

23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4968 9541 Fax: (02) 4967 6951

PO Box 317 Hunter Regional Mail Centre NSW 2310

Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

6 January 2015

Date Received:

7 January 2015

3 samples sampled and submitted by customer and tested as received.

Order Number:

49637

Report Number:

HWA-15/00277

Note: This report replaces Preliminary Report Number HWA-15/00262

Sample ID	Date	Time	Description		
H1500548	6/01/2015	8:00 AM	Ex-Pond Works Discharge E	MP1	<u></u>
Analysis	Method / C	Category		Result	Unit
Ammonia	APHA (201	2) 4500 - NH3 H (Amm	onia)	0.42	mg/L N
BOD5 - Total	APHA (201	2) 5210 B (BOD5)		<2	mg/L
Chlorophyll_a	APHA (201	2) 10200 H (Chlorophy	rll_a)	6.0	ug/L
pH	APHA (201	2) 4500-H+ B (pH)		7.7	8
Suspended Solids	inhouse 4 t	pased on APHA (2012)	2540 D (Suspended Solids)	5	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 b	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		3.4	mg/L N
Total Oil and Grease	APHA (201	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (201	APHA (2012) 4500 - NO3 I (TON)		2.7	mg/L N
Total Phosphorus	APHA (201	2) 4500 - P H (Phospho	orus)	1.1	mg/L P
Sample ID	Date	Time	Description		
H1500549	6/01/2015	8:00 AM	Up-Stream EMP3		
Analysis	Method / C	Calegory		Result	Unit
pH	APHA (201)	2) 4500-H+ B (pH)		6.8	(F
Total Kjeldahl Nitrogen	Inhouse 2 b	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/∟ N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 I (TON)		0.10	mg/L N
Total Phosphorus	APHA (201)	2) 4500 - P H (Phospho	orus)	0.06	mg/L P

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Sample İD	Date Time	Description		
H1500550	6/01/2015 8:00 AM	Downstream EMP4		
Analysis	Method / Category		Result	Unit
рН	APHA (2012) 4500-H+ B	(pH)	7.0	59-7
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA	4 (2012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3	I (TON)	0.15	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H ((Phosphorus)	0.16	mg/L P

Neil Martin

Chemistry Team Leader

Martin

13 January 2015

Tuesday, 13 January, 2015



23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4968 9541 Fax: (02) 4967 6951



PO Box 317 Hunter Regional Mail Centre NSW 2310

Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

11 February 2015

Date Received:

12 February 2015

o odin

3 samples sampled and submitted by customer and tested as received.

Order Number:

49640

Report Number:

HWA-15/01363

Sample ID	Date	Time	Description		
H1504710	11/02/2015	9:00 AM	Ex-Pond Works Discharge El	VIP1	
Analysis	Method / Co	ategory		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H (Ammonia)	0.42	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)		<2	mg/L
Chlorophyll_a	APHA (2012) 10200 H (Chlor	ophyll_a)	13.5	ug/L
pН	APHA (2012) 4500-H+ B (pH))	8.0	•
Suspended Solids	Inhouse 4 ba	ased on APHA (20	012) 2540 D (Suspended Solids)	16	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 ba	ased on APHA (20	012) 4500-Norg B (TKN)	3.6	mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Grease	a)	<2	mg/L
Total Oxidised Nitrogen	APHA (2012	APHA (2012) 4500 - NO3 I (TON)		1.8	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	0.88	mg/L P
Sample ID	Date	Time	Description		
H1504711	11/02/2015	9:00 AM	Up-Stream EMP3		
Analysis	Method / Co	ntegory		Result	Unit
pH	APHA (2012) 4500-H+ B (pH))	7.6	-
Total Kjeldahl Nitrogen	Inhouse 2 ba	esed on APHA (2)	012) 4500-Norg B (TKN)	1.7	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	<0.05	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	0.07	mg/L P

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Sample ID	Date Time	Description	
H1504712	11/02/2015 9:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
pH	APHA (2012) 4500-H+ B (pH)	7.8	590
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	12) 4500-Norg B (TKN) 1.1	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TO	ON) <0.05	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	sphorus) 0.21	mg/L P

Bob Manevski

Senior Technical Officer

19 February 2015



23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4968 9541 Fax: (02) 4967 6951 PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

10 March 2015

Date Received:

11 March 2015

3 samples sampled and submitted by customer and tested as received.

