



R & C Formation, Ltd.

Professional Groundwater and Environmental Services

705 Bedford Avenue, Suite 2B

Bellmore, New York 11710

(516) 797-7330 Fax: (516) 797-7339

JAN 15 2010

**Groundwater Monitoring Report
Former Nepera Plant
Harriman, New York
October, 2009**

Prepared for:

**Maybrook and Harriman Trust
c/o Mr. George Hollerbach, Trust Representative
Quantum Management Group, Inc.
1187 Main Avenue, Suite 2B
Clifton, NJ 07011**

Prepared by:

**R & C Formation, Ltd.
705 Bedford Ave., Suite 2B
Bellmore, New York 11710**

TABLE OF CONTENTS

	Page
Introduction	1
Scope of Work	1
Monitoring Procedures	2
Groundwater Level Measurements	2
Groundwater Sampling	2
Observations	3
Quality Assurance/Quality Control	3
Groundwater Level Measurements	3
Groundwater Sampling	3
Groundwater Analysis	3
Summary of Analytical Results	4
QA/QC Samples	4
Volatile Organic Compounds	4
Semi-Volatile Organic Compounds	4
General Chemistry	4
Conclusions	4

Figure

Following Page

Figure 1.	Monitoring Well Location Map	1
-----------	------------------------------------	---

Summary Tables

Following Page

Table 1.	Basic Hydrologic Data	2
Table 2.	Analytical Results- (Volatile Organic Compounds)	5
Table 3.	Analytical Results- (Semi-Volatile Organic Compounds)	5
Table 4.	Analytical Results- (General Chemistry)	5

Appendices

- Appendix 1. Groundwater Sampling Logs
- Appendix 2. Electronic Water Level Indicator Calibration Procedures
- Appendix 3. Statement of Procedures for the Calibration of Multi-Parameter Water Quality Monitoring System, Horiba U-22XD
- Appendix 4. Laboratory Analytical Data

**Groundwater Monitoring Report
Former Nepera Plant
Harriman, New York
October, 2009**

Introduction

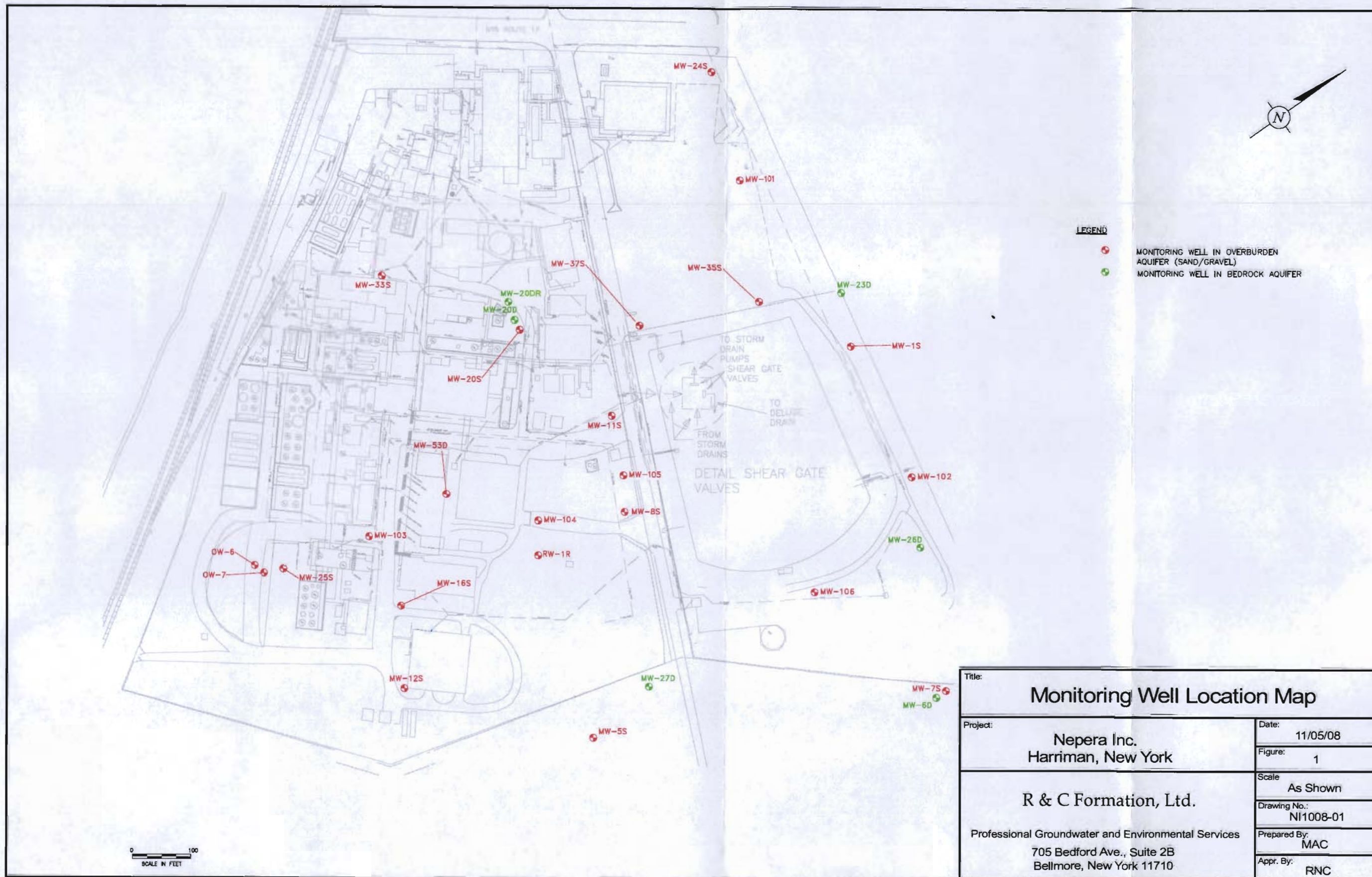
Presented herein are the results of groundwater monitoring activities performed at the Former Nepera Plant, Harriman, New York, October 21-23, 2009. The results of groundwater monitoring activities reported represent the third event completed following the shut-down of the onsite biosparge system, as approved by NYSDEC, pursuant to the *Conceptual Site Model and Supplemental Remedial Action Work Plan* (HydroQual, May, 2008). The scope-of-work performed, per an agreement with the Maybrook and Harriman Environmental Trust, is presented below. A description of monitoring procedures, quality assurance/quality control protocols and a summary of analytical results follows.

Scope of Work

The scope-of-work includes performance of the following items:

- 1) Measurement of groundwater levels in 34 select Overburden Aquifer wells.
- 2) Collection of groundwater samples from 29 monitoring wells installed within 2 hydrogeologic units identified beneath the Former Nepera Plant: *Overburden Aquifer* (MW-1S, MW-5S, MW-7S, MW-8S, MW-11S, MW-12S, MW-16S, MW-20S, MW-24S, MW-25S, MW-33S, MW-35S, MW-37S, OW-6, OW-7, RW-1R, MW-53D, MW-101, MW-102, MW-103, MW-104, MW-105 & MW-106); *Bedrock Aquifer* (MW-6D, MW-20D, MW-23D, MW-26D, MW-27D & MW-20DR).
- 3) Analysis of collected groundwater samples for *volatile organic compounds* (benzene, toluene, ethylbenzene and xylenes); *semi-volatile organic compounds* (pyridine, alpha-picoline and 2-aminopyridine); and *general chemistry* (iron, manganese, sulfate, nitrate and ammonia).

The location of monitoring points is depicted in Figure 1.



Title: Monitoring Well Location Map		
Project: Nepera Inc. Harriman, New York	Date:	11/05/08
	Figure:	1
R & C Formation, Ltd. Professional Groundwater and Environmental Services 705 Bedford Ave., Suite 2B Bellmore, New York 11710	Scale:	As Shown
	Drawing No.:	NI1008-01
	Prepared By:	MAC
	Appr. By:	RNC

Monitoring Procedures

Groundwater Level Measurements

The depth-to-water in 34 select Overburden Aquifer monitoring wells was measured within a period of 4-hours utilizing an electronic water level indicator accurate to within 0.01 feet. Measurements recorded and correlated to mean sea level (via existing reported measuring point elevations) are presented on Table 1.

Groundwater Sampling

Prior to commencing groundwater sampling activities, the concentration of volatile organic compounds within the head-space of on-site monitoring wells, if any, was measured using a photoionization detector (PID) capable of detecting a vapor-phase concentration to within 1 part per million (ppm).

Groundwater sampling protocol encompassed low-flow purging and subsequent sample collection upon the stabilization of measured and recorded field parameters: oxidation-reduction potential, pH, conductivity, temperature, dissolved oxygen and turbidity. A submersible centrifugal pump (Grundfos Redi-Flo2) placed at well-screen (or open borehole) depth with per-well dedicated tubing, was used for both purging and sample collection. Field parameters were measured via a Horiba U-22XD multi-parameter water quality monitoring system and flow-through cell. In addition, all collected samples were field-analyzed for iron+2 using a Hach 1R-18C Test Kit.

As a means to negate the potential for cross-well contamination, the sampling pump was cleaned internally and externally with an Alconox and water solution, followed by a fresh water rinse, between monitoring locations. Furthermore, groundwater samples were collected in the following progression: 1) downgradient (with respect to groundwater flow) perimeter monitoring wells; 2) monitoring wells associated with historically non-detect groundwater analyses; and 3) monitoring wells associated with the historically most impacted groundwater analyses.

Following the completion of each daily sampling event, collected samples were submitted under chain-of-custody control to New York State Certified TestAmerica Analytical Laboratories for required analysis.

Table 1
Basic Hydrologic Data
Nepera Harriman Site, Harriman, NY
Measured October 21, 2009

Well Number	Measuring Point (feet above MSL)	Depth to Water (feet)	Water Level (feet above MSL)	Screen Interval (feet above and below MSL)
MW-1S	522.77	7.50	515.27	507.77-497.77
MW-2S	530.58	8.12	522.46	518.08-508.08
MW-3S	525.70	6.19	519.51	510.70-500.70
MW-4S	524.74	5.05	519.69	482.24-472.24
MW-5S	535.26	14.72	520.54	500.26-490.26
MW-7S	524.69	7.01	517.68	498.69-488.69
MW-8S	526.24	5.81	520.43	461.24-456.24
MW-9S	529.59	6.19	523.40	515.59-508.59
MW-11S	527.44	5.99	521.45	482.44-477.44
MW-12S	530.21	9.14	521.07	505.21-495.21
MW-13S	530.36	9.45	520.91	503.36-493.36
MW-16S	534.71	13.27	521.44	499.71-489.71
MW-20S	528.61	3.73	524.88	511.61-501.61
MW-21S	544.67	20.30	524.37	529.67-519.67
MW-24S	527.86	8.18	519.68	520.36-510.36
MW-25S	535.16	12.25	522.91	512.16-507.16
MW-27S	535.09	14.45	520.64	505.09-500.09
MW-33S	535.74	10.11	525.63	531.74-516.74
MW-35S	524.92	5.40	519.52	499.42-489.42
MW-36S	525.33	5.60	519.73	500.33-490.33
MW-37S	524.99	3.08	521.91	510.99-500.99
OW-6	534.51	11.20	523.31	514.51-504.51
OW-7	534.82	11.69	523.13	514.82-504.82
RW-1R	529.78	11.36	518.42	481.78-473.78
MW-53D	532.31	9.80	522.51	485.31-475.31
PZ-1	544.46	20.20	524.26	517.46-512.46
PZ-2	531.86	8.12	523.74	483.86-478.86
PZ-3	525.49	5.78	519.71	495.49-490.49
MW-101	525.94	6.61	519.33	28.00-33.00
MW-102	522.53	5.85	516.68	10.00-20.00
MW-103	533.52	12.02	521.50	50.00-60.00
MW-104	525.63	5.05	520.58	54.00-64.00
MW-105	528.22	7.55	520.67	63.50-68.50
MW-106	533.68	14.30	519.38	38.00-48.00

Note:

NA: Not Accessible

Observations

Field parameters measured during well-purging activities and the physical characteristics (e.g., color, odor) of sampled groundwater are recorded on Groundwater Sampling Logs presented in Appendix 1.

