorella	440000 cells/mL
Phytoflagellates small_spp	92600 cells/mL
Unicellular green algae small_spp	535000 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	19.8 mm3/L
Phytoflagellates small_spp	7.24 mm3/L
Unicellular green algae small_spp	7.54 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	34.6 mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	34.6 mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	1070000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	1070000 cells/mL



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Analytical Results

Sampling Point	531012-EPA - Sth Policeman Point
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 4:00:02PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2595
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)	24/11/2022
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C	
Chlorophyll a & Phaeophytin a T0380-02(ADEL)	24/11/2022
Chlorophyll a	0.1 47.2 µg/L
Phaeophytin a	0.1 17.5 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	35 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	47600 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	0.8 µg/L	
# Nitrate + Nitrite as NO3	2.3	3.54 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		3.90 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	3.289 µg/L	
Phosphorus-Filterable Reactive as P	0.5	1.1 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.162 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	2.02 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	3.90 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
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Analytical Results

Sampling Point	531012-EPA - Sth Policeman Point
Sampled Date	24/11/2022 8:50:00AM
Sample Received Date	24/11/2022 4:00:02PM
Sample Analysis Completed	21/12/2022 2:56:31PM
Sample ID	*2022-009-2595
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	18.5 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	25.9 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		215 mg/L	
Bicarbonate		263 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	81200 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	64600 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.4 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	10 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	8 mg/L	



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Analytical Results

Sampling Point	31526-EPA - Nth Jack Point
Sampled Date	24/11/2022 9:15:00AM
Sample Received Date	24/11/2022 3:58:56PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2577
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Phytoflagellates	46500 cells/mL
Unicellular green algae small_spp	523000 cells/mL
Chlorella	890000 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	40.0 mm3/L
Unicellular green algae small_spp	7.37 mm3/L

Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	1460000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	1460000 cells/mL
Toxin producing BGA - Total	0 cells/mL



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Analytical Results

Sampling Point	31526-EPA - Nth Jack Point
Sampled Date	24/11/2022 9:15:00AM
Sample Received Date	24/11/2022 3:58:56PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2577
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)			24/11/2022
Chlorophyll a	0.1	52.8 µg/L	
Phaeophytin a	0.1	17.7 µg/L	

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	31 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	32000 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	1.2 µg/L	
# Nitrate + Nitrite as NO ₃	2.3	5.32 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		3.55 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO ₄	1.5	24.518 µg/L	
Phosphorus-Filterable Reactive as P	0.5	8.2 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.156 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	1.75 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	3.55 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			



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Analytical Results

Sampling Point	31526-EPA - Nth Jack Point
Sampled Date	24/11/2022 9:15:00AM
Sample Received Date	24/11/2022 3:58:56PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2577
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	17.4 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	24.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		219 mg/L	
Bicarbonate		267 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	77500 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	60800 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.2 pH units	
Temperature at which pH is measured		22.6 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	13 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	12 mg/L	



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Analytical Results

Sampling Point	300712-Tilley Swamp Watercourse Outlet Channel
Sampled Date	24/11/2022 9:45:00AM
Sample Received Date	24/11/2022 3:57:41PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2588
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

CRYPTOPHYTES			
Cryptomonads		10 cells/mL	
DIATOMS			
PENNALES		20 cells/mL	
Cyclotella		50 cells/mL	
DINOFLAGELLATES			
PERIDINIALES		2 cells/mL	
GREEN ALGAE			
Monoraphidium		50 cells/mL	
Monoraphidium sp_2_(short)		200 cells/mL	
Organism - Comment		PERIDINIALES - This was Ensiculifera.	

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

CRYPTOPHYTES			
Cryptomonads		<0.01 mm3/L	
DIATOMS			
Cyclotella		0.03 mm3/L	
PENNALES		<0.01 mm3/L	
GREEN ALGAE			
Monoraphidium		0.04 mm3/L	
Monoraphidium sp_2_(short)		0.01 mm3/L	
# Algal Biovolume Comment		Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.	
# Total Algae Biovolume		0.08 mm3/L	
# Total Blue_Green Algae Biovolume		0.00 mm3/L	





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Analytical Results

Sampling Point	300712-Tilley Swamp Watercourse Outlet Channel
Sampled Date	24/11/2022 9:45:00AM
Sample Received Date	24/11/2022 3:57:41PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2588
Status	Endorsed
Collection Type	Customer Collected

