

Inorganic Parameters

page : 1

Client : Alpha Chemical Ltd.
Unit 8, 75 MacDonald Ave
Dartmouth,
NS B3B 1T8
PSC Project Number : 0417932H
Client Project Number :

RAWDING, PAUL

FAX # : 468-8540
Printed : 2004/10/07 (Event 669)
Reported : 2004/10/07

Matrix	Water
Philip ID	04-H068603
Client ID	Rocky Lake
	Tap Water
Date Sampled (y/m/d)	04/09/30
Date Received (y/m/d)	04/09/30

Analyte	Units	EQL	
Total Water Digest			20041001-B
Sodium	mg/L	0.1	4.1
Potassium	mg/L	0.1	0.9
Calcium	mg/L	0.1	16.1
Magnesium	mg/L	0.1	1.3

Alkalinity (as CaCO3)	mg/L	5.	28.
Sulfate	mg/L	2.	11.
Chloride	mg/L	1.	5.
Reactive Silica (as SiO2)	mg/L	0.5	9.6
Ortho Phosphate (as P)	mg/L	0.01	nd

Phosphorus	mg/L	0.1	
Nitrate + Nitrite (as N)	mg/L	0.05	nd
Nitrate (as N)	mg/L	0.05	nd
Nitrite	mg/L	0.01	nd
Ammonia (as N)	mg/L	0.05	nd

Color	TCU	5.	nd
Total Org. Carbon (by UV)	mg/L	0.5	nd
Turbidity	NTU	0.1	3.0
Conductance (RCap)	uS/cm	1.	110.

Legend


EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.

ND = Not Detected, instrument did not detect anything above standard EQL.

ND () = Not Detected at the elevated EQL specified, due to matrix interferences or sample pre-dilution.

- = Dash is reported when parameter not requested in sample.

Note : Soil results are expressed as air dry weight basis.
: Biota results are expressed on a wet weight basis unless otherwise stated.

page verified 

PSC Analytical Services
 200 Bluewater Road
 Bedford, NS Canada B4B 1G9
 Tel (902) 420-0203
 Toll free (800) 565-7227
 Fax (902) 420-8612

Inorganic Parameters page : 2
 Client : Alpha Chemical Ltd.
 Unit 8, 75 MacDonald Ave
 Dartmouth,
 NS B3B 1T8
 PSC Project Number : 0417932H
 Client Project Number :

RAWDING, PAUL

FAX # : 468-8540
 Printed : 2004/10/07 E669
 Reported : 2004/10/07

Matrix	Water
Philip ID	04-H068603
Client ID	Rocky Lake
	Tap Water
Date Sampled (y/m/d)	04/09/30
Date Received (y/m/d)	04/09/30

Analyte Units EQL (Continued from previous page)

pH	Units		7.3

Hardness (as CaCO3)	mg/L	0.1	45.6
Bicarbonate (as CaCO3)	mg/L		28.
Carbonate (as CaCO3)	mg/L	1.	nd
TDS (Calculated)	mg/L	1.	65.
Cation Sum	meq/L	0.10	1.12


Anion Sum	meq/L	0.10	0.93
Ion Balance	%		8.88
Langlier Index @			-1.88
Langlier Index @			-1.48
Saturation pH @ 4	Units		9.18

Saturation pH @ 20C	Units		8.78
Aluminum	ug/L	10	nd
Antimony	ug/L	2.	nd
Arsenic	ug/L	2.	nd
Barium	ug/L	5.	50.

Beryllium	ug/L		nd
Bismuth	ug/L	2.	nd
Boron	ug/L	5.	5.
Cadmium	ug/L	0.3	nd
Chromium	ug/L	2.	nd

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND = Not Detected, instrument did not detect anything above standard EQL.
 ND () = Not Detected at the elevated EQL specified, due to matrix interferences or sample pre-dilution.
 - = Dash is reported when parameter not requested in sample.

Note : Soil results are expressed as air dry weight basis.
 : Biota results are expressed on a wet weight basis unless otherwise stated.

page verified 

PSC Analytical Services
 200 Bluewater Road
 Bedford, NS Canada B4B 1G9
 Tel (902) 420-0203
 Toll free (800) 565-7227
 Fax (902) 420-8612

Client : Alpha Chemical Ltd.
 Unit 8, 75 MacDonald Ave
 Dartmouth,
 NS B3B 1T8
 PSC Project Number : 0417932H
 Client Project Number :

RAWDING, PAUL

FAX # : 468-8540
 Printed : 2004/10/07 E669
 Reported : 2004/10/07

Matrix	Water
Philip ID	04-H068603
Client ID	Rocky Lake
	Tap Water
Date Sampled (y/m/d)	04/09/30
Date Received (y/m/d)	04/09/30

Analyte Units EQL (Continued from previous page)

Cobalt	ug/L		1.
Copper	ug/L	2.	34.
Iron	ug/L	50	720
Lead	ug/L	0.5	7.9
Manganese	ug/L	2.	61.

