

**FOREST ROAD LANDFILL - YEARLY SUMMARY FOR 2021/22**

Licence Number - 5921

Forest Road Landfill - Forest Road, Tamworth NSW 2340 Licencee - Tamworth Regional Council  
Public Register <https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers>

LICENCE PERIOD: 25th Sept 2021 - 24th Sept 2022

PQL = Practical Quantitation Limit  
LOR = Limit of Reporting

**DISCHARGE AND MONITORING POINT 1 - Surface Water Dam Overflow adjacent to Forest Road and Landfill access road intersection**  
Concentration Limits: Point 1: TSS (Total Suspended Solids) - 50mg/L, 100 percentile concentration limit

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled
			25/11/2021	16/09/2022
			Date Data Obtained	Date Data Obtained
			8/12/2021	4/10/2022
			Value	Value
Alkalinity	mg/L	Special Frequency 1	135	173
Biological Oxygen Demand	mg/L	Special Frequency 1	2	13
Calcium	mg/L	Special Frequency 1	51	58
Chloride	mg/L	Special Frequency 1	71	81
Fluoride	mg/L	Special Frequency 1	0.47	0.35
Iron	mg/L	Special Frequency 1	4.67	12.9
Magnesium	mg/L	Special Frequency 1	12	12
Manganese	mg/L	Special Frequency 1	0.166	12
Nitrate	mg/L	Special Frequency 1	2.54	2.77
Nitrogen (Ammonia)	mg/L	Special Frequency 1	1.08	8.19
Oil and Grease	mg/L	Special Frequency 1	< 5	<5
pH	pH Units	Special Frequency 1	8.0	7.9
Potassium	mg/L	Special Frequency 1	21	37
Sodium	mg/L	Special Frequency 1	49	50
Sulfate	mg/L	Special Frequency 1	36	18
Total Organic Carbon	mg/L	Special Frequency 1	20	40
Total Phenolics	µg/L	Special Frequency 1	< 0.05	<0.05
Total Suspended Solids	mg/L	Special Frequency 1	106	73
Volumetric Flow Rate (estimate)	KL/Day	Special Frequency 1	1152.0	NS

NOTE: Special Frequency 1 - collection of samples once in each 3-monthly period at a time of stormwater discharge from Point 1 and on each occasion that discharge from Point 1 incorporates leachate overflow from Point 17

**MONITORING POINT 2 - Surface Water Dam**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			1/12/2021	1/03/2022	1/06/2022	8/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			13/12/2021	1/03/2022	14/06/2022	20/09/2022
			Value	Value	Value	Value
Alkalinity	mg/L	Quarterly	147	110	236	173
Biological Oxygen Demand	mg/L	Quarterly	18	16	4	4
Calcium	mg/L	Quarterly	54	49	68	42
Chloride	mg/L	Quarterly	77	153	182	112
Fluoride	mg/L	Quarterly	0.40	0.39	0.13	0.44
Iron	mg/L	Quarterly	0.2	3.5	1.28	0.53
Magnesium	mg/L	Quarterly	12	21	27	17
Manganese	mg/L	Quarterly	0.093	0.925	0.755	0.132
Nitrate	mg/L	Quarterly	3.39	0.47	3.9	3.42
Nitrite	mg/L	Quarterly	0.61	0.33	0.85	0.61
Nitrogen (Ammonia)	mg/L	Quarterly	1.14	1.31	9.5	5.18
Oil and Grease	mg/L	Quarterly	< 5	< 5	<5	<5
pH	pH Units	Quarterly	8.1	8.4	8	8.5
Potassium	mg/L	Quarterly	27	27	26	22
Sodium	mg/L	Quarterly	50	88	107	77
Sulfate	mg/L	Quarterly	47	87	39	36
Total Organic Carbon	mg/L	Quarterly	16	25	23	23
Total Phenolics	µg/L	Quarterly	< 0.05	< 0.05	<0.05	<0.05
Total Suspended Solids	mg/L	Quarterly	28	136	66	17

