

COFFS HARBOUR LABORATORY

Environmental Analysis

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KEMPSEY SHIRE COUNCIL
BLAKE GIDDY
P.O. BOX 3078
WEST KEMPSEY NSW 2440

BATCHNUMBER: 25/0848
No. of SAMPLES: 12
DATE COLLECTED: 09/04/25
DATE RECEIVED: 09/04/25
TIME RECEIVED: 16:27
DATE TESTING COMMENCED:
09/04/25

REPORT OF ANALYSIS

SAMPLE REFERENCE	SAMPLE DESCRIPTION
25/0848/1	South Kempsey TP
25/0848/2	Crescent Head CW
25/0848/3	Gladstone TP
25/0848/4	Frederickton TP
25/0848/5	South West Rocks CW
25/0848/6	West Kempsey TP
25/0848/7	Hat Head C Well
25/0848/8	South Kempsey STP Head Wall Day Pond
25/0848/9	Upstream Gladstone TP
25/0848/10	Downstream Gladstone TP
25/0848/11	Upstream Frederickton TP
25/0848/12	Downstream Frederickton TP

ANALYSIS	UNITS	25/0848/1	25/0848/2	25/0848/3	25/0848/4	METHODNO
pH	pH unit	6.8	7.3	7.7	7.2	APHA 4500-H+ B
Conductivity	µS/cm	-	939	-	-	APHA 2510 B
Turbidity	NTU	-	0.75	-	-	APHA 2130 B
Transmittance	%	-	-	58.7	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	3	2	6	5	APHA 2540 D
Biochem Oxygen Demand (BOD ₅)	mg/L	2	<2	2	3	APHA 5210 B



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ANALYSIS	UNITS	25/0848/1	25/0848/2	25/0848/3	25/0848/4	METHODNO
Nitrate Nitrogen	mg/L	-	9.96	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	0.93	0.28	1.17	0.48	APHA 4500-NH3 H
Total Nitrogen	mg/L	3.44	11.8	2.93	2.20	APHA 4500-P J
Total Phosphorus	mg/L	1.95	0.05	5.27	3.64	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	<2	EL23A
Chlorophyll-a	µg/L	-	-	8	15	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	500	114	1,000	850	ELM 3

ANALYSIS	UNITS	25/0848/5	25/0848/6	25/0848/7	25/0848/8	METHODNO
pH	pH unit	6.9	7.1	7.6	-	APHA 4500-H+ B
Conductivity	µS/cm	599	-	1,020	-	APHA 2510 B
Turbidity	NTU	3.0	-	0.60	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	654	-	EL7B
Alkalinity	mg CaCO ₃ /L	42	-	165	-	APHA 2320 B
Total Suspended Solids	mg/L	4	7	<2	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	3	7	<2	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	2.62	0.28	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	0.72	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	1.27	0.43	0.02	-	APHA 4500-NH3 H
Total Nitrogen	mg/L	13.1	5.22	0.97	-	APHA 4500-P J
Total Phosphorus	mg/L	1.81	0.12	0.10	-	APHA 4500-P J
Oil & Grease	mg/L	<2	<2	<2	-	EL23A
Chlorophyll-a	µg/L	-	20	-	-	APHA 10200 H
Potassium	mg/L	17	-	18	-	EL9A
Chloride	mg/L	91	-	129	-	EL10
Arsenic	mg/L	<0.012	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	0	20	2	300	ELM 3



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ANALYSIS	UNITS	25/0848/9	25/0848/10	25/0848/11	25/0848/12	METHODNO
pH	pH unit	-	-	-	-	APHA 4500-H+ B
Conductivity	µS/cm	-	-	-	-	APHA 2510 B
Turbidity	NTU	-	-	-	-	APHA 2130 B
Transmittance	%	-	-	-	-	APHA 5910
Total Dissolved Solids	mg/L	-	-	-	-	EL7B
Alkalinity	mg CaCO ₃ /L	-	-	-	-	APHA 2320 B
Total Suspended Solids	mg/L	-	-	-	-	APHA 2540 D
Biochem Oxygen Demand (BOD5)	mg/L	-	-	-	-	APHA 5210 B
Nitrate Nitrogen	mg/L	-	-	-	-	APHA 4500-NO3I
Nitrite Nitrogen	mg/L	-	-	-	-	APHA 4500-NO 2
Ammonia Nitrogen	mg/L	-	-	-	-	APHA 4500-NH3H
Total Nitrogen	mg/L	-	-	-	-	APHA 4500-P J
Total Phosphorus	mg/L	-	-	-	-	APHA 4500-P J
Oil & Grease	mg/L	-	-	-	-	EL23A
Chlorophyll-a	µg/L	-	-	-	-	APHA 10200 H
Potassium	mg/L	-	-	-	-	EL9A
Chloride	mg/L	-	-	-	-	EL10
Arsenic	mg/L	-	-	-	-	EL9A
Thermotolerant Coliforms	cfu/100mL	30	90	120	75	ELM 3