Quality Assurance/Quality Control

Groundwater Level Measurements

Prior to beginning groundwater level measuring activities, the electronic water level indicator utilized was calibrated as shown in *Electronic Water Level Indicator Calibration Procedures* presented in Appendix 2.

Groundwater Sampling

The Horiba U-22XD multi-parameter water quality monitoring system utilized during groundwater sampling activities was calibrated, prior to each daily sampling event, as shown in *Statement of Procedures for the Calibration of Multi-Parameter Water Quality Monitoring System, Horiba U-22XD* presented in Appendix 3. In addition, a field blank (FB 10-23) was collected to assure the integrity of sampling equipment and procedures.

Groundwater Analysis

Laboratory analytical reports, in chronological order in relation to the aforementioned 3-day sampling event, are presented in Appendix 4. Included in the reports are Case Narratives (conformance/nonconformance summary) of QA/QC procedures practiced by TestAmerica Analytical Laboratories which, in general, encompass instrument calibrations, analyses of method blanks, matrix spike blanks, and the percent-recovery of surrogates (system monitoring compounds).

Additionally, per-day trip blanks (TB 10-21, TB 10-22 and TB 10-23) were analyzed for volatile organic compounds as a means to evaluate potential sources of contamination in sample container preparation, method blank water and sample transport. The accuracy of reported analytical results was also assessed via the analysis of a blind duplicate collected from monitoring well MW-16S (MW-DUP).

Summary of Analytical Results

QA/QC Samples

The volatile organic compound *total xylenes*, was detected in trip blank TB 10-21. Consequently, the detection of *total xylenes* in groundwater samples collected October 21, 2009, including those from monitoring wells MW-1S, MW-7S, MW-35S and MW-6D, is not considered valid. The general chemistry parameters *sulfate*, *nitrate* and *ammonia* were detected in field blank FB 10-23, however, at concentrations considered negligible. Analytical results in relation to blind duplicate sample MW-DUP and groundwater sample MW-16S are comparable. Therefore, with the exception of the detection of *total xylenes* in groundwater sampled from the above-mention monitoring wells, analytical results summarized below are considered valid.

Volatile Organic Compounds

Analytical results for volatile organic compounds - including comparisons with New York State Department of Environmental Conservation (NYSDEC) Class GA Drinking Water Standards - are presented on Table 2.

Semi-Volatile Organic Compounds

Analytical results for semi-volatile organic compounds (NYSDEC Class GA Drinking Water Standards not established) are presented in Table 3.

General Chemistry

Analytical results for general chemistry parameters – including comparisons with New York State Department of Environmental Conservation (NYSDEC) Class GA Drinking Water Standards – are presented on Table 4.

Conclusions

The results of groundwater monitoring activities summarized above are similar with those of recent events. Groundwater beneath the central portion of the Former Nepera Plant remains impacted, however, the contaminants of concern, volatile organic compounds and semi-volatile organic compounds, continue to be confined to the former manufacturing areas and are either not detected, or detected below drinking water standards in groundwater sampled from perimeter wells.

R & C Formation, Ltd.

The next semi-annual monitoring event is scheduled for April, 2010.

Table 2
Summary of Analytical Results
Former Nepera Plant, Harriman, NY
Sampled October 21-23, 2009
Volatile Organic Compounds
Reported in Micrograms per Liter (µg/L)

	Benzene	Toluene	Ethylbenzene	Xylenes, (Total)
<i>Overburden Aquifer Wells</i>				
MW-1S	ND(0.74)	ND(0.72)	2.60 J	11.00*
MW-5S	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-7S	ND(0.74)	ND(0.72)	1.6 J	6.50*
MW-8S	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-11S	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-12S	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-16S	30.00	ND(0.72)	ND(0.87)	ND(2.30)
MW-20S	57.00	ND(0.72)	ND(0.87)	ND(2.30)
MW-24S	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-25S	290.00	ND(2.9)	ND(3.5)	ND(9.1)
MW-33S	20.00	2.20 J	ND(0.87)	ND(2.30)
MW-35S	ND(0.74)	ND(0.72)	0.92 J	3.10 J*
MW-37S	3.1 J	ND(0.72)	ND(0.87)	ND(2.30)
OW-6	4,900.00	ND(7.2)	ND(8.7)	ND(23)
OW-7	460.00	ND(0.72)	ND(0.87)	ND(2.30)
RW-1R	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-53D	48.00	ND(0.72)	ND(0.87)	ND(2.30)
MW-101	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-102	0.95 J	ND(0.72)	ND(0.87)	ND(2.30)
MW-103	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-104	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-105	1.20 J	ND(0.72)	ND(0.87)	ND(2.30)
MW-106	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
<i>Bedrock Wells</i>				
MW-6D	ND(0.74)	ND(0.72)	1.10 J	4.70 J*
MW-20D	60.00	230.00	1.30 J	2.60 J
MW-23D	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-26D	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-27D	ND(0.74)	ND(0.72)	ND(0.87)	3.6 J
MW-20DR	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
<i>QA/QC</i>				
TB 10-21	ND(0.74)	ND(0.72)	ND(0.87)	2.4 J
TB 10-22	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
TB 10-23	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
FB 10-23	ND(0.74)	ND(0.72)	ND(0.87)	ND(2.30)
MW-DUP	31.00	ND(0.72)	ND(0.87)	ND(2.30)
NYSDEC Class GA Standard	1.0	5.0	5.0	5.0

Note:

ND(): Compound not detected at the method detection limit

J: Indicates an estimated value

NYSDEC Class GA Standards: New York State Department of Environmental Conservation

Ambient Water Quality Standards for Source of Drinking Water Title 6 Part 703 (per August 1999 Amendment)

* Analytical detection not valid, compound detected in associated QA/QC Trip Blank TB 10-21

Table 3
Summary of Analytical Results
Former Nepera Plant, Harriman, NY
Sampled November 21-23, 2009
Semi-Volatile Organic Compounds
Reported in Micrograms per Liter (µg/L)

	Pyridine	alpha-Picoline	2-Aminopyridine
<i>Overburden Aquifer Wells</i>			
MW-1S	ND(3.90)	ND(1.20)	ND(1.10)
MW-5S	ND(4.00)	ND(1.20)	ND(1.20)
MW-7S	ND(4.00)	ND(1.20)	ND(1.20)
MW-8S	ND(3.90)	ND(1.20)	ND(1.10)
MW-11S	ND(4.00)	ND(1.20)	ND(1.20)
MW-12S	ND(4.00)	ND(1.20)	ND(1.20)
MW-16S	ND(4.00)	4.40 J	ND(1.20)
MW-20S	ND(4.10)	ND(1.30)	5.50 J
MW-24S	ND(4.10)	ND(1.30)	ND(1.20)
MW-25S	ND(4.00)	54.00	ND(1.20)
MW-33S	ND(4.00)	ND(1.20)	ND(1.20)
MW-35S	ND(3.90)	ND(1.20)	ND(1.10)
MW-37S	ND(3.90)	ND(1.20)	ND(1.10)
OW-6	ND(81.00)	1,300.00	ND(24.00)
OW-7	ND(20.00)	280.00	ND(5.9)
RW-1R	ND(4.30)	ND(1.30)	ND(1.3)
MW-53D	ND(4.00)	ND(1.20)	ND(1.20)
MW-101	ND(4.10)	ND(1.30)	ND(1.20)
MW-102	ND(3.90)	ND(1.20)	ND(1.10)
MW-103	ND(3.90)	ND(1.20)	ND(1.10)
MW-104	ND(4.00)	ND(1.20)	ND(1.20)
MW-105	ND(4.00)	ND(1.20)	ND(1.20)
MW-106	ND(4.00)	ND(1.20)	ND(1.20)
<i>Bedrock Wells</i>			
MW-6D	ND(3.90)	ND(1.20)	ND(1.10)
MW-20D	70.00 J	67.00	210.00
MW-23D	ND(4.30)	ND(1.30)	ND(1.20)
MW-26D	ND(4.00)	ND(1.20)	ND(1.20)
MW-27D	ND(4.10)	ND(1.30)	ND(1.20)
MW-20DR	ND(4.00)	ND(1.20)	ND(1.20)
<i>QA/QC</i>			
FB 10-23	ND(4.00)	ND(1.20)	ND(1.20)
MW-DUP	ND(4.00)	6.40 J	1.40 J
NYSDEC Class GA Standard	NS	NS	NS

Note:

ND(): Compound not detected at the method detection limit

J: Indicates an estimated value

NYSDEC Class GA Standards: New York State Department of Environmental Conservation
Ambient Water Quality Standards for Source of Drinking Water Title 6 Part 703 (per
August 1999 Amendment)

NS: No NYSDEC Standard Established

Table 4
Summary of Analytical Results
Former Nepera Plant, Harriman, NY
Sampled October 21-23, 2009
General Chemistry

	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Nitrate (mg/L)	Ammonia (mg/L)
<i>Overburden Aquifer Wells</i>					
MW-1S	7,820.00	870.00	26.00	0.059 J	25.80
MW-5S	1,070.00	2,120.00	27.10	0.038 J	2.70
MW-7S	92.5 J	741.00	34.00	0.018 J	0.05
MW-8S	13,400.00	485.00	46.80	0.018 J	12.60
MW-11S	1,540.00	627.00	15.20	0.17	12.90
MW-12S	13,500.00	941.00	0.20 J	0.018 J	0.20
MW-16S	7,220.00	554.00	9.40	0.23	14.80
MW-20S	1,080.00	582.00	26.10	0.018 J	11.00
MW-24S	2,010.00	807.00	756.00	0.025 J	2.00
MW-25S	7,920.00	1,720.00	55.40	0.086 J	4.10
MW-33S	827,000.00	13,200.00	5.10	0.018 J	369.00
MW-35S	4,710.00	7,500.00	1,270.00	0.018 J	6.50
MW-37S	5,530.00	955.00	21.60	0.035 J	53.60
OW-6	24,700.00	7,710.00	5.80	0.018 J	7.80
OW-7	21,000.00	5,010.00	9.70	0.018 J	3.60
RW-1R	16,700.00	1,870.00	14.20	0.018 J	6.10
MW-53D	5,310.00	241.00	0.60 J	0.043 J	30.70
MW-101	13,400.00	1,810.00	348.00	0.018 J	10.40
MW-102	2,820.00	916.00	67.70	0.020 J	19.20
MW-103	1,260.00	433.00	19.60	0.22	0.12
MW-104	1,780.00	1,210.00	26.10	0.018 J	2.60
MW-105	7,630.00	627.00	32.70	0.030 J	4.40
MW-106	334.00	660.00	39.30	0.018 J	5.60
<i>Bedrock Wells</i>					
MW-6D	1,940.00	41.10	19.00	0.018 J	0.58
MW-20D	543.00	13.10 J	52.90	0.018 J	26.80
MW-23D	335.00	12.20 J	18.80	0.018 J	0.077 J
MW-26D	115.00 J	2.60 J	24.20	0.038 J	0.091 J
MW-27D	35.70 J	6.20 J	14.20	0.35	1.00
MW-20DR	1,900.00	53.60	92.90	0.018 J	0.14
<i>QA/QC</i>					
FB 10-23	ND(30.00)	ND(0.50)	0.16 J	0.018 J	0.035 J
MW-DUP	7,040.00	559.00	8.40	0.018 J	14.40
NYSDEC Class GA Standard	300.0	300.0	250.0	10.0	2.0