**MONITORING POINT 3 -Instream water - Spring Creek above overflow from surface water dam**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled
			25/11/2021
			Date Data Obtained
			8/12/2021
			Value
Alkalinity (as Calcium Carbonate)	mg/L	Special Frequency 1	197
Biological Oxygen Demand	mg/L	Special Frequency 1	< 2
Calcium	mg/L	Special Frequency 1	47
Chloride	mg/L	Special Frequency 1	26
Fluoride	mg/L	Special Frequency 1	0.33
Iron	mg/L	Special Frequency 1	1.34
Magnesium	mg/L	Special Frequency 1	20
Manganese	mg/L	Special Frequency 1	0.021
Nitrate	mg/L	Special Frequency 1	0.25
Nitrogen (Ammonia)	mg/L	Special Frequency 1	0.06
pH	pH Units	Special Frequency 1	8.3
Potassium	mg/L	Special Frequency 1	3
Sodium	mg/L	Special Frequency 1	54
Sulfate	mg/L	Special Frequency 1	43
Total Organic Carbon	mg/L	Special Frequency 1	10
Total Phenolics	µg/L	Special Frequency 1	< 0.05
Total Suspended Solids	mg/L	Special Frequency 1	5
Volumetric Flow Rate	KL/Day	Special Frequency 1	720

NOTE: Special Frequency 1 - collection of samples once in each 3-monthly period at a time of stormwater discharge from Point 1 and on each occasion that discharge from Point 1 incorporates leachate overflow from Point 17

**MONITORING POINT 4 -Instream water - Spring Creek below overflow from surface water dam**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled
			25/11/2021
			Date Data Obtained
			8/12/2021
			Value
Alkalinity (as Calcium Carbonate)	mg/L	Special Frequency 1	209
Biological Oxygen Demand	mg/L	Special Frequency 1	< 2
Calcium	mg/L	Special Frequency 1	49
Chloride	mg/L	Special Frequency 1	31
Fluoride	mg/L	Special Frequency 1	0.37
Iron	mg/L	Special Frequency 1	0.63
Magnesium	mg/L	Special Frequency 1	21
Manganese	mg/L	Special Frequency 1	0.017
Nitrate	mg/L	Special Frequency 1	0.33
Nitrogen (Ammonia)	mg/L	Special Frequency 1	0.02
pH	pH Units	Special Frequency 1	8.1
Potassium	mg/L	Special Frequency 1	4
Sodium	mg/L	Special Frequency 1	54
Sulphate	mg/L	Special Frequency 1	46
Total Organic Carbon	mg/L	Special Frequency 1	11
Total Phenolics	µg/L	Special Frequency 1	< 0.05
Total Suspended Solids	mg/L	Special Frequency 1	5
Volumetric Flow Rate	KL/Day	Special Frequency 1	720

NOTE: Special Frequency 1 - collection of samples once in each 3-monthly period at a time of stormwater discharge from Point 1 and on each occasion that discharge from Point 1 incorporates leachate overflow from Point 17

**MONITORING POINT 5 - Northern Leachate Pond**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			1/12/2021	1/03/2022	1/06/2022	8/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			13/12/2021	15/03/2022	14/06/2022	20/09/2022
			Value	Value	Value	Value
Alkalinity (as Calcium Carbonate)	mg/L	Quarterly	498	280	324	382
Biological Oxygen Demand	mg/L	Quarterly	6	7	4	10
Calcium	mg/L	Quarterly	145	100	131	121
Chloride	mg/L	Quarterly	495	1097	659	587
Fluoride	mg/L	Quarterly	0.7	0.74	0.54	0.35
Iron	mg/L	Quarterly	0.1	0.68	0.62	81
Magnesium	mg/L	Quarterly	58	90	65	62
Manganese	mg/L	Quarterly	0.256	0.44	0.07	0.071
Nitrate	mg/L	Quarterly	12.1	0.8	34.03	33.3
Nitrogen (Ammonia)	mg/L	Quarterly	8.25	0.38	2.4	5.3
Oil and Grease	mg/L	Quarterly	<5	< 5	<5	<5
pH	pH Units	Quarterly	7.8	8.1	7.9	7.9
Potassium	mg/L	Quarterly	56	58	45	44
Sodium	mg/L	Quarterly	328	627	400	348
Sulphate	mg/L	Quarterly	115	100	56	81
Total Organic Carbon	mg/L	Quarterly	42	57	35	40
Total Phenolics	µg/L	Quarterly	<0.05	< 0.05	<0.05	<0.05
Total Suspended Solids	mg/L	Quarterly	5	26	19	21
Volatile Organic Compounds	mg/L	Quarterly	<PQL	<PQL	<PQL	<PQL
Organochlorine Pesticides	µg/L	Quarterly	<LOR	<LOR	<LOR	<LOR
Organophosphate Pesticides	µg/L	Quarterly	<LOR	<LOR	<LOR	<LOR

