

## RESULTS OF WATER ANALYSIS

15 samples supplied by Lismore City Council on 29/05/2024, Lab Job No. R4777.

Samples submitted by Commercial Services Compliance, Your Job: PO 101426 -TP 23/102-Lismore Waste Facility FY23  
PO Box 234 LISMORE NSW 2480

Parameter	Methods reference	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15
		MW01	MW02	MW09	MW11	MW12	MW13	MW15	MW16	MW18	MW19	MW20	MW21	MW22	MW23	MW25
<b>Job No.</b>																
pH	Onsite	6.29	6.55	6.90	6.68	11.1	6.94	6.49	9.14	7.16	6.74	6.42	6.28	6.53	7.21	6.92
Conductivity (EC) (dS/m)	Onsite	0.302	3.37	0.613	7.46	4.29	4.42	7.83	0.926	2.25	3.66	3.36	10.3	3.15	2.83	
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	205	2,289	417	5,074	2,920	3,002	5,322	630	1,530	153	2,491	2,285	6,984	2,144	1,926
Redox Potential (mV)	Onsite	22.9	-74.2	7.90	-70.1	-175	-54.3	-107	-41.1	-232	-50.0	-109	-89.2	-53	-11.4	-121
Standing Water Level (m)	Onsite	1.59	0.000	1.88	1.23	0.71	0.98	3.27	2.48	3.20	3.02	1.14	0.85	2.98	3.74	4.13
Total Alkalinity (mg/L CaCO <sub>3</sub> equivalent)	** Total Alkalinity - APHA 2320	75	1,150	198	774	189	707	391	29	555	75	193	148	618	480	343
Dissolved Oxygen (mg/L O <sub>2</sub> )	Onsite	3.91	3.15	3.49	2.92	2.06	1.21	2.39	1.76	3.06	2.83	2.12	2.81	3.23	3.92	2.02
Biochemical Oxygen Demand <sub>5</sub> (mg/L O <sub>2</sub> )	APHA 5210-B	<1	<1	<1	14.7	2.85	8.35	1.45	<1	<1	3.00	6.40	3.95	3.40	1.25	8.60
Total Phosphorus (mg/L P)	In house method W4	0.613	0.111	0.358	1.90	0.021	1.57	0.138	0.211	0.476	0.682	1.65	1.30	1.29	1.87	1.79
Total Nitrogen (mg/L N)	In house method W4	0.675	0.924	0.293	3.35	23.3	3.10	2.05	0.526	0.236	1.13	4.91	6.25	2.64	3.98	17.0
Nitrate (mg/L N)	APHA 4500 NO <sub>3</sub> -F	0.546	0.109	0.040	0.036	<0.005	<0.005	0.143	0.197	0.039	0.085	0.060	0.020	0.091	0.087	0.056
Ammonia (mg/L N)	APHA 4500 NH <sub>3</sub> -H	0.007	<0.05	0.042	4.93	25.6	3.92	2.60	0.140	0.162	0.205	6.63	6.91	2.62	3.81	16.9
Temperature (°C)	Onsite	21.1	23.2	21.7	22.2	20.7	20.1	20.2	22.3	21.7	21.5	20.4	20.5	21.5	22.3	21.1
Sodium (mg/L)	APHA 3125 ICIPMS <sup>1400</sup>	24.9	245	52.0	841	535	573	836	158	289	10.1	520	506	1199	555	429
Potassium (mg/L)	APHA 3125 ICIPMS <sup>1400</sup>	0.4	1.0	1.1	18.9	31.4	13.7	12.3	1.7	3.8	5.4	17.0	18.1	10.7	12.1	20.0
Calcium (mg/L)	APHA 3125 ICIPMS <sup>1400</sup>	20.8	293	34.7	354	331	184	589	14.1	85.5	14.3	92.2	56.9	671	37.1	44.1
Magnesium (mg/L)	APHA 3125 ICIPMS <sup>1400</sup>	9.5	168	32.6	259	0.3	139	390	0.3	81.9	9.3	78.6	63.1	535	46.8	48.7
Sodium Absorption Ratio (SAR)	** By calculation	1.1	2.8	1.5	8.3	8.1	7.8	6.6	11.4	5.3	0.5	9.6	11.0	8.4	14.3	10.6
Chloride (mg/L)	APHA 3125 ICIPMS <sup>1400</sup>	29.2	435	32.7	1,943	1,193	921	1,068	216	344	18.8	913	874	1,662	660	614