Note:

ND (): Compound not detected at the method detection limit

J: Indicates an estimated value

NYSDEC Class GA Standards: New York State Department of Environmental Conservation

Ambient Water Quality Standards for Source of Drinking Water Title 6 Part 703 (per August 1999 Amendment)

NS: No NYSDEC Standard Established

NA: Not Applicable

APPENDIX 1

Harriman, New York

Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	32.58
Volume of Water in Well (gal):	21.24
Total Volume Purged (ml):	12,600
Duration of Pumping (min):	36
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	0.8

Purge Method: Low Flow

Pump Off: 1219

[illegible]

Purge Water Disposition: On Ground

Harriman, New York

Meter Number: 511017

Notes:

Length of Water Column (ft):	173.13
Volume of Water in Well (gal):	253.98
Total Volume Purged (ml):	10,800
Duration of Pumping (min):	36
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	1.6

Pump Off: 1521

[illegible]

Purge Water Disposition: On Ground

Harriman, New York

Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	62.79
Volume of Water in Well (gal):	40.94
Total Volume Purged (ml):	8,100
Duration of Pumping (min):	27
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	1.6

Purge Method: Low Flow

Pump Off: 1016

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	44.37
Volume of Water in Well (gal):	28.93
Total Volume Purged (L):	17,200
Duration of Pumping (min):	43
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	0.2

Purge Method: Low Flow

Pump Off: 0758

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	25.76
Volume of Water in Well (gal):	4.20
Total Volume Purged (ml):	10,000
Duration of Pumping (min):	25
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	0.0

Purge Method: Low Flow

Pump Off: 0831

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number:	511017
Notes:	

WELL WATER INFORMATION

Length of Water Column (ft):	32.65
Volume of Water in Well (gal):	21.29
Total Volume Purged (ml):	18,500
Duration of Pumping (min):	37
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	1.6

Purge Method: Low Flow

Pump Off: 1035

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number:	511017
Notes:	

WELL WATER INFORMATION

Length of Water Column (ft):	23.78
Volume of Water in Well (gal):	15.50
Total Volume Purged (ml):	9,900
Duration of Pumping (min):	33
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	0.4

Purge Method: Low Flow

Pump Off: 0908

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	79.33
Volume of Water in Well (gal):	51.72
Total Volume Purged (ml):	14,350
Duration of Pumping (min):	41
Odor:	None
Color:	Yellow tint
Fe ⁺² (mg/L):	0.0

Purge Method: Low Flow

Pump Off: 0922

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number:	511017
Notes:	Casing cracked

WELL WATER INFORMATION

Length of Water Column (ft):	90.74
Volume of Water in Well (gal):	14.79
Total Volume Purged (ml):	11,400.0
Duration of Pumping (min):	38
Odor:	None
Color:	Cloudy
Fe ⁺² (mg/L):	1.8

Purge Method: Low-flow

Pump Off: 0837

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	96.48
Volume of Water in Well (gal):	62.90
Total Volume Purged (ml):	13,950
Duration of Pumping (min):	31
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	0.2

Purge Method: Low Flow

Pump Off:	1352
-----------	------

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	11.52
Volume of Water in Well (gal):	7.51
Total Volume Purged (ml):	19,500
Duration of Pumping (min):	39
Odor:	None
Color:	Clear
Fe+2 (mg/L):	2.0

Purge Method: Low Flow

Pump Off: 1152

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	18.60
Volume of Water in Well (gal):	12.13
Total Volume Purged (ml):	12,400
Duration of Pumping (min):	31
Odor:	None
Color:	Brown Tint
Fe ⁺² (mg/L):	0.4

Purge Method: Low Flow

Pump Off: 1150

[illegible]

Purge Water Disposition: On Ground

Harriman, New York

Harriman, New York

Meter Number: 511017
Notes: Insufficient water column & recharge;
samples collected in 2 phases (0940 & 1445)

WELL WATER INFORMATION

Length of Water Column (ft):	5.89
Volume of Water in Well (gal):	0.96
Total Volume Purged (ml):	NA
Duration of Pumping (min):	NA
Odor:	Pungent
Color:	Dark grey
Fe ⁺² (mg/L):	NA

Purge Method: Bailed

Pump Off:

[illegible]

Purge Water Disposition: On Ground

Harriman, New York

Meter Number: 511017

Notes:

WELL INFORMATION

Well Depth (ft):	19.20
Water Level Depth (ft):	5.40
Pumping Water Depth (ft):	6.18
Well Diameter (in):	2.00
Well Condition:	Good
PID Reading (ppm):	7.90

WELL WATER INFORMATION

Length of Water Column (ft):	13.80
Volume of Water in Well (gal):	2.25
Total Volume Purged (ml):	15,500
Duration of Pumping (min):	31
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	0.8

EVACUATION INFORMATION

Purge Method: Low Flow

Pump On: 1554

Pump Off: 1625

[illegible]

Purge Water Disposition: On Ground

Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	20.27
Volume of Water in Well (gal):	3.30
Total Volume Purged (ml):	12,800
Duration of Pumping (min):	32
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	3.8

Purge Method: Low Flow

Pump Off:	1108
-----------	------

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	28.00
Volume of Water in Well (gal):	4.56
Total Volume Purged (ml):	18,900
Duration of Pumping (min):	42
Odor:	None
Color:	Brown Tint
Fe+2 (mg/L):	2.0

Purge Method: Low Flow

Pump Off: 1249

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	19.22
Volume of Water in Well (gal):	3.13
Total Volume Purged (ml):	10,000
Duration of Pumping (min):	25
Odor:	None
Color:	Light Brown
Fe+2 (mg/L):	3.0

Purge Method: Low Flow

Pump Off: 1210

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number:	511017
Notes:	

WELL WATER INFORMATION

Length of Water Column (ft):	44.84
Volume of Water in Well (gal):	65.78
Total Volume Purged (ml):	12,600
Duration of Pumping (min):	36
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	2.2

Purge Method: Low Flow

Pump Off: 1110

[illegible]

Purge Water Disposition: On Ground

Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	44.89
Volume of Water in Well (gal):	29.27
Total Volume Purged (ml):	12,250
Duration of Pumping (min):	35
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	0.2

Purge Method: Low Flow

Pump Off: 1000

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	26.29
Volume of Water in Well (gal):	4.29
Total Volume Purged (ml):	15,500
Duration of Pumping (min):	31
Odor:	None
Color:	Cloudy Grey
Fe+2 (mg/L):	1.0

Purge Method: Low-Flow

Pump Off: 1229

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	16.25
Volume of Water in Well (gal):	2.65
Total Volume Purged (ml):	13,200
Duration of Pumping (min):	33
Odor:	None
Color:	Clear
Fe+ ² (mg/L):	2.0

Purge Method: Low-Flow

Pump Off: 1407

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	60.05
Volume of Water in Well (gal):	9.79
Total Volume Purged (ml):	7,700
Duration of Pumping (min):	22
Odor:	None
Color:	Clear
Fe+2 (mg/L):	1.2

Purge Method: Low-Flow

Pump Off: 1035

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	63.10
Volume of Water in Well (gal):	10.29
Total Volume Purged (ml):	13,600
Duration of Pumping (min):	34
Odor:	None
Color:	Yellow-Brown
Fe+2 (mg/L):	3.2

Purge Method: Low-Flow

Pump Off: 0950

[illegible]

Purge Water Disposition: On Ground

Nepera
Harriman, New York

Meter Number: 511017

Notes:

WELL WATER INFORMATION

Length of Water Column (ft):	26.65
Volume of Water in Well (gal):	4.34
Total Volume Purged (ml):	14,000
Duration of Pumping (min):	35
Odor:	None
Color:	Clear
Fe ⁺² (mg/L):	0.8

Purge Method: Low-Flow

Pump Off: 1430

[illegible]

Purge Water Disposition: On Ground

APPENDIX 2

Electronic Water Level Indicator Calibration Procedures

If using an electronic water level indicator, the device must be calibrated prior to each water level monitoring event and a calibration sticker with date of calibration attached. Electronic water level indicators with stretched electric lines (in whole or in part) spliced, or generally in poor condition shall not be used. A battery check must be performed before use.

1. Calibration is accomplished by comparing the marked intervals of the electronic sounding device with an engineer's tape marked in 0.01 foot intervals. The lower 30 feet of the electronic water level wire, which is most subject to stretching, is to be examined. If any five-foot interval of the wire is stretched more than 0.01 feet, the wire shall be replaced.
2. Calibration/inspection procedures must be documented in a calibration logbook or electronic spreadsheet file (in addition to the calibration date noted on a calibration sticker and affixed to the instrument).
3. When multiple water level devices are used to collect synoptic water levels, verification of instrument calibration and measurement techniques shall be checked by having each field technician measure the depth-to-water in a single designated well. All measurements must be within 0.05 feet of each other. If one or more measurements fall outside of this range, determine whether the discrepancy is due to instrumentation or measurement technique problems and make appropriate repairs, substitutions or corrections.

APPENDIX 3

Statement of Procedures for the Calibration of Multi-Parameter Water Quality Monitoring System, Horiba U-22XD

Purpose and Scope

This Statement of Procedures (SOP) presents detailed methodology for the measurement of field parameters including *temperature, conductivity, pH, dissolved oxygen, ORP* and *turbidity*. The purpose of this SOP is to ensure the accurate measurement of these water quality parameters through routine checks and periodic calibration of the Horiba U-22XD by sampling personnel.

Responsibilities

It is the responsibility of assigned sampling personnel to calibrate monitoring equipment at the beginning of each month prior to use, or upon completion of all instrument repairs (Span Calibration). Sampling personnel will also perform a daily instrument check (Zero Calibration). Documentation of calibrations, performance checks, inspection/acceptance and maintenance is the responsibility of field personnel. Periodic (e.g., yearly) factory calibration certificates shall be available for review. Any parameters out of calibration are to be documented and all records generated shall be maintained.

Precautions

Handling of Sensor Probe

Do not shock sensor probe. Sensor will be damaged.

Do not remove protective cover from sensor probe.

Slowly lower sensor probe into sample.

Do not immerse sensor probe to a depth in excess of 300 feet. Excessive hydraulic pressure will cause damage.