Order Number:

49645

Report Number:

HWA-15/02098

Note: This report replaces Preliminary Report Number HWA-15/02087

Sample ID	Date	Time	Description		
H1506293	10/03/2015	8:00 AM	Ex-Pond Works Discharge E	MP1	
Analysis	Method / Ca	tegory		Result	Unit
Ammonia	APHA (2012)) 4500 - NH3 H ((Ammonia)	0.33	mg/L N
BOD5 - Total	APHA (2012)) 5210 B (BOD5))	<2	mg/L
Chlorophyll_a	APHA (2012)) 10200 H (Chlor	rophyll_a)	1.8	ug/L
pH	APHA (2012)) 4500-H+ B (pH)	8.5	-
Suspended Solids	Inhouse 4 ba	sed on APHA (2	2012) 2540 D (Suspended Solids)	8	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 ba	sed on APHA (2	012) 4500-Norg B (TKN)	2.0	mg/L N
Total Oil and Grease	APHA (2012)	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (2012)	APHA (2012) 4500 - NO3 I (TON)		1.8	mg/L N
Total Phosphorus	APHA (2012)) 4500 - P H (Ph	osphorus)	1.6	mg/L P
Sample ID	Date	Time	Description		
H1506294	10/03/2015	8:00 AM	Up-Stream EMP3		
Analysis	Method / Ca	tegory		Result	Unit
pH	APHA (2012)) 4500-H+ B (pH)	6.7	-
Total Kjeldahl Nitrogen	Inhouse 2 ba	sed on APHA (2	012) 4500-Norg B (TKN)	1.1	mg/L N
Total Oxidised Nitrogen	APHA (2012)) 4500 - NO3 I (1	ron)	<0.05	mg/L N
Total Phosphorus	APHA (2012)) 4500 - P H (Ph	osphorus)	0.13	mg/L P

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Sample ID	Date Time	Description	
H1506295	10/03/2015 8:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
pH	APHA (2012) 4500-H+ B (pH) 6.8	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA	(2012) 4500-Norg B (TKN) 1.4	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3	(TON) <0.05	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (I	Phosphorus) 0.15	mg/L P

Neil Martin

Chemistry Team Leader

Martin

17 March 2015



23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4968 9541 Fax: (02) 4967 6951



PO Box 317 Hunter Regional Mail Centre NSW 2310

Report of Analysis

Customer: Oberon Council

PO Box 84, Oberon, NSW 2787

Contact: Ken Robinson
Sample Date: 7 April 2015

Date Received: 8 April 2015

3 samples sampled and submitted by customer and tested as received.

Order Number: 49647

Report Number: HWA-15/02734

Note: This report replaces Preliminary Report Number HWA-15/02707

Sample ID	Date	Time	Description		
H1510016	7/04/2015	Not recorded	Ex-Pond Works EMP1		
Analysis	Method / C	ntegory		Result	Unit
Ammonia	APHA (2012	2) 4500 - NH3 H (An	nmonia)	1.2	mg/L N
BOD5 - Total	APHA (2012	e) 5210 B (BOD5)		<2	mg/L
Chlorophyll_a	APHA (2012	!) 10200 H (Chlorop	hyll_a)	6.0	ug/L
pH	APHA (2012	2) 4500-H+ B (pH)		7.8	32
Suspended Solids	Inhouse 4 b	ased on APHA (201	2) 2540 D (Suspended Solids)	4	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 b	esed on APHA (201	2) 4500-Norg B (TKN)	3.1	mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON)		1.4	mg/L N	
Total Phosphorus	APHA (2012) 4500 - P H (Phos	phorus)	1.2	mg/L P
Sample ID	Date	Time	Description		
H1510017	7/04/2015	Not recorded	Up-Stream EMP3		
Analysis	Method / Co	utegory		Result	Unit
рН	APHA (2012) 4500-H+ B (pH)		6.9	=
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			5.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TO	N)	0.05	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Phos	phorus)	0.05	mg/L P

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Monday, 13 April, 2015 Page 1 of 2

Sample ID	Date Time	Description	
H1510018	7/04/2015 Not recorded	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pH)	7.0	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012	2) 4500-Norg B (TKN) 0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON	0.19	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Phosp	horus) 0.11	mg/L P

Neil Martin

Chemistry Team Leader

Martin

13 April 2015



23 Rosegum Drive WARABROOK NSW 2304 Tele: (02) 4968 9541 Fax: (02) 4967 6951 PO Box 317 Hunter Regional Mail Centre NSW 2310



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Ken Robinson

Sample Date:

4 May 2015

Date Received:

6 May 2015

3 samples sampled and submitted by customer and tested as received.

