

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398826

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

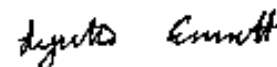
Sample Taken From: 11 - Piles Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 9:00
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	0.1 mS/cm
Dissolved Oxygen	In Situ Testing	6.4 mg/L
pH	In Situ Testing	6.5 pH Units
Salinity	In Situ Testing	0.1 PSS
Temperature	In Situ Testing	19.9 °C
Turbidity	In Situ Testing	90.2 NTU
Ammonia Nitrogen as N	CA13201	0.05 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	5 µg/L
Enterococci	CA22064	6500 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.50 mg/L
Ortho-Phosphate (as P)	CA13200	0.03 mg/L
Thermotolerant Coliforms	CA22067	7800 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.7 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	1.2 mg/L
Total Phosphorus	CA13200	0.1 mg/L
Total Suspended Solids (@ 105°C)	CA12119	36 mg/L

Comments

Date: 24/Mar/2009

Authorised by:

Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398827

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

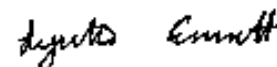
Sample Taken From: 10 - Booker Bay

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 11:40
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	52.1 mS/cm
Dissolved Oxygen	In Situ Testing	5.1 mg/L
pH	In Situ Testing	7.8 pH Units
Salinity	In Situ Testing	34.1 PSS
Temperature	In Situ Testing	22.5 °C
Turbidity	In Situ Testing	3.5 NTU
Ammonia Nitrogen as N	CA13201	0.04 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	2 µg/L
Enterococci	CA22064	74 CFU/100mL
Nitrite + Nitrate as N (NO _x)	CA13202	0.02 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	82 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	<0.1 mg/L
Total Nitrogen as N (TKN + NO _x)	CA11130	<0.1 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	12 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398828

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 09 - Cockle Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 11:20
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	50.5 mS/cm
Dissolved Oxygen	In Situ Testing	4.9 mg/L
pH	In Situ Testing	7.8 pH Units
Salinity	In Situ Testing	33.0 PSS
Temperature	In Situ Testing	23.7 °C
Turbidity	In Situ Testing	0.6 NTU
Ammonia Nitrogen as N	CA13201	0.04 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	1 µg/L
Enterococci	CA22064	43 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.02 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	70 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.1 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.1 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	10 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398829

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 03 - Cockrone Lagoon

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 11:00
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	22.5 mS/cm
Dissolved Oxygen	In Situ Testing	5.2 mg/L
pH	In Situ Testing	8.3 pH Units
Salinity	In Situ Testing	13.5 PSS
Temperature	In Situ Testing	24.3 °C
Turbidity	In Situ Testing	1.9 NTU
Ammonia Nitrogen as N	CA13201	0.04 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	2 µg/L
Enterococci	CA22064	54 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NO _x)	CA13202	0.02 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	89 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.8 mg/L
Total Nitrogen as N (TKN + NO _x)	CA11130	0.8 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	4 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398830

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 05 - Kincumber Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 10:35
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	45.8 mS/cm
Dissolved Oxygen	In Situ Testing	4.5 mg/L
pH	In Situ Testing	7.5 pH Units
Salinity	In Situ Testing	29.6 PSS
Temperature	In Situ Testing	23.6 °C
Turbidity	In Situ Testing	1.7 NTU
Ammonia Nitrogen as N	CA13201	0.05 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	4 µg/L
Enterococci	CA22064	436 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.03 mg/L
Ortho-Phosphate (as P)	CA13200	0.02 mg/L
Thermotolerant Coliforms	CA22067	3500 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.3 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.3 mg/L
Total Phosphorus	CA13200	0.02 mg/L
Total Suspended Solids (@ 105°C)	CA12119	8 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398831

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 04 - Avoca Lagoon

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 10:15
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	18.8 mS/cm
Dissolved Oxygen	In Situ Testing	5.8 mg/L
pH	In Situ Testing	8.0 pH Units
Salinity	In Situ Testing	11.1 PSS
Temperature	In Situ Testing	24.7 °C
Turbidity	In Situ Testing	3.3 NTU
Ammonia Nitrogen as N	CA13201	0.03 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	1 µg/L
Enterococci	CA22064	309 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NOx)	CA13202	0.02 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	218 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.8 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.8 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	4 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398832

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

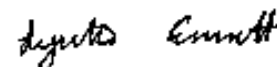
Sample Taken From: 02 - Terrigal Lagoon

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 10:00
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	14.3 mS/cm
Dissolved Oxygen	In Situ Testing	5.6 mg/L
pH	In Situ Testing	7.4 pH Units
Salinity	In Situ Testing	8.3 PSS
Temperature	In Situ Testing	23.2 °C
Turbidity	In Situ Testing	17.2 NTU
Ammonia Nitrogen as N	CA13201	0.08 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	1 µg/L
Enterococci	CA22064	6400 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NOx)	CA13202	0.13 mg/L
Ortho-Phosphate (as P)	CA13200	0.04 mg/L
Thermotolerant Coliforms	CA22067	7300 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.6 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.7 mg/L
Total Phosphorus	CA13200	0.05 mg/L
Total Suspended Solids (@ 105°C)	CA12119	12 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398833

