Internet: www.awqc.com.au

Adelaide SA 5000



Email: awqc@sawater.com.au

Tel: 1300 653 366

Fax: 1300 883 171

DEW - Department of Environment and Water

ATTN: Claire Sims 81-95 Waymouth Street

SA 5000 AUSTRALIA

26/10/2023

Dear Claire

Please find attached the Final Analytical Report for

Customer Service Request: 143419-2023-CSR-4

Account: 143419

Project: AWQC-186821 DEW - Healthy Coorong Healthy Basin - NR Events SEP

23/24

This report has also been sent to: Tim Branford

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

Yours sincerely,

Corrina Smith
Customer Service Officer
Corrina.Smith@sawater.com.au



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This report supercedes the following issued reports: 371421

Report Information

Project Name AWQC-186821

Customer DEW - Department of Environment and Water

CSR_ID 143419-2023-CSR-4

Analytical Results

 Sampling Point
 351213-EPA - Murray Mouth

 Sampled Date
 27/09/2023 11:45:00AM

 Sample Received Date
 28/09/2023 4:39:21PM

 Sample Analysis Completed
 18/10/2023 4:20:40PM

 Sample ID
 *2023-007-2393

Status Endorsed

Collection Type Customer Collected

Biology Operations	LOR	Result	Test Start Date

Sample temperature at time of receipt 8.3°C

Algal	Identification	T0393(ADEL)
-------	----------------	-------------

Other Organisms	875 cells/mL
BLUE GREEN ALGAE	

Cuspidothrix 312 cells/mL Dolichospermum (straight small) 416 cells/mL

 Phormidium narrow spp
 2880 cells/mL

 Pseudanabaena
 500 cells/mL

 Cyanodictyon
 126000 cells/mL

 Cyanogranis
 11400 cells/mL

 Snowella
 140 cells/mL

 Romeria
 160 cells/mL

Planktolyngbya 18600 cells/mL Limnothrix 760 cells/mL

DIATOMS

 Aulacoseira
 578 cells/mL

 Synedra
 10 cells/mL

 Nitzschia
 20 cells/mL

 Asterionella
 8 cells/mL

 GREEN ALGAE

 Planctonema
 6860 cells/mL

 Scenedesmus
 500 cells/mL

 Tetrastrum
 40 cells/mL

 Actinastrum
 650 cells/mL

 Crucigenia
 160 cells/mL

 Monoraphidium
 450 cells/mL



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Analytical Results

 Sampling Point
 351213-EPA - Murray Mouth

 Sampled Date
 27/09/2023 11:45:00AM

 Sample Received Date
 28/09/2023 4:39:21PM

 Sample Analysis Completed
 18/10/2023 4:20:40PM

 Sample ID
 *2023-007-2393

Status Endorsed

Collection Type Customer Collected

Algal Identification T0393(ADEL)

 Oocystis sp_1_(small_cells)
 325 cells/mL

 Kirchneriella
 275 cells/mL

Organism - Comment Limnothrix - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL) 27/09/2023

BLUE GREEN ALGAE

Cuspidothrix 0.02 mm3/L Dolichospermum (straight small) 0.03 mm3/L Phormidium narrow spp 0.07 mm3/L Planktolyngbya 0.09 mm3/L Limnothrix <0.01 mm3/L Romeria <0.01 mm3/l Pseudanabaena <0.01 mm3/L Cyanodictyon 0.06 mm3/L Cyanogranis <0.01 mm3/L Snowella <0.01 mm3/L

DIATOMS

 Aulacoseira
 1.65 mm3/L

 Synedra
 <0.01 mm3/L</td>

 Asterionella
 <0.01 mm3/L</td>

 Nitzschia
 0.03 mm3/L

GREEN ALGAE

 Monoraphidium
 0.40 mm3/L

 Oocystis sp_1_(small_cells)
 0.06 mm3/L

 Kirchneriella
 <0.01 mm3/L</td>

 Scenedesmus
 0.12 mm3/L

 Actinastrum
 0.05 mm3/L

 Crucigenia
 <0.01 mm3/L</td>



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Analytical Results

 Sampling Point
 351213-EPA - Murray Mouth

 Sampled Date
 27/09/2023 11:45:00AM

 Sample Received Date
 28/09/2023 4:39:21PM

 Sample Analysis Completed
 18/10/2023 4:20:40PM

 Sample ID
 *2023-007-2393

 Sample ID
 *2023-007-239

 Status
 Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 27/09/2023

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 0.27 mm3/L # Total Diatom Biovolume 1.68 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 27/09/2023

 Algae - Total
 171000 cells/mL

 Blue Green Algae - Total
 161000 cells/mL

 Diatoms - Total
 616 cells/mL

 Geosmin-MIB producing BGA - Total
 3380 cells/mL

 Green Algae - Total
 9260 cells/mL

Green Algae - Total 9260 cells/ml
Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 27.0 $\,\mu g/L$ Phaeophytin a 0.1 12.7 $\,\mu g/L$

Inorganic Chemistry - Nutrients LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Ammonia as N (ADEL)

17/10/2023

Ammonia as N 1 μg/L

Chloride T0104-02(ADEL) 03/10/2023

Chloride 4.0 706 mg/L



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Analytical Results

Sampling Point 351213-EPA - Murray Mouth 27/09/2023 11:45:00AM **Sampled Date** 28/09/2023 4:39:21PM Sample Received Date 18/10/2023 4:20:40PM Sample Analysis Completed *2023-007-2393 Sample ID

Endorsed Status

Customer Collected Collection Type

Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	27.0 μg/L	
# Nitrate + Nitrite as NO3	2.3	120 μg/L	
# Nitrate as Nitrogen		24.2 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	2.8 μg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		1.78 mg/L	
Phosphorus - Filterable Reactive as P (A	ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	14.352 μg/L	
Phosphorus-Filterable Reactive as P	0.5	4.8 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.085 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	0.43 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	1.75 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C Dissolved Organic Carbon T0158-07(ADEL) Dissolved Organic Carbon	1	8.0 mg/L	04/10/2023
Total Organic Carbon T0158-07(ADEL) Total Organic Carbon	1	12.1 mg/L	04/10/2023

Sample temperature at time of receipt 8.3°C

Inorganic Chemistry - Physical

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Result

Alkalinity as Calcium Carbonate 76 mg/L Bicarbonate 93 mg/L

LOR



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Test Start Date

03/10/2023

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Analytical Results

 Sampling Point
 351213-EPA - Murray Mouth

 Sampled Date
 27/09/2023 11:45:00AM

 Sample Received Date
 28/09/2023 4:39:21PM

 Sample Analysis Completed
 18/10/2023 4:20:40PM

 Sample ID
 *2023-007-2393

 Status
 Endorsed

Collection Type Customer Collected

Alkalinity Carbonate Bicarbonate and	Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)		
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			03/10/2023
Conductivity	2	2780 μS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	1560 mg/L	
pH T0010-01(ADEL)			03/10/2023
рН		8.1 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	46 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3° Suspended Solids T0160-01(ADEL)	°C		06/10/2023
Suspended Solids	1.0	40 mg/L	



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Analytical Results

Sampling Point 11885-DEW - Mundoo Barrage Downstream

 Sampled Date
 27/09/2023
 12:34:00PM

 Sample Received Date
 28/09/2023
 4:35:40PM

 Sample Analysis Completed
 18/10/2023
 10:52:49AM

 Sample ID
 *2023-007-2384

Sample ID *2023-007 Status Endorsed

Collection Type Customer Collected

Biology Operations	LOR	Result	Test Start Date
Sample temperature at time of receipt a	8.3°C		
Algal Identification T0393(ADEL)			
Other Organisms		1450 cells/mL	
BLUE GREEN ALGAE			
Phormidium narrow spp		2830 cells/mL	
Dolichospermum (straight small)		190 cells/mL	
Snowella		500 cells/mL	
Planktolyngbya		6910 cells/mL	
Cyanodictyon		180000 cells/mL	
Cyanogranis		10400 cells/mL	
Pseudanabaena		100 cells/mL	
Romeria		120 cells/mL	
Limnothrix		240 cells/mL	
DIATOMS			
Aulacoseira		1110 cells/mL	
Nitzschia		40 cells/mL	
Cyclotella		10 cells/mL	
GREEN ALGAE			
Planctonema		8880 cells/mL	
Tetrastrum		350 cells/mL	
Actinastrum		140 cells/mL	
Monoraphidium		425 cells/mL	
Scenedesmus		400 cells/mL	
Gloeocystis		60 cells/mL	
Crucigenia		840 cells/mL	
Organism - Comment		Limnothrix - The identification for this organism is tentative only.	

Sample temperature at time of receipt 8.3°C Algal Biovolume T0393(ADEL)
BLUE GREEN ALGAE

27/09/2023



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Analytical Results

Sampling Point 11885-DEW - Mundoo Barrage Downstream

 Sampled Date
 27/09/2023
 12:34:00PM

 Sample Received Date
 28/09/2023
 4:35:40PM

 Sample Analysis Completed
 18/10/2023
 10:52:49AM

 Sample ID
 *2023-007-2384

Sample ID *2023-007 Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 27/09/2023

Phormidium narrow spp 0.07 mm3/L Dolichospermum (straight small) 0.02 mm3/L Cyanodictyon 0.09 mm3/L Cyanogranis <0.01 mm3/L Pseudanabaena <0.01 mm3/L Romeria <0.01 mm3/L Limnothrix <0.01 mm3/L Snowella <0.01 mm3/L Planktolyngbya 0.03 mm3/L

DIATOMS

 Aulacoseira
 3.17 mm3/L

 Nitzschia
 0.06 mm3/L

 Cyclotella
 <0.01 mm3/L</td>

GREEN ALGAE

 Actinastrum
 0.01 mm3/L

 Monoraphidium
 0.38 mm3/L

 Scenedesmus
 0.10 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 0.21 mm3/L # Total Diatom Biovolume 3.23 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 27/09/2023

Algae - Total 214000 cells/mL



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29/09/2023

17/10/2023

03/10/2023

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Analytical Results

Ammonia as N (ADEL) # Ammonia as N

Sampling Point 11885-DEW - Mundoo Barrage Downstream

 Sampled Date
 27/09/2023
 12:34:00PM

 Sample Received Date
 28/09/2023
 4:35:40PM

 Sample Analysis Completed
 18/10/2023
 10:52:49AM

 Sample ID
 *2023-007-2384

Status Endorsed

Collection Type Customer Collected

Algal Count - Total T0393(ADEL)		27/09/2023
Blue Green Algae - Total	201000 cells/mL	
Diatoms - Total	1160 cells/mL	

 Diatoms - Total
 1160 cells/mL

 Geosmin-MIB producing BGA - Total
 2930 cells/mL

 Green Algae - Total
 11100 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 22.1 $\mu g/L$ Phaeophytin a 0.1 10.8 $\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Res	esult	Test Start Date
Sample temperature at time of receipt 8.3°C				

69 µg/L

		10	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	61 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	10.4 μg/L	
# Nitrate + Nitrite as NO3	2.3	46.1 μg/L	
# Nitrate as Nitrogen		8.89 µg/L	
Nitrite as N (ADEL)			17/10/2023

# Nitrite as N	0.5	1.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogon Total		0.00//	

Nillogen - Total		0.00 Hig/L	
Phosphorus - Filterable Reactive as P (ADEL)			17/10/2023
# 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)			10/10/2023

Phosphorus - Total 10103-44 (ADEL) Phosphorus - Total 0.005 0.074 mg/L



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Silica - Reactive T0111-01(ADEL)

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10/10/2023

04/10/2023

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Analytical Results

11885-DEW - Mundoo Barrage Downstream **Sampling Point**

27/09/2023 12:34:00PM **Sampled Date** 28/09/2023 4:35:40PM Sample Received Date 18/10/2023 10:52:49AM Sample Analysis Completed *2023-007-2384 Sample ID

Endorsed **Status**

Customer Collected Collection Type

Silica - Reactive T0111-01(ADEL)	03/10/2023
----------------------------------	------------

Silica - Reactive 0.05 0.28 mg/L

TKN as N T0112-01(ADEL)

0.05 TKN as Nitrogen 0.87 mg/L

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3	°C		
Dissolved Organic Carbon T0158-07(ADEL	.)		04/10/2023
Dissolved Organic Carbon	1	8.6 mg/L	

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 10.7 mg/L

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
--------------------------------	-----	--------	-----------------

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL) 03/10/2023

Alkalinity as Calcium Carbonate 58 mg/L Bicarbonate 71 mg/L Carbonate 0 mg/L Hvdroxide 0 mg/L

03/10/2023 Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 325 µS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 180 mg/L

03/10/2023 pH T0010-01(ADEL)

рΗ 7.6 pH units

Temperature at which pH is measured 22.6 °C

29/09/2023 **Turbidity T0018-01(ADEL)**

Turbidity 0.1 52 NTU



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Analytical Results

Sampling Point 11885-DEW - Mundoo Barrage Downstream

 Sampled Date
 27/09/2023
 12:34:00PM

 Sample Received Date
 28/09/2023
 4:35:40PM

 Sample Analysis Completed
 18/10/2023
 10:52:49AM

 Sample ID
 *2023-007-2384

Sample ID *2023-007 Status Endorsed

Collection Type Customer Collected

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL)

06/10/2023

Suspended Solids 1.0 8 mg/L



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Analytical Results

Sampling Point 11884-DEW - Mundoo Barrage Upstream

 Sampled Date
 27/09/2023
 12:35:00PM

 Sample Received Date
 28/09/2023
 4:35:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2385

Status Endorsed

Collection Type Customer Collected

Biology Operations	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C	,		
Algal Identification T0393(ADEL)			
Other Organisms		2700 cells/mL	
BLUE GREEN ALGAE			
Cuspidothrix		196 cells/mL	
Phormidium		3770 cells/mL	
Limnothrix		500 cells/mL	
Romeria		200 cells/mL	
Cyanogranis		31200 cells/mL	
Cyanodictyon		232000 cells/mL	
Snowella		230 cells/mL	
Planktolyngbya		8040 cells/mL	
Anabaena		60 cells/mL	
Dolichospermum (straight small)		88 cells/mL	
CRYPTOPHYTES			
Chroomonas		250 cells/mL	
DIATOMS			
Aulacoseira		1630 cells/mL	
Synedra		10 cells/mL	
Staurosira		70 cells/mL	
Gyrosigma		2 cells/mL	
Asterionella		2 cells/mL	
GREEN ALGAE			
Planctonema		5630 cells/mL	
Closterium		4 cells/mL	
Actinastrum		720 cells/mL	
Monoraphidium		275 cells/mL	

860 cells/mL

450 cells/mL

tentative only.