Algal Biovolume T0393(ADEL)

24/11/2022

# Total Diatom Biovolume	0.03 mm3/L
# Total Green Algae Biovolume	0.05 mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	332 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	70 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	250 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	1.23 µg/L
Phaeophytin a	0.1	<0.1 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	85 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	4900 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	4.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	19.9 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		0.88 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022



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Analytical Results

Sampling Point	300712-Tilley Swamp Watercourse Outlet Channel
Sampled Date	24/11/2022 9:45:00AM
Sample Received Date	24/11/2022 3:57:41PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2588
Status	Endorsed
Collection Type	Customer Collected

Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	19.435 µg/L	
Phosphorus-Filterable Reactive as P	0.5	6.5 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	<0.005 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	9.97 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	0.88 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	7.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	8.9 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		389 mg/L	
Bicarbonate		475 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	16200 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	9720 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.3 pH units	



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Analytical Results

Sampling Point	300712-Tilley Swamp Watercourse Outlet Channel
Sampled Date	24/11/2022 9:45:00AM
Sample Received Date	24/11/2022 3:57:41PM
Sample Analysis Completed	23/12/2022 11:39:38AM
Sample ID	*2022-009-2588
Status	Endorsed
Collection Type	Customer Collected

pH T0010-01(ADEL)			25/11/2022
Temperature at which pH is measured		22.6 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	3.0 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	6 mg/L	



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Analytical Results

Sampling Point	31514-EPA - Stoney Well
Sampled Date	24/11/2022 9:50:00AM
Sample Received Date	24/11/2022 3:58:06PM
Sample Analysis Completed	23/12/2022 11:39:39AM
Sample ID	*2022-009-2582
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

DINOFLAGELLATES

Heterocapsa	6 cells/mL
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GREEN ALGAE

Chlorella	683000 cells/mL
Unicellular green algae	266000 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	30.7 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	949000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	949000 cells/mL
Toxin producing BGA - Total	0 cells/mL



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Analytical Results

Sampling Point	31514-EPA - Stoney Well
Sampled Date	24/11/2022 9:50:00AM
Sample Received Date	24/11/2022 3:58:06PM
Sample Analysis Completed	23/12/2022 11:39:39AM
Sample ID	*2022-009-2582
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	42.8 µg/L
Phaeophytin a	0.1	14.9 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	25 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	26700 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	1.1 µg/L	
# Nitrate + Nitrite as NO ₃	2.3	4.87 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		2.99 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO ₄	1.5	6.877 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.112 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	0.71 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	2.99 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			



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Analytical Results

Sampling Point	31514-EPA - Stoney Well
Sampled Date	24/11/2022 9:50:00AM
Sample Received Date	24/11/2022 3:58:06PM
Sample Analysis Completed	23/12/2022 11:39:39AM
Sample ID	*2022-009-2582
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	15.8 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	20.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		202 mg/L	
Bicarbonate		246 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	68000 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	51400 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.2 pH units	
Temperature at which pH is measured		22.6 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	13 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	12 mg/L	



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Analytical Results

Sampling Point	300713-Tilley Swamp Drain D/S Northern Outlet
Sampled Date	24/11/2022 9:57:00AM
Sample Received Date	24/11/2022 3:57:29PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2586
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

DIATOMS

Synedra	2 cells/mL
Cyclotella	80 cells/mL

DINOFLAGELLATES

Heterocapsa	2 cells/mL
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GREEN ALGAE

Monoraphidium	30 cells/mL
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Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

DIATOMS

Synedra	<0.01 mm3/L
Cyclotella	0.04 mm3/L

GREEN ALGAE

Monoraphidium	0.03 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	0.07 mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.04 mm3/L
# Total Green Algae Biovolume	0.03 mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	114 cells/mL
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Analytical Results

Sampling Point	300713-Tilley Swamp Drain D/S Northern Outlet
Sampled Date	24/11/2022 9:57:00AM
Sample Received Date	24/11/2022 3:57:29PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2586
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)

24/11/2022

Blue Green Algae - Total	0 cells/mL
Diatoms - Total	82 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	30 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	1.09 µg/L
Phaeophytin a	0.1	<0.1 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	61 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	5070 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	4.7 µg/L	
# Nitrate + Nitrite as NO3	2.3	20.8 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		0.68 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	15.847 µg/L	
Phosphorus-Filterable Reactive as P	0.5	5.3 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	<0.005 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	9.79 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022