Replacement of Batteries and Sensors

Do not replace sensor probe batteries or sensors in atmosphere of high temperature or humidity.

R & C Formation, Ltd.

The sensor probe's battery cover is kept waterproof by use of an O-ring. After confirming that there are no foreign bodies adhering to the O-ring, tighten to indicated position. Do not tighten with O-ring twisted or warped.

Handling of Cable

Do not store cable with connector excessively tensed or bent.

When storing, wipe area around connector dry and cover with rubber cap.

Handling of Control Unit

Do not shock control unit. The control unit will be damaged.

Do not expose control unit to ultraviolet rays for long periods. Ultraviolet rays can damage control unit's LCD display.

Do not use a hair dryer to dry control unit. If control unit becomes wet, dry with soft cloth.

Handling of DO Sensor

In the event of breakage of the DO sensor diaphragm, replace whole DO sensor and diaphragm.

Do not touch caustic internal solution.

When removing DO sensor from sensor probe, attach included short socket.

Handling of Cond/Turb Sensor Unit

When cleaning Cond/Turb sensor unit, use a cotton swab to avoid damage.

Handling pH Sensor

The pH sensor is made of very thin glass. Handle carefully to avoid breakage.

Handling during Transportation

Always store Horiba U-22XD in carrying case to prevent damage.

Calibration

The Horiba U-22XD includes an auto calibration mode (see Operations Manual). However, in order to achieve the highest instrument performance and measurement accuracy, manual calibration techniques described below are recommended. Note: In the event the instruments calibration readings do not come within 10% of standard values, a supervisor must be notified. The instrument is not to be used until repairs are made. Designate instrument with a “**DO NOT USE, OUT OF CALIBRATION**” sticker.

Manual pH Calibration

Zero Calibration

1. Wash sensor using distilled water; pour pH standard solution into calibration beaker; immerse sensor.
2. Press **CAL** key twice in the pH measurement mode. When the instrument enters the manual zero calibration mode, **MAN**, **ZERO** and **CAL** light up (measured temperature is displayed).
3. Use the **UP/DOWN** keys to input value of the pH 7 standard solution at the measured temperature (see reference data, page 100 of Operation Manual).
4. Press **ENT** key. The manual zero calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.

Span Calibration

1. Wash sensor using distilled water; pour pH 4 or pH 9 standard solution into calibration beaker; immerse sensor.
2. On the zero calibration of the pH sensor, press **CAL** key to ensure that the control unit is in the manual span calibration mode. **MAN**, **SPAN** and **CAL** light up.
3. Use the **UP/Down** keys to set the value for the pH 4 or pH 9 standard solution at the measured temperature (see reference data, page 100 of Operation Manual).
4. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.
5. Press **MEAS** key to return to the measurement mode.

R & C Formation, Ltd.

Manual Conductivity Calibration

Zero Calibration

1. Wash sensor using distilled water. Completely remove the water on the sensor and calibrate the instrument in the atmosphere
2. Press **Cal** key twice in the conductivity measurement mode. When the instrument enters the manual zero calibration mode, **MAN**, **ZERO** and **CAL** light up.
3. Use the **UP/DOWN** key to set the value to 0.0.
4. Press the **ENT** key. The manual zero calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.

Span Calibration

1. Wash sensor using distilled water; pour standard solution into calibration beaker; immerse sensor.
2. On the zero calibration of the conductivity sensor, press the **CAL** key to ensure that the instrument is in the manual span calibration mode. **MAN**, **SPAN** and **CAL** light up.
3. Use the **UP/Down** keys to set the standard solution value. Note: The sensor automatically identifies the calibration solution and the relevant calibration range (0.90 S/m to 9.99 S/m, 0.090 S/m to 0.999 S/m, 0.0 mS/m to 99.9 mS/m) is displayed via **1**, **2** or **3**.
4. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.
5. Press **MEAS** key to return to the measurement mode.

Manual Turbidity Calibration

Zero Calibration

1. Wash sensor using distilled water; pour distilled water into calibration beaker; immerse sensor.
2. Press **Cal** key twice in the turbidity measurement mode. When the instrument enters the manual zero calibration mode, **MAN**, **ZERO** and **CAL** light up.
3. Use the **UP/DOWN** key to set the value to 0.0.

R & C Formation, Ltd.

4. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.

Span Calibration

1. Wash sensor using distilled water; pour 100 NTU (or other) solution into calibration beaker; immerse sensor.
2. On the zero calibration of the turbidity sensor, press the **CAL** key to ensure that the instrument is in the manual span calibration mode. **MAN**, **SPAN** and **CAL** light up.
3. Use the **UP/Down** keys to set the value to 100 NTU.
4. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.
5. Press **MEAS** key to return to the measurement mode.

Manual Dissolved Oxygen Calibration

Zero Calibration

1. Wash sensor using distilled water; pour 0.0 oxygen solution into calibration beaker; immerse sensor.
2. Press **Cal** key twice in the dissolved oxygen measurement mode. When the instrument enters the manual zero calibration mode, **MAN**, **ZERO** and **CAL** light up.
3. After the display has stabilized, use the **UP/DOWN** keys to set the value to 0.0.
4. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.
5. After zero calibration, clean sensor with tap water.

Span Calibration

1. Pour 1 – 2 liters of tap water into suitable flask. Using an air pump, feed air into the water and aerate solution.

2. Wash sensor using distilled water and immerse DO sensor completely into span calibration liquid.
3. On the zero calibration of the DO sensor, press the **CAL** key to ensure that the instrument is in the manual span calibration mode. **MAN**, **SPAN** and **CAL** light up.
4. After the display has stabilized, use the **UP/DOWN** keys to set the amount of saturated dissolved oxygen in water at its water temperature (see reference data, page 56 of Operation Manual for DO value at corresponding temperature).
5. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.
6. Press **MEAS** key to return to the measurement mode.

Manual Temperature Calibration

1. Press **CAL** key in the temperature measurement mode. Select the manual calibration mode.
2. Immerse sensor in water with known temperature (i.e., measured with Nation Institute of Technology approved thermometer).
3. Use the **UP/Down** keys to set the temperature value to that of NIT thermometer.
4. Press the **ENT** key. The manual span calibration starts. The measured value is displayed during calibration and **DATA IN** blinks until the indicated value stabilizes. When the indicated value has stabilized, **DATA IN** lights up and the calibration finishes. Note: When **DATA INN** is blinking, press **CAL** key to cancel calibration or **ENT** key to fix calibration.
5. Press **MEAS** key to return to the measurement mode.

Manual ORP Calibration

1. Add 250 ml pure (ion exchange) water to one packet of standard solution.
2. Immerse wash and dried ORP electrode in the ORP standard solution and measure mV value
3. If electrode and meter are working correctly, numerical values within 15 mV or less of those listed in Table 1 of Operation Manual are obtained.
4. If measurements within 15 mV of Table 1 values are not obtained, reference electrode is faulty. Replace.

R & C Formation, Ltd.

Implementation and Training

Sampling personnel shall implement this procedure for the calibration and daily performance checks of field monitoring equipment. Staff responsible for implementing this procedure shall be thoroughly familiar with its contents and requirements. It shall be documented by each staff member that they have read and understand the procedure.

APPENDIX 4

ANALYTICAL REPORT

Job Number: 220-10501-1

SDG Number: 220-10501

Job Description: Nepera Maybrook Semi-Annual Sampling

For:

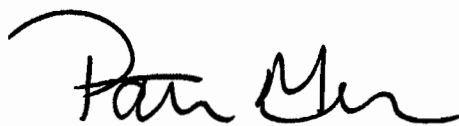
R & C Formation Ltd.

705 Bedford Ave.

Suite 2B

Bellmore, NY 11710

Attention: Mr. Robert Casson



Approved for release.
Patty A. Mercure
11/5/2009 1:07 PM

Designee for

Johanna Dubauskas

Project Manager I

johanna.dubauskas@testamericainc.com

11/05/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	7
Method / Analyst Summary	8
Sample Summary	9
Sample Results	10
Sample Datasheets	11
Data Qualifiers	41
Shipping and Receiving Documents	42
Sample Receipt Checklist	46

Case Narrative for Job: 220-10501-1

Client: R & C Formation Ltd.
Date: November 5, 2009

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

November 5, 2009

Date

Job Narrative
220-10501-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC/MS Semi VOA

Method(s) 8270C: Surrogate recovery for the following sample was outside control limits: MW-101 (220-10501-2). Re-extraction was performed outside of holding time with acceptable results. Both sets of data have been reported.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-10501-1	MW-24S					
Iron		2010		250	ug/L	6010B
Manganese		807		16.0	ug/L	6010B
Sulfate		756		50.0	mg/L	300.0
Nitrate as N		0.025	J	0.10	mg/L	300.0
Ammonia		2.0		0.10	mg/L	350.1
220-10501-2	MW-101					
Iron		13400		250	ug/L	6010B
Manganese		1810		16.0	ug/L	6010B
Sulfate		348		5.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		10.4		0.50	mg/L	350.1
220-10501-3	MW-1S					
Ethylbenzene		2.6	J	5.0	ug/L	8260B
Xylenes, Total		11		5.0	ug/L	8260B
Iron		7820		250	ug/L	6010B
Manganese		870		16.0	ug/L	6010B
Sulfate		26.0		1.0	mg/L	300.0
Nitrate as N		0.059	J	0.10	mg/L	300.0
Ammonia		25.8		2.5	mg/L	350.1
220-10501-4	MW-102					
Benzene		0.95	J	5.0	ug/L	8260B
Iron		2820		250	ug/L	6010B
Manganese		916		16.0	ug/L	6010B
Sulfate		67.7		1.0	mg/L	300.0
Nitrate as N		0.020	J	0.10	mg/L	300.0
Ammonia		19.2		2.5	mg/L	350.1
220-10501-5	MW-7S					
Ethylbenzene		1.6	J	5.0	ug/L	8260B
Xylenes, Total		6.5		5.0	ug/L	8260B
Iron		92.5	J	250	ug/L	6010B
Manganese		741		16.0	ug/L	6010B
Sulfate		34.0		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		0.48		0.10	mg/L	350.1

TestAmerica Connecticut

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Lab Sample ID	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-10501-6	MW-6D					
Ethylbenzene		1.1	J	5.0	ug/L	8260B
Xylenes, Total		4.7	J	5.0	ug/L	8260B
Iron		1940		250	ug/L	6010B
Manganese		41.1		16.0	ug/L	6010B
Sulfate		19.0		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		0.58		0.10	mg/L	350.1
220-10501-7	MW-35S					
Ethylbenzene		0.92	J	5.0	ug/L	8260B
Xylenes, Total		3.1	J	5.0	ug/L	8260B
Iron		4710		250	ug/L	6010B
Manganese		7500		16.0	ug/L	6010B
Sulfate		1270		25.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		6.5		0.50	mg/L	350.1
220-10501-8TB	TB 10-21					
Xylenes, Total		2.4	J	5.0	ug/L	8260B

METHOD SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
Purge and Trap	TAL CT		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL CT	SW846 8270C	
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Metals (ICP)	TAL CT	SW846 6010B	
Preparation, Total Metals	TAL CT		SW846 3010A
Nitrate	TAL CT	MCAWW 300.0	
Anions, Ion Chromatography	TAL CT	MCAWW 300.0	
Nitrogen, Ammonia	TAL CT	MCAWW 350.1	
Distillation, Ammonia	TAL CT		Distill/Ammonia