Limnothrix - The identification for this organism is



Crucigenia

Organism - Comment

Oocystis

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Analytical Results

Sampling Point 11884-DEW - Mundoo Barrage Upstream

 Sampled Date
 27/09/2023
 12:35:00PM

 Sample Received Date
 28/09/2023
 4:35:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2385

 Status
 Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL) 27/09/2023

BLUE GREEN ALGAE

Phormidium	<0.01 mm3/L
Planktolyngbya	0.02 mm3/L
Anabaena	0.04 mm3/L
Dolichospermum (straight small)	<0.01 mm3/L
Snowella	0.03 mm3/L
Limnothrix	0.01 mm3/L
Romeria	<0.01 mm3/L
Cyanogranis	<0.01 mm3/L
Cyanodictyon	0.02 mm3/L

CRYPTOPHYTES

Chroomonas 0.14 mm3/L

DIATOMS

 Aulacoseira
 4.66 mm3/L

 Synedra
 0.01 mm3/L

 Gyrosigma
 <0.01 mm3/L</td>

 Asterionella
 <0.01 mm3/L</td>

 Staurosira
 <0.01 mm3/L</td>

GREEN ALGAE

 Closterium
 0.38 mm3/L

 Oocystis
 <0.01 mm3/L</td>

 Actinastrum
 0.01 mm3/L

 Monoraphidium
 0.05 mm3/L

 Crucigenia
 0.25 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 11884-DEW - Mundoo Barrage Upstream

 Sampled Date
 27/09/2023
 12:35:00PM

 Sample Received Date
 28/09/2023
 4:35:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2385

Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 27/09/2023

Total Blue_Green Algae Biovolume 0.57 mm3/L # Total Diatom Biovolume 4.67 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 27/09/2023

 Algae - Total
 286000 cells/mL

 Blue Green Algae - Total
 276000 cells/mL

 Diatoms - Total
 1710 cells/mL

 Geosmin-MIB producing BGA - Total
 3770 cells/mL

 Green Algae - Total
 7940 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 22.9 µg/L

Phaeophytin a 0.1 10.8 μ g/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	173 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	48 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	10.2 μg/L	
# Nitrate + Nitrite as NO3	2.3	45.2 μg/L	
# Nitrate as Nitrogen		8.82 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	1.4 µg/L	



Corporate Accreditation No.1115 Chemical and Biological Testing Accredited for compliance with ISO/IEC 17025 -Testing 29/09/2023

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Analytical Results

Sampling Point 11884-DEW - Mundoo Barrage Upstream

 Sampled Date
 27/09/2023
 12:35:00PM

 Sample Received Date
 28/09/2023
 4:35:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2385

Status Endorsed

Collection Type Customer Collected

Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		10.81 mg/L	
Phosphorus - Filterable Reactive as P (A	ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	7.475 µg/L	
Phosphorus-Filterable Reactive as P	0.5	2.5 μg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.608 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	0.16 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	10.8 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3	°C		
Dissolved Organic Carbon T0158-07(ADEL	.)		04/10/2023
Dissolved Organic Carbon	1	8.3 mg/L	
Total Organic Carbon T0158-07(ADEL)			04/10/2023
Total Organic Carbon	1	11.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

03/10/2023

03/10/2023

Alkalinity as Calcium Carbonate 57 $\,$ mg/L Bicarbonate 57 $\,$ mg/L Carbonate 60 $\,$ mg/L Hydroxide 50 $\,$ mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

284 μS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 157 mg/L



Conductivity

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Analytical Results

Sampling Point 11884-DEW - Mundoo Barrage Upstream

 Sampled Date
 27/09/2023
 12:35:00PM

 Sample Received Date
 28/09/2023
 4:35:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2385

Status Endorsed

Collection Type Customer Collected

pH T0010-01(ADEL) 03/10/2023

pH 7.6 pH units Temperature at which pH is measured 22.6 $^{\circ}$ C

Turbidity T0018-01(ADEL) 29/09/2023

Turbidity 0.1 53 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C
Suspended Solids T0160-01(ADEL)

04/10/2023

Suspended Solids 1.0 24 mg/L



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Analytical Results

Sampling Point 353177-EPA - Tauwitchere Barrage DS

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:37PM

 Sample Analysis Completed
 18/10/2023
 10:12:56AM

 Sample ID
 *2023-007-2389

Sample ID *2023-007-Status Endorsed

Collection Type Customer Collected

Biology Operations	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Algal Identification T0393(ADEL)			
Other Organisms		180 cells/mL	
BLUE GREEN ALGAE			
Cvanocatena		8400 cells/ml	

Planktolyngbya6150 cells/mLCyanodictyon732000 cells/mLPhormidium narrow spp1880 cells/mLCuspidothrix208 cells/mLAnabaena26 cells/mLCyanogranis10400 cells/mL

DIATOMS

Aulacoseira 2200 cells/mL
Asterionella 14 cells/mL

GREEN ALGAE Planctonema 5460 cells/mL Pediastrum 14 cells/mL Crucigenia 1360 cells/mL Scenedesmus 240 cells/mL Oocystis 300 cells/mL Actinastrum 320 cells/mL Monoraphidium 90 cells/mL Tetrastrum 160 cells/mL

Sample temperature at time of receipt 8.3°C Algal Biovolume T0393(ADEL)

27/09/2023

BLUE GREEN ALGAE

 Cyanogranis
 <0.01 mm3/L</td>

 Cyanocatena
 <0.01 mm3/L</td>

 Planktolyngbya
 0.03 mm3/L

 Cyanodictyon
 0.37 mm3/L



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Analytical Results

Sampling Point 353177-EPA - Tauwitchere Barrage DS

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:37PM

 Sample Analysis Completed
 18/10/2023
 10:12:56AM

 Sample ID
 *2023-007-2389

 Status
 Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 27/09/2023

 Phormidium narrow spp
 0.05 mm3/L

 Cuspidothrix
 0.01 mm3/L

 Anabaena
 <0.01 mm3/L</td>

DIATOMS

Aulacoseira 6.29 mm3/L
Asterionella <0.01 mm3/L

GREEN ALGAE

 Pediastrum
 0.02 mm3/L

 Crucigenia
 0.04 mm3/L

 Scenedesmus
 0.06 mm3/L

 Occystis
 0.09 mm3/L

 Actinastrum
 0.02 mm3/L

 Monoraphidium
 0.08 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 0.46 mm3/L # Total Diatom Biovolume 6.29 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 27/09/2023

0 cells/mL

 Algae - Total
 769000 cells/mL

 Blue Green Algae - Total
 759000 cells/mL

 Diatoms - Total
 2210 cells/mL

 Geosmin-MIB producing BGA - Total
 1880 cells/mL

 Green Algae - Total
 7940 cells/mL



Toxin producing BGA - Total

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Analytical Results

Status

Sampling Point 353177-EPA - Tauwitchere Barrage DS

Endorsed

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:37PM

 Sample Analysis Completed
 18/10/2023
 10:12:56AM

 Sample ID
 *2023-007-2389

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

29/09/2023

Chlorophyll a 0.1 22.9 $\mu g/L$ Phaeophytin a 0.1 11.5 $\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	89 µg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	442 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	16.2 μg/L	
# Nitrate + Nitrite as NO3	2.3	71.8 µg/L	
# Nitrate as Nitrogen		12.3 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	3.9 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		2.33 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	43.056 μg/L	
Phosphorus-Filterable Reactive as P	0.5	14.4 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.276 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	0.21 mg/L	
TKN as N T0112-01(ADEL)		-	10/10/2023
TKN as Nitrogen	0.05	2.31 mg/L	

Organic Chemistry LOR Result Test Start Date



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Analytical Results

Dissolved Organic Carbon

Sampling Point 353177-EPA - Tauwitchere Barrage DS

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:37PM

 Sample Analysis Completed
 18/10/2023
 10:12:56AM

 Sample ID
 *2023-007-2389

Status Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C Dissolved Organic Carbon T0158-07(ADEL)

04/10/2023

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 11.2 mg/L

Inorganic Chemistry - Physical LOR Result Test Start Date

8.1 mg/L

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

03/10/2023

 Alkalinity as Calcium Carbonate
 60 mg/L

 Bicarbonate
 73 mg/L

 Carbonate
 0 mg/L

 Hydroxide
 0 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 2 1680 µS/cm

Note Conductivity measurement is corrected to 25°C

1

Total Dissolved Solids (by EC) 1 935 mg/L

pH T0010-01(ADEL) 03/10/2023

pH 7.9 pH units
Temperature at which pH is measured 22.5 °C

Turbidity T0018-01(ADEL) 29/09/2023

Turbidity 0.1 47 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL) 04/10/2023

Suspended Solids 1.0 40 mg/L



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Analytical Results

Sampling Point 353179-EPA - Tauwitchere Barrage Upstream

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:53PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2394

Status Endorsed

Collection Type Customer Collected

Biology Operations	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°	С		
Algal Identification T0393(ADEL)			
Other Organisms		467 cells/mL	
BLUE GREEN ALGAE			
Cyanogranis		8400 cells/mL	
•			

Cyanogranis8400 cells/mLCyanodictyon910000 cells/mLPhormidium narrow spp784 cells/mLPlanktolyngbya6500 cells/mLAnabaena74 cells/mLCyanocatena7400 cells/mL

DIATOMS

Aulacoseira 2270 cells/mL
Asterionella 40 cells/mL

GREEN ALGAE Planctonema 8240 cells/mL Scenedesmus 220 cells/mL Crucigenia 600 cells/mL Tetrastrum 40 cells/mL Oocystis 317 cells/mL Pediastrum 100 cells/mL Monoraphidium 50 cells/mL Actinastrum 240 cells/mL

Sample temperature at time of receipt 8.3°C Algal Biovolume T0393(ADEL)

27/09/2023

BLUE GREEN ALGAE

 Cyanocatena
 <0.01 mm3/L</td>

 Cyanogranis
 <0.01 mm3/L</td>

 Cyanodictyon
 0.46 mm3/L

 Phormidium narrow spp
 0.02 mm3/L



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Analytical Results

Sampling Point 353179-EPA - Tauwitchere Barrage Upstream

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:53PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2394

Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 27/09/2023

 Planktolyngbya
 0.03 mm3/L

 Anabaena
 <0.01 mm3/L</td>

DIATOMS

Aulacoseira 6.49 mm3/L Asterionella 0.02 mm3/L

GREEN ALGAE

 Scenedesmus
 0.06 mm3/L

 Crucigenia
 0.02 mm3/L

 Oocystis
 0.10 mm3/L

 Pediastrum
 0.12 mm3/L

 Monoraphidium
 0.04 mm3/L

 Actinastrum
 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.