**MONITORING POINT 6 - Southern Leachate Pond**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			1/12/2021	1/03/2022	1/06/2022	8/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			13/12/2021	15/03/2022	14/06/2022	20/09/2022
			Value	Value	Value	Value
Alkalinity (as Calcium Carbonate)	mg/L	Quarterly	183	DRY	DRY	241
Biological Oxygen Demand	mg/L	Quarterly	24	DRY	DRY	6
Calcium	mg/L	Quarterly	43	DRY	DRY	65
Chloride	mg/L	Quarterly	368	DRY	DRY	507
Fluoride	mg/L	Quarterly	0.37	DRY	DRY	0.31
Iron	mg/L	Quarterly	0.14	DRY	DRY	0.27
Magnesium	mg/L	Quarterly	35	DRY	DRY	51
Manganese	mg/L	Quarterly	0.014	DRY	DRY	0.013
Nitrate	mg/L	Quarterly	4.51	DRY	DRY	24.7
Nitrogen (Ammonia)	mg/L	Quarterly	0.18	DRY	DRY	0.06
Oil and Grease	mg/L	Quarterly	<5	DRY	DRY	<5
pH	pH Units	Quarterly	8.5	DRY	DRY	8.6
Potassium	mg/L	Quarterly	37	DRY	DRY	37
Sodium	mg/L	Quarterly	229	DRY	DRY	316
Sulphate	mg/L	Quarterly	66	DRY	DRY	77
Total Organic Carbon	mg/L	Quarterly	27	DRY	DRY	34
Total Phenolics	µg/L	Quarterly	50	DRY	DRY	0.05
Total Suspended Solids	mg/L	Quarterly	6	DRY	DRY	10
Volatile Organic Compounds	mg/L	Quarterly	<PQL	DRY	DRY	<PQL
Organochlorine Pesticides	µg/L	Quarterly	<LOR	DRY	DRY	<LOR
Organophosphate Pesticides	µg/L	Quarterly	<LOR	DRY	DRY	<LOR

**DISCHARGE AND MONITORING POINT 7 -Leachate overflow from southern leachate retention pond**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled
			No Overflow
			Date Data Obtained
			No Overflow
			Value
Alkalinity (as calcium carbonate)	mg/L	Special Frequency 2	N/A
Biological Oxygen Demand	mg/L	Special Frequency 2	N/A
Calcium	mg/L	Special Frequency 2	N/A
Chloride	mg/L	Special Frequency 2	N/A
Fluoride	mg/L	Special Frequency 2	N/A
Iron	mg/L	Special Frequency 2	N/A
Magnesium	mg/L	Special Frequency 2	N/A
Manganese	mg/L	Special Frequency 2	N/A
Nitrate	mg/L	Special Frequency 2	N/A
Nitrogen (ammonia)	mg/L	Special Frequency 2	N/A
pH	pH Units	Special Frequency 2	N/A
Potassium	mg/L	Special Frequency 2	N/A
Sodium	mg/L	Special Frequency 2	N/A
Sulfate	mg/L	Special Frequency 2	N/A
Total Organic Carbon	mg/L	Special Frequency 2	N/A
Total Phenolics	µg/L	Special Frequency 2	N/A
Total Suspended Solids	mg/L	Special Frequency 2	N/A
Volatile Organic Compounds	mg/L	Special Frequency 2	N/A
Volumetric Flow Rate	KL/Day	Special Frequency 2	N/A
Organochlorine Pesticides	µg/L	Special Frequency 2	N/A
Organophosphate Pesticides	µg/L	Special Frequency 2	N/A

