

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958**Nalco Representative:** David Supierz**Laboratory Report:**

400237

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/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-Apr-2009 8:25
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	0.2 mS/cm
Dissolved Oxygen	In Situ Testing	8.5 mg/L
pH	In Situ Testing	6.9 pH Units
Salinity	In Situ Testing	0.1 PSS
Temperature	In Situ Testing	16.3 °C
Turbidity	In Situ Testing	33.1 NTU
Ammonia Nitrogen as N	CA13201	0.23 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	<1 µg/L
Enterococci	CA22064	2400 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.76 mg/L
Ortho-Phosphate (as P)	CA13200	0.04 mg/L
Thermotolerant Coliforms	CA22067	14000 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.6 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	1.4 mg/L
Total Phosphorus	CA13200	0.07 mg/L
Total Suspended Solids (@ 105°C)	CA12119	16 mg/L

**Comments****Date:** 22/Apr/2009**Authorised by:**Lynette M Emmett  
Chemist



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400238

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09/Apr/2009

**Date Completed:**

22/Apr/2009

### WATER ANALYSIS

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

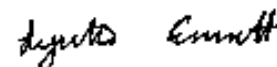
**Sample Taken From:** 10 - Booker Bay

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Apr-2009 11:15
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	51.9 mS/cm
Dissolved Oxygen	In Situ Testing	6.6 mg/L
pH	In Situ Testing	7.9 pH Units
Salinity	In Situ Testing	33.9 PSS
Temperature	In Situ Testing	21.1 °C
Turbidity	In Situ Testing	1.0 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	3 CFU/100mL
Nitrite + Nitrate as N (NO <sub>x</sub> )	CA13202	0.02 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	5 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.3 mg/L
Total Nitrogen as N (TKN + NO <sub>x</sub> )	CA11130	0.3 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	7 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist



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**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400239

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/2009

### WATER ANALYSIS

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

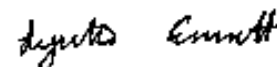
**Sample Taken From:** 09 - Cockle Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Apr-2009 11:00
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	50.3 mS/cm
Dissolved Oxygen	In Situ Testing	6.4 mg/L
pH	In Situ Testing	7.8 pH Units
Salinity	In Situ Testing	32.8 PSS
Temperature	In Situ Testing	22.1 °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	<1 µg/L
Enterococci	CA22064	49 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	<0.01 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	527 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.2 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.2 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	4 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist



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**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400240

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/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-Apr-2009 10:35
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	20.9 mS/cm
Dissolved Oxygen	In Situ Testing	6.9 mg/L
pH	In Situ Testing	8.8 pH Units
Salinity	In Situ Testing	12.4 PSS
Temperature	In Situ Testing	21.3 °C
Turbidity	In Situ Testing	1.3 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	10 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NOx)	CA13202	<0.01 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	5 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	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:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist



**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400241

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/2009

### WATER ANALYSIS

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

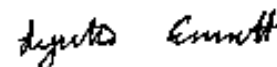
**Sample Taken From:** 05 - Kincumber Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Apr-2009 10:15
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	49.0 mS/cm
Dissolved Oxygen	In Situ Testing	5.8 mg/L
pH	In Situ Testing	7.7 pH Units
Salinity	In Situ Testing	31.8 PSS
Temperature	In Situ Testing	21.2 °C
Turbidity	In Situ Testing	5.9 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	5 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	<0.01 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	3 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.3 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.3 mg/L
Total Phosphorus	CA13200	0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	10 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist



**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400242

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/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-Apr-2009 10:00
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	18.1 mS/cm
Dissolved Oxygen	In Situ Testing	7.1 mg/L
pH	In Situ Testing	8.1 pH Units
Salinity	In Situ Testing	10.7 PSS
Temperature	In Situ Testing	21.8 °C
Turbidity	In Situ Testing	2.5 NTU
Ammonia Nitrogen as N	CA13201	0.05 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	<1 µg/L
Enterococci	CA22064	8 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NO <sub>x</sub> )	CA13202	<0.01 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	7 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.8 mg/L
Total Nitrogen as N (TKN + NO <sub>x</sub> )	CA11130	0.8 mg/L
Total Phosphorus	CA13200	0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	2 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist



**GOSFORD CITY COUNCIL**

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**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400243

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/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-Apr-2009 9:35
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	37.2 mS/cm
Dissolved Oxygen	In Situ Testing	6.0 mg/L
pH	In Situ Testing	7.5 pH Units
Salinity	In Situ Testing	23.4 PSS
Temperature	In Situ Testing	20.8 °C
Turbidity	In Situ Testing	3.1 NTU
Ammonia Nitrogen as N	CA13201	0.06 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	<1 µg/L
Enterococci	CA22064	18 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NO <sub>x</sub> )	CA13202	0.02 mg/L
Ortho-Phosphate (as P)	CA13200	<0.02 mg/L
Thermotolerant Coliforms	CA22067	33 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.4 mg/L
Total Nitrogen as N (TKN + NO <sub>x</sub> )	CA11130	0.4 mg/L
Total Phosphorus	CA13200	<0.02 mg/L
Total Suspended Solids (@ 105°C)	CA12119	6 mg/L

**Comments**

400243 Limit of reporting raised for Phosphate due to sample matrix interference.



**Date:** 22/Apr/2009

**Authorised by:**

Lynette M Emmett  
Chemist



**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400244

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/2009

### WATER ANALYSIS

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

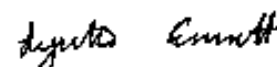
**Sample Taken From:** 01 - Wamberal Lagoon