0 cells/ml

Total Algae Biovolume Not Calculated mm3/L

Total Blue_Green Algae Biovolume 0.51 mm3/L # Total Diatom Biovolume 6.51 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C Algal Count - Total T0393(ADEL)

Algae - Total 954000 cells/mL

| Square - Total | Squa

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Toxin producing BGA - Total

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Analytical Results

Sampling Point 353179-EPA - Tauwitchere Barrage Upstream

 Sampled Date
 27/09/2023
 1:20:00PM

 Sample Received Date
 28/09/2023
 4:39:53PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2394

 Status
 Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3 $^{\circ}\text{C}$

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 25.4 $\mu g/L$ Phaeophytin a 0.1 10.8 $\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 8	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	31 µg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	93 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	7.9 µg/L	
# Nitrate + Nitrite as NO3	2.3	35.0 μg/L	
# Nitrate as Nitrogen		5.54 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	2.4 μg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		1.71 mg/L	
Phosphorus - Filterable Reactive as P (A	ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	15.548 μg/L	
Phosphorus-Filterable Reactive as P	0.5	5.2 μg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.091 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	0.15 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	1.70 mg/L	
Organic Chemistry	LOR	Result	Test Start Date



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Analytical Results

Total Organic Carbon

Status

353179-EPA - Tauwitchere Barrage Upstream **Sampling Point**

27/09/2023 1:20:00PM Sampled Date 28/09/2023 4:39:53PM Sample Received Date 18/10/2023 8:07:28AM Sample Analysis Completed *2023-007-2394 Sample ID Endorsed

Customer Collected Collection Type

Sample temperature at time of receipt 8.3°C

04/10/2023 **Dissolved Organic Carbon T0158-07(ADEL)**

Dissolved Organic Carbon 1 8.0 mg/L

Total Organic Carbon T0158-07(ADEL)

1

Inorganic Chemistry - Physical LOR Result **Test Start Date**

10.5 mg/L

Sample temperature at time of receipt 8.3°C

03/10/2023 Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate 58 mg/L Bicarbonate 70 mg/L Carbonate 0 mg/L Hydroxide 0 mg/L

03/10/2023 Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 286 µS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 158 mg/L

03/10/2023 pH T0010-01(ADEL)

7.9 pH units Temperature at which pH is measured 22.5 °C

29/09/2023 **Turbidity T0018-01(ADEL)**

Turbidity 0.1 48 NTU

Inorganic Chemistry - Waste Water LOR Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

04/10/2023 Suspended Solids T0160-01(ADEL)

Suspended Solids 1.0 42 mg/L



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Analytical Results

Sampling Point 31522-EPA - Mark Point 27/09/2023 1:48:00PM **Sampled Date** Sample Received Date 28/09/2023 4:37:50PM 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2392 Sample ID

Endorsed **Status**

Customer Collected Collection Type

Biology Operations	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C			
Algal Identification T0393(ADEL)			
CRYPTOPHYTES			
Cryptomonads		30 cells/mL	

DIATOMS

Chaetoceros 50 cells/mL Pennate diatoms 10 cells/mL

GREEN ALGAE

Planctonema 5 cells/mL Phytoflagellates 40 cells/mL Tetrastrum 30 cells/mL Crucigenia 310 cells/mL Scenedesmus 30 cells/mL Monoraphidium 10 cells/mL Chlorella 2200 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL) 27/09/2023

CRYPTOPHYTES

Cryptomonads <0.01 mm3/L

GREEN ALGAE

Crucigenia <0.01 mm3/L Scenedesmus <0.01 mm3/L Monoraphidium <0.01 mm3/L Chlorella 0.10 mm3/L



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Analytical Results

31522-EPA - Mark Point **Sampling Point** 27/09/2023 1:48:00PM Sampled Date 28/09/2023 4:37:50PM Sample Received Date 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2392 Sample ID

Endorsed **Status**

Customer Collected Collection Type

27/09/2023 Algal Biovolume T0393(ADEL)

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 8.3°C

27/09/2023 Algal Count - Total T0393(ADEL)

Algae - Total 2720 cells/ml Blue Green Algae - Total 0 cells/mL Diatoms - Total 60 cells/mL Geosmin-MIB producing BGA - Total 0 cells/mL Green Algae - Total 2620 cells/ml Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL) 29/09/2023

Chlorophyll a 2.04 µg/L Phaeophytin a 0.1 3.18 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
---------------------------------	-----	--------	-----------------

Sample temperature at time of receipt 8.3°C 17/10/2023 Ammonia as N (ADEL)

Ammonia as N 35 µg/L 03/10/2023 Chloride T0104-02(ADEL)

Chloride 4.0 9690 mg/L



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Sampling Point	31522-EPA - Mark Point
Sampled Date	27/09/2023 1:48:00PM
Sample Received Date	28/09/2023 4:37:50PM
Sample Analysis Completed	18/10/2023 8:07:29AM
Sample ID	*2023-007-2392

Endorsed **Status**

Customer Collected Collection Type

Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	45.4 μg/L	
# Nitrate + Nitrite as NO3	2.3	201 μg/L	
# Nitrate as Nitrogen		37.1 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	8.3 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		1.88 mg/L	
Phosphorus - Filterable Reactive as P (AD	DEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	31.395 μg/L	
Phosphorus-Filterable Reactive as P	0.5	10.5 μg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.108 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023

Organic Chemistry	LOR	Result	Test Start Date	
Sample temperature at time of red	ceipt 8.3°C			
Dissolved Organic Carbon T0158-	07(ADEL)		04/10/2023	
Dissolved Organic Carbon	1	13.4 mg/L		
Total Organic Carbon T0158-07(AE	DEL)		04/10/2023	
Total Organic Carbon	1	14.0 mg/L		

1.71 mg/L

1.83 mg/L

14.0 mg/L

0.05

0.05

Inorganic Chemistry - Physical LOR	Result	Test Start Date
------------------------------------	--------	-----------------

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate 121 mg/L Bicarbonate 147 mg/L



Silica - Reactive

TKN as Nitrogen

TKN as N T0112-01(ADEL)

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10/10/2023

03/10/2023

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Analytical Results

 Sampling Point
 31522-EPA - Mark Point

 Sampled Date
 27/09/2023
 1:48:00PM

 Sample Received Date
 28/09/2023
 4:37:50PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2392

 Status
 Endorsed

Collection Type Customer Collected

Alkalinity Carbonate Bicarbonate and	I Hydroxide T0101-0	I(ADEL)	03/10/2023
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			03/10/2023
Conductivity	2	30200 µS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	19400 mg/L	
pH T0010-01(ADEL)			03/10/2023
рН		7.9 pH units	
Temperature at which pH is measured		22.4 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	10 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3° Suspended Solids T0160-01(ADEL)	C		04/10/2023
Suspended Solids	1.0	18 ma/L	



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Analytical Results

31523-EPA - Long Point **Sampling Point** 27/09/2023 2:23:00PM Sampled Date 28/09/2023 4:38:05PM Sample Received Date 18/10/2023 8:07:28AM Sample Analysis Completed *2023-007-2374 Sample ID

Endorsed **Status**

Customer Collected Collection Type

LOR **Biology Operations** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Nitzschia 20 cells/ml

GREEN ALGAE

Chlorella 150 cells/ml Phytoflagellates 50 cells/ml

Sample temperature at time of receipt 8.3°C Algal Biovolume T0393(ADEL)

DIATOMS 0.03 mm3/L

Nitzschia

GREEN ALGAE

Chlorella <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 0.00 mm3/L # Total Diatom Biovolume 0.03 mm3/L

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

27/09/2023 Algal Count - Total T0393(ADEL)

0 cells/mL

Algae - Total 220 cells/mL Blue Green Algae - Total 0 cells/mL

Diatoms - Total 20 cells/mL

Geosmin-MIB producing BGA - Total Corporate Accreditation No.1115 Chemical and **Biological Testing**

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 Sampling Point
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 Sampled Date
 27/09/2023
 2:23:00PM

 Sample Received Date
 28/09/2023
 4:38:05PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2374

 Status
 Endorsed

Collection Type Customer Collected

Algal Count - Total T0393(ADEL)

Green Algae - Total 200 cells/mL
Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 2.33 $\,\mu g/L$ Phaeophytin a 0.1 2.73 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt a	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	51 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	16500 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	27.1 μg/L	
# Nitrate + Nitrite as NO3	2.3	120 µg/L	
# Nitrate as Nitrogen		23.2 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	3.9 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		2.21 mg/L	
Phosphorus - Filterable Reactive as P (A	ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	12.857 µg/L	
Phosphorus-Filterable Reactive as P	0.5	4.3 μg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.058 mg/L	
Silica - Reactive T0111-01(ADEL)		· ·	03/10/2023
Silica - Reactive	0.05	1.80 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	2.18 mg/L	
		g/L	



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Analytical Results

 Sampling Point
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 Sampled Date
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 2:23:00PM

 Sample Received Date
 28/09/2023
 4:38:05PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2374

 Status
 Endorsed

Collection Type Customer Collected

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.	3°C		
Dissolved Organic Carbon T0158-07(ADE	:L)		04/10/2023
Dissolved Organic Carbon	1	15.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			04/10/2023
Total Organic Carbon	1	15.9 mg/L	
Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.	3°C		
Alkalinity Carbonate Bicarbonate and Hy	droxide T0101-0	1(ADEL)	03/10/2023
Alkalinity as Calcium Carbonate		138 mg/L	
Bicarbonate		169 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0	016-01(ADEL)		03/10/2023
Conductivity	2	46600 μS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	32200 mg/L	
pH T0010-01(ADEL)			03/10/2023
pH		8.0 pH units	
Temperature at which pH is measured		22.4 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	7.0 NTU	
Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.	3°C		
Suspended Solids T0160-01(ADEL)			06/10/2023
Suspended Solids	1.0	<1 mg/L	



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Analytical Results

 Sampling Point
 31523-EPA - Long Point

 Sampled Date
 27/09/2023
 2:23:00PM

 Sample Received Date
 28/09/2023
 4:38:05PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2374

Status Endorsed

Collection Type Customer Collected



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53032-EPA - Noonameena **Sampling Point** 27/09/2023 2:53:00PM Sampled Date 28/09/2023 4:40:09PM Sample Received Date 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2391

Sample ID Endorsed **Status**

Customer Collected Collection Type

LOR **Biology Operations** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Fragilaria 34 cells/ml Navicula 10 cells/mL Pennate diatoms 10 cells/mL

GREEN ALGAE

Chlorella 1500 cells/mL

Organism - Comment Fragilaria - The identification for this organism is

tentative only.

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

DIATOMS

Fragilaria 0.02 mm3/L Navicula 0.01 mm3/L

GREEN ALGAE

Total Algae Biovolume

Total Diatom Biovolume

Total Toxic BGA Biovolume

Total Green Algae Biovolume

Total Blue Green Algae Biovolume

Chlorella 0.07 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.

Not Calculated mm3/L

0.00 mm3/l

Not Calculated mm3/L

0.07 mm3/L 0.00 mm3/L

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 53032-EPA - Noonameena

 Sampled Date
 27/09/2023 2:53:00PM

 Sample Received Date
 28/09/2023 4:40:09PM

 Sample Analysis Completed
 18/10/2023 8:07:29AM

 Sample ID
 *2023-007-2391

 Status
 Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

 Algal Count - Total T0393(ADEL)
 27/09/2023

 Algae - Total
 1550 cells/mL

 Blue Green Algae - Total
 0 cells/mL

 Diatoms - Total
 54 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 1500 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 1.34 $\,\mu g/L$ Phaeophytin a 0.1 1.27 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 8	3.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	28 µa/L	

1	28 μg/L	
		03/10/2023
4.0	18700 mg/L	
		17/10/2023
0.5	13.1 µg/L	
2.3	58.0 µg/L	
	10.3 µg/L	
		17/10/2023
0.5	2.8 µg/L	
		29/09/2023
	2.34 mg/L	
		17/10/2023
1.5	4.186 μg/L	
	0.5 2.3 0.5	4.0 18700 mg/L 0.5 13.1 μg/L 2.3 58.0 μg/L 10.3 μg/L 0.5 2.8 μg/L 2.34 mg/L

1.4 µg/L

0.5

Phosphorus - Total T0109-44(ADEL)

Phosphorus-Filterable Reactive as P

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03/10/2023

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 Sampling Point
 53032-EPA - Noonameena

 Sampled Date
 27/09/2023
 2:53:00PM

 Sample Received Date
 28/09/2023
 4:40:09PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2391

Status Endorsed

Collection Type Customer Collected

Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.059 mg/L	

Silica - Reactive T0111-01(ADEL)

Silica - Reactive 0.05 0.60 mg/L **TKN as N T0112-01(ADEL)**

TKN as Nitrogen 0.05 2.33 mg/L

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C			

Dissolved Organic Carbon T0158-07(ADEL)

Dissolved Organic Carbon 1 17.3 mg/L

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 18.8 mg/L

Inorganic Chemistry - Physical LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate 160 mg/L
Bicarbonate 159 mg/L
Carbonate 18 mg/L
Hydroxide 0 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 2 53200 µS/cm

Conductivity 2 53200 µS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 37800 mg/L

pH T0010-01(ADEL) 03/10/2023

pH 8.5 pH units Temperature at which pH is measured 22.5 $^{\circ}$ C

Turbidity T0018-01(ADEL) 29/09/2023

Turbidity 0.1 5.4 NTU



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 53032-EPA - Noonameena

 Sampled Date
 27/09/2023
 2:53:00PM

 Sample Received Date
 28/09/2023
 4:40:09PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2391

Status Endorsed

Collection Type Customer Collected

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C Suspended Solids T0160-01(ADEL)	;		06/10/2023
Suspended Solids	1.0	9 mg/L	



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Analytical Results

 Sampling Point
 31524-EPA - Bonneys

 Sampled Date
 27/09/2023
 3:15:00PM

 Sample Received Date
 28/09/2023
 4:38:20PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2387

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Chlorella 6500 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

GREEN ALGAE

Chlorella 0.29 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.