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Analytical Results

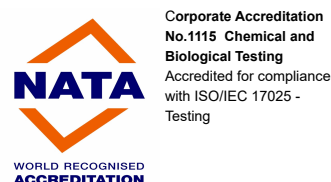
Sampling Point	300713-Tilley Swamp Drain D/S Northern Outlet
Sampled Date	24/11/2022 9:57:00AM
Sample Received Date	24/11/2022 3:57:29PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2586
Status	Endorsed
Collection Type	Customer Collected

TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	0.68 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	7.4 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	7.8 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		384 mg/L	
Bicarbonate		469 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	16800 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	10100 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.2 pH units	
Temperature at which pH is measured		22.6 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	3.0 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			





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Analytical Results

Sampling Point	300713-Tilley Swamp Drain D/S Northern Outlet
Sampled Date	24/11/2022 9:57:00AM
Sample Received Date	24/11/2022 3:57:29PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2586
Status	Endorsed
Collection Type	Customer Collected

Suspended Solids T0160-01(ADEL)

28/11/2022

Suspended Solids	1.0	5 mg/L
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Analytical Results

Sampling Point	31525-EPA - Villa de Yumpa
Sampled Date	24/11/2022 10:25:00AM
Sample Received Date	24/11/2022 3:58:08PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2575
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

DIATOMS

Chaetoceros	114 cells/mL
Pennate diatoms	10 cells/mL
Eunotia	10 cells/mL

GREEN ALGAE

Chlorella	449000 cells/mL
Phytoplankton	6330 cells/mL
Unicellular green algae	188000 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	20.2 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	Not Calculated mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	643000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	134 cells/mL



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Analytical Results

Sampling Point	31525-EPA - Villa de Yumpa
Sampled Date	24/11/2022 10:25:00AM
Sample Received Date	24/11/2022 3:58:08PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2575
Status	Endorsed
Collection Type	Customer Collected

Algal Count - Total T0393(ADEL)	24/11/2022
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	643000 cells/mL
Toxin producing BGA - Total	0 cells/mL

Sample temperature at time of receipt 10.1°C	
Chlorophyll a & Phaeophytin a T0380-02(ADEL)	24/11/2022
Chlorophyll a	0.1 32.3 µg/L
Phaeophytin a	0.1 12.4 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	22 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	24600 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	<0.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	<2.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		2.72 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	5.98 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.0 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.093 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	0.34 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	2.72 mg/L	



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Analytical Results

Sampling Point	31525-EPA - Villa de Yumpa
Sampled Date	24/11/2022 10:25:00AM
Sample Received Date	24/11/2022 3:58:08PM
Sample Analysis Completed	23/12/2022 11:39:40AM
Sample ID	*2022-009-2575
Status	Endorsed
Collection Type	Customer Collected

Organic Chemistry	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	15.0 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	19.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		183 mg/L	
Bicarbonate		223 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	63000 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	46700 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.2 pH units	
Temperature at which pH is measured		22.6 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	9.5 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
<i>Sample temperature at time of receipt 10.1°C</i>			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	4 mg/L	



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Analytical Results

Sampling Point	31513-EPA - Parnka Point Boat Ramp
Sampled Date	24/11/2022 11:10:00AM
Sample Received Date	24/11/2022 3:57:55PM
Sample Analysis Completed	23/12/2022 11:39:24AM
Sample ID	*2022-009-2579
Status	Endorsed
Collection Type	Customer Collected

Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 10.1°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Chlorella	213000 cells/mL
Unicellular green algae	116000 cells/mL
Phytoflagellates	700 cells/mL

Sample temperature at time of receipt 10.1°C

Algal Biovolume T0393(ADEL)

24/11/2022

GREEN ALGAE

Chlorella	9.58 mm3/L
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Algal Biovolume Comment

Biovolumes for taxa reported at genus level are approximate values. Reported taxa and calculated biovolume includes only those with taxon cell volume and associated cell count data. Biovolume totals have specific criteria around how they calculate.