Molybdenum	ug/L	2.	nd
Nickel	ug/L	2.	nd
Selenium	ug/L		nd
Silver	ug/L	0.5	nd
Strontium	ug/L	5.	56.

Thallium	ug/L		nd
Tin	ug/L		nd
Titanium	ug/L	2.	nd
Uranium	ug/L	0.1	nd
Vanadium	ug/L	2.	nd

Zinc	ug/L		14.

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND = Not Detected, instrument did not detect anything above standard EQL.
 ND () = Not Detected at the elevated EQL specified, due to matrix interferences or sample pre-dilution.
 - = Dash is reported when parameter not requested in sample.

Note : Soil results are expressed as air dry weight basis.
 : Biota results are expressed on a wet weight basis unless otherwise stated.

PSC Analytical Services
200 Bluewater Road
Bedford, NS Canada B4B 1G9
Tel (902) 420-0203
Toll free (800) 565-7227
Fax (902) 420-8612

Client : Alpha Chemical Ltd.
Unit 8, 75 MacDonald Ave
Dartmouth,
NS B3B 1T8
PSC Project Number : 0417932H
Client Project Number :

RAWDING, PAUL
FAX # : 468-8540
Printed : 2004/10/07 E669
Reported : 2004/10/07

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
- Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
- Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
- Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
- Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
- Total Recoverable Metals Digest: Homogenization/Digestion. Ref: USEPA Method #200.2
- NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colormetric Analyser. Ref. USEPA Method #353.1
- pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
- Phosphorus: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
- Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
- Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
- Turbidity: Nephelometric. Ref: USEPA Method #180.1
- Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
- Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
- Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
- Nitrite. Roche Cobas/BMC Hitachi 911 Automated Colormetric Analyser. Ref: USEPA Method #354.1
- Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
- Total Metals in Water: Digestion/ICP-MS. Ref: USEPA 200.8

PSC Analytical Services
200 Bluewater Road
Bedford, NS Canada B4B 1G9
Tel (902) 420-0203
Toll free (800) 565-7227
Fax (902) 420-8612

Client : Alpha Chemical Ltd.
Unit 8, 75 MacDonald Ave
Dartmouth,
NS B3B 1T8
PSC Project Number : 0417932H
Client Project Number :

RAWDING, PAUL
FAX # : 468-8540
Printed : 2004/10/07 E669
Reported : 2004/10/07

Certificate of Analysis

Conversions: 1 mg/L = 1000 ug/L = 1 part per million (ppm)
1 ug/L = 0.001 mg/L = 1 part per billion (ppb)

All work recorded herein has been done in accordance with normal professional standards using accepted testing technologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. The results relate only to the items tested. Liability for any and all use of these test results shall be limited to the actual cost of the pertinent analysis performed. There is no other warranty expressed or implied. Excess sample will be discarded upon expiry of hold time.

Analyses reviewed by:

Inorganics Manager :



Jerry Arenovich

Client : Alpha Chemical Ltd.
Unit 8, 75 MacDonald Ave
Dartmouth,
NS B3B 1T8
PSC Project Number : 0417932H
Client Project Number :

RAWDING, PAUL

FAX # : 468-8540
Printed : 2004/10/07 (Event 671)
Reported : 2004/10/07

04-H068603 Rocky Lake Tap Water

Date Sampled : 2004/09/30
Time Sampled : 8:30
Date Received : 2004/09/30

E. coli (Colilert) Absent
Total Coliform (Colilert) Absent

PSC Analytical Services
200 Bluewater Road
Bedford, NS Canada B4B 1G9
Tel (902) 420-0203
Fax (902) 420-8612
P.O.

Client : Alpha Chemical Ltd.
Unit 8, 75 MacDonald Ave
Dartmouth,
NS B3B 1T8
PSC Project Number : 0417932H
Client Project Number :

RAWDING, PAUL

Printed : 2004/10/07
Reported : 2004/10/07

Certificate of Analysis

Method Summaries:

Total Coliform and E. coli: Defined Substrate Test. Ref: Standard Methods,
19th Edition, 1995.

Conversions: 1 mg/L = 1000 ug/L = 1 part per million (ppm)
1 ug/L = 0.001 mg/L : 1 part per billion (ppb)

All work recorded herein has been done in accordance with normal professional standards using accepted testing technologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. The results relate only to the items tested. Liability for any and all use of these test results shall be limited to the actual cost of the pertinent analysis performed. There is no other warranty expressed or implied. Excess sample will be discarded upon expiry of hold time.

Analyses reviewed by:

Microbiology Supervisor :


Patti Densmore