Order Number:

49648

Report Number:

HWA-15/03475

Note: This report replaces Preliminary Report Number HWA-15/03466

Sample ID	Date Time	Description		
H1512441	4/05/2015 9:00 AM	Ex-Pond Works Discharge		
Analysis	Method / Category		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H	(Ammonia)	2.3	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)	2	mg/L
Chlorophyll_a	APHA (2012) 10200 H (Chlo	rophyll_a)	42.3	ug/L
COD-Total	Inhouse 5 based APHA (201	2) 5220 D (COD)	140	mg/L
pH	APHA (2012) 4500-H+ B (ph	1)	8.8	Si
Suspended Solids	Inhouse 4 based on APHA (2	2012) 2540 D (Suspended Solids)	6	mg/L
Total Kjeldahl Nitrogen	inhouse 2 based on APHA (2	inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		mg/L N
Total Oil and Grease	APHA (2012) 5520 D (Greas	APHA (2012) 5520 D (Grease)		mg/L
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (APHA (2012) 4500 - NO3 i (TON)		mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus)	0.78	mg/L P
Sample ID	Date Time	Description		
H1512442	4/05/2015 9:00 AM	Upstream EMP3		···
Analysis	Method / Category		Result	Unit
pH	APHA (2012) 4500-H+ B (pH)	7.1	-
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	2012) 4500-Norg B (TKN)	<0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON)	0.09	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus)	<0.05	mg/L P

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Monday, 11 May, 2015 Page 1 of 2

Sample ID	Date Time	Description	
H1512443	4/05/2015 9:00 AM	Downstream EMP4	
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pH	7.1	-
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2	2012) 4500-Norg B (TKN) <0.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (1	TON) 0.74	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus) 0.14	mg/L P

Neil Martin

Chemistry Team Leader

Martin

11 May 2015

Monday, 11 May, 2015 Page 2 of 2



5/585 Maitland Road Mayfield West NSW 2304 Tele: (02) 4014 2531



Report of Analysis

Customer: Oberon Council

PO Box 84, Oberon, NSW 2787

Contact: Richard Robinson / Lou Grozdanovski

Sample Date: 1 June 2015

Date Received: 4 June 2015

3 samples sampled and submitted by customer and tested as received.

Order Number: 49650

Report Number: HWA-15/04342

Note: This report replaces Preliminary Report Number HWA-15/04326

Sample ID	Date	Time	Description		
H1514348	1/06/2015	8:00 AM	Ex-Pond Works Discharge E	MP1	
Analysis	Method /	Category		Result	Unit
Ammonia	APHA (20	12) 4500 - NH3 H (Ammonia)	0.78	mg/L N
BOD5 - Total	APHA (20	12) 5210 B (BOD5))	4	mg/L
Chlorophyll_a	APHA (20	12) 10200 H (Chlor	rophyll_a)	49.7	ug/L
рН	APHA (20	12) 4500-H+ B (pH	()	9.4	-
Suspended Solids	Inhouse 4	based on APHA (2	012) 2540 D (Suspended Solids)	7	mg/L
Total Kjeldahl Nitrogen	Inhouse 2	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)			mg/L N
Total Oil and Grease	APHA (20	APHA (2012) 5520 D (Grease)			mg/L
Total Oxidised Nitrogen	APHA (20	APHA (2012) 4500 - NO3 I (TON)		7.5	mg/L N
Total Phosphorus	APHA (20	12) 4500 - P H (Ph	osphorus)	0.46	mg/L P
Sample ID	Date	Time	Description		
H1514349	1/06/2015	8:00 AM	Up-Stream EMP3		
Analysis	Method /	Category		Result	Unit
pH	APHA (20	12) 4500-H+ B (pH)	7.3	-
Total Kjeldahl Nitrogen	Inhouse 2	based on APHA (2	012) 4500-Norg B (TKN)	0.6	mg/L N
Total Oxidised Nitrogen	APHA (20	12) 4500 - NO3 I (1	TON)	0.99	mg/L N
Total Phosphorus	APHA (20	12) 4500 - P H (Ph	osphorus)	<0.05	mg/L P

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Wednesday, 10 June, 2015 Page 1 of 2

