

R2844866

M-39B

Water Type	Na-SO ₄		
Dissolved Solids	7866.9 mg/kg	7890 mg/L	Measured
Density	1.0029 g/cm ³		Calculated
Conductivity	8190 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	3327 mg/kg	3336.8 mg/L	Calculated
Carbonate	2355.2	2362.1	
Non-Carbonate	971.8	974.65	

Primary Tests

Anion-Cation Balance

Anions	111	
Cations	107	
% Difference	1.663	OK

Measured TDS = Calculated TDS

Measured	7866.872	
Calculated	7892.317	
Ratio	0.997	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	8190.000	
Calculated	6651.422	
Ratio	1.231	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.354046	Not within preferred range (0.9-1.1)
Cations	1.309750	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.964	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.961	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

TR-2B

Water Type	Na-HCO ₃		
Dissolved Solids	576.46 mg/kg	575 mg/L	Measured
Density	0.99747 g/cm ³		Calculated
Conductivity	968 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	155.92 mg/kg	155.52 mg/L	Calculated
Carbonate	155.92	155.52	
Non-Carbonate	0.0	0.0	

Primary Tests

Anion-Cation Balance

Anions	21.2	
Cations	8.91	
% Difference	40.723	Not within ± 5%

Measured TDS = Calculated TDS

Measured	576.461	
Calculated	1350.153	
Ratio	0.427	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	968.000	
Calculated	1248.256	
Ratio	0.775	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	2.185146	Not within preferred range (0.9-1.1)
Cations	0.920458	Within preferred range (0.9-1.1)
Calculated TDS to EC ratio	1.395	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.596	OK

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

M-69B

Water Type	Na-Cl		
Dissolved Solids	4627.6 mg/kg	4630 mg/L	Measured
Density	1.0005 g/cm ³		Calculated
Conductivity	5730 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	1505.2 mg/kg	1506 mg/L	Calculated
Carbonate	1505.2	1506	
Non-Carbonate	0.0	0.0	

Primary Tests

Anion-Cation Balance

Anions	74.3	
Cations	63.1	
% Difference	8.134	Not within ± 5%

Measured TDS = Calculated TDS

Measured	4627.631	
Calculated	5130.074	
Ratio	0.902	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	5730.000	
Calculated	4781.989	
Ratio	1.198	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.297055	Not within preferred range (0.9-1.1)
Cations	1.101924	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.895	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.808	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

1-BB

Water Type	Na-HCO ₃		
Dissolved Solids	4547.9 mg/kg	4550 mg/L	Measured
Density	1.0005 g/cm ³		Calculated
Conductivity	6130 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	1401.1 mg/kg	1401.8 mg/L	Calculated
Carbonate	1401.1	1401.8	
Non-Carbonate	0.0	0.0	

Primary Tests

Anion-Cation Balance

Anions	80.1	
Cations	62.9	
% Difference	11.984	Not within ± 5%

Measured TDS = Calculated TDS

Measured	4547.944	
Calculated	5635.452	
Ratio	0.807	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	6130.000	
Calculated	4792.552	
Ratio	1.279	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.306413	Not within preferred range (0.9-1.1)
Cations	1.026807	Within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.919	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.742	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

M-96BF

Water Type	Na-SO ₄		
Dissolved Solids	6706.1 mg/kg	6720 mg/L	Measured
Density	1.0021 g/cm ³		Calculated
Conductivity	7190 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	2062.1 mg/kg	2066.4 mg/L	Calculated
Carbonate	1702.4	1706	
Non-Carbonate	359.7	360.44	

Primary Tests

Anion-Cation Balance

Anions	94.7	
Cations	88.9	
% Difference	3.141	OK

Measured TDS = Calculated TDS

Measured	6706.117	
Calculated	6745.934	
Ratio	0.994	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	7190.000	
Calculated	6106.431	
Ratio	1.177	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.316921	Not within preferred range (0.9-1.1)
Cations	1.236713	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.938	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.933	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