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8270C	Jonas, Stephan	SJ
SW846 6010B	Petronchak, Nestor	NP
MCAWW 300.0	Madumadu, Dave	DM
MCAWW 350.1	Natoli, Richard A	RN

SAMPLE SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10501-1	MW-24S	Water	10/21/2009 1149	10/21/2009 2000
220-10501-2	MW-101	Water	10/21/2009 1224	10/21/2009 2000
220-10501-3	MW-1S	Water	10/21/2009 1320	10/21/2009 2000
220-10501-4	MW-102	Water	10/21/2009 1400	10/21/2009 2000
220-10501-5	MW-7S	Water	10/21/2009 1445	10/21/2009 2000
220-10501-6	MW-6D	Water	10/21/2009 1516	10/21/2009 2000
220-10501-7	MW-35S	Water	10/21/2009 1620	10/21/2009 2000
220-10501-8TB	TB 10-21	Water	10/21/2009 0000	10/21/2009 2000

SAMPLE RESULTS

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-24S

Lab Sample ID: 220-10501-1

Client Matrix: Water

Date Sampled: 10/21/2009 1149

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32829

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7562.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/28/2009 1116

Final Weight/Volume: 5 mL

Date Prepared: 10/28/2009 1116

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	86		63 - 127
1,2-Dichloroethane-d4 (Surr)	89		65 - 136
4-Bromofluorobenzene	86		51 - 142
Dibromofluoromethane	88		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-101

Lab Sample ID: 220-10501-2

Client Matrix: Water

Date Sampled: 10/21/2009 1224

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32748

Instrument ID: MSL

Preparation: 5030B

Lab File ID: L8736.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 1610

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 1610

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	86		63 - 127
1,2-Dichloroethane-d4 (Surr)	96		65 - 136
4-Bromofluorobenzene	78		51 - 142
Dibromofluoromethane	100		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-1S

Lab Sample ID: 220-10501-3

Client Matrix: Water

Date Sampled: 10/21/2009 1320

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32815

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7538.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 1925

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 1925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	2.6	J	0.87	5.0
Xylenes, Total	11		2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	89		63 - 127
1,2-Dichloroethane-d4 (Surr)	73		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	82		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-102

Lab Sample ID: 220-10501-4

Client Matrix: Water

Date Sampled: 10/21/2009 1400

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32748

Instrument ID: MSL

Preparation: 5030B

Lab File ID: L8737.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 1634

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 1634

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	0.95	J	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	78		63 - 127
1,2-Dichloroethane-d4 (Surr)	107		65 - 136
4-Bromofluorobenzene	76		51 - 142
Dibromofluoromethane	105		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-7S

Lab Sample ID: 220-10501-5

Client Matrix: Water

Date Sampled: 10/21/2009 1445

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32815

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7539.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 1951

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 1951

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	1.6	J	0.87	5.0
Xylenes, Total	6.5		2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	75		65 - 136
4-Bromofluorobenzene	82		51 - 142
Dibromofluoromethane	82		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-6D

Lab Sample ID: 220-10501-6

Client Matrix: Water

Date Sampled: 10/21/2009 1516

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32815

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7540.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 2018

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 2018

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	1.1	J	0.87	5.0
Xylenes, Total	4.7	J	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	75		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	84		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-35S

Lab Sample ID: 220-10501-7

Client Matrix: Water

Date Sampled: 10/21/2009 1620

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32815

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7541.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 2044

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 2044

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	0.92	J	0.87	5.0
Xylenes, Total	3.1	J	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	78		65 - 136
4-Bromofluorobenzene	83		51 - 142
Dibromofluoromethane	84		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: TB 10-21

Lab Sample ID: 220-10501-8TB

Date Sampled: 10/21/2009 0000

Client Matrix: Water

Date Received: 10/21/2009 2000

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32815

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7542.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/27/2009 2111

Final Weight/Volume: 5 mL

Date Prepared: 10/27/2009 2111

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	2.4	J	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	78		65 - 136
4-Bromofluorobenzene	81		51 - 142
Dibromofluoromethane	84		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-24S

Lab Sample ID: 220-10501-1

Date Sampled: 10/21/2009 1149

Client Matrix: Water

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14355.D
Dilution:	1.0		Initial Weight/Volume:	940 mL
Date Analyzed:	10/28/2009 1730		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.1	21
.alpha.-Picoline	11	U	1.3	11
2-Aminopyridine	11	U	1.2	11

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	43		13 - 120
Terphenyl-d14	73		10 - 120
Phenol-d5	30		10 - 120
Nitrobenzene-d5	66		40 - 120
2-Fluorobiphenyl	63		39 - 120
2,4,6-Tribromophenol	78		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-101

Lab Sample ID: 220-10501-2

Date Sampled: 10/21/2009 1224

Client Matrix: Water

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14356.D
Dilution:	1.0		Initial Weight/Volume:	970 mL
Date Analyzed:	10/28/2009 1800		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	13		13 - 120
Terphenyl-d14	44		10 - 120
Phenol-d5	7	*	10 - 120
Nitrobenzene-d5	32	*	40 - 120
2-Fluorobiphenyl	38	*	39 - 120
2,4,6-Tribromophenol	41		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-101

Lab Sample ID: 220-10501-2

Client Matrix: Water

Date Sampled: 10/21/2009 1224

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32970	Instrument ID:	MSZ
Preparation:	3510C	Prep Batch: 220-32793	Lab File ID:	Z13655.D
Dilution:	1.0		Initial Weight/Volume:	950 mL
Date Analyzed:	11/03/2009 1754	Run Type: RE	Final Weight/Volume:	1.0 mL
Date Prepared:	10/29/2009 0954		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U H	4.1	21
.alpha.-Picoline	11	U H	1.3	11
2-Aminopyridine	11	U H	1.2	11

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	38		13 - 120
Terphenyl-d14	64		10 - 120
Phenol-d5	27		10 - 120
Nitrobenzene-d5	59		40 - 120
2-Fluorobiphenyl	56		39 - 120
2,4,6-Tribromophenol	65		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-1S

Lab Sample ID: 220-10501-3

Date Sampled: 10/21/2009 1320

Client Matrix: Water

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14357.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	10/28/2009 1831		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	40		13 - 120
Terphenyl-d14	65		10 - 120
Phenol-d5	27		10 - 120
Nitrobenzene-d5	63		40 - 120
2-Fluorobiphenyl	61		39 - 120
2,4,6-Tribromophenol	65		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-102

Lab Sample ID: 220-10501-4

Client Matrix: Water

Date Sampled: 10/21/2009 1400

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14358.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	10/28/2009 1902		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	44		13 - 120
Terphenyl-d14	70		10 - 120
Phenol-d5	29		10 - 120
Nitrobenzene-d5	67		40 - 120
2-Fluorobiphenyl	65		39 - 120
2,4,6-Tribromophenol	72		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-7S

Lab Sample ID: 220-10501-5

Client Matrix: Water

Date Sampled: 10/21/2009 1445

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14359.D
Dilution:	1.0		Initial Weight/Volume:	970 mL
Date Analyzed:	10/28/2009 1933		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	44		13 - 120
Terphenyl-d14	75		10 - 120
Phenol-d5	31		10 - 120
Nitrobenzene-d5	68		40 - 120
2-Fluorobiphenyl	65		39 - 120
2,4,6-Tribromophenol	73		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-6D

Lab Sample ID: 220-10501-6

Client Matrix: Water

Date Sampled: 10/21/2009 1516

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14360.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	10/28/2009 2004		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	41		13 - 120
Terphenyl-d14	70		10 - 120
Phenol-d5	28		10 - 120
Nitrobenzene-d5	63		40 - 120
2-Fluorobiphenyl	63		39 - 120
2,4,6-Tribromophenol	67		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-35S

Lab Sample ID: 220-10501-7

Date Sampled: 10/21/2009 1620

Client Matrix: Water

Date Received: 10/21/2009 2000

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32789	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32624	Lab File ID:	C14361.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	10/28/2009 2035		Final Weight/Volume:	1.0 mL
Date Prepared:	10/23/2009 1007		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	43		13 - 120
Terphenyl-d14	68		10 - 120
Phenol-d5	30		10 - 120
Nitrobenzene-d5	66		40 - 120
2-Fluorobiphenyl	63		39 - 120
2,4,6-Tribromophenol	73		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: **MW-24S**

Lab Sample ID: 220-10501-1

Date Sampled: 10/21/2009 1149

Client Matrix: Water

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32886

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1415

Final Weight/Volume: 50 mL

Date Prepared: 11/02/2009 1133

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	2010		30.0	250
Manganese	807		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-101

Lab Sample ID: 220-10501-2

Client Matrix: Water

Date Sampled: 10/21/2009 1224

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32886

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1418

Final Weight/Volume: 50 mL

Date Prepared: 11/02/2009 1133

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	13400		30.0	250
Manganese	1810		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-1S

Lab Sample ID: 220-10501-3

Client Matrix: Water

Date Sampled: 10/21/2009 1320

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32886

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1421

Final Weight/Volume: 50 mL

Date Prepared: 11/02/2009 1133

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	7820		30.0	250
Manganese	870		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-102

Lab Sample ID: 220-10501-4

Client Matrix: Water

Date Sampled: 10/21/2009 1400

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32886

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1424

Final Weight/Volume: 50 mL

Date Prepared: 11/02/2009 1133

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	2820		30.0	250
Manganese	916		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-7S

Lab Sample ID: 220-10501-5

Client Matrix: Water

Date Sampled: 10/21/2009 1445

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32886

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1428

Final Weight/Volume: 50 mL

Date Prepared: 11/02/2009 1133

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	92.5	J	30.0	250
Manganese	741		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-6D

Lab Sample ID: 220-10501-6

Client Matrix: Water

Date Sampled: 10/21/2009 1516

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32886

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1431

Final Weight/Volume: 50 mL

Date Prepared: 11/02/2009 1133

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1940		30.0	250
Manganese	41.1		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Client Sample ID: MW-35S

Lab Sample ID: 220-10501-7

Client Matrix: Water

Date Sampled: 10/21/2009 1620

Date Received: 10/21/2009 2000

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33001

Instrument ID: ICAP2

Preparation: 3010A

Prep Batch: 220-32946

Lab File ID: W110409

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1314

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 1050

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	4710		30.0	250
Manganese	7500		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry

Client Sample ID: **MW-24S**

Lab Sample ID: 220-10501-1

Date Sampled: 10/21/2009 1149

Client Matrix: Water

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	2.0		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1241				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	756		mg/L	2.0	50.0	50	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 2050				
Nitrate as N	0.025	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1148				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry

Client Sample ID: MW-101

Lab Sample ID: 220-10501-2

Date Sampled: 10/21/2009 1224

Client Matrix: Water

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	10.4		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	348		mg/L	0.20	5.0	5.0	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 2131				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1229				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry

Client Sample ID: MW-1S

Lab Sample ID: 220-10501-3

Client Matrix: Water

Date Sampled: 10/21/2009 1320

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	25.8		mg/L	0.82	2.5	25	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	26.0		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 1242				
Nitrate as N	0.059	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1242				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry

Client Sample ID: MW-102

Lab Sample ID: 220-10501-4

Client Matrix: Water

Date Sampled: 10/21/2009 1400

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	19.2		mg/L	0.82	2.5	25	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1430				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	67.7		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 1256				
Nitrate as N	0.020	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1256				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry**Client Sample ID: MW-7S**

Lab Sample ID: 220-10501-5

Client Matrix: Water

Date Sampled: 10/21/2009 1445

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.48		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1252				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	34.0		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 1309				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1309				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry

Client Sample ID: MW-6D

Lab Sample ID: 220-10501-6

Client Matrix: Water

Date Sampled: 10/21/2009 1516

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.58		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1252				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	19.0		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 1323				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1323				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

General Chemistry

Client Sample ID: MW-35S

Lab Sample ID: 220-10501-7

Client Matrix: Water

Date Sampled: 10/21/2009 1620

Date Received: 10/21/2009 2000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	6.5		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1430				
	Prep Batch: 220-32776		Date Prepared: 10/27/2009 1840				
Sulfate	1270		mg/L	1.0	25.0	25	300.0
	Analysis Batch: 220-32740		Date Analyzed: 10/22/2009 2211				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32741		Date Analyzed: 10/22/2009 1403				

DATA REPORTING QUALIFIERS

Client: R & C Formation Ltd.