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

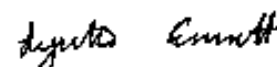
Sample Taken From: 01 - Wamberal Lagoon

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 9:50
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	16.2 mS/cm
Dissolved Oxygen	In Situ Testing	5.6 mg/L
pH	In Situ Testing	7.6 pH Units
Salinity	In Situ Testing	9.5 PSS
Temperature	In Situ Testing	23.7 °C
Turbidity	In Situ Testing	10.4 NTU
Ammonia Nitrogen as N	CA13201	0.06 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	4 µg/L
Enterococci	CA22064	836 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NOx)	CA13202	0.07 mg/L
Ortho-Phosphate (as P)	CA13200	0.03 mg/L
Thermotolerant Coliforms	CA22067	1600 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.7 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.8 mg/L
Total Phosphorus	CA13200	0.03 mg/L
Total Suspended Solids (@ 105°C)	CA12119	6 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398834

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

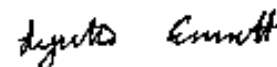
Sample Taken From: 06 - Erina Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 9:30
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	14.5 mS/cm
Dissolved Oxygen	In Situ Testing	5.1 mg/L
pH	In Situ Testing	6.6 pH Units
Salinity	In Situ Testing	8.4 PSS
Temperature	In Situ Testing	21.6 °C
Turbidity	In Situ Testing	30.4 NTU
Ammonia Nitrogen as N	CA13201	0.18 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	2 µg/L
Enterococci	CA22064	5500 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.23 mg/L
Ortho-Phosphate (as P)	CA13200	0.04 mg/L
Thermotolerant Coliforms	CA22067	10800 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.7 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.9 mg/L
Total Phosphorus	CA13200	0.08 mg/L
Total Suspended Solids (@ 105°C)	CA12119	23 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398835

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

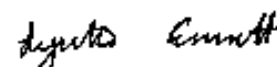
Sample Taken From: 07 - Narara Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 9:15
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	22.5 mS/cm
Dissolved Oxygen	In Situ Testing	4.9 mg/L
pH	In Situ Testing	6.4 pH Units
Salinity	In Situ Testing	13.9 PSS
Temperature	In Situ Testing	22.7 °C
Turbidity	In Situ Testing	14.3 NTU
Ammonia Nitrogen as N	CA13201	0.10 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	2 µg/L
Enterococci	CA22064	6400 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.16 mg/L
Ortho-Phosphate (as P)	CA13200	0.05 mg/L
Thermotolerant Coliforms	CA22067	16300 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.5 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.7 mg/L
Total Phosphorus	CA13200	0.06 mg/L
Total Suspended Solids (@ 105°C)	CA12119	9 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist



GOSFORD CITY COUNCIL

NSW, AUSTRALIA

Request Number: EF800145

Nalco Representative: David Supierz

Laboratory Report:

398836

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 08 - Woy Woy Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Mar-2009 11:55
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	38.6 mS/cm
Dissolved Oxygen	In Situ Testing	5.1 mg/L
pH	In Situ Testing	7.7 pH Units
Salinity	In Situ Testing	24.5 PSS
Temperature	In Situ Testing	23.4 °C
Turbidity	In Situ Testing	2.8 NTU
Ammonia Nitrogen as N	CA13201	0.04 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	2 µg/L
Enterococci	CA22064	2900 CFU/100mL
Nitrite + Nitrate as N (NO _x)	CA13202	0.05 mg/L
Ortho-Phosphate (as P)	CA13200	0.02 mg/L
Thermotolerant Coliforms	CA22067	2800 CFU/100mL
Total Kjeldahl Nitrogen	CA13202	0.2 mg/L
Total Nitrogen as N (TKN + NO _x)	CA11130	0.3 mg/L
Total Phosphorus	CA13200	0.02 mg/L
Total Suspended Solids (@ 105°C)	CA12119	5 mg/L

Comments

Date: 24/Mar/2009

Authorised by:



Lynette M Emmett
Chemist

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

Request Number: EF800145**Nalco Representative:** David Supierz**Laboratory Report:**

398837

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

12/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 13 - Field Blank - BOOKER BAY**Analyte****Test Method****Result**

Enterococci

CA22064

2 CFU/100mL

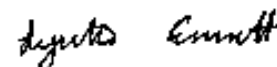
Thermotolerant Coliforms

CA22067

2 CFU/100mL

Comments

398837 Same batch DI water kept in the laboratory was >2 cfu/100mL for both tests.

Date: 24/Mar/2009**Authorised by:**Lynette M Emmett
Chemist

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

Request Number: EF800145**Nalco Representative:** David Supierz**Laboratory Report:**

398838

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

12/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 12 - Trip Blank**Analyte****Test Method****Result**

Enterococci

CA22064

<2 CFU/100mL

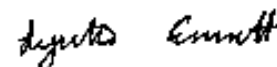
Thermotolerant Coliforms

CA22067

<2 CFU/100mL

Comments

398838 Same batch DI water kept in laboratory was >2cfu/100mL for both tests.

Date: 24/Mar/2009**Authorised by:**Lynette M Emmett
Chemist

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

Request Number: EF800145**Nalco Representative:** David Supierz**Laboratory Report:**

398839

Date Sampled:

09/Mar/2009

Date Received:

09/Mar/2009

Date Completed:

24/Mar/2009

WATER ANALYSIS

The sample was analysed as received, the results being as follows:

Sample Taken From: 14 - Information**Analyte****Test Method****Result**

High Tide Level

1.83 m

High Tide Time

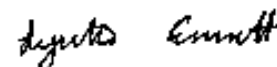
06:44

Rainfall For Preceding 48 Hours

39.8 mm

Rainfall For Preceding 7 Days

39.8 mm

Comments**Date:** 24/Mar/2009**Authorised by:**Lynette M Emmett
Chemist