

Report No.: M241489

Issue Date: 20/09/24

 Accreditation No.: 12902
Accredited for compliance with
ISO/IEC 17025 - Testing

The results on this report relate only to the items tested and/or sampled.

Attention: Duncan Russ
Customer: MidCoast Council (Forster) Landfills
Address: PO Box 450
FORSTER NSW 2428

Ph: 02 65917352
Fax No.:
Customer ID: G_GLC_LFIL

Sample No	Sampling Point	Sampled	Sampling Method	Time Sampled	Received	Testing Commenced	Authorised
M241489/1	Minimbah MB:02	21/08/2024	3	08:48	21/08/2024	21/08/2024	20/09/2024
M241489/2	Minimbah MB:03	21/08/2024	3	09:50	21/08/2024	21/08/2024	20/09/2024
M241489/3	Minimbah MB:04	21/08/2024	3	08:05	21/08/2024	21/08/2024	20/09/2024
M241489/4	Minimbah MB:05	21/08/2024	3	10:15	21/08/2024	21/08/2024	20/09/2024
M241489/5	Minimbah MB:06	21/08/2024	3	09:25	21/08/2024	21/08/2024	20/09/2024
M241489/6	BUNCKE	21/08/2024	3	10:55	21/08/2024	21/08/2024	20/09/2024
M241489/7	BUNCKW	21/08/2024	3	07:40	21/08/2024	21/08/2024	20/09/2024
M241489/8	Minimbah Surface Water Dam	21/08/2024	3	10:30	21/08/2024	21/08/2024	20/09/2024

Sample Number Sampling Point Test / Method	NATA	* Unit	M241489/1 Minimbah MB:02	M241489/2 Minimbah MB:03	M241489/3 Minimbah MB:04	M241489/4 Minimbah MB:05	M241489/5 Minimbah MB:06
Metals Totals Digestion Metals by ICPMS	Y	Done	Done	Done	Done	Done	Done
Aluminium Total mg/L Metals by ICPMS	Y	mg/L	0.071	0.218	1.18	10.6	0.585
Arsenic Total mg/L Metals by ICPMS	Y	mg/L	0.0005	0.0030	0.014	0.0058	0.0022
Barium Total mg/L Metals by ICPMS	Y	mg/L	0.083	0.045	0.058	0.043	0.064
Calcium Total mg/L Metals by ICPMS	Y	mg/L	231	368	238	203	300
Cadmium Total mg/L Metals by ICPMS	Y	mg/L	<0.0001	<0.0001	<0.0001	0.0006	<0.0001
Chromium Total mg/L Metals by ICPMS	Y	mg/L	0.0017	0.0043	0.0023	0.039	0.0059
Copper Total mg/L Metals by ICPMS	Y	mg/L	0.0024	0.0013	0.0029	0.055	0.0041
Iron Total mg/L Metals by ICPMS	Y	mg/L	0.173	4.35	6.51	21.8	17.9
Mercury Total ug/L Metals by ICPMS	Y	ug/L	<0.2	<0.2	<0.2	3	<0.2
Potassium Total mg/L Metals by ICPMS	Y	mg/L	3.11	5.29	5.08	5.07	5.01
Magnesium Total mg/L Metals by ICPMS	Y	mg/L	148	295	182	204	330
Manganese Total mg/L Metals by ICPMS	Y	mg/L	0.188	0.535	0.777	0.533	0.664