M-48B

Water Type	Na-HCO ₃		
Dissolved Solids	3221.8 mg/kg	3220 mg/L	Measured
Density	0.99946 g/cm ³		Calculated
Conductivity	3870 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	1008.6 mg/kg	1008.1 mg/L	Calculated
Carbonate	1008.6	1008.1	
Non-Carbonate	0.0	0.0	

Primary Tests

Anion-Cation Balance

Anions	59.6	
Cations	42.5	
% Difference	16.735	Not within ± 5%

Measured TDS = Calculated TDS

Measured	3221.750	
Calculated	4188.175	
Ratio	0.769	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	3870.000	
Calculated	3508.027	
Ratio	1.103	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.541208	Not within preferred range (0.9-1.1)
Cations	1.099313	Within preferred range (0.9-1.1)
Calculated TDS to EC ratio	1.082	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.832	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

TR-4B

Water Type	Na-HCO ₃		
Dissolved Solids	922.1 mg/kg	920 mg/L	Measured
Density	0.99773 g/cm ³		Calculated
Conductivity	1440 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	324.21 mg/kg	323.47 mg/L	Calculated
Carbonate	324.21	323.47	
Non-Carbonate	0.0	0.0	

Primary Tests

Anion-Cation Balance

Anions	23.4	
Cations	13	
% Difference	28.424	Not within ± 5%

Measured TDS = Calculated TDS

Measured	922.096	
Calculated	1442.249	
Ratio	0.639	Not within range 1.0 to 1.2

Measured EC = Calculated EC

Measured	1440.000	
Calculated	1585.785	
Ratio	0.908	OK

Secondary Tests

Measured EC and Ion Sums:

Anions	1.623815	Not within preferred range (0.9-1.1)
Cations	0.905025	Within preferred range (0.9-1.1)
Calculated TDS to EC ratio	1.002	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.640	OK

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

CLD3-RB

Water Type	Na-Cl		
Dissolved Solids	12520 mg/kg	12600 mg/L	Measured
Density	1.0064 g/cm ³		Calculated
Conductivity	16800 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	2591.5 mg/kg	2608.2 mg/L	Calculated
Carbonate	195.58	196.84	
Non-Carbonate	2395.9	2411.3	

Primary Tests

Anion-Cation Balance

Anions	199	
Cations	193	
% Difference	1.588	OK

Measured TDS = Calculated TDS

Measured	12519.563	
Calculated	12073.310	
Ratio	1.037	OK

Measured EC = Calculated EC

Measured	16800.000	
Calculated	12320.152	
Ratio	1.364	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.185133	Not within preferred range (0.9-1.1)
Cations	1.148090	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.719	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.745	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

CLD1-RB

Water Type	Na-Cl		
Dissolved Solids	5742.3 mg/kg	5750 mg/L	Measured
Density	1.0013 g/cm ³		Calculated
Conductivity	7810 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	1207.2 mg/kg	1208.8 mg/L	Calculated
Carbonate	325.99	326.43	
Non-Carbonate	881.22	882.41	

Primary Tests

Anion-Cation Balance

Anions	86.4	
Cations	86.4	
% Difference	0.011	OK

Measured TDS = Calculated TDS

Measured	5742.261	
Calculated	5458.796	
Ratio	1.052	OK

Measured EC = Calculated EC

Measured	7810.000	
Calculated	6330.194	
Ratio	1.234	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.105683	Not within preferred range (0.9-1.1)
Cations	1.105935	Not within preferred range (0.9-1.1)

Calculated TDS to EC ratio 0.699 OK

Measured TDS to EC ratio 0.735 Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

M-124B

Water Type	Na-SO ₄		
Dissolved Solids	2382.8 mg/kg	2380 mg/L	Measured
Density	0.99883 g/cm ³		Calculated
Conductivity	3140 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	1038.8 mg/kg	1037.5 mg/L	Calculated
Carbonate	103.63	103.51	
Non-Carbonate	935.13	934.03	