# Total Algae Biovolume	Not Calculated mm3/L
# Total Blue_Green Algae Biovolume	0.00 mm3/L
# Total Diatom Biovolume	0.00 mm3/L
# Total Green Algae Biovolume	Not Calculated mm3/L
Total Toxic BGA Biovolume	0.00 mm3/L

Sample temperature at time of receipt 10.1°C

Algal Count - Total T0393(ADEL)

24/11/2022

Algae - Total	330000 cells/mL
Blue Green Algae - Total	0 cells/mL
Diatoms - Total	0 cells/mL
Geosmin-MIB producing BGA - Total	0 cells/mL
Green Algae - Total	330000 cells/mL
Toxin producing BGA - Total	0 cells/mL



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Analytical Results

Sampling Point	31513-EPA - Parnka Point Boat Ramp
Sampled Date	24/11/2022 11:10:00AM
Sample Received Date	24/11/2022 3:57:55PM
Sample Analysis Completed	23/12/2022 11:39:24AM
Sample ID	*2022-009-2579
Status	Endorsed
Collection Type	Customer Collected

Sample temperature at time of receipt 10.1°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

24/11/2022

Chlorophyll a	0.1	9.97 µg/L
Phaeophytin a	0.1	3.60 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Ammonia as N (ADEL)			28/11/2022
# Ammonia as N	1	37 µg/L	
Chloride T0104-02(ADEL)			28/11/2022
Chloride	4.0	22000 mg/L	
Nitrate + Nitrite as N (ADEL)			28/11/2022
# Nitrate + Nitrite as N	0.5	<0.5 µg/L	
# Nitrate + Nitrite as NO3	2.3	<2.3 µg/L	
# Nitrate as Nitrogen		false µg/L	
Nitrogen - Total TMZ-M06(ADEL)			24/11/2022
Nitrogen - Total		2.07 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)			28/11/2022
# Phosphorus -Filterable Reactive as PO4	1.5	2.99 µg/L	
Phosphorus-Filterable Reactive as P	0.5	1.0 µg/L	
Phosphorus - Total T0109-44(ADEL)			06/12/2022
Phosphorus - Total	0.005	0.048 mg/L	
Silica - Reactive T0111-01(ADEL)			28/11/2022
Silica - Reactive	0.05	<0.05 mg/L	
TKN as N T0112-01(ADEL)			13/12/2022
TKN as Nitrogen	0.05	2.07 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022



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Analytical Results

Sampling Point	31513-EPA - Parnka Point Boat Ramp
Sampled Date	24/11/2022 11:10:00AM
Sample Received Date	24/11/2022 3:57:55PM
Sample Analysis Completed	23/12/2022 11:39:24AM
Sample ID	*2022-009-2579
Status	Endorsed
Collection Type	Customer Collected

Dissolved Organic Carbon T0158-07(ADEL)			05/12/2022
Dissolved Organic Carbon	1	14.2 mg/L	
Total Organic Carbon T0158-07(ADEL)			05/12/2022
Total Organic Carbon	1	16.3 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)			25/11/2022
Alkalinity as Calcium Carbonate		163 mg/L	
Bicarbonate		199 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			25/11/2022
Conductivity	2	55800 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	40100 mg/L	
pH T0010-01(ADEL)			25/11/2022
pH		8.1 pH units	
Temperature at which pH is measured		22.4 °C	
Turbidity T0018-01(ADEL)			25/11/2022
Turbidity	0.1	4.7 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 10.1°C			
Suspended Solids T0160-01(ADEL)			28/11/2022
Suspended Solids	1.0	2 mg/L	