Sample Number Sampling Point Test / Method	NATA	*Unit	M241489/1 Minimbah MB:02	M241489/2 Minimbah MB:03	M241489/3 Minimbah MB:04	M241489/4 Minimbah MB:05	M241489/5 Minimbah MB:06
Sodium Total mg/L Metals by ICPMS	Y	mg/L	1,109	2,624	1,592	2,421	3,103
Cobalt Total mg/L Metals by ICPMS	Y	mg/L	0.0039	0.0082	0.0036	0.015	0.037
Lead Total mg/L Metals by ICPMS	Y	mg/L	0.0010	0.0006	0.0008	0.0076	0.0006
Zinc Total mg/L Metals by ICPMS	Y	mg/L	0.060	0.016	0.016	0.205	0.022
Total Alkalinity to pH 4.5 MT LABC_MT_TOT_ALK - (APHA 2320B and in-house)	Y	mg CaCO ₃ L	620	560	600	530	770
Conductivity by ManTech LABC_MT_COND - (APHA 2510B and in-house)	Y	mS/m	660.0	985.0	875.0	1,185.0	1,550.0
Fluoride LABC_IC_F - (APHA 4110 B and in-house)	Y	mg/L	0.37	0.73	0.68	1.44	0.81
pH @ 25 degrees C by MT LABC_MT_PH - (APHA 4500H+B and in-house)	Y	pH units	7.0	7.0	6.6	6.8	6.8
Sulphate LABC_IC_SO4 - (APHA 4110 B and in-house)	Y	mg SO ₄ ²⁻ -L	250	355	295	585	565
Chloride LABC_IC_Cl - (APHA 4110 B and in-house)	Y	mg/L	1,885.0	2,715.0	2,726.0	3,755.0	5,112.0
Nitrate by calculation LABC34 - (APHA 4500-NO ₃ I and in-house)	Y	mg N/L	0.06	0.06	0.01	0.25	0.03
Oxidised Nitrogen LABC32 - (APHA 4500-NO _x I and in-house)	Y	mg N/L	0.06	0.06	0.01	0.25	0.03
Nitrite Nitrogen LABC33 - (APHA 4500-NO ₂ I and in-house)	Y	mg N/L	0.001	<0.001	<0.001	0.002	<0.001
Ammonia Nitrogen LABC31 - (APHA 4500-NH ₃ H and in-house)	Y	mg N/L	<0.010	0.020	0.040	<0.010	<0.010
Total Hardness (Calculation) LABC02 - (APHA 2340C and in-house)	Y	mg CaCO ₃ L	1,340	2,417	1,520	1,580	2,416
Total Dissolved Solids LABC14 - (APHA 2540 C and in-house)	Y	mg/L	4,150	5,800	5,550	7,050	10,050

Sample Number Sampling Point Test / Method	NATA	*Unit	M241489/1 Minimbah MB:02	M241489/2 Minimbah MB:03	M241489/3 Minimbah MB:04	M241489/4 Minimbah MB:05	M241489/5 Minimbah MB:06
TKN by calculation	Y	mg N/L					
Soluble Reactive Phosphorus LABC38 - (APHA 4500-P G and in-house)	Y	mg P/L	0.0050	<0.0050	<0.0050	0.019	<0.0050
BOD5 LABC17 - (APHA 5210 B and in- house)	Y	mg/L	<2	<2	<2	<2	<2
Non Purgeable TOC LABC_NPOC_T (APHA 5310 B and in-house)	Y	mg/L	2.8	2.6	5.5	3.8	3.6
Total Suspended Solids LABC44 - (APHA 2540 D and in- house)	Y	mg/L	4	30	88	350	490

Sample Number Sampling Point Test / Method	NATA	*Unit	M241489/6 BUNCKE	M241489/7 BUNCKW	M241489/8 Minimbah Surface Water Dam
Metals Totals Digestion Metals by ICPMS	Y	Done	Done	Done	Done
Aluminium Total mg/L Metals by ICPMS	Y	mg/L	1.21	1.19	1.56
Arsenic Total mg/L Metals by ICPMS	Y	mg/L	0.0007	0.0007	0.0015
Barium Total mg/L Metals by ICPMS	Y	mg/L	0.016	0.014	0.020
Calcium Total mg/L Metals by ICPMS	Y	mg/L	5.52	5.23	4.44
Cadmium Total mg/L Metals by ICPMS	Y	mg/L	<0.0001	<0.0001	<0.0001
Chromium Total mg/L Metals by ICPMS	Y	mg/L	0.0006	0.0006	0.0006
Copper Total mg/L Metals by ICPMS	Y	mg/L	0.0015	0.0016	0.001
Iron Total mg/L Metals by ICPMS	Y	mg/L	1.82	1.73	3.13
Mercury Total ug/L Metals by ICPMS	Y	ug/L	<0.2	<0.2	<0.2
Potassium Total mg/L Metals by ICPMS	Y	mg/L	1.76	1.66	3.61
Magnesium Total mg/L Metals by ICPMS	Y	mg/L	5.66	5.46	4.95
Manganese Total mg/L Metals by ICPMS	Y	mg/L	0.044	0.042	0.071
Sodium Total mg/L Metals by ICPMS	Y	mg/L	31.3	29.5	26.6