Job Number: 220-10501-1

Sdg Number: 220-10501

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	H	Sample was prepped or analyzed beyond the specified holding time
	*	Surrogate exceeds the control limit
Metals		
	*	Duplicate analysis not within control limits.
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL
	N	Spiked sample recovery is not within control limits.
General Chemistry		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

MISCELLANEOUS DOCUMENTS

128 Long Hill Cross Road

Shelton, CT 06484

Phone (203) 929-8140 Fax (203) 929-8142

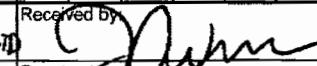
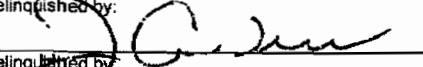
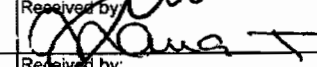
Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: BOB CARSON	Field Sampler: AJ SCHEFF	TAT Required (business days): STANDARD	Lab PM/Contact: JD	COC Number: 12270
Company: R+C FORMATION, LTA	Mobile/Field Number: (516) 680-9509		Lab Job Number (Lab Use Only): 10501	Page 1 of 1
Address: 705 BEDFORD AVE, SUITE 208	E-Mail:	Deliverable Type (Report/EDD):	Passed Rad Screen (Lab Use Only): ☒ Yes ☐ No	Carrier Tracking Notes:
City, State, Zip: BELLMORE, NY 11710	PO #:	Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for ___ Months (A fee may be assessed if samples are retained for longer than 1 month)	Cooler Temperatures (Lab Use Only): #1 @ 1.5°C probe #2 @ 1.8°C probe	
Phone: (516) 797-7339	WO #:	State Regulatory QC Criteria Requirements:	Analysis (Attach list if more space is needed)	
Email: rcarson@rcformationlta.com	Project #:			
Project Name/Location (State): NEPERA, HARRISMAN, NY	SSOW#:			

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	No. of Containers/Preservatives										Comments				
						Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	6010B (M)	Ammonia (M)	8260B (M)		8270C (M)	NITRATE AS N	SULFATE	8260B
1	MW-245	10/21/09	1149	AQ	N	3	1	1	2				x	x	x	x	x	x		
2	MW-101		1224										x	x	x	x	x	x		
3	MW-15		1320										x	x	x	x	x	x		
4	MW-102		1400										x	x	x	x	x	x		
5	MW-75		1445										x	x	x	x	x	x		
6	MW-60		1516										x	x	x	x	x	x		
7	MW-355		1620										x	x	x	x	x	x		
8	TB 10-21		1															X		

Relinquished by: 	Date/Time: 10/21/09 1815	Company: R+C Formation, LTA	Received by: 	Date/Time: 10/21/09 1815	Company: TestAmerica
Relinquished by: 	Date/Time: 10/21/09 20:00	Company: TestAmerica	Received by: 	Date/Time: 10-21-09 2000	Company: TestAmerica
Relinquished by: 	Date/Time:	Company:	Received by:	Date/Time:	Company:

Comments:

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

STAMERICA CONNECTION RESERVATIVE RECORD

Client: *R+C*
Client Project:

Lab Number	Preservative	pH	Adjustment (mLs)	pH after Adjustment	Preservative Lot Number	Initials	Date
10501	1	H ₂ SO ₄	L2	NA	NA	NA	10-21-09
↓	2	↓	↓	↓	↓	↓	↓
↓	3	↓	↓	↓	↓	↓	↓
↓	4	↓	↓	↓	↓	↓	↓
↓	5	↓	↓	↓	↓	↓	↓
↓	6	↓	↓	↓	↓	↓	↓
10501	7	H ₂ SO ₄	L2	NA	NA	NA	10-21-09
↓	↓	↓	↓	↓	↓	↓	↓
10501	1	HNO ₃	L2	NA	NA	NA	10-21-09
↓	2	↓	↓	↓	↓	↓	↓
↓	3	↓	↓	↓	↓	↓	↓
↓	4	↓	↓	↓	↓	↓	↓
↓	5	↓	↓	↓	↓	↓	↓
↓	6	↓	↓	↓	↓	↓	↓
10501	7	HNO ₃	L2	NA	NA	NA	10-21-09
↓	↓	↓	↓	↓	↓	↓	↓
~~11/05/2009~~							

Page 44 of 46

11/05/2009

TestAmerica - Connecticut
Internal Chain-of-Custody

220-1050
R-1C

Trip Blank: # 8

QC: ☒

Air: ☒

Date Received: 10-21-09

EB: ☒

Sample #: 1-8

Soil: ☒

Water: # 1-8

Locations: 97E, R-1I

Laboratory Sample #	Signature-Sample Removal	Date	Time	Reason	Signature-Sample Return	Date	Time
1-7	<i>[Signature]</i>	10/22/09	1033 hrs.	Ext.	Used		
1-7	<i>[Signature]</i>	10/22/09	10 ⁰⁰	IC	<i>[Signature]</i>	10/22/09	1700
1-8	<i>[Signature]</i>	10/26/09	11:55	VOA	<i>[Signature]</i>		
1-8	<i>[Signature]</i>	10/27/09	14:00	VOA	<i>[Signature]</i>		
1-8	<i>[Signature]</i>	10/27	1600	NH ₃	<i>[Signature]</i>	10/27	2000
2	<i>[Signature]</i>	10/29/09	9:16	Ext	<i>[Signature]</i>		
1, 3-7	<i>[Signature]</i>	10/29/09	17:00	Ext	<i>[Signature]</i>		
1-6	<i>[Signature]</i>	11-2-09	1015	mtl	<i>[Signature]</i>	11-2-9	1615
7	<i>[Signature]</i>	11/3/09	1003	mtl	<i>[Signature]</i>	11/3/09	1315
<i>[Signature]</i> 11/5/09							

Login Sample Receipt Check List

Client: R & C Formation Ltd.

Job Number: 220-10501-1

SDG Number: 220-10501

Login Number: 10501

Creator: Teixeira, Maria L

List Number: 1

List Source: TestAmerica Connecticut

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5C/1.8C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

ANALYTICAL REPORT

Job Number: 220-10515-1

SDG Number: 220-10515

Job Description: Nepera Maybrook Semi-Annual Sampling

For:

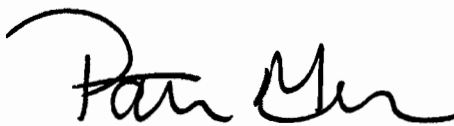
R & C Formation Ltd.

705 Bedford Ave.

Suite 2B

Bellmore, NY 11710

Attention: Mr. Robert Casson



Approved for release.
Patty A. Mercure
11/5/2009 2:48 PM

Designee for

Johanna Dubauskas

Project Manager I

johanna.dubauskas@testamericainc.com

11/06/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	8
Method / Analyst Summary	9
Sample Summary	10
Sample Results	11
Sample Datasheets	12
Data Qualifiers	61
Shipping and Receiving Documents	62
Sample Receipt Checklist	67

Case Narrative for Job: 220-10515-1

Client: R & C Formation Ltd.
Date: November 6, 2009

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

November 6, 2009

Date

Job Narrative
220-10515-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-10515-1	MW-11S					
Iron		1540		250	ug/L	6010B
Manganese		627		16.0	ug/L	6010B
Sulfate		15.2		1.0	mg/L	300.0
Nitrate as N		0.17		0.10	mg/L	300.0
Ammonia		12.9		0.50	mg/L	350.1
220-10515-2	MW-20DR					
Iron		1900		250	ug/L	6010B
Manganese		53.6		16.0	ug/L	6010B
Sulfate		92.9		5.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		0.14		0.10	mg/L	350.1
220-10515-3	MW-20S					
Benzene		57		5.0	ug/L	8260B
2-Aminopyridine		5.5	J	11	ug/L	8270C
Iron		1080		250	ug/L	6010B
Manganese		582		16.0	ug/L	6010B
Sulfate		26.1		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		11.0		0.50	mg/L	350.1
220-10515-4	MW-10S					
Benzene		1.2	J	5.0	ug/L	8260B
Iron		7630		250	ug/L	6010B
Manganese		627		16.0	ug/L	6010B
Sulfate		32.7		1.0	mg/L	300.0
Nitrate as N		0.030	J	0.10	mg/L	300.0
Ammonia		4.4		0.50	mg/L	350.1
220-10515-5	MW-8S					
Iron		13400		250	ug/L	6010B
Manganese		485		16.0	ug/L	6010B
Sulfate		46.8		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		12.6		0.50	mg/L	350.1

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-10515-6	MW-104					
Iron		1780		250	ug/L	6010B
Manganese		1210		16.0	ug/L	6010B
Sulfate		26.1		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		2.6		0.10	mg/L	350.1
220-10515-7	RW-1R					
Iron		16700		250	ug/L	6010B
Manganese		1870		16.0	ug/L	6010B
Sulfate		14.2		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		6.1		0.50	mg/L	350.1
220-10515-8	MW-5S					
Iron		1070		250	ug/L	6010B
Manganese		2120		16.0	ug/L	6010B
Sulfate		27.1		1.0	mg/L	300.0
Nitrate as N		0.038	J	0.10	mg/L	300.0
Ammonia		2.7		0.10	mg/L	350.1
220-10515-9	MW-27D					
Xylenes, Total		3.6	J	5.0	ug/L	8260B
Iron		35.7	J	250	ug/L	6010B
Manganese		6.2	J	16.0	ug/L	6010B
Sulfate		14.2		1.0	mg/L	300.0
Nitrate as N		0.35		0.10	mg/L	300.0
Ammonia		1.0		0.10	mg/L	350.1
220-10515-10	MW-23D					
Iron		335		250	ug/L	6010B
Manganese		12.2	J	16.0	ug/L	6010B
Sulfate		18.8		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		0.077	J	0.10	mg/L	350.1