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AWQC Signatories

Dzung Bui - Supervisor Metals and Physical

Thuy Diep - Technical Officer Chemistry

David Evans - Technical Officer Chemistry

Andrew Ford - Senior Technical Officer Chemistry

Sharon Helgeson - Technical Officer Life Sciences

Kerrie Jooste - Manager Chemistry Services

Aji John - Technical Officer Chemistry

John Martini - Method Development Specialist

Dean Newman - Senior Technical Officer Biology

Melissa Phillips - Technical Officer Chemistry

Gayle Polley - Supervisor Nutrients and Waste



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2022-009-2575	31525	EPA - Villa de Yumpa	24/11/2022	pH	Test not processed within holding time
2022-009-2575	31525	EPA - Villa de Yumpa	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2575	31525	EPA - Villa de Yumpa	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2575	31525	EPA - Villa de Yumpa	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2576	31523	EPA - Long Point	23/11/2022	pH	Test not processed within holding time
2022-009-2576	31523	EPA - Long Point	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2576	31523	EPA - Long Point	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2576	31523	EPA - Long Point	23/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2577	31526	EPA - Nth Jack Point	24/11/2022	pH	Test not processed within holding time
2022-009-2577	31526	EPA - Nth Jack Point	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2577	31526	EPA - Nth Jack Point	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2577	31526	EPA - Nth Jack Point	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2578	31515	EPA - Snipe Point	24/11/2022	pH	Test not processed within holding time
2022-009-2578	31515	EPA - Snipe Point	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2578	31515	EPA - Snipe Point	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2578	31515	EPA - Snipe Point	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2579	31513	EPA - Parnka Point Boat Ramp	24/11/2022	pH	Test not processed within holding time
2022-009-2579	31513	EPA - Parnka Point Boat Ramp	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2579	31513	EPA - Parnka Point Boat Ramp	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2579	31513	EPA - Parnka Point Boat Ramp	24/11/2022	Total Organic Carbon	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2022-009-2580	31511	EPA - 3.2km South Salt Creek	24/11/2022	pH	Test not processed within holding time
2022-009-2580	31511	EPA - 3.2km South Salt Creek	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2580	31511	EPA - 3.2km South Salt Creek	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2580	31511	EPA - 3.2km South Salt Creek	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2581	31517	EPA - 1.8km West Salt Creek	24/11/2022	pH	Test not processed within holding time
2022-009-2581	31517	EPA - 1.8km West Salt Creek	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2581	31517	EPA - 1.8km West Salt Creek	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2581	31517	EPA - 1.8km West Salt Creek	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2582	31514	EPA - Stoney Well	24/11/2022	pH	Test not processed within holding time
2022-009-2582	31514	EPA - Stoney Well	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2582	31514	EPA - Stoney Well	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2582	31514	EPA - Stoney Well	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2583	31512	EPA - McGrath Flat North	23/11/2022	pH	Test not processed within holding time
2022-009-2583	31512	EPA - McGrath Flat North	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2583	31512	EPA - McGrath Flat North	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2583	31512	EPA - McGrath Flat North	23/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2584	31519	EPA - Morella Basin at Outlet Regulator	24/11/2022	pH	Test not processed within holding time
2022-009-2584	31519	EPA - Morella Basin at Outlet Regulator	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2584	31519	EPA - Morella Basin at Outlet Regulator	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2584	31519	EPA - Morella Basin at Outlet Regulator	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2022-009-2585	315191	EPA - Morella Creek @ guage	24/11/2022	pH	Test not processed within holding time
2022-009-2585	315191	EPA - Morella Creek @ guage	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2585	315191	EPA - Morella Creek @ guage	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2585	315191	EPA - Morella Creek @ guage	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2586	300713	Tilley Swamp Drain D/S Northern Outlet	24/11/2022	pH	Test not processed within holding time
2022-009-2586	300713	Tilley Swamp Drain D/S Northern Outlet	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2586	300713	Tilley Swamp Drain D/S Northern Outlet	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2586	300713	Tilley Swamp Drain D/S Northern Outlet	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2588	300712	Tilley Swamp Watercourse Outlet Channel	24/11/2022	pH	Test not processed within holding time
2022-009-2588	300712	Tilley Swamp Watercourse Outlet Channel	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2588	300712	Tilley Swamp Watercourse Outlet Channel	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2588	300712	Tilley Swamp Watercourse Outlet Channel	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2589	31522	EPA - Mark Point	23/11/2022	pH	Test not processed within holding time
2022-009-2589	31522	EPA - Mark Point	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2589	31522	EPA - Mark Point	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2589	31522	EPA - Mark Point	23/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2590	351213	EPA - Murray Mouth	23/11/2022	pH	Test not processed within holding time
2022-009-2590	351213	EPA - Murray Mouth	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2590	351213	EPA - Murray Mouth	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2590	351213	EPA - Murray Mouth	23/11/2022	Total Organic Carbon	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2022-009-2591	31524	EPA - Bonneys	23/11/2022	pH	Test not processed within holding time
2022-009-2591	31524	EPA - Bonneys	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2591	31524	EPA - Bonneys	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2591	31524	EPA - Bonneys	23/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2592	31528	EPA - Salt Creek Outlet	24/11/2022	pH	Test not processed within holding time
2022-009-2592	31528	EPA - Salt Creek Outlet	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2592	31528	EPA - Salt Creek Outlet	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2592	31528	EPA - Salt Creek Outlet	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2593	353179	EPA - Tauwiche Barrage Upstream	23/11/2022	pH	Test not processed within holding time
2022-009-2593	353179	EPA - Tauwiche Barrage Upstream	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2593	353179	EPA - Tauwiche Barrage Upstream	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2593	353179	EPA - Tauwiche Barrage Upstream	23/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2594	353177	EPA - Tauwiche Barrage DS	23/11/2022	pH	Test not processed within holding time
2022-009-2594	353177	EPA - Tauwiche Barrage DS	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2594	353177	EPA - Tauwiche Barrage DS	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2594	353177	EPA - Tauwiche Barrage DS	23/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2595	531012	EPA - Sth Policeman Point	24/11/2022	pH	Test not processed within holding time
2022-009-2595	531012	EPA - Sth Policeman Point	24/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2595	531012	EPA - Sth Policeman Point	24/11/2022	Total Organic Carbon	Test not processed within holding time
2022-009-2595	531012	EPA - Sth Policeman Point	24/11/2022	Dissolved Organic Carbon	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2022-009-2596	53032	EPA - Nooameena	23/11/2022	pH	Test not processed within holding time
2022-009-2596	53032	EPA - Nooameena	23/11/2022	Silica - Reactive	Test not processed within holding time
2022-009-2596	53032	EPA - Nooameena	23/11/2022	Dissolved Organic Carbon	Test not processed within holding time
2022-009-2596	53032	EPA - Nooameena	23/11/2022	Total Organic Carbon	Test not processed within holding time