0 cells/mL

 # Total Algae Biovolume
 0.29 mm3/L

 # Total Blue_Green Algae Biovolume
 0.00 mm3/L

 # Total Diatom Biovolume
 0.00 mm3/L

Total Green Algae Biovolume 0.29 mm3/L
Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C Algal Count - Total T0393(ADEL)

Algae - Total 6500 cells/mL

Blue Green Algae - Total

Diatoms - Total 0 cells/mL Geosmin-MIB producing BGA - Total 0 cells/mL

 Green Algae - Total
 6500 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

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Analytical Results

Sampling Point 31524-EPA - Bonneys 27/09/2023 3:15:00PM **Sampled Date** 28/09/2023 4:38:20PM Sample Received Date 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2387 Sample ID Endorsed **Status Customer Collected Collection Type**

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

0.1 1.11 µg/L

Chlorophyll a 0.97 μg/L Phaeophytin a 0.1

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	11 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	19900 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	18.2 μg/L	
# Nitrate + Nitrite as NO3	2.3	80.6 µg/L	
# Nitrate as Nitrogen		17.3 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	0.9 μg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		2.42 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	4.186 μg/L	
Phosphorus-Filterable Reactive as P	0.5	1.4 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.034 mg/L	
Silica - Reactive T0111-01(ADEL)		-	03/10/2023
Silica - Reactive	0.05	0.33 mg/L	
TKN as N T0112-01(ADEL)		G	10/10/2023
TKN as Nitrogen	0.05	2.40 mg/L	
-		. 3	
Organic Chemistry	LOR	Result	Test Start Date



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04/10/2023

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Analytical Results

 Sampling Point
 31524-EPA - Bonneys

 Sampled Date
 27/09/2023
 3:15:00PM

 Sample Received Date
 28/09/2023
 4:38:20PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2387

Status Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

Dissolved Organic Carbon T0158-07(ADEL)

Dissolved Organic Carbon 1 19.1 mg/L

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 19.4 mg/L

Inorganic Chemistry - Physical LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate 168 $\,$ mg/L Bicarbonate 162 $\,$ mg/L Carbonate 21 $\,$ mg/L Hydroxide 0 $\,$ mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

03/10/2023

Conductivity 2 59200 μ S/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 43200 mg/L

pH T0010-01(ADEL) 03/10/2023

pH 8.5 pH units Temperature at which pH is measured 22.5 $^{\circ}$ C

Turbidity T0018-01(ADEL) 29/09/2023

Turbidity 0.1 7.1 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL) 06/10/2023

Suspended Solids 1.0 2 mg/L



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Analytical Results

Sampling Point 31513-EPA - Parnka Point Boat Ramp

 Sampled Date
 27/09/2023
 3:50:00PM

 Sample Received Date
 28/09/2023
 4:36:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2377

 Status
 Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

 Naviculoids
 3720 cells/mL

 Nitzschia
 36 cells/mL

 Amphiprora_(=_Entomoneis)
 2 cells/mL

 Pennate diatoms
 12 cells/mL

GREEN ALGAE

Unicellular green algae 90000 cells/mL
Chlorella 1040000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

DIATOMS

Nitzschia 0.05 mm3/L Amphiprora_(=_Entomoneis) 0.03 mm3/L

GREEN ALGAE

Total Algae Biovolume

Total Diatom Biovolume

Total Toxic BGA Biovolume

Total Green Algae Biovolume

Total Blue_Green Algae Biovolume

Chlorella 46.8 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. Not Calculated mm3/L

0.00 mm2/l

0.00 mm3/L

Not Calculated mm3/L Not Calculated mm3/L

0.00 mm3/L

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Analytical Results

Sampling Point 31513-EPA - Parnka Point Boat Ramp

 Sampled Date
 27/09/2023
 3:50:00PM

 Sample Received Date
 28/09/2023
 4:36:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2377

Status Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 27/09/2023

 Algae - Total
 1130000 cells/mL

 Blue Green Algae - Total
 0 cells/mL

 Diatoms - Total
 3770 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 1130000 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 68.2 $\,\mu g/L$ Phaeophytin a 0.1 21.9 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date			
Samula tampayatiyya at tima af yaqaint 0.200						

Sample temperature at time of receipt 8	.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	82 µg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	26800 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	4.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	17.7 μg/L	
# Nitrate as Nitrogen		3.45 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.44 mg/L	
Phosphorus - Filterable Reactive as P (A	DEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	<1.5 µg/L	
Phosphorus-Filterable Reactive as P	0.5	<0.5 µg/L	





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Analytical Results

Sampling Point 31513-EPA - Parnka Point Boat Ramp

 Sampled Date
 27/09/2023
 3:50:00PM

 Sample Received Date
 28/09/2023
 4:36:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2377

Status Endorsed

Collection Type Customer Collected

Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.118 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023

Silica - Reactive T0111-01(ADEL)Silica - Reactive 0.05 5.49 mg/L

TKN as N T0112-01(ADEL) 10/10/2023

TKN as Nitrogen 0.05 4.44 mg/L

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°	°C		
Dissolved Organic Carbon T0158-07(ADEL)		04/10/2023
Dissolved Organic Carbon	1	23.5 mg/L	
Total Organic Carbon T0158-07(ADEL)			04/10/2023
Total Organic Carbon	1	27.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

 Alkalinity as Calcium Carbonate
 200 mg/L

 Bicarbonate
 222 mg/L

 Carbonate
 11 mg/L

 Hydroxide
 0 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL) 03/10/2023

Conductivity 2 71200 µS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 54500 mg/L

pH T0010-01(ADEL) 03/10/2023

pH 8.4 pH units Temperature at which pH is measured 22.5 $^{\circ}$ C

Temperature at which pH is measured 22.5 °C **Turbidity T0018-01(ADEL)**29/09/2023

Turbidity 0.1 13 NTU



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Analytical Results

Sampling Point 31513-EPA - Parnka Point Boat Ramp

 Sampled Date
 27/09/2023
 3:50:00PM

 Sample Received Date
 28/09/2023
 4:36:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2377

Sample ID *2023-007-Status Endorsed

Collection Type Customer Collected

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL)

06/10/2023

Suspended Solids 1.0 20 mg/L



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Analytical Results

31512-EPA - McGrath Flat North **Sampling Point** 27/09/2023 4:15:00PM Sampled Date

28/09/2023 4:36:09PM Sample Received Date 18/10/2023 8:07:30AM Sample Analysis Completed *2023-007-2381

Sample ID Endorsed **Status**

Customer Collected Collection Type

LOR **Biology Operations** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Naviculoids 72 cells/ml Pennate diatoms 8 cells/mL Thalassionema 12 cells/mL Gyrosigma 2 cells/mL

GREEN ALGAE

Unicellular green algae 78000 cells/mL Chlorella 1020000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

DIATOMS

Gyrosigma <0.01 mm3/l

GREEN ALGAE

Chlorella 45.9 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.

Not Calculated mm3/L

0.00 mm3/L

Not Calculated mm3/L Not Calculated mm3/L

0.00 mm3/L

Total Green Algae Biovolume Total Toxic BGA Biovolume

Total Blue_Green Algae Biovolume

Total Algae Biovolume

Total Diatom Biovolume

Sample temperature at time of receipt 8.3°C



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Analytical Results

31512-EPA - McGrath Flat North **Sampling Point** 27/09/2023 4:15:00PM **Sampled Date** 28/09/2023 4:36:09PM Sample Received Date 18/10/2023 8:07:30AM Sample Analysis Completed *2023-007-2381 Sample ID

Endorsed **Status**

Customer Collected Collection Type

27/09/2023 Algal Count - Total T0393(ADEL)

Algae - Total 1100000 cells/mL Blue Green Algae - Total 0 cells/mL Diatoms - Total 94 cells/mL Geosmin-MIB producing BGA - Total 0 cells/mL Green Algae - Total 1100000 cells/mL Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

29/09/2023 Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 65.6 µg/L Phaeophytin a 0.1 21.8 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C			

Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	22 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	26100 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	6.0 µg/L	
# Nitrate + Nitrite as NO3	2.3	26.6 μg/L	
# Nitrate as Nitrogen		4.66 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	1.3 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		3.87 mg/L	
Dheanhaine Eilterahla Dagativa as D /Al	DELV		17/10/2023

Phosphorus - Filterable Reactive as P (ADEL) 17/10/2023

Phosphorus -Filterable Reactive as PO4 1.5 6.877 µg/L Phosphorus-Filterable Reactive as P 0.5 2.3 µg/L

10/10/2023 Phosphorus - Total T0109-44(ADEL)

0.005 Phosphorus - Total

0.127 mg/L

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04/10/2023

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	Ana	lytical	Resu	lts
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Silica - Reactive

 Sampling Point
 31512-EPA - McGrath Flat North

 Sampled Date
 27/09/2023 4:15:00PM

 Sample Received Date
 28/09/2023 4:36:09PM

 Sample Analysis Completed
 18/10/2023 8:07:30AM

 Sample ID
 *2023-007-2381

 Status
 Endorsed

Collection Type Customer Collected

Silica - Reactive T0111-01(ADEL) 03/10/2023

2.70 mg/L

TKN as N T0112-01(ADEL)

TKN as Nitrogen 0.05 3.86 mg/L

0.05

Organic Chemistry LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C Dissolved Organic Carbon T0158-07(ADEL)

Dissolved Organic Carbon 1 21.9 mg/L

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 25.5 mg/L

Inorganic Chemistry - Physical LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

03/10/2023

Alkalinity as Calcium Carbonate 195 $\,$ mg/L Bicarbonate 206 $\,$ mg/L Carbonate 16 $\,$ mg/L Hydroxide 0 $\,$ mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL) 03/10/2023

Conductivity 2 70500 μ S/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC)

1 53800 mg/L

pH T0010-01(ADEL) 03/10/2023

pH 8.4 pH units

0.4 pri units

Temperature at which pH is measured 22.5 °C

Turbidity T0018-01(ADEL) 29/09/2023

Turbidity 0.1 12 NTU



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Analytical Results

Sampling Point 31512-EPA - McGrath Flat North

27/09/2023 4:15:00PM **Sampled Date** 28/09/2023 4:36:09PM **Sample Received Date** 18/10/2023 8:07:30AM Sample Analysis Completed

*2023-007-2381 Sample ID Endorsed **Status**

Customer Collected Collection Type

LOR **Inorganic Chemistry - Waste Water** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C Suspended Solids T0160-01(ADEL)

06/10/2023

Suspended Solids 1.0 7 mg/L



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Analytical Results

 Sampling Point
 31528-EPA - Salt Creek Outlet

 Sampled Date
 28/09/2023 8:05:00AM

 Sample Received Date
 28/09/2023 4:39:05PM

 Sample Analysis Completed
 25/10/2023 10:19:25AM

 Sample ID
 *2023-007-2388

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Synedra 16 cells/mL
Aulacoseira 10 cells/mL
Pennate diatoms 20 cells/mL

GREEN ALGAE

 Oocystis sp_1_(small_cells)
 5850 cells/mL

 Chlorella
 139000 cells/mL

 Monoraphidium sp_2_(short)
 2400 cells/mL

 Unicellular green algae
 7100 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

DIATOMS

 Synedra
 0.01 mm3/L

 Aulacoseira
 0.03 mm3/L

GREEN ALGAE

 Oocystis sp_1_(small_cells)
 1.01 mm3/L

 Chlorella
 6.26 mm3/L

 Monoraphidium sp_2_(short)
 0.13 mm3/L

Monoraphidium sp_2_(short)

Algal Biovolume Comment

0.20 hillion

0.13 mm3/L

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

Total Algae Biovolume how they calculate.

**Not Calculated mm3/L

Total Blue_Green Algae Biovolume 0.00 mm3/L
Total Diatom Biovolume Not Calculated mm3/L

NATA

WORLD RECOGNISED

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 Sampling Point
 31528-EPA - Salt Creek Outlet

 Sampled Date
 28/09/2023 8:05:00AM

 Sample Received Date
 28/09/2023 4:39:05PM

 Sample Analysis Completed
 25/10/2023 10:19:25AM

 Sample ID
 *2023-007-2388

Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 28/09/2023

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 28/09/2023

 Algae - Total
 154000 cells/mL

 Blue Green Algae - Total
 0 cells/mL

 Diatoms - Total
 46 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 154000 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 3.08 $\,\mu g/L$ Phaeophytin a 0.1 0.88 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	41 µg/L	
Chloride T0104-02(ADEL)			09/10/2023
Chloride	4.0	4050 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	4.6 µg/L	
# Nitrate + Nitrite as NO3	2.3	20.4 µg/L	
# Nitrate as Nitrogen		4.15 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		1.22 mg/L	



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 Sampling Point
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 Sampled Date
 28/09/2023 8:05:00AM

 Sample Received Date
 28/09/2023 4:39:05PM

 Sample Analysis Completed
 25/10/2023 10:19:25AM

 Sample ID
 *2023-007-2388

Status Endorsed

Collection Type Customer Collected

TKN as Nitrogen	0.05	1.22 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
Silica - Reactive	0.05	10.2 mg/L	
Silica - Reactive T0111-01(ADEL)			09/10/2023
Phosphorus - Total	0.005	<0.005 mg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus-Filterable Reactive as P	0.5	1.0 μg/L	
# Phosphorus -Filterable Reactive as PO4	1.5	2.99 µg/L	
Phosphorus - Filterable Reactive as P (A	ADEL)		17/10/2023

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Dissolved Organic Carbon T0158-07(A	DEL)		23/10/2023
Dissolved Organic Carbon	1	10.8 mg/L	
Total Organic Carbon T0158-07(ADEL)			23/10/2023
Total Organic Carbon	1	11.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
--------------------------------	-----	--------	-----------------

Sample temperature at time of receipt 8.3°C

Alkalinity as Calcium Carbonate

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

354 mg/L 380 mg/L

 Bicarbonate
 380 mg/L

 Carbonate
 25 mg/L

 Hydroxide
 0 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL) 03/10/2023

Conductivity 2 17500 μ S/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC)

1 10600 mg/L

pH T0010-01(ADEL) 03/10/2023

pH 8.6 pH units



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Analytical Results

 Sampling Point
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 Sampled Date
 28/09/2023 8:05:00AM