TestAmerica Connecticut

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-10515-11	MW-26D					
Iron		115	J	250	ug/L	6010B
Manganese		2.6	J	16.0	ug/L	6010B
Sulfate		24.2		1.0	mg/L	300.0
Nitrate as N		0.038	J	0.10	mg/L	300.0
Ammonia		0.091	J	0.10	mg/L	350.1
220-10515-12	MW-106					
Iron		334		250	ug/L	6010B
Manganese		660		16.0	ug/L	6010B
Sulfate		39.3		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		5.6		0.50	mg/L	350.1

METHOD SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Description		Lab Location	Method	Preparation Method
Matrix	Water			
Volatile Organic Compounds (GC/MS)		TAL CT	SW846 8260B	
Purge and Trap		TAL CT		SW846 5030B
Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)		TAL CT	SW846 8270C	
Liquid-Liquid Extraction (Separatory Funnel)		TAL CT		SW846 3510C
Metals (ICP)		TAL CT	SW846 6010B	
Preparation, Total Metals		TAL CT		SW846 3010A
Nitrate		TAL CT	MCAWW 300.0	
Anions, Ion Chromatography		TAL CT	MCAWW 300.0	
Nitrogen, Ammonia		TAL CT	MCAWW 350.1	
Distillation, Ammonia		TAL CT		Distill/Ammonia

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8270C	Jonas, Stephan	SJ
SW846 6010B	Petronchak, Nestor	NP
MCAWW 300.0	Madumadu, Dave	DM
MCAWW 350.1	Natoli, Richard A	RN

SAMPLE SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10515-1	MW-11S	Water	10/22/2009 0751	10/22/2009 2015
220-10515-2	MW-20DR	Water	10/22/2009 0830	10/22/2009 2015
220-10515-3	MW-20S	Water	10/22/2009 0901	10/22/2009 2015
220-10515-4	MW-10S	Water	10/22/2009 0942	10/22/2009 2015
220-10515-5	MW-8S	Water	10/22/2009 1010	10/22/2009 2015
220-10515-6	MW-104	Water	10/22/2009 1029	10/22/2009 2015
220-10515-7	RW-1R	Water	10/22/2009 1105	10/22/2009 2015
220-10515-8	MW-5S	Water	10/22/2009 1213	10/22/2009 2015
220-10515-9	MW-27D	Water	10/22/2009 1251	10/22/2009 2015
220-10515-10	MW-23D	Water	10/22/2009 1347	10/22/2009 2015
220-10515-11	MW-26D	Water	10/22/2009 1534	10/22/2009 2015
220-10515-12	MW-106	Water	10/22/2009 1421	10/22/2009 2015
220-10515-13TB	TB-10-22	Water	10/22/2009 0000	10/22/2009 2015

SAMPLE RESULTS

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-11S

Lab Sample ID: 220-10515-1

Client Matrix: Water

Date Sampled: 10/22/2009 0751

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32824

Instrument ID:

MSL

Preparation: 5030B

Lab File ID:

L8844.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/29/2009 2239

Final Weight/Volume: 5 mL

Date Prepared: 10/29/2009 2239

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	114		63 - 127
1,2-Dichloroethane-d4 (Surr)	119		65 - 136
4-Bromofluorobenzene	101		51 - 142
Dibromofluoromethane	115		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-20DR

Lab Sample ID: 220-10515-2

Client Matrix: Water

Date Sampled: 10/22/2009 0830

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32824

Instrument ID:

MSL

Preparation: 5030B

Lab File ID:

L8847.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/29/2009 2350

Final Weight/Volume: 5 mL

Date Prepared: 10/29/2009 2350

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	100		63 - 127
1,2-Dichloroethane-d4 (Surr)	113		65 - 136
4-Bromofluorobenzene	96		51 - 142
Dibromofluoromethane	106		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-20S

Lab Sample ID: 220-10515-3

Client Matrix: Water

Date Sampled: 10/22/2009 0901

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32824

Instrument ID: MSL

Preparation: 5030B

Lab File ID: L8846.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/29/2009 2326

Final Weight/Volume: 5 mL

Date Prepared: 10/29/2009 2326

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	57		0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	104		63 - 127
1,2-Dichloroethane-d4 (Surr)	111		65 - 136
4-Bromofluorobenzene	99		51 - 142
Dibromofluoromethane	107		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-10S

Lab Sample ID: 220-10515-4

Client Matrix: Water

Date Sampled: 10/22/2009 0942

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32824	Instrument ID:	MSL
Preparation:	5030B		Lab File ID:	L8845.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	10/29/2009 2303		Final Weight/Volume:	5 mL
Date Prepared:	10/29/2009 2303			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	1.2	J	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	106		63 - 127
1,2-Dichloroethane-d4 (Surr)	120		65 - 136
4-Bromofluorobenzene	100		51 - 142
Dibromofluoromethane	113		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-8S

Lab Sample ID: 220-10515-5

Client Matrix: Water

Date Sampled: 10/22/2009 1010

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32824

Instrument ID:

MSL

Preparation: 5030B

Lab File ID:

L8843.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/29/2009 2215

Final Weight/Volume: 5 mL

Date Prepared: 10/29/2009 2215

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		63 - 127
1,2-Dichloroethane-d4 (Surr)	110		65 - 136
4-Bromofluorobenzene	96		51 - 142
Dibromofluoromethane	106		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-104

Lab Sample ID: 220-10515-6

Client Matrix: Water

Date Sampled: 10/22/2009 1029

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7652.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1554

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1554

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	85		63 - 127
1,2-Dichloroethane-d4 (Surr)	103		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	100		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: RW-1R

Lab Sample ID: 220-10515-7

Client Matrix: Water

Date Sampled: 10/22/2009 1105

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID:

MSV

Preparation: 5030B

Lab File ID:

V7653.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1621

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1621

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	108		65 - 136
4-Bromofluorobenzene	87		51 - 142
Dibromofluoromethane	101		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-5S

Lab Sample ID: 220-10515-8

Client Matrix: Water

Date Sampled: 10/22/2009 1213

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7658.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1834

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1834

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	107		65 - 136
4-Bromofluorobenzene	86		51 - 142
Dibromofluoromethane	102		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-27D

Lab Sample ID: 220-10515-9

Client Matrix: Water

Date Sampled: 10/22/2009 1251

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID:

MSV

Preparation: 5030B

Lab File ID:

V7654.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1647

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1647

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	3.6	J	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	106		65 - 136
4-Bromofluorobenzene	85		51 - 142
Dibromofluoromethane	102		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-23D

Lab Sample ID: 220-10515-10

Date Sampled: 10/22/2009 1347

Client Matrix: Water

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7655.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1714

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1714

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	106		65 - 136
4-Bromofluorobenzene	86		51 - 142
Dibromofluoromethane	103		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-26D

Lab Sample ID: 220-10515-11

Date Sampled: 10/22/2009 1534

Client Matrix: Water

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7659.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1901

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1901

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	108		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	101		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-106

Lab Sample ID: 220-10515-12

Client Matrix: Water

Date Sampled: 10/22/2009 1421

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32894	Instrument ID:	MSV
Preparation:	5030B		Lab File ID:	V7656.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/02/2009 1741		Final Weight/Volume:	5 mL
Date Prepared:	11/02/2009 1741			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	108		65 - 136
4-Bromofluorobenzene	85		51 - 142
Dibromofluoromethane	100		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: TB-10-22

Lab Sample ID: 220-10515-13TB

Client Matrix: Water

Date Sampled: 10/22/2009 0000

Date Received: 10/22/2009 2015

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32894	Instrument ID:	MSV
Preparation:	5030B		Lab File ID:	V7657.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	11/02/2009 1807		Final Weight/Volume:	5 mL
Date Prepared:	11/02/2009 1807			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	106		65 - 136
4-Bromofluorobenzene	87		51 - 142
Dibromofluoromethane	101		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-11S

Lab Sample ID: 220-10515-1

Date Sampled: 10/22/2009 0751

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14485.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1023		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	33		13 - 120
Terphenyl-d14	68		10 - 120
Phenol-d5	22		10 - 120
Nitrobenzene-d5	62		40 - 120
2-Fluorobiphenyl	62		39 - 120
2,4,6-Tribromophenol	68		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-20DR

Lab Sample ID: 220-10515-2

Date Sampled: 10/22/2009 0830

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14486.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1053		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	37		13 - 120
Terphenyl-d14	64		10 - 120
Phenol-d5	24		10 - 120
Nitrobenzene-d5	61		40 - 120
2-Fluorobiphenyl	61		39 - 120
2,4,6-Tribromophenol	68		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-20S

Lab Sample ID: 220-10515-3

Date Sampled: 10/22/2009 0901

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14487.D
Dilution:	1.0		Initial Weight/Volume:	940 mL
Date Analyzed:	11/04/2009 1124		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.1	21
.alpha.-Picoline	11	U	1.3	11
2-Aminopyridine	5.5	J	1.2	11

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	34		13 - 120
Terphenyl-d14	79		10 - 120
Phenol-d5	24		10 - 120
Nitrobenzene-d5	63		40 - 120
2-Fluorobiphenyl	69		39 - 120
2,4,6-Tribromophenol	83		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-10S

Lab Sample ID: 220-10515-4

Date Sampled: 10/22/2009 0942

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14488.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1154		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	32		13 - 120
Terphenyl-d14	65		10 - 120
Phenol-d5	20		10 - 120
Nitrobenzene-d5	61		40 - 120
2-Fluorobiphenyl	61		39 - 120
2,4,6-Tribromophenol	68		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-8S

Lab Sample ID: 220-10515-5

Date Sampled: 10/22/2009 1010

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14489.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	11/04/2009 1225		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	36		13 - 120
Terphenyl-d14	71		10 - 120
Phenol-d5	23		10 - 120
Nitrobenzene-d5	64		40 - 120
2-Fluorobiphenyl	65		39 - 120
2,4,6-Tribromophenol	73		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-104

Lab Sample ID: 220-10515-6

Date Sampled: 10/22/2009 1029

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14490.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1256		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	35		13 - 120
Terphenyl-d14	70		10 - 120
Phenol-d5	22		10 - 120
Nitrobenzene-d5	58		40 - 120
2-Fluorobiphenyl	57		39 - 120
2,4,6-Tribromophenol	69		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: RW-1R

Lab Sample ID: 220-10515-7

Date Sampled: 10/22/2009 1105

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14491.D
Dilution:	1.0		Initial Weight/Volume:	900 mL
Date Analyzed:	11/04/2009 1326		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	22	U	4.3	22
.alpha.-Picoline	11	U	1.3	11
2-Aminopyridine	11	U	1.3	11

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	36		13 - 120
Terphenyl-d14	67		10 - 120
Phenol-d5	25		10 - 120
Nitrobenzene-d5	59		40 - 120
2-Fluorobiphenyl	59		39 - 120
2,4,6-Tribromophenol	68		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-5S

Lab Sample ID: 220-10515-8

Client Matrix: Water

Date Sampled: 10/22/2009 1213

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch:	220-32683	Lab File ID:	C14492.D
Dilution:	1.0			Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1357			Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	35		13 - 120
Terphenyl-d14	74		10 - 120
Phenol-d5	23		10 - 120
Nitrobenzene-d5	58		40 - 120
2-Fluorobiphenyl	59		39 - 120
2,4,6-Tribromophenol	76		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-27D