NOTE: Special Frequency 2 - collection of samples once in the first 24 hours after detection of discharge and then weekly whilst the discharge continues

**MONITORING POINT 8 - Groundwater Bore (FRMB02 - GW16)**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			2/12/2021	3/03/2022	24/06/2022	31/08/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			6/12/2021	7/03/2022	8/07/2022	5/09/2022
			Value	Value	Value	Value
pH	pH Value	Quarterly	DRY	DRY	DRY	DRY
Electrical Conductivity	µS/cm	Quarterly	DRY	DRY	DRY	DRY
Calcium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Magnesium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Sodium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Potassium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Sulfate	mg/L	Quarterly	DRY	DRY	DRY	DRY
Chloride	mg/L	Quarterly	DRY	DRY	DRY	DRY
Fluoride	mg/L	Quarterly	DRY	DRY	DRY	DRY
Ammonia	mg/L	Quarterly	DRY	DRY	DRY	DRY
Nitrate+ nitrite (oxidised nitrogen)	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Phosphorus	mg/L	Quarterly	DRY	DRY	DRY	DRY
Soluble Phosphorus	mg/L	Quarterly	DRY	DRY	DRY	DRY
Biological Oxygen Demand	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Organic Carbon	mg/L	Quarterly	DRY	DRY	DRY	DRY
Dissolved Organic Carbon	mg/L	Yearly	DRY	DRY	DRY	DRY
Iron (Dissolved)	mg/L	Quarterly	DRY	DRY	DRY	DRY
Aluminium	mg/L	Yearly	DRY	DRY	DRY	DRY
Arsenic	mg/L	Yearly	DRY	DRY	DRY	DRY
Copper	mg/L	Yearly	DRY	DRY	DRY	DRY
Cadmium	mg/L	Yearly	DRY	DRY	DRY	DRY
Iron (Total)	mg/L	Yearly	DRY	DRY	DRY	DRY
Manganese	mg/L	Yearly	DRY	DRY	DRY	DRY
Mercury	mg/L	Yearly	DRY	DRY	DRY	DRY
Lead	mg/L	Yearly	DRY	DRY	DRY	DRY
Nickel	mg/L	Yearly	DRY	DRY	DRY	DRY
Zinc	mg/L	Yearly	DRY	DRY	DRY	DRY
Oil and Grease	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Phenols	µg/L	Yearly	DRY	DRY	DRY	DRY
Organochlorine Pesticides	µg/L	Yearly	DRY	DRY	DRY	DRY
Organophosphate Pesticides	µg/L	Yearly	DRY	DRY	DRY	DRY

MONITORING POINT 9 - Groundwater Bore (FRMB04 - GW10)