ANALYSIS	UNITS	25/0848/1	25/0848/2	25/0848/3	25/0848/4	METHODNO
PFAS*						
PFBA(375-22-4)	ug/L	<0.05	<0.05	<0.05	<0.05	NR70
PFPeA(2706-90-3)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70
PFHxA(307-24-4)	ug/L	0.016	0.015	<0.01	<0.01	NR70
PFHpA(375-85-9)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFOA(335-67-1)	ug/L	<0.01	0.013	<0.01	0.050	NR70
PFNA(375-95-1)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFDA(335-76-2)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFUdA(2058-94-8)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFDoA(307-55-1)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFTTrDA(72629-94-8)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70
PFTeDA(376-06-7)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70
PFHxDA(67905-19-5)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70
PFODO(16517-11-6)	ug/L	<0.05	<0.05	<0.05	<0.05	NR70
FOUEA(70887-84-2)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFDS(335-77-3)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFPeS(2706-91-4)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFHxS(355-46-4)	ug/L	0.013	<0.01	<0.01	<0.01	NR70
PFHpS(375-92-8)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFOS(1763-23-1)	ug/L	0.029	<0.02	<0.02	0.021	NR70
PFNS(68259-12-1)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
PFBS(375-73-5)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70



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ANALYSIS	UNITS	25/0848/1	25/0848/2	25/0848/3	25/0848/4	METHODNO
PFOSA (754-91-6)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
N-MeFOSA (31506-32-8)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70
N-EtFOSA (4151-50-2)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70
N-MeFOSAA (2355-31-9)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
N-EtFOSAA (2991-50-6)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
N-MeFOSE (24448-09-7)	ug/L	<0.05	<0.05	<0.05	<0.05	NR70
N-EtFOSE (1691-99-2)	ug/L	<0.05	<0.05	<0.05	<0.05	NR70
4:2 FTS (757124-72-4)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
6:2 FTS (27619-97-2)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
8:2 FTS (39108-34-4)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
10:2 FTS (120226-60-0)	ug/L	<0.01	<0.01	<0.01	<0.01	NR70
8:2 diPAP (678-41-1)	ug/L	<0.02	<0.02	<0.02	<0.02	NR70

ANALYSIS	UNITS	25/0848/5	25/0848/6	25/0848/7	25/0848/8	METHODNO
PFAS*						
PFBA (375-22-4)	ug/L	<0.05	<0.05	<0.05	-	NR70
PFPeA (2706-90-3)	ug/L	<0.02	<0.02	<0.02	-	NR70
PFHxA (307-24-4)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFHpA (375-85-9)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFOA (335-67-1)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFNA (375-95-1)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFDA (335-76-2)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFUdA (2058-94-8)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFDoA (307-55-1)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFTTrDA (72629-94-8)	ug/L	<0.02	<0.02	<0.02	-	NR70
PFTeDA (376-06-7)	ug/L	<0.02	<0.02	<0.02	-	NR70
PFHxDA (67905-19-5)	ug/L	<0.02	<0.02	<0.02	-	NR70
PFODO (16517-11-6)	ug/L	<0.05	<0.05	<0.05	-	NR70
FOUEA (70887-84-2)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFDS (335-77-3)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFPeS (2706-91-4)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFHxS (355-46-4)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFHpS (375-92-8)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFOS (1763-23-1)	ug/L	<0.02	<0.02	<0.02	-	NR70
PFNS (68259-12-1)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFBS (375-73-5)	ug/L	<0.01	<0.01	<0.01	-	NR70
PFOSA (754-91-6)	ug/L	<0.01	<0.01	<0.01	-	NR70
N-MeFOSA (31506-32-8)	ug/L	<0.02	<0.02	<0.02	-	NR70
N-EtFOSA (4151-50-2)	ug/L	<0.02	<0.02	<0.02	-	NR70
N-MeFOSAA (2355-31-9)	ug/L	<0.01	<0.01	<0.01	-	NR70
N-EtFOSAA (2991-50-6)	ug/L	<0.01	<0.01	<0.01	-	NR70
N-MeFOSE (24448-09-7)	ug/L	<0.05	<0.05	<0.05	-	NR70
N-EtFOSE (1691-99-2)	ug/L	<0.05	<0.05	<0.05	-	NR70
4:2 FTS (757124-72-4)	ug/L	<0.01	<0.01	<0.01	-	NR70
6:2 FTS (27619-97-2)	ug/L	<0.01	<0.01	<0.01	-	NR70