 Sample Received Date
 28/09/2023 4:39:05PM

 Sample Analysis Completed
 25/10/2023 10:19:25AM

 Sample ID
 *2023-007-2388

 Sample ID
 *2023-007-238

 Status
 Endorsed

Collection Type Customer Collected

pH T0010-01(ADEL) 03/10/2023

Temperature at which pH is measured 22.4 °C

Turbidity T0018-01(ADEL)

Turbidity 0.1 3.0 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL)
06/10/2023

Suspended Solids 1.0 <1 mg/L



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Analytical Results

31511-EPA - 3.2km South Salt Creek **Sampling Point**

28/09/2023 8:12:00AM Sampled Date 28/09/2023 4:35:55PM Sample Received Date 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2378 Sample ID

Endorsed **Status**

Customer Collected Collection Type

LOR **Biology Operations** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Naviculoids 2 cells/ml Pennate diatoms 10 cells/mL

DINOFLAGELLATES

Heterocapsa 80 cells/ml PERIDINIACEAE 10 cells/mL

GREEN ALGAE

Phytoflagellates 80 cells/mL Unicellular green algae 124000 cells/mL Chlorella 1900000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C Algal Biovolume T0393(ADEL)

GREEN ALGAE

Total Algae Biovolume

Total Diatom Biovolume

Total Toxic BGA Biovolume

Total Green Algae Biovolume

Total Blue_Green Algae Biovolume

Chlorella 85.5 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. Not Calculated mm3/L

0.00 mm3/L

Not Calculated mm3/L Not Calculated mm3/L

0.00 mm3/L

Sample temperature at time of receipt 8.3°C



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Analytical Results

Sampling Point 31511-EPA - 3.2km South Salt Creek

28/09/2023 8:12:00AM **Sampled Date** 28/09/2023 4:35:55PM **Sample Received Date** 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2378 Sample ID

Endorsed **Status**

Customer Collected Collection Type

Algal Count - Total T0393(ADEL)		28/09/2023
Algae - Total	124000 cells/mL	
Plus Croop Algos Total	0 11-/1	

Blue Green Algae - Total 0 cells/mL 12 cells/mL Geosmin-MIB producing BGA - Total 0 cells/mL Green Algae - Total 124000 cells/mL Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 153 µg/L Phaeophytin a 0.1 50.6 μg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date

Sample temperature at time of receipt 8	2.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	112 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	25500 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	6.1 µg/L	
# Nitrate + Nitrite as NO3	2.3	27.0 μg/L	
# Nitrate as Nitrogen		5.65 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.94 mg/L	
Phosphorus - Filterable Reactive as P (A	(DEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	5.382 μg/L	
Phosphorus-Filterable Reactive as P	0.5	1.8 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.113 mg/L	



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Analytical Results

31511-EPA - 3.2km South Salt Creek **Sampling Point**

28/09/2023 8:12:00AM Sampled Date 28/09/2023 4:35:55PM Sample Received Date 18/10/2023 8:07:29AM Sample Analysis Completed *2023-007-2378 Sample ID

Endorsed **Status Customer Collected Collection Type**

03/10/2023 Silica - Reactive T0111-01(ADEL)

0.05 Silica - Reactive 6.93 mg/L

TKN as N T0112-01(ADEL)

TKN as Nitrogen 0.05 4.93 mg/L

Organic Chemistry LOR **Test Start Date** Result

Sample temperature at time of receipt 8.3°C **Dissolved Organic Carbon T0158-07(ADEL)**

04/10/2023 Dissolved Organic Carbon 1 20.5 mg/L

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 26.7 mg/L

Inorganic Chemistry - Physical LOR Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL) 03/10/2023

Alkalinity as Calcium Carbonate 246 mg/L Bicarbonate 292 mg/L Carbonate 4 mg/L Hvdroxide 0 mg/L

03/10/2023 Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 68800 µS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 52200 mg/L

03/10/2023 pH T0010-01(ADEL)

8.3 pH units

Temperature at which pH is measured 22.4 °C

Turbidity T0018-01(ADEL)

Turbidity 0.1 18 NTU



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Analytical Results

Sampling Point 31511-EPA - 3.2km South Salt Creek

 Sampled Date
 28/09/2023
 8:12:00AM

 Sample Received Date
 28/09/2023
 4:35:55PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2378

Sample ID *2023-007 Status Endorsed

Collection Type Customer Collected

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL)

06/10/2023

Suspended Solids 1.0 32 mg/L



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28/09/2023

28/09/2023

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Analytical Results

Sampling Point 31517-EPA - 1.8km West Salt Creek

 Sampled Date
 28/09/2023
 8:22:00AM

 Sample Received Date
 28/09/2023
 4:37:07PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2379

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

GREEN ALGAE

Chlorella 1710000 cells/mL Unicellular green algae 134000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

GREEN ALGAE

Chlorella 77.0 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 8.3°C Algal Count - Total T0393(ADEL)

Algae - Total

Blue Green Algae - Total

Diatoms - Total

Geosmin-MIB producing BGA - Total

Green Algae - Total

Toxin producing BGA - Total

1840000 cells/mL 0 cells/mL 0 cells/mL 0 cells/mL

1840000 cells/mL 0 cells/mL

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Analytical Results

Sampling Point 31517-EPA - 1.8km West Salt Creek

 Sampled Date
 28/09/2023
 8:22:00AM

 Sample Received Date
 28/09/2023
 4:37:07PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2379

 Status
 Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

29/09/2023

Chlorophyll a 0.1 174 $\,\mu g/L$ Phaeophytin a 0.1 64.0 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	19 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	23600 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	2.7 µg/L	
# Nitrate + Nitrite as NO3	2.3	12.0 µg/L	
# Nitrate as Nitrogen		2.26 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.81 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)		17/10/2023
# 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)			10/10/2023
Phosphorus - Total	0.005	0.143 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	7.30 mg/L	
TKN as N T0112-01(ADEL)		•	10/10/2023
TKN as Nitrogen	0.05	4.81 mg/L	

Organic Chemistry LOR Result Test Start Date



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Analytical Results

Dissolved Organic Carbon

Sampling Point 31517-EPA - 1.8km West Salt Creek

 Sampled Date
 28/09/2023
 8:22:00AM

 Sample Received Date
 28/09/2023
 4:37:07PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2379

Status Endorsed

Collection Type Customer Collected

Sample temperature at time of receipt 8.3°C

Dissolved Organic Carbon T0158-07(ADEL) 04/10/2023

20.0 mg/L

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 25.9 mg/L

Inorganic Chemistry - Physical LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate, Ricarbonate and Hydroxide T0101-01(ADEL

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

03/10/2023

Alkalinity as Calcium Carbonate 247 $\,$ mg/L Bicarbonate 301 $\,$ mg/L Carbonate 0 $\,$ mg/L Hydroxide 0 $\,$ mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

03/10/2023

Conductivity 2 65300 μ S/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 48800 mg/L

1

pH T0010-01(ADEL) 03/10/2023

pH 8.3 pH units
Temperature at which pH is measured 22.5 °C

Turbidity T0018-01(ADEL) 29/09/2023

Tables

Turbidity 0.1 17 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL)

Suspended Solids 1.0 30 mg/L



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Analytical Results

315191-EPA - Morella Creek @ guage **Sampling Point**

Sampled Date 28/09/2023 8:34:00AM 28/09/2023 4:37:36PM Sample Received Date 18/10/2023 4:09:19PM Sample Analysis Completed *2023-007-2383 Sample ID

Endorsed **Status**

Customer Collected Collection Type

biology Operations Lon Result lest Statt Da	Biology Operations	LOR	Result	Test Start Date
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Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

BLUE GREEN ALGAE

Cyanogranis 5800 cells/mL

CRYPTOPHYTES

Chroomonas 10 cells/ml

DIATOMS

Naviculoids 8 cells/mL Pennate diatoms 10 cells/mL

DINOFLAGELLATES

Heterocapsa 10 cells/mL

GREEN ALGAE

Oocystis sp_1_(small_cells) 3100 cells/mL Colonial green algae 650 cells/mL Chlorella 102000 cells/ml Monoraphidium sp_2_(short) 4900 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

BLUE GREEN ALGAE

Algal Biovolume T0393(ADEL)

Cyanogranis <0.01 mm3/L

CRYPTOPHYTES

Chroomonas <0.01 mm3/l

GREEN ALGAE

Oocystis sp_1_(small_cells) 0.54 mm3/L Colonial green algae 0.08 mm3/L Chlorella 4.59 mm3/L Monoraphidium sp_2_(short) 0.26 mm3/L



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Analytical Results

Sampling Point 315191-EPA - Morella Creek @ guage

 Sampled Date
 28/09/2023
 8:34:00AM

 Sample Received Date
 28/09/2023
 4:37:36PM

 Sample Analysis Completed
 18/10/2023
 4:09:19PM

 Sample ID
 *2023-007-2383

Sample ID *2023-007 Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 28/09/2023

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 5.47 mm3/L
Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 28/09/2023

 Algae - Total
 116000 cells/mL

 Blue Green Algae - Total
 5800 cells/mL

 Diatoms - Total
 18 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 111000 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 3.38 $\,\mu g/L$ Phaeophytin a 0.1 1.11 $\,\mu g/L$

Inorganic Chemistry - Nutrients LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Ammonia as N (ADEL)

17/10/2023

Ammonia as N 1 85 $\,\mu g/L$

Chloride T0104-02(ADEL) 03/10/2023

Chloride 4.0 5500 mg/L



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Analytical Results

Sampling Point 315191-EPA - Morella Creek @ guage

 Sampled Date
 28/09/2023
 8:34:00AM

 Sample Received Date
 28/09/2023
 4:37:36PM

 Sample Analysis Completed
 18/10/2023
 4:09:19PM

 Sample ID
 *2023-007-2383

Status Endorsed

Collection Type Customer Collected

Collection Type Customer Collected				
Nitrate + Nitrite as N (ADEL)			17/10/2023	
# Nitrate + Nitrite as N	0.5	3.5 µg/L		
# Nitrate + Nitrite as NO3	2.3	15.5 μg/L		
# Nitrate as Nitrogen		3.12 µg/L		
Nitrite as N (ADEL)			17/10/2023	
# Nitrite as N	0.5	<0.5 μg/L		
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023	
Nitrogen - Total		1.32 mg/L		
Phosphorus - Filterable Reactive as P (A	DEL)		17/10/2023	
# Phosphorus -Filterable Reactive as PO4	1.5	5.083 μg/L		
Phosphorus-Filterable Reactive as P	0.5	1.7 µg/L		
Phosphorus - Total T0109-44(ADEL)			10/10/2023	
Phosphorus - Total	0.005	0.007 mg/L		
Silica - Reactive T0111-01(ADEL)			03/10/2023	
Silica - Reactive	0.05	12.6 mg/L		
TKN as N T0112-01(ADEL)			10/10/2023	
TKN as Nitrogen	0.05	1.32 mg/L		
Organic Chemistry	LOR	Result	Test Start Date	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of recei Dissolved Organic Carbon T0158-07(04/10/2023
Dissolved Organic Carbon Total Organic Carbon T0158-07(ADEI	1 _)	11.2 mg/L	04/10/2023
Total Organic Carbon	1	11.5 mg/L	

Result

Sample temperature at time of receipt 8.3°C

Inorganic Chemistry - Physical

Alkalinity as Calcium Carbonate

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

353 mg/L 384 mg/L

LOR



Bicarbonate

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Analytical Results

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 Sampled Date
 28/09/2023
 8:34:00AM

 Sample Received Date
 28/09/2023
 4:37:36PM

 Sample Analysis Completed
 18/10/2023
 4:09:19PM

 Sample ID
 *2023-007-2383

Status Endorsed

Collection Type Customer Collected

Alkalinity Carbonate Bicarbonate and	Hydroxide T0101-0	1(ADEL)	03/10/2023
Carbonate	-	23 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids	T0016-01(ADEL)		03/10/2023
Conductivity	2	17100 μS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	10300 mg/L	
pH T0010-01(ADEL)			03/10/2023
рН		8.6 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	4.3 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C	C		
Suspended Solids T0160-01(ADEL)			06/10/2023
Suspended Solids	1.0	2 mg/L	



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Analytical Results

 Sampling Point
 31515-EPA - Snipe Point

 Sampled Date
 28/09/2023 8:40:00AM

 Sample Received Date
 28/09/2023 4:36:52PM

 Sample Analysis Completed
 18/10/2023 8:07:28AM

 Sample ID
 *2023-007-2376

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DINOFLAGELLATES

Heterocapsa 40 cells/mL

GREEN ALGAE

Unicellular green algae122000 cells/mLPhytoflagellates20 cells/mLChlorella1880000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

122000 cells/mL

0 cells/mL

0 cells/mL

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

GREEN ALGAE

Chlorella 84.6 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

taxon cell volume and associated cell count da 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 8.3°C Algal Count - Total T0393(ADEL)

Algal Count - Total T0393(ADEL)

Algae - Total

Blue Green Algae - Total

Distance Total

Diatoms - Total

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Analytical Results

 Sampling Point
 31515-EPA - Snipe Point

 Sampled Date
 28/09/2023 8:40:00AM

 Sample Received Date
 28/09/2023 4:36:52PM

 Sample Analysis Completed
 18/10/2023 8:07:28AM

 Sample ID
 *2023-007-2376

 Status
 Endorsed

Collection Type Customer Collected

Algal Count - Total T0393(ADEL) 28/09/2023

Geosmin-MIB producing BGA - Total 0 cells/mL

Green Algae - Total 122000 cells/mL

Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 193 $\,\mu g/L$ Phaeophytin a 0.1 68.5 $\,\mu g/L$