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			2/12/2021	3/03/2022	24/06/2022	31/08/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			6/12/2021	7/03/2022	8/07/2022	5/09/2022
			Value	Value	Value	Value
pH	pH Value	Quarterly	DRY	DRY	DRY	DRY
Electrical Conductivity	µS/cm	Quarterly	DRY	DRY	DRY	DRY
Calcium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Magnesium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Sodium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Potassium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Sulfate	mg/L	Quarterly	DRY	DRY	DRY	DRY
Chloride	mg/L	Quarterly	DRY	DRY	DRY	DRY
Fluoride	mg/L	Quarterly	DRY	DRY	DRY	DRY
Ammonia	mg/L	Quarterly	DRY	DRY	DRY	DRY
Nitrate+ nitrite (oxidised nitrogen)	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Phosphorus	mg/L	Quarterly	DRY	DRY	DRY	DRY
Soluble Phosphorus	mg/L	Quarterly	DRY	DRY	DRY	DRY
Biological Oxygen Demand	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Organic Carbon	mg/L	Quarterly	DRY	DRY	DRY	DRY
Dissolved Organic Carbon	mg/L	Yearly	DRY	DRY	DRY	DRY
Iron (Dissolved)	mg/L	Quarterly	DRY	DRY	DRY	DRY
Aluminium	mg/L	Yearly	DRY	DRY	DRY	DRY
Arsenic	mg/L	Yearly	DRY	DRY	DRY	DRY
Copper	mg/L	Yearly	DRY	DRY	DRY	DRY
Cadmium	mg/L	Yearly	DRY	DRY	DRY	DRY
Iron (Total)	mg/L	Yearly	DRY	DRY	DRY	DRY
Manganese	mg/L	Yearly	DRY	DRY	DRY	DRY
Mercury	mg/L	Yearly	DRY	DRY	DRY	DRY
Lead	mg/L	Yearly	DRY	DRY	DRY	DRY
Nickel	mg/L	Yearly	DRY	DRY	DRY	DRY
Zinc	mg/L	Yearly	DRY	DRY	DRY	DRY
Oil and Grease	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Phenols	µg/L	Yearly	DRY	DRY	DRY	DRY
Organochlorine Pesticides	µg/L	Yearly	DRY	DRY	DRY	DRY
Organophosphate Pesticides	µg/L	Yearly	DRY	DRY	DRY	DRY

MONITORING POINT 18 - Groundwater Bore (FRMB07 - GW14)

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			1/12/2021	24/02/2022	24/06/2022	20/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			13/12/2021	24/02/2022	8/07/2022	5/10/2022
			Value	Value	Value	Value
pH	pH Value	Quarterly	6.7	DRY	6.8	6.8
Electrical Conductivity	µS/cm	Quarterly	1300	DRY	1300	1300
Calcium	mg/L	Quarterly	118	DRY	80	117
Magnesium	mg/L	Quarterly	12	DRY	10	11
Sodium	mg/L	Quarterly	142	DRY	139	154
Potassium	mg/L	Quarterly	4	DRY	3	3
Sulfate	mg/L	Quarterly	31	DRY	28	30
Chloride	mg/L	Quarterly	155	DRY	95	153
Fluoride	mg/L	Quarterly	<0.2	DRY	0.13	0.14
Ammonia	mg/L	Quarterly	0.0	DRY	<0.1	0.01
Nitrate+ nitrite (oxidised nitrogen)	mg/L	Quarterly	3.79	DRY	3.29	5.02
Total Phosphorus	mg/L	Quarterly	< 0.01	DRY	0.03	0.02
Soluble Phosphorus	mg/L	Quarterly	0.01	DRY	0.04	NS
Biological Oxygen Demand	mg/L	Quarterly	<2	DRY	<2	<2
Total Organic Carbon	mg/L	Quarterly	1	DRY	1	6
Dissolved Organic Carbon	mg/L	Yearly	2.0	DRY	4.9	NA
Iron (Dissolved)	mg/L	Quarterly	<0.05	DRY	<0.05	<0.05
Aluminium	mg/L	Yearly	<0.01	DRY	NS	NA
Arsenic	mg/L	Yearly	<0.001	DRY	NS	NA
Copper	mg/L	Yearly	0.0	DRY	NS	NA
Cadmium	mg/L	Yearly	<0.0001	DRY	NS	NA
Iron (Total)	mg/L	Yearly	<0.05	DRY	NS	NA
Manganese	mg/L	Yearly	<0.001	DRY	NS	NA
Mercury	mg/L	Yearly	<0.0001	DRY	NS	NA
Lead	mg/L	Yearly	<0.001	DRY	NS	NA
Nickel	mg/L	Yearly	<0.001	DRY	NS	NA
Zinc	mg/L	Yearly	0.0	DRY	NS	NA
Oil and Grease	mg/L	Quarterly	<5	DRY	<5	<5
Total Phenols	µg/L	Yearly	<0.05	DRY	NS	NA
Organochlorine Pesticides	µg/L	Yearly	<LOR	DRY	NS	NA
Organophosphate Pesticides	µg/L	Yearly	<LOR	DRY	NS	NA