Sulfate (mg/L SO <sub>4</sub> <sup>2-</sup> )	APHA 3125 ICIPMS <sup>1400</sup>	<9	10.2	58.5	9.42	79.8	29.1	2,718	35.0	50.8	<9	46.5	12.3	3,000	22.9	<9
Chloride/Sulfate Ratio	** Calculation	..	42.5	0.560	206	15.0	31.7	0.393	6.16	6.78	..	19.6	71.0	0.554	28.9	..
Fluoride (mg/L)	** APHA 4500-F-D	0.11	0.12	0.20	0.20	0.06	0.27	0.17	0.04	0.15	0.08	0.44	0.43	0.21	0.66	0.41
Faecal Coliform (cfu/100 mL)	APHA 9222-D	10	<10	110	20	<10	250	<10	<10	180	110	210	<10	10	50	<10
Dissolved Organic Carbon (mg/L)	APHA 5310-B	1.26	13.8	1.64	11.5	<10	10.9	13.2	3.04	<10	22.9	<10	<10	24.7	<10	<10
Arsenic (mg/L)	Total Available - APHA 3125 ICIPMS <sup>1400</sup>	<0.001	<0.001	0.001	0.005	<0.001	0.002	0.004	0.003	<0.001	0.002	0.001	<0.001	0.003	<0.001	<0.001
Iron (mg/L)	Total Available - APHA 3125 ICIPMS <sup>1400</sup>	0.381	0.366	9.52	33.4	0.107	18.0	13.6	0.065	0.545	9.12	7.74	0.781	30.3	1.39	0.606
Manganese (mg/L)	Total Available - APHA 3125 ICIPMS <sup>1400</sup>	0.010	1.84	0.361	0.440	0.003	0.271	1.92	0.003	0.650	1.64	1.35	1.48	3.21	0.420	0.565
Total Phenolics (mg/L)	subcontracted: SGS report SE 266081	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
<b>Pesticide analysis screen</b> <small>*see notes</small>																
Hexachlorobenzene (HCB) (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC) (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Endosulfan (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Chlordane (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDO (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DOT (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulfate (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MXZ (µg/L)	subcontracted: SGS report SE 266081	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total OC (µg/L)	subcontracted: SGS report SE 266081	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorvos (µg/L)	subcontracted: SGS report SE 266081	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate (µg/L)	subcontracted: SGS report SE 266081	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate) (µg/L)	subcontracted: SGS report SE 266081	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion (µg/L)	subcontracted: SGS report SE 266081	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion (µg/L)	subcontracted: SGS report SE 266081	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl) (µg/L)	subcontracted: SGS report SE 266081	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion) (µg/L)	subcontracted: SGS report SE 266081	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl (µg/L)	subcontracted: SGS report SE 266081	<0.2	<0.2	<0.2	<0.2	&lt										