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ANALYSIS	UNITS	25/0848/5	25/0848/6	25/0848/7	25/0848/8	METHODNO
8:2FTS(39108-34-4)	ug/L	<0.01	<0.01	<0.01	-	NR70
10:2FTS(120226-60-0)	ug/L	<0.01	<0.01	<0.01	-	NR70
8:2diPAP(678-41-1)	ug/L	<0.02	<0.02	<0.02	-	NR70

ANALYSIS	UNITS	25/0848/9	25/0848/10	25/0848/11	25/0848/12	METHODNO
PFAS*						
PFBA(375-22-4)	ug/L	-	-	-	-	NR70
PFPeA(2706-90-3)	ug/L	-	-	-	-	NR70
PFHxA(307-24-4)	ug/L	-	-	-	-	NR70
PFHpA(375-85-9)	ug/L	-	-	-	-	NR70
PFOA(335-67-1)	ug/L	-	-	-	-	NR70
PFNA(375-95-1)	ug/L	-	-	-	-	NR70
PFDA(335-76-2)	ug/L	-	-	-	-	NR70
PFUdA(2058-94-8)	ug/L	-	-	-	-	NR70
PFDoA(307-55-1)	ug/L	-	-	-	-	NR70
PFTTrDA(72629-94-8)	ug/L	-	-	-	-	NR70
PFTeDA(376-06-7)	ug/L	-	-	-	-	NR70
PFHxDA(67905-19-5)	ug/L	-	-	-	-	NR70
PFODO(16517-11-6)	ug/L	-	-	-	-	NR70
FOUEA(70887-84-2)	ug/L	-	-	-	-	NR70
PFDS(335-77-3)	ug/L	-	-	-	-	NR70
PFPeS(2706-91-4)	ug/L	-	-	-	-	NR70
PFHxS(355-46-4)	ug/L	-	-	-	-	NR70
PFHpS(375-92-8)	ug/L	-	-	-	-	NR70
PFOS(1763-23-1)	ug/L	-	-	-	-	NR70
PFNS(68259-12-1)	ug/L	-	-	-	-	NR70
PFBS(375-73-5)	ug/L	-	-	-	-	NR70
PFOSA(754-91-6)	ug/L	-	-	-	-	NR70
N-MeFOSA(31506-32-8)	ug/L	-	-	-	-	NR70
N-EtFOSA(4151-50-2)	ug/L	-	-	-	-	NR70
N-MeFOSAA(2355-31-9)	ug/L	-	-	-	-	NR70
N-EtFOSAA(2991-50-6)	ug/L	-	-	-	-	NR70
N-MeFOSE(24448-09-7)	ug/L	-	-	-	-	NR70
N-EtFOSE(1691-99-2)	ug/L	-	-	-	-	NR70
4:2FTS(757124-72-4)	ug/L	-	-	-	-	NR70
6:2FTS(27619-97-2)	ug/L	-	-	-	-	NR70
8:2FTS(39108-34-4)	ug/L	-	-	-	-	NR70
10:2FTS(120226-60-0)	ug/L	-	-	-	-	NR70
8:2diPAP(678-41-1)	ug/L	-	-	-	-	NR70



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Comments

Sample(s) collected by client and analysed as received in accordance with "Standard Methods for the Examination of Water & Wastewater", 24th Edition, 2023, APHA. Raw data sheets stating analysis dates are available upon request.

Tests marked with '#' are not covered by NATA Accreditation.

Measurement Uncertainty is available upon request.

*Analysis conducted by a subcontracted laboratory (NATA Accreditation Number 198) RN1462534.

Report Date: 28/04/25



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Approved:

A handwritten signature in black ink, appearing to read "Shane Ewart", written over a horizontal line.

Shane Ewart
Technical Supervisor
Microbiology and Chemistry

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