MONITORING POINT 19 - Groundwater Bore (FRMB09 - GW15)

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			1/12/2021	2/03/2022	24/06/2022	20/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			13/12/2021	16/03/2022	8/07/2022	5/10/2022
			Value	Value	Value	Value
pH	pH Value	Quarterly	6.7	6.6	6.7	6.7
Electrical Conductivity	µS/cm	Quarterly	2.3	2	2.2	2.3
Calcium	mg/L	Quarterly	227	224	167	239
Magnesium	mg/L	Quarterly	90	87	65	98
Sodium	mg/L	Quarterly	125	123	109	134
Potassium	mg/L	Quarterly	2	2	2	4
Sulfate	mg/L	Quarterly	113	103	115	89
Chloride	mg/L	Quarterly	415	393	327	442
Fluoride	mg/L	Quarterly	0.39	0.35	0.35	0.38
Ammonia	mg/L	Quarterly	0.01	0.01	0.01	1.67
Nitrate+ nitrite (oxidised nitrogen)	mg/L	Quarterly	4.68	4.34	4.2	2.62
Total Phosphorus	mg/L	Quarterly	0.01	0.01	0.06	0.59
Soluble Phosphorus	mg/L	Quarterly	0.02	0.01	0.05	NS
Biological Oxygen Demand	mg/L	Quarterly	<2	< 2	< 2	8
Total Organic Carbon	mg/L	Quarterly	1	1	1	10
Dissolved Organic Carbon	mg/L	Yearly	1	NA	NA	NA
Iron (Dissolved)	mg/L	Quarterly	0.05	0.05	0.05	1.2
Aluminium	mg/L	Yearly	<0.01	NA	NA	NA
Arsenic	mg/L	Yearly	<0.001	NA	NA	NA
Copper	mg/L	Yearly	0.006	NA	NA	NA
Cadmium	mg/L	Yearly	<0.0001	NA	NA	NA
Iron (Total)	mg/L	Yearly	<0.05	NA	NA	NA
Manganese	mg/L	Yearly	0.024	NA	NA	NA
Mercury	mg/L	Yearly	<0.0001	NA	NA	NA
Lead	mg/L	Yearly	<0.001	NA	NA	NA
Nickel	mg/L	Yearly	0.002	NA	NA	NA
Zinc	mg/L	Yearly	0.01	NA	NA	NA
Oil and Grease	mg/L	Quarterly	<5	< 5	< 5	<5
Total Phenols	µg/L	Yearly	<0.05	NA	NA	NA
Organochlorine Pesticides	µg/L	Yearly	<LOR	NA	NA	NA
Organophosphate Pesticides	µg/L	Yearly	<LOR	NA	NA	NA