**RESULTS OF WATER ANALYSIS**

5 samples supplied by Lismore City Council on 27/05/2024, Lab Job No. R4681.

Samples submitted by CS Compliance, Your Job: PO 101426-TP 23/102-Lismore Waste Facility FY23

EAL Commercial Services, Compliance LISMORE NSW 2480

Parameter	Methods reference	Sample 1		Sample 2		Sample 3		Sample 4		Sample 5	
		MCS01 27/05/24	R4681/1	MCS02 27/05/24	R4681/2	MCS03 27/05/24	R4681/3	MCS04 27/05/24	R4681/4	MCS05 27/05/24	R4681/5
Job No.											
pH	APHA 4500-H <sup>a</sup> -B	6.87	7.07	7.11	7.06	7.11					
Conductivity (EC) (dS/m)	APHA 2510-B	0.208	0.268	0.289	0.276	0.300					
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	141	182	197	188	204					
Redox Potential (mV)	Onsite	250	220	241	250	254					
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	17	38	35	46	45					
Turbidity (NTU)	APHA 2130	29.9	33.9	31.9	39.5	46.0					
Total Alkalinity (mg/L CaCO <sub>3</sub> equivalent)	** Total Alkalinity - APHA 2320	52	66	70	68	70					
Dissolved Oxygen (mg/L O <sub>2</sub> )	** APHA 4500-O-G (Onsite method preferable)	6.79	6.88	6.63	6.18	6.02					
Biochemical Oxygen Demand, (mg/L O <sub>2</sub> )	APHA 5210-B	1.68	4.64	4.73	5.01	3.37					
Total Phosphorus (mg/L P)	In house method W4	0.116	0.383	0.372	0.390	0.388					
Total Nitrogen (mg/L N)	In house method W4	0.388	2.37	2.51	2.29	2.62					
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN - NOx	0.341	1.14	1.34	0.445	1.32					
Nitrate (mg/L N)	APHA 4500-NO <sub>3</sub> -F	0.047	1.17	1.10	1.77	1.20					
Ammonia (mg/L N)	APHA 4500-NH <sub>3</sub> -H	<0.005	0.193	0.167	0.216	0.271					
Temperature (°C)	data supplied by client	18	19	18	17	18					
Sodium (mg/L)	APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	23.5	34.6	36.4	34.0	36.5					
Potassium (mg/L)	APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	0.730	4.40	5.20	4.51	5.15					
Calcium (mg/L)	APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	10.2	14.1	15.1	14.2	14.7					
Magnesium (mg/L)	APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	7.16	6.65	7.02	6.79	6.84					
Sodium Absorption Ratio (SAR)	** By calculation	1.38	1.90	1.94	1.86	1.97					
Chloride (mg/L)	APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	33.5	38.9	41.6	41.9	38.7					
Sulfate (mg/L SO <sub>4</sub> <sup>2-</sup> )	APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	<9	9.59	<9	<9	9.15					
Chloride/Sulfate Ratio	** Calculation	..	4.05	..	..	4.23					
Fluoride (mg/L)	** APHA 4500-F-D	0.090	0.090	0.090	0.090	0.090					
Faecal Coliform (cfu/100 mL)	APHA 2222-D	270	850	580	720	360					
Dissolved Organic Carbon (mg/L)	APHA 5310-B	4.57	4.83	5.06	4.72	5.15					
Iron (mg/L)	Total Available - APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	2.11	1.10	1.44	1.50	1.46					
Manganese (mg/L)	Total Available - APHA 3125 ICPMS <sup>b</sup> ( <sup>c</sup> )	0.041	0.058	0.076	0.101	0.137					
<b>BTEX</b>											
Benzene (pg/L)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
Toluene (pg/L)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
Ethylbenzene (pg/L)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
m,p-xylene (pg/L)	Subcontracted SGS report SE 265977	<1	<1	<1	<1	<1					
o-xylene (pg/L)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
Total xylenes (pg/L)	Subcontracted SGS report SE 265977	<1.5	<1.5	<1.5	<1.5	<1.5					
Total BTEX (pg/L)	Subcontracted SGS report SE 265977	<3	<3	<3	<3	<3					
Naphthalene (VOG) (pg/L)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
<b>Total Recoverable Hydrocarbons (TRH)</b>											
TRH C6-C9	Subcontracted SGS report SE 265977	<40	<40	<40	<40	<40					
Benzene (F0)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
TRH C6-C10	Subcontracted SGS report SE 265977	<50	<50	<50	<50	<50					
TRH C6-C10 minus BTEX (F1)	Subcontracted SGS report SE 265977	<50	<50	<50	<50	<50					
LLTRH C10-C14	Subcontracted SGS report SE 265977	<50	<50	<50	<50	<50					
LLTRH C15-C28	Subcontracted SGS report SE 265977	<100	100.0	<100	<100	<100					
LLTRH C29-C36	Subcontracted SGS report SE 265977	<50	<50	<50	<50	<50					
LLTRH <C10-C16	Subcontracted SGS report SE 265977	<50	<50	<50	<50	<50					
LLTRH <C16-C34 (F3)	Subcontracted SGS report SE 265977	<100	100.0	<100	<100	<100					
LLTRH <C34-C40 (F4)	Subcontracted SGS report SE 265977	<100	<100	<100	<100	<100					
TRH Sum C10-C36	Subcontracted SGS report SE 265977	<100	150.0	<100	<100	<100					
LLTRH C37-C40	Subcontracted SGS report SE 265977	<100	<100	<100	<100	<100					
Phenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2-methyl phenol (o-cresol)	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
3,4-methyl phenol (m,p-cresol)	Subcontracted SGS report SE 265977	<1	<1	<1	<1	<1					
2-chlorophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2,4-dimethylphenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2,6-dichlorophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2,4-dichlorophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2,4,6-trichlorophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2-nitrophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
4-nitrophenol	Subcontracted SGS report SE 265977	<1	<1	<1	<1	<1					
2,4,5-trichlorophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
Pentachlorophenol	Subcontracted SGS report SE 265977	<0.5	<0.5	<0.5	<0.5	<0.5					
2,4-dinitrophenol	Subcontracted SGS report SE 265977	<2	<2	<2	<2	<2					