Primary Tests

Anion-Cation Balance

Anions	36	
Cations	35.5	
% Difference	0.633	OK

Measured TDS = Calculated TDS

Measured	2382.797	
Calculated	2319.733	
Ratio	1.027	OK

Measured EC = Calculated EC

Measured	3140.000	
Calculated	3063.943	
Ratio	1.025	OK

Secondary Tests

Measured EC and Ion Sums:

Anions	1.146144	Not within preferred range (0.9-1.1)
Cations	1.131732	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.739	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.759	Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

M-123B

Water Type	Na-Cl		
Dissolved Solids	12716 mg/kg	12800 mg/L	Measured
Density	1.0066 g/cm ³		Calculated
Conductivity	16900 µmho/cm		Measured
Hardness (as CaCO₃)			
Total	2092.1 mg/kg	2105.9 mg/L	Calculated
Carbonate	329.19	331.35	
Non-Carbonate	1763	1774.5	

Primary Tests

Anion-Cation Balance

Anions	186	
Cations	195	
% Difference	2.337	OK

Measured TDS = Calculated TDS

Measured	12716.423	
Calculated	11351.853	
Ratio	1.120	OK

Measured EC = Calculated EC

Measured	16900.000	
Calculated	12183.556	
Ratio	1.387	Not within range 0.9 to 1.1

Secondary Tests

Measured EC and Ion Sums:

Anions	1.102393	Not within preferred range (0.9-1.1)
Cations	1.155161	Not within preferred range (0.9-1.1)

Calculated TDS to EC ratio 0.672 OK

Measured TDS to EC ratio 0.752 Not within preferred range (0.55-0.7)

Organic Mass Balance

DOC ≥ Sum of Organics

DOC unavailable

R254866

Name	Unit	M-39B	TR-2B	M-69B	1-BB	M-86B	M-48B	TR-4B	CLD3-RB	CLD1-RB	M-124B	M-123B
Sample ID		M-39B	TR-2B	M-69B	1-BB	M-86B	M-48B	TR-4B	CLD3-RB	CLD1-RB	M-124B	M-123B
115782		1115782	1115783	1115784	1115785	1116367	1116370	1116373	1116921	1116922	1117196	1117197
Calcium	ppm	642000	293000.0	331000	314000	534000	219000	959000.0	581000	212000	240000	375000
Magnesium	ppm	421600	209000.0	165000	150000	178000	112000	204000.0	275000	165000	104000	284000
Potassium	ppm	376000.0	7140	382000.0	392000.0	253000.0	152000.0	102000.0	442000.0	178000.0	189000.0	521000.0
Sodium	ppm	9116000	1290000	7396000	7800000	1088000	5060000	1480000	3211000	1421000	3290000	3480000
Chloride	ppm	14500	ND	235000.0	873000.0	489500	4570000	ND	4780000	1340000	3260000	ND
Perchlorate	ppm	ND	ND	560000	8430000	354000	2240000	ND	29800	153	20800	141
Bicarbonate	ppm	1440	888	1320	1530	1030	1360	717	ND	120	63.1	202
Carbonate	ppm	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloride	ppm	876	124	851	859	552	436	300	4580	1690	387	4900
Conductivity	umhos/cm	8190	968	5730	6130	7180	3870	1440	169000.0	7810	3140	16800.0
Fluoride	ppm											
Hydroxide	ppm											
Nitrate	ppm	7.92	1.24	50	64.5	36.6	32.7	1.47	19.7	18.4	6.28	3.22
Phosphorus	ppm	ND	0.0516	ND	ND	ND	ND	ND	ND	ND	0.0504	ND
Dissolved Solids	ppm	7990	375	4630	4650	6720	3270	920	126000.0	5750	2360	12800.0
Sulfate	ppm	2030	148	1050	971	2530	784	145	2430	1610	1130	2040