Inorganic Chemistry - Nutrients LOR Result Test Start Date

Sample temperature at time of receipt 8	.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	11 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	23800 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	4.3 µg/L	
# Nitrate + Nitrite as NO3	2.3	19.0 μg/L	
# Nitrate as Nitrogen		3.93 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.55 mg/L	
Phosphorus - Filterable Reactive as P (A	DEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	2.392 µg/L	
Phosphorus-Filterable Reactive as P	0.5	0.8 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.120 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023

7.10 mg/L

0.05

TKN as N T0112-01(ADEL)



Silica - Reactive

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Analytical Results

Collection Type

31515-EPA - Snipe Point **Sampling Point** 28/09/2023 8:40:00AM **Sampled Date** Sample Received Date 28/09/2023 4:36:52PM 18/10/2023 8:07:28AM Sample Analysis Completed *2023-007-2376 Sample ID Endorsed **Status**

10/10/2023 TKN as N T0112-01(ADEL)

Customer Collected

TKN as Nitrogen 0.05 4.55 mg/L

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		_
Dissolved Organic Carbon T0158-07(Al			04/10/2023
Dissolved Organic Carbon	1	18.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			04/10/2023
Total Organic Carbon	1	25.4 mg/L	
Inorganic Chemistry - Physical	LOR	Result	Test Start Date

morganic chem	iistiy - Filysi	Cai	LON	resuit		rest Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hyd	droxide T0101-01(ADEL)	03/10/2023
Alkalinity as Calcium Carbonate	248 mg/L	

Bicarbonate 302 mg/L Carbonate 0 mg/L Hydroxide 0 mg/L

03/10/2023 Conductivity & Total Dissolved Solids T0016-01(ADEL) Conductivity

65000 µS/cm Note

Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 48500 mg/L

pH T0010-01(ADEL)

8.2 pH units

Temperature at which pH is measured 22.4 °C

29/09/2023 **Turbidity T0018-01(ADEL)** Turbidity 0.1 16 NTU

Inorganic Chemistry - Waste Water LOR Result **Test Start Date**

Sample temperature at time of receipt 8.3°C



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03/10/2023

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Analytical Results

 Sampling Point
 31515-EPA - Snipe Point

 Sampled Date
 28/09/2023
 8:40:00AM

 Sample Received Date
 28/09/2023
 4:36:52PM

 Sample Analysis Completed
 18/10/2023
 8:07:28AM

 Sample ID
 *2023-007-2376

Status Endorsed

Collection Type Customer Collected

Suspended Solids T0160-01(ADEL)

06/10/2023

Suspended Solids 1.0 22 mg/L



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Analytical Results

Sampling Point 31519-EPA - Morella Basin at Outlet Regulator

 Sampled Date
 28/09/2023
 8:52:00AM

 Sample Received Date
 28/09/2023
 4:37:21PM

 Sample Analysis Completed
 18/10/2023
 4:12:19PM

 Sample ID
 *2023-007-2382

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

BLUE GREEN ALGAE

Cyanogranis 9000 cells/mL

CRYPTOPHYTES

Chroomonas 10 cells/mL

DIATOMS

Synedra 2 cells/mL

GREEN ALGAE

Chlorella122000 cells/mLMonoraphidium sp_2_(short)5900 cells/mLOocystis sp_1_(small_cells)4550 cells/mLColonial green algae170 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

BLUE GREEN ALGAE

Cyanogranis <0.01 mm3/L

CRYPTOPHYTES

Chroomonas <0.01 mm3/L

DIATOMS

Synedra <0.01 mm3/L

GREEN ALGAE

 Chlorella
 5.49 mm3/L

 Monoraphidium sp_2_(short)
 0.31 mm3/L

 Oocystis sp_1_(small_cells)
 0.79 mm3/L

 Colonial green algae
 0.02 mm3/L



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Analytical Results

31519-EPA - Morella Basin at Outlet Regulator **Sampling Point**

28/09/2023 8:52:00AM Sampled Date 28/09/2023 4:37:21PM Sample Received Date 18/10/2023 4:12:19PM Sample Analysis Completed *2023-007-2382 Sample ID

Endorsed **Status**

Customer Collected Collection Type

28/09/2023 Algal Biovolume T0393(ADEL)

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. 6.61 mm3/L

Total Algae Biovolume # Total Blue_Green Algae Biovolume <0.01 mm3/l # Total Diatom Biovolume <0.01 mm3/L # Total Green Algae Biovolume 6.61 mm3/L 0.00 mm3/L

Total Toxic BGA Biovolume

Sample temperature at time of receipt 8.3°C 28/09/2023 Algal Count - Total T0393(ADEL)

Algae - Total 142000 cells/ml Blue Green Algae - Total 9000 cells/mL Diatoms - Total 2 cells/mL Geosmin-MIB producing BGA - Total 0 cells/mL Green Algae - Total 133000 cells/mL

Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

29/09/2023 Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0 1 3.26 µg/L Phaeophytin a 0.1 0.70 µg/L

Inorganic Chemistry - Nutrients LOR Result **Test Start Date**

Sample temperature at time of receipt 8.3°C 17/10/2023 Ammonia as N (ADEL)

Ammonia as N 69 µg/L

03/10/2023 Chloride T0104-02(ADEL)

Chloride 4.0 5450 mg/L

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Analytical Results

Sampling Point 31519-EPA - Morella Basin at Outlet Regulator

 Sampled Date
 28/09/2023
 8:52:00AM

 Sample Received Date
 28/09/2023
 4:37:21PM

 Sample Analysis Completed
 18/10/2023
 4:12:19PM

 Sample ID
 *2023-007-2382

Status Endorsed

Collection Type Customer Collected

Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	3.7 µg/L	
# Nitrate + Nitrite as NO3	2.3	16.4 µg/L	
# Nitrate as Nitrogen		3.52 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		1.37 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)		17/10/2023
# 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)			10/10/2023
Phosphorus - Total	0.005	<0.005 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	12.1 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	1.37 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt Dissolved Organic Carbon T0158-07(AD			04/10/2023
Dissolved Organic Carbon	1	10.9 mg/L	0.444.0000
Total Organic Carbon T0158-07(ADEL) Total Organic Carbon	1	44 G. mall	04/10/2023
iotal Organio Carbon	'	11.6 mg/L	

Inorganic Chemistry - Physical LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate 354 mg/L Bicarbonate 387 mg/L



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03/10/2023

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Analytical Results

Status

Sampling Point 31519-EPA - Morella Basin at Outlet Regulator

Endorsed

 Sampled Date
 28/09/2023
 8:52:00AM

 Sample Received Date
 28/09/2023
 4:37:21PM

 Sample Analysis Completed
 18/10/2023
 4:12:19PM

 Sample ID
 *2023-007-2382

Collection Type Customer Collected

Alkalinity Carbonate Bicarbonate and	03/10/2023		
Carbonate		22 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T0016-01(ADEL)			03/10/2023
Conductivity	2	17100 μS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	10300 mg/L	
pH T0010-01(ADEL)			03/10/2023
pН		8.5 pH units	
Temperature at which pH is measured		22.5 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	1.9 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°0 Suspended Solids T0160-01(ADEL)	С		06/10/2023
Suspended Solids	1.0	<1 mg/L	



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Analytical Results

Sampling Point 531012-EPA - Sth Policeman Point

 Sampled Date
 28/09/2023
 9:00:00AM

 Sample Received Date
 28/09/2023
 4:40:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2390

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DINOFLAGELLATES

Heterocapsa 10 cells/mL

GREEN ALGAE

Chlorella 1660000 cells/mL Unicellular green algae 117000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C Algal Biovolume T0393(ADEL)

GREEN ALGAE

Total Algae Biovolume

Total Diatom Biovolume

Total Toxic BGA Biovolume

Total Green Algae Biovolume

Total Blue_Green Algae Biovolume

Chlorella 74.7 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.

Not Calculated mm3/L

0.00 mm3/L 0.00 mm3/L

Not Calculated mm3/L

0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL)
Algae - Total

Diatoms - Total

Blue Green Algae - Total

Geosmin-MIB producing BGA - Total

1780000 cells/mL 0 cells/mL

0 cells/mL 0 cells/mL

NATA
WORLD RECOGNISED

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Sampling Point 531012-EPA - Sth Policeman Point

 Sampled Date
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 9:00:00AM

 Sample Received Date
 28/09/2023
 4:40:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2390

 Status
 Endorsed

Collection Type Customer Collected

Algal Count - Total T0393(ADEL) 29/09/2023

Green Algae - Total 1780000 cells/mL
Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 140 $\,\mu g/L$ Phaeophytin a 0.1 80.9 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt 8	3.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	15 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	24000 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	3.2 µg/L	
# Nitrate + Nitrite as NO3	2.3	14.2 μg/L	
# Nitrate as Nitrogen		2.99 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.42 mg/L	
Phosphorus - Filterable Reactive as P (A	ADEL)		17/10/2023
# 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)			10/10/2023
Phosphorus - Total	0.005	0.093 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	7.13 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	4.42 mg/L	



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Analytical Results

Sampling Point 531012-EPA - Sth Policeman Point

 Sampled Date
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 9:00:00AM

 Sample Received Date
 28/09/2023
 4:40:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2390

StatusEndorsedCollection TypeCustomer Collected

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3	l°C		
Dissolved Organic Carbon T0158-07(ADEL	-)		04/10/2023
Dissolved Organic Carbon	1	19.5 mg/L	
Total Organic Carbon T0158-07(ADEL)			04/10/2023
Total Organic Carbon	1	24.6 mg/L	
Inorganic Chemistry - Physical	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3	ı°C		
Alkalinity Carbonate Bicarbonate and Hyd		1(ADEL)	04/10/2023
Alkalinity as Calcium Carbonate		249 mg/L	
Bicarbonate		304 mg/L	
Carbonate		0 mg/L	
Hydroxide		0 mg/L	
Conductivity & Total Dissolved Solids T00	16-01(ADEL)		04/10/2023
Conductivity	2	65100 μS/cm	
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	48600 mg/L	
pH T0010-01(ADEL)			04/10/2023
pH		8.2 pH units	
Temperature at which pH is measured		22.3 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	15 NTU	
Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3 Suspended Solids T0160-01(ADEL)	°C		06/10/2023



Suspended Solids

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1.0

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Analytical Results

Sampling Point 531012-EPA - Sth Policeman Point

 Sampled Date
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 9:00:00AM

 Sample Received Date
 28/09/2023
 4:40:23PM

 Sample Analysis Completed
 18/10/2023
 8:07:29AM

 Sample ID
 *2023-007-2390

Sample ID *2023-007 Status Endorsed

Collection Type Customer Collected



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Analytical Results

300713-Tilley Swamp Drain D/S Northern Outlet **Sampling Point**

Sampled Date 28/09/2023 9:12:00AM 28/09/2023 4:41:07PM Sample Received Date 18/10/2023 11:59:08AM Sample Analysis Completed

*2023-007-2386 Sample ID Endorsed **Status**

Customer Collected Collection Type

LOR **Biology Operations** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Pennate diatoms 22 cells/ml Synedra 14 cells/mL Gyrosigma 2 cells/mL Naviculoids 10 cells/mL Nitzschia 4 cells/mL Cyclotella 1850 cells/mL

EUGLENOPHYTES

Phacus 10 cells/mL

GREEN ALGAE

Tetraselmis 40 cells/mL Monoraphidium sp_2_(short) 118000 cells/mL

Sample temperature at time of receipt 8.3°C

28/09/2023 Algal Biovolume T0393(ADEL)

DIATOMS

Synedra <0.01 mm3/l Gyrosigma <0.01 mm3/L Nitzschia <0.01 mm3/L Cyclotella 0.94 mm3/L

EUGLENOPHYTES

Phacus 0.06 mm3/L

GREEN ALGAE

Monoraphidium sp_2_(short) 6.23 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

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Analytical Results

Sampling Point 300713-Tilley Swamp Drain D/S Northern Outlet

 Sampled Date
 28/09/2023
 9:12:00AM

 Sample Received Date
 28/09/2023
 4:41:07PM

 Sample Analysis Completed
 18/10/2023
 11:59:08AM

 Sample ID
 *2023-007-2386

Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 28/09/2023

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 8.3°C

Algal Count - Total T0393(ADEL) 28/09/2023

 Algae - Total
 120000 cells/mL

 Blue Green Algae - Total
 0 cells/mL

 Diatoms - Total
 1900 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 118000 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 21.9 $\mu g/L$ Phaeophytin a 0.1 3.97 $\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	82 µg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	3920 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	294 µg/L	
# Nitrate + Nitrite as NO3	2.3	1300 μg/L	
# Nitrate as Nitrogen		271 µg/L	



Nitrite as N (ADEL)

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Analytical Results

Sampling Point 300713-Tilley Swamp Drain D/S Northern Outlet

 Sampled Date
 28/09/2023
 9:12:00AM

 Sample Received Date
 28/09/2023
 4:41:07PM

 Sample Analysis Completed
 18/10/2023
 11:59:08AM

 Sample ID
 *2023-007-2386

Sample ID *2023-007-Status Endorsed

Collection Type Customer Collected

Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	23.2 μg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		1.93 mg/L	
Phosphorus - Filterable Reactive as P	(ADEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	2.691 μg/L	
Phosphorus-Filterable Reactive as P	0.5	0.9 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus - Total	0.005	0.008 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	14.8 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
TKN as Nitrogen	0.05	1.64 mg/L	