**MONITORING POINT 20 - Groundwater Bore (FRMB03-GW17)**

Pollutant	Unit of measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			1/12/2021	24/02/2022	24/06/2022	31/08/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			13/12/2021	24/02/2022	8/07/2022	5/09/2022
			Value	Value	Value	Value
pH	pH Value	Quarterly	DRY	DRY	DRY	DRY
Electrical Conductivity	µS/cm	Quarterly	DRY	DRY	DRY	DRY
Calcium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Magnesium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Sodium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Potassium	mg/L	Quarterly	DRY	DRY	DRY	DRY
Sulfate	mg/L	Quarterly	DRY	DRY	DRY	DRY
Chloride	mg/L	Quarterly	DRY	DRY	DRY	DRY
Fluoride	mg/L	Quarterly	DRY	DRY	DRY	DRY
Ammonia	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Nitrogen	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Phosphorus	mg/L	Quarterly	DRY	DRY	DRY	DRY
Soluble Phosphorus	mg/L	Quarterly	DRY	DRY	DRY	DRY
Biological Oxygen Demand	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Organic Carbon	mg/L	Quarterly	DRY	DRY	DRY	DRY
Dissolved Organic Carbon	mg/L	Yearly	DRY	DRY	DRY	DRY
Iron (Dissolved)	mg/L	Quarterly	DRY	DRY	DRY	DRY
Aluminium	mg/L	Yearly	DRY	DRY	DRY	DRY
Arsenic	mg/L	Yearly	DRY	DRY	DRY	DRY
Copper	mg/L	Yearly	DRY	DRY	DRY	DRY
Cadmium	mg/L	Yearly	DRY	DRY	DRY	DRY
Iron (Total)	mg/L	Yearly	DRY	DRY	DRY	DRY
Manganese	mg/L	Yearly	DRY	DRY	DRY	DRY
Mercury	mg/L	Yearly	DRY	DRY	DRY	DRY
Lead	mg/L	Yearly	DRY	DRY	DRY	DRY
Nickel	mg/L	Yearly	DRY	DRY	DRY	DRY
Zinc	mg/L	Yearly	DRY	DRY	DRY	DRY
Oil and Grease	mg/L	Quarterly	DRY	DRY	DRY	DRY
Total Phenols	µg/L	Yearly	DRY	DRY	DRY	DRY
Organochlorine Pesticides	µg/L	Yearly	DRY	DRY	DRY	DRY
Organophosphate Pesticides	µg/L	Yearly	DRY	DRY	DRY	DRY

**MONITORING POINT 13 - Methane (Capped area)**

Pollutant	Unit of Measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			2/12/2021	31/03/2022	24/06/2022	30/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			6/12/2021	31/03/2022	8/07/2022	30/09/2022
			Value	Value	Value	Value
Methane	%/volume	Quarterly	<0.05	<0.05	<0.05	<0.05

**MONITORING POINT 15 - Methane (G8)**

Pollutant	Unit of Measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			2/12/2021	31/03/2022	24/06/2022	30/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			6/12/2021	31/03/2022	8/07/2022	30/09/2022
			Value	Value	Value	Value
Methane	%/volume	Quarterly	<0.05	<0.05	<0.05	<0.05

**MONITORING POINT 16 - Methane (G9)**

Pollutant	Unit of Measure	Monitoring Frequency	Date Sampled	Date Sampled	Date Sampled	Date Sampled
			2/12/2021	31/03/2022	24/06/2022	30/09/2022
			Date Data Obtained	Date Data Obtained	Date Data Obtained	Date Data Obtained
			6/12/2021	31/03/2022	8/07/2022	30/09/2022
			Value	Value	Value	Value
Methane	%/volume	Quarterly	<0.05	<0.05	<0.05	<0.05







212  
15  
54  
437.5  
0.34  
0.205  
43  
0.0135  
14.605  
0.12  
#DIV/0!  
8.55  
37  
272.5  
71.5  
30.5  
25.025  
8  
#DIV/0!  
#DIV/0!  
#DIV/0!





6.766667  
1300  
105  
11  
145  
3.333333  
29.666667  
134.3333  
0.135  
0.01  
4.033333  
0.025  
0.025  
#DIV/0!  
2.666667  
3.45  
#DIV/0!  
#DIV/0!  
#DIV/0!  
0.002  
#DIV/0!  
#DIV/0!  
#DIV/0!  
#DIV/0!  
#DIV/0!  
#DIV/0!  
0.007  
#DIV/0!  
#DIV/0!  
#DIV/0!  
#DIV/0!

2.25  
214.25  
85  
122.75  
2.5  
105  
394.25  
0.3675  
0.425  
3.96  
0.1675  
0.026667  
8  
3.25  
1  
0.3375  
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#DIV/0!  
0.006  
#DIV/0!  
#DIV/0!  
0.024  
#DIV/0!  
#DIV/0!  
0.002  
0.01  
#DIV/0!  
#DIV/0!  
#DIV/0!  
#DIV/0!