Sample ID	Date Time	Description	
H1514350	1/06/2015 8:00 AM	Down-Sream EMP4	
Analysis	Method / Category	Result	Unit
pH	APHA (2012) 4500-H+ B (pH)	7.2	34
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (26	012) 4500-Norg B (TKN) 0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON) 4.5	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus) 0.07	mg/L P

Neil Martin

Chemistry Team Leader

Martin

10 June 2015



5/585 Maitland Road Mayfield West NSW 2304 Tele: (02) 4014 2531



Report of Analysis

Customer: Oberon Council

PO Box 84, Oberon, NSW 2787

Contact: Richard Robinson / Lou Grozdanovski

Sample Date: 6 July 2015

Date Received: 9 July 2015

3 samples sampled and submitted by customer and tested as received.

Order Number: 49659

Report Number: HWA-15/05209

Sample ID	Date Ti	me	Description		
H1517878	6/07/2015 8:00) AM	Ex-Pond Works Discharge E	MP1	
Analysis	Method / Catego	יניזי		Result	Unit
Ammonia	APHA (2012) 450	00 - NH3 H (Ammo	nia)	4.3	mg/L N
BOD5 - Total	APHA (2012) 521	10 B (BOD5)		13	mg/L
Chlorophyll_a	APHA (2012) 102	200 H (Chlorophyll_	_a)	48.5	ug/L
pΗ	APHA (2012) 450	00-H+ B (pH)		8.3	13
Suspended Solids	Inhouse 4 based	Inhouse 4 based on APHA (2012) 2540 D (Suspended Solids)		2	mg/L
Total Kjeldahi Nitrogen	Inhouse 2 based	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		8.7	mg/L N
Total Oil and Grease	APHA (2012) 552	APHA (2012) 5520 D (Grease)		<2	mg/L
Total Oxidised Nitrogen	APHA (2012) 450	APHA (2012) 4500 - NO3 I (TON)		2.2	mg/L N
Total Phosphorus	APHA (2012) 450	00 - P H (Phosphor	us)	0.59	mg/L P
Sample ID	Date Tin	me	Description		
H1517879	6/07/2015 8:00	AM .	Up-Stream EMP3		
Analysis	Method / Catego	Method / Category		Result	Unit
рН	APHA (2012) 4500-H+ B (pH)		7.1	-	
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (2012) 4500-Norg B (TKN)		500-Norg B (TKN)	1.1	mg/L N
Fotal Oxidised Nitrogen	APHA (2012) 450	00 - NO3 I (TON)		0.18	mg/L N
Total Phosphorus	APHA (2012) 450	00 - P H (Phosphon	us)	<0.05	mg/L P

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Sample ID	Date Time	Description	
H1517880	6/07/2015 8:00 AM	Down-Stream EMP4	
Analysis	Method / Category	Result	Unit
рН	APHA (2012) 4500-H+ B (pH)	7.2	∑ * €
Total Kjeldahl Nitrogen	Inhouse 2 based on APHA (20	012) 4500-Norg B (TKN) 6.7	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON) 0.80	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus) 0.10	mg/L P

Neil Martin

Chemistry Team Leader

Martin

15 July 2015



5/585 Maitland Road Mayfield West NSW 2304 Tele: (02) 4014 2531



Report of Analysis

Customer: Oberon Council

PO Box 84, Oberon, NSW 2787

Contact: Richard Robinson / Lou Grozdanovski

Sample Date: 10 August 2015

Date Received: 13 August 2015

1 sample sampled and submitted by customer and tested as received.

Order Number: 49662

Report Number: HWA-15/06207

Note: This report replaces F		oort Number H	WA-15/06192
Sample ID	Date	Tîme	Descrip

Sample ID	Date	Time	Description		
H1521107	10/08/2015	8:30 AM	Borg Trade Waste Works Dis	scharge Bryne to Sewer	
Analysis	Method / C	ategory		Result	Unit
Alkalinity @ pH 4.5	APHA (201	2) 2320 B (Alkalini	ity)	364	mg/L CaCO3
Ammonia	APHA (201	2) 4500 - NH3 H (<i>i</i>	Ammonia)	49.8	mg/∟ N
BOD5 - Total	APHA (201	2) 5 2 10 B (BOD5)		394	mg/L
Colour-True	APHA (201	2) 2120 B (Colour	- True)	45	cu
рН	APHA (201	2) 4500-H+ B (pH)	1	6.9	9
Suspended Solids	Inhouse 4 b	eased on APHA (20	012) 2540 D (Suspended Solids)	96	mg/L
Total Kjeldahl Nitrogen	Inhouse 2 t	eased on APHA (20	012) 4500-Norg B (TKN)	65.5	mg/L N
Total Oxidised Nitrogen	APHA (201	2) 4500 - NO3 I (T	ON)	0.13	mg/L N
Total Phosphorus	APHA (201:	2) 4500 - P H (Pho	osphorus)	1.0	mg/L P