Samples Not Collected

Sample ID	S.Point	Description	Sampled Date	Non Collect Reason
2022-009-2587	300711	Tilley Swamp Drain U/S Morella	22/11/2022	Customer chose not to collect sample

Analytical Method

Analytical Method Code	Description	Reference Method
T0010-01	Determination of pH	AP4500HB
T0016-01	Determination of Conductivity - Corrected to 25C	AP2510B
T0018-01	Turbidity - Nephelometric Measurement	APAWWA-WEF
T0101-01	Alkalinity - Automated Acidimetric Titration	AP2320B
T0104-02	Chloride - Discrete Analyser	AP4500CLE
T0109-44	Phosphorous -total Kjeldahl for seawater by automated flow colorimetry	AP4500PF
T0111-01	Silica by automated fow colorimetry	AP4500SI02
T0112-01	Nitrogen- Total Kjeldahl by discrete analyser	AP4500NORGA
T0158-07	Total and Dissolved Organic Carbon (OI Analytical)	SM5310C
T0160-01	Suspended Solids 103C to 105C	AP4500
T0380-02	Chlorophyll a & b and phaeophytin	ISO10260
T0393	Microalgae & Cyanobacteria - Scan & Identification	
T0393	Microalgae & Cyanobacteria - Scan & Identification	Hotzel1999
TMZ-M06	Derived Results and Data Checks	AP4500NORGA

Laboratory Information

Laboratory	NATA accreditation ID
Inorganic Chemistry - Physical	1115
Inorganic Chemistry - Waste Water	1115
Inorganic Chemistry - Nutrients	1115
Organic Chemistry	1115
Biology Operations	1115



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- Notes
1. The last figure of the result value is a significant figure.
 2. # determination of the component is not covered by NATA Accreditation.
 3. ^ indicates result is out of specification according to the reference guideline. Refer to report footer.
 4. * indicates an incident has been recorded against the sample. Refer to report footer.
 5. & Indicates the results have changed since the last issued report.
 6. Where a result is required to meet compliance limits the associated measurement uncertainty must be considered. Measurement uncertainty is available at <https://www.awqc.com.au/our-services/Water-quality-testing-and-analysis/measurement-uncertainty>
 7. Uncertainty of Measurement is reported with a coverage factor of 2 providing approximately 95% confidence interval
 8. The Limit of Reporting (LOR) is the lowest concentration of analyte which is reported at the AWQC and is based on the LOQ rounded up to a more readily used value. The Limit of Quantitation (LOQ) is the lowest concentration of analyte for which quantitative results may be obtained within a specified degree of confidence.
 9. Where collection type is AWQC Collect, NATA has confirmed that due to a robust system in place for maintaining the temperature integrity for samples collected by AWQC's Field Laboratory Services, the recording of temperature when samples arrive at the AWQC is out of scope.
 10. If pH has been tested then the pH will be outside of its holding time unless measured in the field.
 11. (ADEL) indicates analysed in Adelaide, (MELB) indicates analysed in Melbourne.