Notes:

1. Total metals - samples digested with nitric acid. Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH &lt;2;

2. Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis

3. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).

3. 1 mg/L (milligram per liter) = 1 ppm (part per million) = 1000 µg/L. (micrograms per liter) = 1000 ppb (part per billion).

4. Dissolved conductivity 1 dSm = 1 mS/cm = 1000 µS/cm

5. Analysis performed according to APHA (2017) Standard Methods for the Examination of Water &amp; Wastewater, 23rd Edition, except where stated otherwise.

6. Analysis conducted between sample arrival date and reporting date.

7. \*\* NATA Accreditation does not cover the performance of this service.

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11. Results relate only to the samples tested.

12. This report was issued on 11/06/2024.



## RESULTS OF LEACHATE ANALYSIS

2 samples supplied by Lismore City Council on 27/05/2024. Lab Job No. R4682.  
 Samples submitted by CS Compliance . Your Job: PO 101426 -TP 23/102 -Lismore Waste Facility FY23  
 USE Commercial Services Compliance LISMORE NSW 2480

Parameter	Methods reference	Sample 1	Sample 2
		LD 27/05/24	TWP 27/05/24
pH		Job No.	R4682/1
Conductivity (EC) (dS/m)	APHA 4500-H <sup>+</sup> -B	9.22	7.84
Total Dissolved Salts (mg/L)	APHA 2510-B	0.618	1.06
	** Calculation using EC x 680	420	721
Total Alkalinity (mg/L CaCO <sub>3</sub> equivalent)	** Total Alkalinity - APHA 2320	179	403
Chemical Oxygen Demand (mg/L O <sub>2</sub> )	** APHA 5220-D	118	114
Total Phosphorus (mg/L P)	In house method W4	0.476	1.28
Total Nitrogen (mg/L N)	In house method W4	5.33	11.9
Nitrate (mg/L N)	APHA 4500 NO <sub>3</sub> -F	<0.005	0.042
Ammonia (mg/L N)	APHA 4500 NH <sub>3</sub> -H	0.014	7.74
Sodium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	69.0	97.0
Potassium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	33.8	47.6
Calcium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	29.9	72.5
Magnesium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	15.6	22.6
Sodium Absorption Ratio (SAR)	** By calculation	2.55	2.55
Fluoride (mg/L)	** APHA 4500-F-D	0.110	0.110
Faecal Coliforms (cfu/100 ml)	APHA 9222-D	2,800	47,000
Dissolved Organic Carbon (mg/L)	APHA 5310-B	17.3	26.8
Arsenic (mg/L)	Total Available - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	0.002	0.003
<b>Pesticide analysis screen</b> <sup>*see notes</sup>			
Hexachlorobenzene (HCB) (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Alpha BHC (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Lindane (gamma BHC) (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Heptachlor (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Aldrin (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Beta BHC (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Delta BHC (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Heptachlor epoxide (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
o,p'-DDE (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Alpha Endosulfan (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Gamma Chlordane (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Alpha Chlordane (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
trans-Nonachlor (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
p,p'-DDE (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Dieldrin (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Endrin (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
o,p'-DDD (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
o,p'-DDT (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Beta Endosulfan (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
p,p'-DDD (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
p,p'-DDT (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Endosulfan sulphate (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Endrin aldehyde (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Methoxychlor (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Endrin ketone (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Isodrin (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Mirex (µg/L)	Subcontracted: SGS report SE 265976	<0.1	<0.1
Total OC (µg/L)	Subcontracted: SGS report SE 265976	<1	<1
Total OC (µg/L)	Subcontracted: SGS report SE 265976	<1	<1
Dichlorvos (µg/L)	Subcontracted: SGS report SE 265976	<0.5	<0.5
Dimethoate (µg/L)	Subcontracted: SGS report SE 265976	<0.5	<0.5
Diazinon (Dimpylate) (µg/L)	Subcontracted: SGS report SE 265976	<0.5	<0.5
Fenthion (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2
Malathion (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl) (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2
Parathion-ethyl (Parathion) (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2
Bromophos Ethyl (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2
Methidathion (µg/L)	Subcontracted: SGS report SE 265976	<0.5	<0.5
Ethion (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2
Azinphos-methyl (µg/L)	Subcontracted: SGS report SE 265976	<0.2	<0.2