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°C			
Dissolved Organic Carbon T0158-07(ADEL)			04/10/2023
Dissolved Organic Carbon	1	8.9 mg/L	
Total Organic Carbon T0158-07(ADEL)			04/10/2023
Total Organic Carbon	1	9.0 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
--------------------------------	-----	--------	-----------------

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate

4

441 mg/L 538 mg/L

Bicarbonate 538 mg
Carbonate 0 mg/L
Hydroxide 5 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 2 12500 µS/cm



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04/10/2023

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Analytical Results

Sampling Point 300713-Tilley Swamp Drain D/S Northern Outlet

 Sampled Date
 28/09/2023
 9:12:00AM

 Sample Received Date
 28/09/2023
 4:41:07PM

 Sample Analysis Completed
 18/10/2023
 11:59:08AM

 Sample ID
 *2023-007-2386

Status Endorsed

Collection Type Customer Collected

Conductivity & Total Dissolved Solids T	0016-01(ADEL)		04/10/2023
Note		Conductivity measurement is corrected to 25°C	
Total Dissolved Solids (by EC)	1	7360 mg/L	
pH T0010-01(ADEL)			04/10/2023
рН		8.0 pH units	
Temperature at which pH is measured		22.3 °C	
Turbidity T0018-01(ADEL)			29/09/2023
Turbidity	0.1	2.7 NTU	

Inorganic Chemistry - Waste Water	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°	С		06/10/2023
Suspended Solids T0160-01(ADEL)			00/10/2023
Suspended Solids	1.0	8 mg/L	



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Analytical Results

31526-EPA - Nth Jack Point **Sampling Point** 28/09/2023 9:25:00AM Sampled Date 28/09/2023 4:38:51PM Sample Received Date 19/10/2023 3:54:12PM Sample Analysis Completed *2023-007-2375 Sample ID

Endorsed **Status**

Customer Collected Collection Type

LOR **Biology Operations** Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Cyclotella 800 cells/ml

DINOFLAGELLATES

Gymnodinium 20 cells/ml

GREEN ALGAE

Unicellular green algae 32000 cells/mL Chlorella 746000 cells/mL

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

DIATOMS

Cyclotella 0.41 mm3/L

GREEN ALGAE

Chlorella 33.6 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. Not Calculated mm3/L

0 cells/mL

Total Blue_Green Algae Biovolume 0.00 mm3/L

Total Diatom Biovolume 0.41 mm3/L # Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) Algae - Total

Blue Green Algae - Total

Total Algae Biovolume

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779000 cells/mL

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28/09/2023

28/09/2023

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Analytical Results

 Sampling Point
 31526-EPA - Nth Jack Point

 Sampled Date
 28/09/2023
 9:25:00AM

 Sample Received Date
 28/09/2023
 4:38:51PM

 Sample Analysis Completed
 19/10/2023
 3:54:12PM

 Sample ID
 *2023-007-2375

 Status
 Endorsed

Collection Type Customer Collected

Algal Count - Total T0393(ADEL)

 Diatoms - Total
 800 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 778000 cells/mL

 Toxin producing BGA - Total
 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 147 $\,\mu g/L$ Phaeophytin a 0.1 47.7 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	26 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	26000 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	5.6 μg/L	
# Nitrate + Nitrite as NO3	2.3	24.8 μg/L	
# Nitrate as Nitrogen		5.10 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	0.5 μg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		5.17 mg/L	
Phosphorus - Filterable Reactive as P (ADEL)		17/10/2023
# 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)			10/10/2023
Phosphorus - Total	0.005	0.133 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Silica - Reactive	0.05	5.89 mg/L	



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 Sampling Point
 31526-EPA - Nth Jack Point

 Sampled Date
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 9:25:00AM

 Sample Received Date
 28/09/2023
 4:38:51PM

 Sample Analysis Completed
 19/10/2023
 3:54:12PM

 Sample ID
 *2023-007-2375

 Status
 Endorsed

Collection Type Customer Collected

TKN as N T0112-01(ADEL) 10/10/2023

TKN as Nitrogen 0.05 5.16 mg/L

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°			16/10/2023
Dissolved Organic Carbon T0158-07(ADEL) Dissolved Organic Carbon) 1	19.9 mg/L	10/10/2023
Total Organic Carbon T0158-07(ADEL)			16/10/2023
Total Organic Carbon	1	28.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

Alkalinity as Calcium Carbonate

234 mg/L

Alkalinity as Calcium Carbonate 234 mg/L Bicarbonate 285 mg/L Carbonate 0 mg/L Hydroxide 0 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 2 68800 µS/cm

Note Conductivity measurement is corrected to 25°C

Total Dissolved Solids (by EC) 1 52200 mg/L

pH T0010-01(ADEL) 04/10/2023

pH 8.1 pH units Temperature at which pH is measured 22.3 $^{\circ}$ C

Turbidity T0018-01(ADEL) 29/09/2023

Turbidity 0.1 18 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C



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04/10/2023

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Analytical Results

 Sampling Point
 31526-EPA - Nth Jack Point

 Sampled Date
 28/09/2023
 9:25:00AM

 Sample Received Date
 28/09/2023
 4:38:51PM

 Sample Analysis Completed
 19/10/2023
 3:54:12PM

 Sample ID
 *2023-007-2375

Status Endorsed

Collection Type Customer Collected

Suspended Solids T0160-01(ADEL)

06/10/2023

Suspended Solids 1.0 68 mg/L



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Analytical Results

 Sampling Point
 31514-EPA - Stoney Well

 Sampled Date
 28/09/2023 10:00:00AM

 Sample Received Date
 28/09/2023 4:36:38PM

 Sample Analysis Completed
 19/10/2023 3:54:12PM

 Sample ID
 *2023-007-2380

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

DIATOMS

Amphiprora_(=_Entomoneis) 2 cells/mL
Naviculoids 6 cells/mL

GREEN ALGAE

Unicellular green algae 79000 cells/mL
Chlorella 1850000 cells/mL

Organism - Comment Chlorella - The identification for this organism is

tentative only.

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

DIATOMS

Identification

Total Algae Biovolume

Total Diatom Biovolume

Total Toxic BGA Biovolume

Total Green Algae Biovolume

Total Blue Green Algae Biovolume

Amphiprora_(=_Entomoneis) 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.

CHLOROPHYTA_CHLOROPHYCEAE_CHLOROCO

CCALES_OOCYSTACEAE_CHLORELLA

Not Calculated mm3/L

0.00 mm3/L

Not Calculated mm3/L

Not Calculated mm3/L

0.00 mm3/L

Sample temperature at time of receipt 8.3°C Algal Count - Total T0393(ADEL)

Algae - Total 1930000 cells/mL

28/09/2023

28/09/2023



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Analytical Results

Status

31514-EPA - Stoney Well **Sampling Point** 28/09/2023 10:00:00AM **Sampled Date** Sample Received Date 28/09/2023 4:36:38PM 19/10/2023 3:54:12PM Sample Analysis Completed *2023-007-2380 Sample ID Endorsed

Customer Collected Collection Type

Algal Count - Total T0393(ADEL)	28/09/2023
Blue Green Algae - Total	0 cells/mL

Diatoms - Total 8 cells/mL Geosmin-MIB producing BGA - Total 0 cells/mL Green Algae - Total 1930000 cells/mL Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C Chlorophyll a & Phaeophytin a T0380-02(ADEL)

0.1 Chlorophyll a 172 µg/L Phaeophytin a 0.1 55.5 µg/L

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date

Sample temperature at time of receipt 8	.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	26 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	26200 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	4.1 μg/L	
# Nitrate + Nitrite as NO3	2.3	18.2 µg/L	
# Nitrate as Nitrogen		3.97 µg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	<0.5 µg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.67 mg/L	
Phosphorus - Filterable Reactive as P (A	DEL)		17/10/2023
# Phosphorus -Filterable Reactive as PO4	1.5	5.382 μg/L	
Phosphorus-Filterable Reactive as P	0.5	1.8 µg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023

0.123 mg/L

0.005

Silica - Reactive T0111-01(ADEL)



Phosphorus - Total

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10/10/2023

16/10/2023

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Ana	lytical	l Resul	lts
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31514-EPA - Stoney Well **Sampling Point** 28/09/2023 10:00:00AM Sampled Date 28/09/2023 4:36:38PM Sample Received Date 19/10/2023 3:54:12PM Sample Analysis Completed *2023-007-2380 Sample ID

Endorsed **Status**

Customer Collected Collection Type

03/10/2023 Silica - Reactive T0111-01(ADEL)

0.05 Silica - Reactive 5.98 mg/L

TKN as N T0112-01(ADEL)

TKN as Nitrogen 0.05 4.67 mg/L

Organic Chemistry LOR Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

16/10/2023 **Dissolved Organic Carbon T0158-07(ADEL)** Dissolved Organic Carbon 1 21.1 mg/L

Total Organic Carbon T0158-07(ADEL)

Total Organic Carbon 1 30.2 mg/L

Inorganic Chemistry - Physical LOR Result **Test Start Date**

Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL) 04/10/2023

Alkalinity as Calcium Carbonate 214 mg/L Bicarbonate 261 mg/L Carbonate 0 mg/L Hvdroxide 0 mg/L

04/10/2023 Conductivity & Total Dissolved Solids T0016-01(ADEL)

Conductivity 69300 µS/cm

Note

Conductivity measurement is corrected to 25°C Total Dissolved Solids (by EC) 1

52600 mg/L 04/10/2023 pH T0010-01(ADEL)

8.2 pH units

Temperature at which pH is measured 22.3 °C

29/09/2023 **Turbidity T0018-01(ADEL)**

Turbidity 0.1 23 NTU



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Suspended Solids T0160-01(ADEL)

Analytical Results

Collection Type

Sampling Point 31514-EPA - Stoney Well 28/09/2023 10:00:00AM **Sampled Date** 28/09/2023 4:36:38PM **Sample Received Date** 19/10/2023 3:54:12PM Sample Analysis Completed *2023-007-2380 Sample ID

Endorsed **Status Customer Collected**

LOR **Inorganic Chemistry - Waste Water** Result **Test Start Date** Sample temperature at time of receipt 8.3°C 06/10/2023

62 mg/L Suspended Solids 1.0



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Analytical Results

 Sampling Point
 31525-EPA - Villa de Yumpa

 Sampled Date
 28/09/2023 10:25:00AM

 Sample Received Date
 28/09/2023 4:38:34PM

 Sample Analysis Completed
 19/10/2023 3:54:12PM

 Sample ID
 *2023-007-2373

Status Endorsed

Collection Type Customer Collected

Biology Operations LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Algal Identification T0393(ADEL)

CRYPTOPHYTES

Chroomonas 20 cells/mL

DIATOMS

Navicula 20 cells/mL Cyclotella 200 cells/mL

DINOFLAGELLATES

Heterocapsa 10 cells/mL

GREEN ALGAE

 Chlorella
 1580000 cells/mL

 Unicellular green algae
 112000 cells/mL

 Phytoflagellates
 200 cells/mL

Sample temperature at time of receipt 8.3°C

Algal Biovolume T0393(ADEL)

CRYPTOPHYTES

Chroomonas <0.01 mm3/L

DIATOMS

Cyclotella 0.10 mm3/L Navicula 0.02 mm3/L

GREEN ALGAE

Chlorella 71.1 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.

