



**APPENDIX B**

**Sample Handling and Analytical Methods**

# Appendix B

## Sample Handling and Analytical Methods

Water Quality Parameters for Geochemical Analysis	Method	Sample Collection/Handling Information					Detection Limit
		Preservatives	Sample Volume	Container Type	Field Filtering	Any other handling requirements	
Total Alkalinity	EPA 310.1	none	500 ml	Poly	No	4 deg C	10 ppm
Total Dissolved Solids	SM 2540C	none	shared	Poly	No	4 deg C	10 ppm
Total Suspended Solids	EPA 160.2	none	shared	Poly	No	4 deg C-48hr HT	5 ppm
Turbidity	EPA 180.1	none	500 ml	glass	No	4 deg C-48hr HT	0.1 NTU
Color	EPA 110.1	none	shared	glass	No	4 deg C-48hr HT	1 ACU
Specific Conductance	EPA 120.1	none	shared	Poly	No	4 deg C	0.4 □mho
pH	Field						
Temperature	Field						
Dissolved Oxygen	Field						
Eh	Field						
Chloride	EPA 300.0	none	shared	Poly	No	4 deg C	1 ppm
Fluoride	SM 4500F-B	none	shared	Poly	No		0.1 ppm
Sulfate	EPA 300.0	none	shared	Poly	No	4 deg C	2 ppm
Total Silica	EPA 200.7	none	shared	Poly	Yes		1 ppm
Sodium	EPA 200.7	HNO3-pH 2	500 ml	Poly	Yes		1 ppm
Calcium	EPA 200.7	HNO3-pH 2	shared	Poly	Yes		1 ppm
Potassium	EPA 200.7	HNO3-pH 2	shared	Poly	Yes		1 ppm
Magnesium	EPA 200.7	HNO3-pH 2	shared	Poly	Yes		1 ppm
Iron	EPA 200.7	HNO3-pH 2	shared	Poly	Yes		0.1 ppm
Aluminum	EPA 200.8	HNO3-pH 2	shared	Poly	Yes		25 ppb
Copper	EPA 200.8	HNO3-pH 2	shared	Poly	Yes		2 ppb
Manganese	EPA 200.8	HNO3-pH 2	shared	Poly	Yes		2 ppb
Zinc	EPA 200.8	HNO3-pH 2	shared	Poly	Yes		5 ppb
Cadmium	EPA 200.8	HNO3-pH 2	shared	Poly	Yes		1 ppb
Selenium	EPA 200.8	HNO3-pH 2	shared	Poly	Yes		5 ppb
Boron	EPA 200.7	HNO3-pH 2	shared	Poly	Yes		0.05 ppm
Chromium	EPA 200.7	HNO3-pH 2	shared	Poly	Yes		1 ppb
Bromide	EPA 300.0	none	shared	Poly	No		10 ppb
Nitrate	EPA 300.0	none	shared	Poly	No		0.1 ppm
Ortho-Phosphate	EPA 365.2	none	125 ml	Poly	No	4 deg C-48hr HT	0.05 ppm
Ammonia	EPA 350.1	H2SO4	125 ml	Poly	No	4 deg	0.05 ppm
Hydrogen sulfide	EPA 376.2	ZnAc-NaOH	125 ml	Poly	No	4 deg	0.05 ppm
Total Organic Carbon	SM 5310C	H2SO4	250 ml	glass	No	4 deg	0.5 ppm