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Apr-2009 9:20
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	16.9 mS/cm
Dissolved Oxygen	In Situ Testing	7.8 mg/L
pH	In Situ Testing	8.1 pH Units
Salinity	In Situ Testing	9.9 PSS
Temperature	In Situ Testing	21.3 °C
Turbidity	In Situ Testing	3.8 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	3 CFU/100mL
Entrance Condition		Closed
Nitrite + Nitrate as N (NOx)	CA13202	0.01 mg/L
Ortho-Phosphate (as P)	CA13200	<0.01 mg/L
Thermotolerant Coliforms	CA22067	10 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.7 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.7 mg/L
Total Phosphorus	CA13200	<0.01 mg/L
Total Suspended Solids (@ 105°C)	CA12119	5 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist





**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400245

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/2009

### WATER ANALYSIS

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

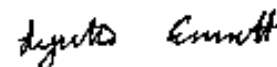
**Sample Taken From:** 06 - Erina Creek

<u>Analyte</u>	<u>Test Method</u>	<u>Result</u>
Date and Time of Sampling	In Situ Testing	09-Apr-2009 8:55
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	45.9 mS/cm
Dissolved Oxygen	In Situ Testing	6.5 mg/L
pH	In Situ Testing	7.3 pH Units
Salinity	In Situ Testing	29.5 PSS
Temperature	In Situ Testing	20.4 °C
Turbidity	In Situ Testing	0.4 NTU
Ammonia Nitrogen as N	CA13201	0.06 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	1 µg/L
Enterococci	CA22064	8 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	0.01 mg/L
Ortho-Phosphate (as P)	CA13200	0.02 mg/L
Thermotolerant Coliforms	CA22067	18 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	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	6 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist



**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400246

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/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-Apr-2009 8:45
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	28.8 mS/cm
Dissolved Oxygen	In Situ Testing	5.9 mg/L
pH	In Situ Testing	6.7 pH Units
Salinity	In Situ Testing	17.6 PSS
Temperature	In Situ Testing	19.6 °C
Turbidity	In Situ Testing	4.4 NTU
Ammonia Nitrogen as N	CA13201	0.26 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	<1 µg/L
Enterococci	CA22064	31 CFU/100mL
Nitrite + Nitrate as N (NO <sub>x</sub> )	CA13202	0.06 mg/L
Ortho-Phosphate (as P)	CA13200	<0.05 mg/L
Thermotolerant Coliforms	CA22067	90 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.6 mg/L
Total Nitrogen as N (TKN + NO <sub>x</sub> )	CA11130	0.7 mg/L
Total Phosphorus	CA13200	<0.05 mg/L
Total Suspended Solids (@ 105°C)	CA12119	8 mg/L

**Comments**

400246 Limit of reporting raised for Phosphate due to sample matrix interference.



**Date:** 22/Apr/2009

**Authorised by:**

Lynette M Emmett  
Chemist



**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958

**Nalco Representative:** David Supierz

**Laboratory Report:**

400247

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

22/Apr/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-Apr-2009 11:30
Depth	In Situ Testing	0.1 m
Conductivity	In Situ Testing	47.4 mS/cm
Dissolved Oxygen	In Situ Testing	5.9 mg/L
pH	In Situ Testing	7.8 pH Units
Salinity	In Situ Testing	30.7 PSS
Temperature	In Situ Testing	22.5 °C
Turbidity	In Situ Testing	0.5 NTU
Ammonia Nitrogen as N	CA13201	0.10 mg/L
BOD (5-Day)	CA11048	<2 mg/L
Chlorophyll a	CA13428	1 µg/L
Enterococci	CA22064	23 CFU/100mL
Nitrite + Nitrate as N (NOx)	CA13202	<0.01 mg/L
Ortho-Phosphate (as P)	CA13200	0.02 mg/L
Thermotolerant Coliforms	CA22067	30 CFU/100mL
Total Kjeldahl Nitrogen	CA13203	0.3 mg/L
Total Nitrogen as N (TKN + NOx)	CA11130	0.3 mg/L
Total Phosphorus	CA13200	0.03 mg/L
Total Suspended Solids (@ 105°C)	CA12119	6 mg/L

### Comments

**Date:** 22/Apr/2009

**Authorised by:**



Lynette M Emmett  
Chemist

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958**Nalco Representative:** David Supierz**Laboratory Report:**

400248

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

11/Apr/2009

**WATER ANALYSIS**

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

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

Enterococci

CA22064

&lt;2 CFU/50mL

Thermotolerant Coliforms

CA22067

&lt;2 CFU/50mL

**Comments****Date:** 22/Apr/2009**Authorised by:**Lynette M Emmett  
Chemist

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958**Nalco Representative:** David Supierz**Laboratory Report:**

400249

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

11/Apr/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

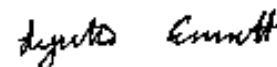
CA22064

&lt;2 CFU/50mL

Thermotolerant Coliforms

CA22067

&lt;2 CFU/50mL

**Comments****Date:** 22/Apr/2009**Authorised by:**Lynette M Emmett  
Chemist

**GOSFORD CITY COUNCIL**

NSW, AUSTRALIA

**Request Number:** D16958**Nalco Representative:** David Supierz**Laboratory Report:**

400250

**Date Sampled:**

09/Apr/2009

**Date Received:**

09/Apr/2009

**Date Completed:**

15/Apr/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

1.61 m

High Tide Time

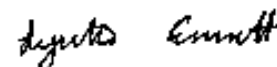
07:55

Rainfall For Preceding 48 Hours

0.0 mm

Rainfall For Preceding 7 Days

0.0 mm

**Comments****Date:** 22/Apr/2009**Authorised by:**Lynette M Emmett  
Chemist