Not Calculated mm3/L

0.00 mm3/L 0.12 mm3/L

Total Algae Biovolume

Total Blue_Green Algae Biovolume # Total Diatom Biovolume



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Analytical Results

 Sampling Point
 31525-EPA - Villa de Yumpa

 Sampled Date
 28/09/2023 10:25:00AM

 Sample Received Date
 28/09/2023 4:38:34PM

 Sample Analysis Completed
 19/10/2023 3:54:12PM

 Sample ID
 *2023-007-2373

Status Endorsed

Collection Type Customer Collected

Algal Biovolume T0393(ADEL) 28/09/2023

Total Green Algae Biovolume Not Calculated mm3/L

Total Toxic BGA Biovolume 0.00 mm3/L

Sample temperature at time of receipt 8.3°C

Algal Count - Total T0393(ADEL) 28/09/2023

 Algae - Total
 1690000 cells/mL

 Blue Green Algae - Total
 0 cells/mL

 Diatoms - Total
 220 cells/mL

 Geosmin-MIB producing BGA - Total
 0 cells/mL

 Green Algae - Total
 1690000 cells/mL

Toxin producing BGA - Total 0 cells/mL

Sample temperature at time of receipt 8.3°C

Chlorophyll a & Phaeophytin a T0380-02(ADEL)

Chlorophyll a 0.1 168 $\,\mu g/L$ Phaeophytin a 0.1 66.1 $\,\mu g/L$

Inorganic Chemistry - Nutrients	LOR	Result	Test Start Date
Sample temperature at time of receipt	8.3°C		
Ammonia as N (ADEL)			17/10/2023
# Ammonia as N	1	25 μg/L	
Chloride T0104-02(ADEL)			03/10/2023
Chloride	4.0	25500 mg/L	
Nitrate + Nitrite as N (ADEL)			17/10/2023
# Nitrate + Nitrite as N	0.5	5.1 μg/L	
# Nitrate + Nitrite as NO3	2.3	22.6 μg/L	
# Nitrate as Nitrogen		4.42 μg/L	
Nitrite as N (ADEL)			17/10/2023
# Nitrite as N	0.5	0.7 μg/L	
Nitrogen - Total TMZ-M06(ADEL)			29/09/2023
Nitrogen - Total		4.72 mg/L	



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Analytical Results

Sampling Point 31525-EPA - Villa de Yumpa 28/09/2023 10:25:00AM **Sampled Date** 28/09/2023 4:38:34PM **Sample Received Date** 19/10/2023 3:54:12PM Sample Analysis Completed *2023-007-2373 Sample ID

Endorsed **Status**

Customer Collected Collection Type

Organic Chemistry	LOR	Result	Test Start Date
TKN as Nitrogen	0.05	4.71 mg/L	
TKN as N T0112-01(ADEL)			10/10/2023
Silica - Reactive	0.05	5.84 mg/L	
Silica - Reactive T0111-01(ADEL)			03/10/2023
Phosphorus - Total	0.005	0.135 mg/L	
Phosphorus - Total T0109-44(ADEL)			10/10/2023
Phosphorus-Filterable Reactive as P	0.5	1.9 μg/L	
# Phosphorus -Filterable Reactive as PO4	1.5	5.681 μg/L	
Phosphorus - Filterable Reactive as P (A	(DEL)		17/10/2023

Organic Chemistry	LOR	Result	Test Start Date
Sample temperature at time of receipt 8.3°	°C		
Dissolved Organic Carbon T0158-07(ADEL)		16/10/2023
Dissolved Organic Carbon	1	20.6 mg/L	
Total Organic Carbon T0158-07(ADEL)			16/10/2023
Total Organic Carbon	1	29.6 mg/L	

Inorganic Chemistry - Physical	LOR	Result	Test Start Date
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Sample temperature at time of receipt 8.3°C

Alkalinity Carbonate Bicarbonate and Hydroxide T0101-01(ADEL)

213 mg/L

Bicarbonate 260 mg/L Carbonate 0 mg/L Hydroxide 0 mg/L

Conductivity & Total Dissolved Solids T0016-01(ADEL)

04/10/2023

04/10/2023

Conductivity

69000 µS/cm

Note Conductivity measurement is corrected to 25°C Total Dissolved Solids (by EC) 1

52400 mg/L

pH T0010-01(ADEL)

Alkalinity as Calcium Carbonate

04/10/2023

8.2 pH units



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Analytical Results

 Sampling Point
 31525-EPA - Villa de Yumpa

 Sampled Date
 28/09/2023 10:25:00AM

 Sample Received Date
 28/09/2023 4:38:34PM

 Sample Analysis Completed
 19/10/2023 3:54:12PM

 Sample ID
 *2023-007-2373

Status Endorsed

Collection Type Customer Collected

pH T0010-01(ADEL) 04/10/2023

Temperature at which pH is measured 22.4 °C

Turbidity T0018-01(ADEL)

Turbidity 0.1 25 NTU

Inorganic Chemistry - Waste Water LOR Result Test Start Date

Sample temperature at time of receipt 8.3°C

Suspended Solids T0160-01(ADEL) 06/10/2023

Suspended Solids 1.0 58 mg/L



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-007-2373	31525	EPA - Villa de Yumpa	28/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2373	31525	EPA - Villa de Yumpa	28/09/2023	pН	Test not processed within holding time
2023-007-2373	31525	EPA - Villa de Yumpa	28/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2373	31525	EPA - Villa de Yumpa	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2373	31525	EPA - Villa de Yumpa	28/09/2023	Dissolved Organic Carbon	Test not processed within holding time
023-007-2373	31525	EPA - Villa de Yumpa	28/09/2023	Total Organic Carbon	Test not processed within holding time
2023-007-2374	31523	EPA - Long Point	27/09/2023	pН	Test not processed within holding time
023-007-2374	31523	EPA - Long Point	27/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2374	31523	EPA - Long Point	27/09/2023	Turbidity	Test not processed within holding time
023-007-2374	31523	EPA - Long Point	27/09/2023	Suspended Solids	Test not processed within holding time
023-007-2374	31523	EPA - Long Point	27/09/2023	Nitrite as N	Test not processed within holding time
023-007-2375	31526	EPA - Nth Jack Point	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2375	31526	EPA - Nth Jack Point	28/09/2023	рН	Test not processed within holding time
023-007-2375	31526	EPA - Nth Jack Point	28/09/2023	Suspended Solids	Test not processed within holding time
023-007-2375	31526	EPA - Nth Jack Point	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2375	31526	EPA - Nth Jack Point	28/09/2023	Total Organic Carbon	Test not processed within holding time
023-007-2375	31526	EPA - Nth Jack Point	28/09/2023	Dissolved Organic Carbon	Test not processed within holding time
023-007-2376	31515	EPA - Snipe Point	28/09/2023	рН	Test not processed within holding time
023-007-2376	31515	EPA - Snipe Point	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2376	31515	EPA - Snipe Point	28/09/2023	Suspended Solids	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-007-2376	31515	EPA - Snipe Point	28/09/2023	Nitrite as N	Test not processed within holding time
2023-007-2377	31513	EPA - Parnka Point Boat Ramp	27/09/2023	рН	Test not processed within holding time
2023-007-2377	31513	EPA - Parnka Point Boat Ramp	27/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2377	31513	EPA - Parnka Point Boat Ramp	27/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2377	31513	EPA - Parnka Point Boat Ramp	27/09/2023	Nitrite as N	Test not processed within holding time
2023-007-2378	31511	EPA - 3.2km South Salt Creek	28/09/2023	pН	Test not processed within holding time
2023-007-2378	31511	EPA - 3.2km South Salt Creek	28/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2378	31511	EPA - 3.2km South Salt Creek	28/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2378	31511	EPA - 3.2km South Salt Creek	28/09/2023	Nitrite as N	Test not processed within holding time
2023-007-2379	31517	EPA - 1.8km West Salt Creek	28/09/2023	рН	Test not processed within holding time
2023-007-2379	31517	EPA - 1.8km West Salt Creek	28/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2379	31517	EPA - 1.8km West Salt Creek	28/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2379	31517	EPA - 1.8km West Salt Creek	28/09/2023	Nitrite as N	Test not processed within holding time
2023-007-2380	31514	EPA - Stoney Well	28/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2380	31514	EPA - Stoney Well	28/09/2023	рН	Test not processed within holding time
2023-007-2380	31514	EPA - Stoney Well	28/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2380	31514	EPA - Stoney Well	28/09/2023	Nitrite as N	Test not processed within holding time
2023-007-2380	31514	EPA - Stoney Well	28/09/2023	Total Organic Carbon	Test not processed within holding time
2023-007-2380	31514	EPA - Stoney Well	28/09/2023	Dissolved Organic	Test not processed within
2023-007-2381	31512	EPA - McGrath Flat North	27/09/2023	Carbon pH	holding time Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-007-2381	31512	EPA - McGrath Flat North	27/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2381	31512	EPA - McGrath Flat North	27/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2381	31512	EPA - McGrath Flat North	27/09/2023	Nitrite as N	Test not processed within holding time
2023-007-2382	31519	EPA - Morella Basin at Outlet Regulator	28/09/2023	pН	Test not processed within holding time
023-007-2382	31519	EPA - Morella Basin at Outlet Regulator	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2382	31519	EPA - Morella Basin at Outlet Regulator	28/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2382	31519	EPA - Morella Basin at Outlet Regulator	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2383	315191	EPA - Morella Creek @ guage	28/09/2023	pН	Test not processed within holding time
2023-007-2383	315191	EPA - Morella Creek @ guage	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2383	315191	EPA - Morella Creek @ guage	28/09/2023	Suspended Solids	Test not processed within holding time
2023-007-2383	315191	EPA - Morella Creek @ guage	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2384	11885	DEW - Mundoo Barrage Downstream	27/09/2023	pН	Test not processed within holding time
2023-007-2384	11885	DEW - Mundoo Barrage Downstream	27/09/2023	Turbidity	Test not processed within holding time
023-007-2384	11885	DEW - Mundoo Barrage Downstream	27/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2384	11885	DEW - Mundoo Barrage Downstream	27/09/2023	Suspended Solids	Test not processed within holding time
023-007-2384	11885	DEW - Mundoo Barrage Downstream	27/09/2023	Nitrite as N	Test not processed within holding time
023-007-2385	11884	DEW - Mundoo Barrage Upstream	27/09/2023	рН	Test not processed within holding time
023-007-2385	11884	DEW - Mundoo Barrage Upstream	27/09/2023	Turbidity	Test not processed within holding time
023-007-2385	11884	DEW - Mundoo Barrage Upstream	27/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2385	11884	DEW - Mundoo Barrage Upstream	27/09/2023	Nitrite as N	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-007-2386	300713	Tilley Swamp Drain D/S Northern Outlet	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2386	300713	Tilley Swamp Drain D/S Northern Outlet	28/09/2023	рН	Test not processed within holding time
023-007-2386	300713	Tilley Swamp Drain D/S Northern Outlet	28/09/2023	Suspended Solids	Test not processed within holding time
023-007-2386	300713	Tilley Swamp Drain D/S Northern Outlet	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2387	31524	EPA - Bonneys	27/09/2023	pН	Test not processed within holding time
023-007-2387	31524	EPA - Bonneys	27/09/2023	Turbidity	Test not processed within holding time
023-007-2387	31524	EPA - Bonneys	27/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2387	31524	EPA - Bonneys	27/09/2023	Suspended Solids	Test not processed within holding time
023-007-2387	31524	EPA - Bonneys	27/09/2023	Nitrite as N	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	рН	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Suspended Solids	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Total Organic Carbon	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Dissolved Organic Carbon	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Total Organic Carbon	Test not processed within holding time
023-007-2388	31528	EPA - Salt Creek Outlet	28/09/2023	Dissolved Organic Carbon	Test not processed within holding time
023-007-2389	353177	EPA - Tauwitchere Barrage DS	27/09/2023	рН	Test not processed within holding time
023-007-2389	353177	EPA - Tauwitchere Barrage DS	27/09/2023	Turbidity	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-007-2389	353177	EPA - Tauwitchere Barrage DS	27/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2389	353177	EPA - Tauwitchere Barrage DS	27/09/2023	Nitrite as N	Test not processed within holding time
023-007-2390	531012	EPA - Sth Policeman Point	28/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2390	531012	EPA - Sth Policeman Point	28/09/2023	pН	Test not processed within holding time
023-007-2390	531012	EPA - Sth Policeman Point	28/09/2023	Suspended Solids	Test not processed within holding time
023-007-2390	531012	EPA - Sth Policeman Point	28/09/2023	Nitrite as N	Test not processed within holding time
023-007-2391	53032	EPA - Noonameena	27/09/2023	pН	Test not processed within holding time
023-007-2391	53032	EPA - Noonameena	27/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2391	53032	EPA - Noonameena	27/09/2023	Turbidity	Test not processed within holding time
023-007-2391	53032	EPA - Noonameena	27/09/2023	Suspended Solids	Test not processed within holding time
023-007-2391	53032	EPA - Noonameena	27/09/2023	Nitrite as N	Test not processed within holding time
023-007-2392	31522	EPA - Mark Point	27/09/2023	рН	Test not processed within holding time
023-007-2392	31522	EPA - Mark Point	27/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2392	31522	EPA - Mark Point	27/09/2023	Turbidity	Test not processed within holding time
023-007-2392	31522	EPA - Mark Point	27/09/2023	Nitrite as N	Test not processed within holding time
023-007-2393	351213	EPA - Murray Mouth	27/09/2023	рН	Test not processed within holding time
023-007-2393	351213	EPA - Murray Mouth	27/09/2023	Silica - Reactive	Test not processed within holding time
023-007-2393	351213	EPA - Murray Mouth	27/09/2023	Turbidity	Test not processed within holding time
023-007-2393	351213	EPA - Murray Mouth	27/09/2023	Suspended Solids	Test not processed within holding time
023-007-2393	351213	EPA - Murray Mouth	27/09/2023	Nitrite as N	Test not processed within holding time



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Incidents

Sample ID	S.Point	Description	Sampled Date	Analysis (where Applicable)	Incident Description
2023-007-2394	353179	EPA - Tauwitchere Barrage Upstream	27/09/2023	рН	Test not processed within holding time
2023-007-2394	353179	EPA - Tauwitchere Barrage Upstream	27/09/2023	Silica - Reactive	Test not processed within holding time
2023-007-2394	353179	EPA - Tauwitchere Barrage Upstream	27/09/2023	Turbidity	Test not processed within holding time
2023-007-2394	353179	EPA - Tauwitchere Barrage Upstream	27/09/2023	Nitrite as N	Test not processed within holding time

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

Sampling Method

Sampling Method Code	Description	
W09-023	Sampling Method for Chemical Analyses	
W09-024	Sampling Method for Biological Analyses	

Sampling point and date sampled are provided when collected by customers. Validity of results are based on information and samples supplied by customers. Unless it is reported that sampling has been performed by AWQC, the samples have been analysed as received.



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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
Customer Service Unit	-



Corporate Accreditation No.1115 Chemical and **Biological Testing** Accredited for compliance with ISO/IEC 17025 -

Testing

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
- 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.
- 12. AWQC Melbourne Laboratory are only NATA accredited for sampling of potable waters by inhouse method W 09-023.