Neil Martin

Chemistry Team Leader

18 August 2015

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5/585 Maitland Road Mayfield West NSW 2304 Tele: (02) 4014 2531



Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Richard Robinson / Lou Grozdanovski

Sample Date:

14 September 2015

Date Received:

15 September 2015

1 sample sampled and submitted by customer and tested as received.

Report Number:

HWA-15/07093

Note: This report replaces Preliminary Report Number HWA-15/07080

Sumple ID	Date Time	Description		
H1524415	14/09/2015 10:00 AM	Borg Trade Waste Works Discharge	e	
Analysis	Method / Category		Result	Unit
Alkalinity @ pH 4.5	APHA (2012) 2320 B (Alkalinity)	2	280	mg/L CaCO3
Ammonia	APHA (2012) 4500 - NH3 H (Ammon	ia) 1	11.4	mg/L N
BOD5 - Total	APHA (2012) 5210 B (BOD5)	2	256	mg/L
Colour-True	APHA (2012) 2120 B (Colour - True)	7	70	CU
рН	APHA (2012) 4500-H+ B (pH)	7	7.1	•
Suspended Solids	inhouse 4 based on APHA (2012) 25	40 D (Suspended Solids)	130	mg/L
Total Kjeldahl Nitrogen	inhouse 6 based on APHA (2012) 45	00-NC & 4500-NO3 (TKN)	33.8	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TON)	(0.13	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Phosphoru	s) C	0.30	mg/L P

Neil Martin

Chemistry Team Leader

22 September 2015

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5/585 Maitland Road Mayfield West NSW 2304 Tele: (02) 4014 2531







Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Richard Robinson / Lou Grozdanovski

Sample Date:

6 October 2015

Date Received:

8 October 2015

3 samples sampled and submitted by customer and tested as received.

Order Number:

49671

Report Number:

HWA-15/07625

Note: This report replaces Preliminary Report Number HWA-15/07600

Sample ID	Date Time	Description		
H1526179	6/10/2015 8:00 A	M Ex-Pond Works Discharg	ge EMP1	
Analysis	Method / Category		Result	Unix
Ammonia	APHA (2012) 4500	- NH3 H (Ammonia)	9.7	mg/L N
BOD5 - Total	APHA (2012) 5210	B (BOD5)	15	mg/L
Chlorophyll_a	APHA (2012) 10200	H (Chlorophyll_a)	59.5	ug/L
рН	APHA (2012) 4500-	H+ B (pH)	8.2	-
Suspended Solids	Inhouse 4 based on	APHA (2012) 2540 D (Suspended Solids)	18	mg/L
Total Kjeldahl Nitrogen	inhouse 6 based on	inhouse 6 based on APHA (2012) 4500-NC & 4500-NO3 (TKN)		mg/L N
Total Oil and Grease	APHA (2012) 5520	APHA (2012) 5520 D (Grease)		mg/L
Total Oxidised Nitrogen	APHA (2012) 4500	APHA (2012) 4500 - NO3 I (TON)		mg/L N
Total Phosphorus	APHA (2012) 4500	- P H (Phosphorus)	1.1	mg/L P
Sample ID	Date Time	Description		
H1526180	6/10/2015 8:00 Al	M Up-Stream EMP3		
Analysis	Medtod / Calegory	Mediod / Category		Unit
рН	APHA (2012) 4500-H+ B (pH)		7.0	-
Total Kjeldahl Nitrogen	Inhouse 6 based on APHA (2012) 4500-NC & 4500-NO3 (TKN)		0.7	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500	APHA (2012) 4500 - NO3 I (TON)		mg/L N
Total Phosphorus	APHA (2012) 4500 -	- P H (Phosphorus)	<0.05	mg/L P

Accredited for compliance with ISO/IEC 17025.