Sample Number Sampling Point			M241489/6 BUNCKE	M241489/7 BUNCKW	M241489/8 Minimbah Surface Water Dam
Test / Method	NATA	*Unit			
Cobalt Total mg/L Metals by ICPMS	Y	mg/L	0.0005	0.0004	0.0004
Lead Total mg/L Metals by ICPMS	Y	mg/L	0.0004	0.0004	0.0003
Zinc Total mg/L Metals by ICPMS	Y	mg/L	<0.001	<0.001	0.0020
Total Alkalinity to pH 4.5 MT LABC_MT_TOT_ALK - (APHA 2320B and in-house)	Y	mg CaCO ₃ L	26.0	27.0	32.0
Conductivity by ManTech LABC_MT_COND - (APHA 2510B and in-house)	Y	mS/m	23.0	20.0	19.0
Fluoride LABC_IC_F - (APHA 4110 B and in-house)	Y	mg/L	<0.10	<0.10	<0.10
pH @ 25 degrees C by MT LABC_MT_PH - (APHA 4500H+B and in-house)	Y	pH units	6.7	6.7	6.6
Sulphate LABC_IC_SO4 - (APHA 4110 B and in-house)	Y	mg SO ₄ ²⁻ -L	2.0	2.1	9.7
Chloride LABC_IC_Cl - (APHA 4110 B and in-house)	Y	mg/L	48.4	13.3	30.6
Nitrate by calculation LABC34 - (APHA 4500-NO ₃ I and in-house)	Y	mg N/L	<0.01	<0.01	<0.01
Oxidised Nitrogen LABC32 - (APHA 4500-NO _x I and in-house)	Y	mg N/L	0.02	0.01	<0.01
Nitrite Nitrogen LABC33 - (APHA 4500-NO ₂ I and in-house)	Y	mg N/L	0.015	0.014	0.009
Ammonia Nitrogen LABC31 - (APHA 4500-NH ₃ H and in-house)	Y	mg N/L	0.040	0.030	<0.010
Total Hardness (Calculation) LABC02 - (APHA 2340C and in- house)	Y	mg CaCO ₃ L	144	146	128
Total Dissolved Solids LABC14 - (APHA 2540 C and in- house)	Y	mg/L	190	210	160

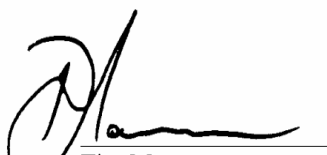
Sample Number Sampling Point			M241489/6 BUNCKE	M241489/7 BUNCKW	M241489/8 Minimbah Surface Water Dam
Test / Method	NATA	*Unit			
TKN by calculation	Y	mgN/L			
Soluble Reactive Phosphorus LABC38 - (APHA 4500-P G and in-house)	Y	mgP/L	0.0060	0.0060	0.0090
BOD5 LABC17 - (APHA 5210 B and in- house)	Y	mg/L	<2	<2	2
Non Purgeable TOC LABC_NPOC_T (APHA 5310 B and in-house)	Y	mg/L	22.0	23.0	14.0
Total Suspended Solids LABC44 - (APHA 2540 D and in- house)	Y	mg/L	3	<2	36

Sampling Methods Key

1. Samples analysed as received
2. Samples collected by LABS01 - Drinking Water
3. Samples collected by LABS03 - Groundwater

This Report is linked to Sydney Water Report No:311527

Where a result is required to meet a compliance limit or specification, the associated uncertainty must be considered. Measurement Uncertainty estimates are available for all accredited test results on request.



Tim Manusu
Senior Microbiologist