Notes:

- Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH <2; Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
- Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
- 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
- For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
- Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- Analysis conducted between sample arrival date and reporting date.
- \*\* NATA accreditation does not cover the performance of this service.
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- This report was issued on 11/06/2024.



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## RESULTS OF WATER ANALYSIS

5 samples supplied by Lismore City Council on 27/02/2024. Lab Job No. R1071.

Samples submitted by Accounts Payable. Your Job: PO 101426 -TP 23/102 -Lismore Waste Facility FY 23.

PO Box 23a LISMORE NSW 2480

Parameter	Methods reference	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
		MCS01	MCS02	MCS03	MCS04	MCS05
pH	Job No.	R1071/1	R1071/2	R1071/3	R1071/4	R1071/5
Conductivity (EC) (dS/m)	APHA 4500-H <sup>+</sup> -B APHA 2510-B	7.06 0.249	7.82 0.541	7.45 0.446	7.25 0.379	7.19 0.380
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	169	368	303	258	258
Temperature (°C)	Onsite	27.2	28.4	27.7	26.6	27.6
Redox Potential (mV)	Onsite	197	226	236	231	244
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	15	67	32	45	62
Turbidity (ntu)	APHA 2130	18.5	36.3	32.9	35.5	73.5
Dissolved Oxygen (mg/L O <sub>2</sub> )	Onsite	4.4	6.8	6.0	5.3	4.3
Biochemical Oxygen Demand <sub>5</sub> (mg/L O <sub>2</sub> )	APHA 5210-B	<1	14.0	5.9	6.4	6.2
Total Phosphorus (mg/L P)	In house method W4	0.17	0.51	0.43	0.57	0.63
Total Nitrogen (mg/L N)	In house method W4	0.60	5.39	3.78	3.54	3.54
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN - NO <sub>x</sub>	0.59	1.91	1.18	1.50	1.49
Nitrate (mg/L N)	APHA 4500 NO <sub>3</sub> -F	0.013	3.25	2.42	1.89	1.91
Ammonia (mg/L N)	APHA 4500 NH <sub>3</sub> -H	0.065	0.219	0.212	0.194	0.264
Faecal Coliforms (cfu/100 ml)	** APHA 9222-D	13,000	92,000	26,000	9,000	15,000
Dissolved Organic Carbon (mg/L C)	APHA 5310-B	10.6	6.47	7.60	8.54	8.85
<b>BTEX</b>						
Benzene (µg/L)	Subcontracted: SGS report SE 261354	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene (µg/L)	Subcontracted: SGS report SE 261354	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene (µg/L)	Subcontracted: SGS report SE 261354	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene (µg/L)	Subcontracted: SGS report SE 261354	<1	<1	<1	<1	<1
o-xylene (µg/L)	Subcontracted: SGS report SE 261354	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes (µg/L)	Subcontracted: SGS report SE 261354	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX (µg/L)	Subcontracted: SGS report SE 261354	<3	<3	<3	<3	<3
Naphthalene (VOC) (µg/L)	Subcontracted: SGS report SE 261354	<0.5	<0.5	<0.5	<0.5	<0.5
<b>Total Recoverable Hydrocarbons (TRH)</b>						
TRH C6-C9 (µg/L)	Subcontracted: SGS report SE 261354	<40	<40	<40	<40	<40
Benzene (F0) (µg/L)	Subcontracted: SGS report SE 261354	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10 (µg/L)	Subcontracted: SGS report SE 261354	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1) (µg/L)	Subcontracted: SGS report SE 261354	<50	<50	<50	<50	<50
LLTRH C10-C14 (µg/L)	Subcontracted: SGS report SE 261354	<50	<50	<50	<50	<50
LLTRH C15-C28 (µg/L)	Subcontracted: SGS report SE 261354	<100	<100	<100	<100	<100
LLTRH C29-C36 (µg/L)	Subcontracted: SGS report SE 261354	<50	<50	<50	<50	<50
LLTRH >C10-C16 (µg/L)	Subcontracted: SGS report SE 261354	<50	<50	<50	<50	<50
LLTRH >C16-C34 (F3) (µg/L)	Subcontracted: SGS report SE 261354	<100	<100	<100	<100	<100
LLTRH >C34-C40 (F4) (µg/L)	Subcontracted: SGS report SE 261354	<100	<100	<100	<100	<100
TRH Sum C10-C36 (µg/L)	Subcontracted: SGS report SE 261354	<100	<100	<100	<100	<100
LLTRH C37-C40 (µg/L)	Subcontracted: SGS report SE 261354	<100	<100	<100	<100	<100