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Sample ID	Date Time	Description		
H1526181	6/10/2015 8:00 AM	Down-Stream EMP4		
Analysis	Method / Category		Result	Unit
рН	APHA (2012) 4500-H+ B (pH)		7.0	=
Total Kjeldahl Nitrogen	Inhouse 6 based on APHA (20	12) 4500-NC & 4500-NO3 (TKN)	1.5	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (TO	ON)	0.74	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	sphorus)	0,10	mg/L P

Neil Martin

Chemistry Team Leader

Martin

14 October 2015



5/585 Maitland Road Mayfield West NSW 2304 Tele: (02) 4014 2531





Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Richard Robinson / Lou Grozdanovski

Sample Date:

9 November 2015

Date Received:

10 November 2015

3 samples sampled and submitted by customer and tested as received.

Order Number:

49675

Report Number:

HWA-15/08570

Note: This report replaces Preliminary Report Number HWA-15/08543

Sample ID	Date	Time	Description		
H1528722	9/11/2015	8:00 AM	Ex-Pond Works Discharge El	MP1	
Analysis	Method / Co	ategory		Result	Unit
Ammonia	APHA (2012) 4500 - NH3 H	(Ammonia)	8.9	mg/L N
BOD5 - Total	APHA (2012	!) 5210 B (BOD5)	12	mg/L
Chlorophyll_a	APHA (2012	2) 10200 H (Chlo	rophyll_a)	4.7	ug/L
pН	APHA (2012	?) 4500-H+ B (pH	R)	7.9	a
Suspended Solids	Inhouse 4 ba	ased on APHA (2	2012) 2540 D (Suspended Solids)	<1	mg/L
Total Kjeldah! Nitrogen	Inhouse 6 ba	Inhouse 6 based on APHA (2012) 4500-NC & 4500-NO3 (TKN)		11.4	mg/L N
Total Oil and Grease	APHA (2012	APHA (2012) 5520 D (Grease)		2	mg/L
Total Oxidised Nitrogen	APHA (2012	APHA (2012) 4500 - NO3 I (TON)		1.8	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus)	1.6	mg/L P
Sample ID	Date	Time	Description		
H1528723	9/11/2015	8:00 AM	Up-Stream EMP3		
Analysis	Method / Ca	itegory		Result	Unit
pH	APHA (2012	APHA (2012) 4500-H+ B (pH)		7.2	
Total Kjeldahl Nitrogen	Inhouse 6 ba	Inhouse 6 based on APHA (2012) 4500-NC & 4500-NO3 (TKN)		0.6	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (1	TON)	0.08	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Ph	osphorus)	0.06	mg/L P

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Sample ID	Date Time	Description		
H1528724	9/11/2015 8:00 AM	Down-Stream EMP4		
Analysis	Method / Category		Result	Unit
pH	APHA (2012) 4500-H+ B (pH)	7.3	/+ /
Total Kjeldahl Nitrogen	Inhouse 6 based on APHA (2	012) 4500-NC & 4500-NO3 (TKN)	1.8	mg/L N
Total Oxidised Nitrogen	APHA (2012) 4500 - NO3 I (T	ON)	0.43	mg/L N
Total Phosphorus	APHA (2012) 4500 - P H (Pho	osphorus)	0.23	mg/L P

Neil Martin

Chemistry Team Leader

Martin

17 November 2015



5/585 Mayfield West Mayfield West NSW 2304 Tele: (02) 4014 2531







Report of Analysis

Customer:

Oberon Council

PO Box 84, Oberon, NSW 2787

Contact:

Richard Robinson / Lou Grozdanovski

Sample Date:

8 December 2015

Date Received:

9 December 2015 at 9:00 AM - Sample Temperature 15°C

1 sample sampled and submitted by customer and tested as received.

Testing Commenced:

9 December 2015 at 11:45 AM

Order Number:

49682

Report Number:

HWA-15/09253

Note: This report replaces Interim Report Number HWA-15/09249

Sample ID	Date Time	Description	
H1531862	8/12/2015 2:00 PM	Ex-Pond Works Discharge EMP1	
Analysis	Method / Category	Result	Unit
Confirmed Thermotolerant	HWC002 (Thermotolerant coli	forms) <100	CFU/100mL

Robin Woodward

Principal Microbiologist

10 December 2015

When testing cannot be performed within 6 hours of collection, samples may be examined up to 12 to 48 hours after collection, depending on requested analysis, provided samples are kept cold $(2^{\circ}\text{C to }8^{\circ}\text{C})$ and in the dark.

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< = less than

> = greater than

~ = approximately

est = estimated

ND = not detected