**Notes:**

1. Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to <2pH;

Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis

2. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).

3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).

4. For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.

5. Analysis performed according to APHA (2012) 'Standard Methods for the Examination of Water & Wastewater', 22nd Edition, except where stated otherwise.

6. Analysis conducted between sample arrival date and reporting date.

7. \*\* NATA accreditation does not cover the performance of this service.

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11. Results relate only to the samples tested.

12. This report was issued on 11/03/2024.



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## RESULTS OF LEACHATE ANALYSIS

2 samples supplied by Lismore City Council on 27/02/2024. Lab Job No. R1070.

Samples submitted by Commercial Services Compliance. Your Job: PO 101426 -TP 23/102 -Lismore Waste Facility FY 23

PO Box 23A LISMORE NSW 2480

Parameter	Methods reference	Sample 1	Sample 2
		LD	TWP
	Job No.	R1070/1	R1070/2
pH	APHA 4500-H <sup>+</sup> -B	9.14	7.42
Conductivity (EC) (dS/m)	APHA 2510-B	0.951	0.903
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	647	614
Total Alkalinity (mg/L CaCO <sub>3</sub> equivalent)	** Total Alkalinity - APHA 2320	268	327
Chemical Oxygen Demand (mg/L O <sub>2</sub> )	** APHA 5220-D	140	120
Total Phosphorus (mg/L P)	In house method W4	0.87	1.65
Total Nitrogen (mg/L N)	In house method W4	12.0	10.7
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN - NOx	11.9	10.7
Nitrate (mg/L N)	APHA 4500 NO <sub>3</sub> <sup>-</sup> -F	<0.005	<0.005
Ammonia (mg/L N)	APHA 4500 NH <sub>3</sub> -H	0.474	4.78
Sodium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	124	87.8
Potassium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	53.0	39.7
Calcium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	19.9	57.6
Magnesium (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	14.4	14.7
Sodium Absorption Ratio (SAR)	** By calculation	5.16	2.67
Chloride (mg/L)	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	138	95.0
Sulfate (mg/L SO <sub>4</sub> <sup>2-</sup> )	APHA 3125 ICPMS <sup>note 1&amp;2</sup>	40.0	56.1
Chloride/Sulfate Ratio	** Calculation	3.43	1.70
Fluoride (mg/L)	** APHA 4500-F-D	0.14	0.60
Faecal Coliforms (cfu/100 ml)	APHA 9222-D	7,000	78,000,000
Dissolved Organic Carbon (mg/L)	APHA 5310-B	41.3	42.5
Arsenic (mg/L)	Total Available - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	0.004	0.005

**Notes:**

1. Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH <2;  
Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
2. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
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