Lab Sample ID: 220-10515-9

Client Matrix: Water

Date Sampled: 10/22/2009 1251

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14493.D
Dilution:	1.0		Initial Weight/Volume:	950 mL
Date Analyzed:	11/04/2009 1427		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.1	21
.alpha.-Picoline	11	U	1.3	11
2-Aminopyridine	11	U	1.2	11

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	34		13 - 120
Terphenyl-d14	65		10 - 120
Phenol-d5	23		10 - 120
Nitrobenzene-d5	58		40 - 120
2-Fluorobiphenyl	58		39 - 120
2,4,6-Tribromophenol	65		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-23D

Lab Sample ID: 220-10515-10

Date Sampled: 10/22/2009 1347

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14494.D
Dilution:	1.0		Initial Weight/Volume:	910 mL
Date Analyzed:	11/04/2009 1458		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	22	U	4.3	22
.alpha.-Picoline	11	U	1.3	11
2-Aminopyridine	11	U	1.2	11

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	35		13 - 120
Terphenyl-d14	76		10 - 120
Phenol-d5	24		10 - 120
Nitrobenzene-d5	60		40 - 120
2-Fluorobiphenyl	63		39 - 120
2,4,6-Tribromophenol	78		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-26D

Lab Sample ID: 220-10515-11

Date Sampled: 10/22/2009 1534

Client Matrix: Water

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14495.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1529		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	35		13 - 120
Terphenyl-d14	69		10 - 120
Phenol-d5	22		10 - 120
Nitrobenzene-d5	57		40 - 120
2-Fluorobiphenyl	57		39 - 120
2,4,6-Tribromophenol	70		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-106

Lab Sample ID: 220-10515-12

Client Matrix: Water

Date Sampled: 10/22/2009 1421

Date Received: 10/22/2009 2015

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-32996	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32683	Lab File ID:	C14496.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/04/2009 1600		Final Weight/Volume:	1.0 mL
Date Prepared:	10/26/2009 1352		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	35		13 - 120
Terphenyl-d14	65		10 - 120
Phenol-d5	23		10 - 120
Nitrobenzene-d5	60		40 - 120
2-Fluorobiphenyl	60		39 - 120
2,4,6-Tribromophenol	69		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-11S

Lab Sample ID: 220-10515-1

Date Sampled: 10/22/2009 0751

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33001

Instrument ID: ICAP2

Preparation: 3010A

Prep Batch: 220-32946

Lab File ID: W110409

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1320

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 1247

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1540		30.0	250
Manganese	627		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-20DR

Lab Sample ID: 220-10515-2

Client Matrix: Water

Date Sampled: 10/22/2009 0830

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33008

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/04/2009 1655

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1900		30.0	250
Manganese	53.6		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-20S

Lab Sample ID: 220-10515-3

Date Sampled: 10/22/2009 0901

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1314

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1080		30.0	250
Manganese	582		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-10S

Lab Sample ID: 220-10515-4

Client Matrix: Water

Date Sampled: 10/22/2009 0942

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1317

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	7630		30.0	250
Manganese	627		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-8S

Lab Sample ID: 220-10515-5

Date Sampled: 10/22/2009 1010

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1321

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	13400		30.0	250
Manganese	485		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-104

Lab Sample ID: 220-10515-6

Client Matrix: Water

Date Sampled: 10/22/2009 1029

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1324

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1780		30.0	250
Manganese	1210		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: RW-1R

Lab Sample ID: 220-10515-7

Date Sampled: 10/22/2009 1105

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1327

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	16700		30.0	250
Manganese	1870		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-5S

Lab Sample ID: 220-10515-8

Client Matrix: Water

Date Sampled: 10/22/2009 1213

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1330

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1070		30.0	250
Manganese	2120		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-27D

Lab Sample ID: 220-10515-9

Date Sampled: 10/22/2009 1251

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1333

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0925

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	35.7	J	30.0	250
Manganese	6.2	J	0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-23D

Lab Sample ID: 220-10515-10

Date Sampled: 10/22/2009 1347

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32928

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1337

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 0945

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	335		30.0	250
Manganese	12.2	J	0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-26D

Lab Sample ID: 220-10515-11

Date Sampled: 10/22/2009 1534

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32951

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1550

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	115	J	30.0	250
Manganese	2.6	J	0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Client Sample ID: MW-106

Lab Sample ID: 220-10515-12

Date Sampled: 10/22/2009 1421

Client Matrix: Water

Date Received: 10/22/2009 2015

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32951

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1553

Final Weight/Volume: 50 mL

Date Prepared: 11/03/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	334		30.0	250
Manganese	660		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-11S

Lab Sample ID: 220-10515-1

Client Matrix: Water

Date Sampled: 10/22/2009 0751

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	12.9		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	15.2		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1234				
Nitrate as N	0.17		mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1234				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry**Client Sample ID: MW-20DR**

Lab Sample ID: 220-10515-2

Date Sampled: 10/22/2009 0830

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.14		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1219				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	92.9		mg/L	0.20	5.0	5.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1611				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1248				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-20S

Lab Sample ID: 220-10515-3

Date Sampled: 10/22/2009 0901

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	11.0		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	26.1		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1301				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1301				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-10S

Lab Sample ID: 220-10515-4

Date Sampled: 10/22/2009 0942

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	4.4		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	32.7		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1315				
Nitrate as N	0.030	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1315				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-8S

Lab Sample ID: 220-10515-5

Date Sampled: 10/22/2009 1010

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	12.6		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	46.8		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1328				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1328				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-104

Lab Sample ID: 220-10515-6

Client Matrix: Water

Date Sampled: 10/22/2009 1029

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	2.6		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1230				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	26.1		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1409				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1409				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: RW-1R

Lab Sample ID: 220-10515-7

Date Sampled: 10/22/2009 1105

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	6.1		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785	Date Analyzed: 10/28/2009 1423					
	Prep Batch: 220-32774	Date Prepared: 10/26/2009 1920					
Sulfate	14.2		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742	Date Analyzed: 10/23/2009 1422					
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743	Date Analyzed: 10/23/2009 1422					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-5S

Lab Sample ID: 220-10515-8

Date Sampled: 10/22/2009 1213

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	2.7		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1230				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	27.1		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1436				
Nitrate as N	0.038	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1436				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-27D

Lab Sample ID: 220-10515-9

Date Sampled: 10/22/2009 1251

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	1.0		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1230				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	14.2		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1450				
Nitrate as N	0.35		mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1450				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-23D

Lab Sample ID: 220-10515-10

Client Matrix: Water

Date Sampled: 10/22/2009 1347

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.077	J	mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1230				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	18.8		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1530				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1530				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry**Client Sample ID: MW-26D**

Lab Sample ID: 220-10515-11

Client Matrix: Water

Date Sampled: 10/22/2009 1534

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.091	J	mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32785	Date Analyzed: 10/28/2009 1230					
	Prep Batch: 220-32774	Date Prepared: 10/26/2009 1920					
Sulfate	24.2		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742	Date Analyzed: 10/23/2009 1544					
Nitrate as N	0.038	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743	Date Analyzed: 10/23/2009 1544					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

General Chemistry

Client Sample ID: MW-106

Lab Sample ID: 220-10515-12

Date Sampled: 10/22/2009 1421

Client Matrix: Water

Date Received: 10/22/2009 2015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	5.6		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32785		Date Analyzed: 10/28/2009 1423				
	Prep Batch: 220-32774		Date Prepared: 10/26/2009 1920				
Sulfate	39.3		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32742		Date Analyzed: 10/23/2009 1557				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32743		Date Analyzed: 10/23/2009 1557				

DATA REPORTING QUALIFIERS

Client: R & C Formation Ltd.

Job Number: 220-10515-1

Sdg Number: 220-10515

Lab Section	Qualifier	Description
GC/MS VOA	U	Analyzed for but not detected.
	J	Indicates an estimated value.
GC/MS Semi VOA	U	Analyzed for but not detected.
	J	Indicates an estimated value.
Metals	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL
General Chemistry	U	Indicates analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Sample result is greater than the MDL but below the CRDL

MISCELLANEOUS DOCUMENTS

TestAmerica Connecticut

128 Long Hill Cross Road

Shelton, CT 06484

Phone (203) 929-8140 Fax (203) 929-8142

 Client Contact: **BOB CASSON**

 Company: **R+C FORMATION, LTD**

 Address: **705 LEAFORD AVE, SUITE 208**

 City, State, Zip: **BELLMOORE, NY 11710**

 Phone: **(516) 797-7330**

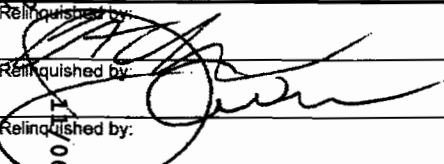
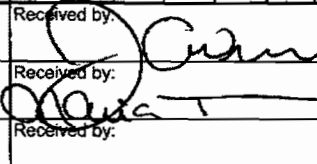
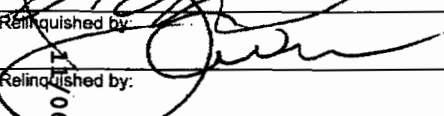
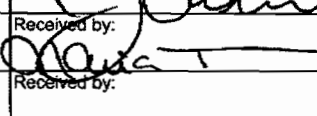
 Email: **rcasson@rcformation-ltd.com**

 Project Name/Site Location (State): **NEPERA / HARRIMAN, NY**
Chain of Custody Record
TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Field Sampler: Phil HOFFEREN	TAT Required (business days): NORMAL	Lab PM/Contact: Schanna	COC Number: 12269
Mobile/Field Number: 631-854-4837	Deliverable Type (Report/EDD):	Lab Job Number (Lab Use Only): 10515	Page 1 of 2
E-Mail:	Sample Disposal: [] Return to Client [X] Disposal by Lab [] Archive for ___ Months (A fee may be assessed if samples are retained for longer than 1 month)	Passed Rad Screen (Lab Use Only): Yes [] No [X]	Carrier Tracking Notes:
PO #:	State Regulatory QC Criteria Requirements:	Cooler Temperatures (Lab Use Only): #1 @ 4.1c #2 @ 2.9c #3 @ 4.2c Probe	Comments
WO #:	No. of Containers/Preservatives	Analysis (Attach list if more space is needed)	
Project #:			
SSOW#:			

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	6010B (mg)	Ammonia	8260B (mg)	8270C (mg)	NITRATE AS N	SULFATE	8260B
1	MW-115	10/22/09	0251	AQ		3	1	1	2				X	X	X	X	X	X	X
2	MW-208R		0830										X	X	X	X	X	X	X
3	MW-205		0901										X	X	X	X	X	X	X
4	MW-105		0942										X	X	X	X	X	X	X
5	MW-85		1010										X	X	X	X	X	X	X
6	MW-104		1029										X	X	X	X	X	X	X
7	RW-1R		1105										X	X	X	X	X	X	X
8	MW-55		1213										X	X	X	X	X	X	X
9	MW-27D		1251										X	X	X	X	X	X	X
10	MW-23D		1347										X	X	X	X	X	X	X

Relinquished by: 	Date/Time: 10/22/09 1834	Company: R+C FORM LTD	Received by: 	Date/Time: 10/22/09 1834	Company: TEST AMERICA
Relinquished by: 	Date/Time: 10/22/09 2015	Company: TA	Received by: 	Date/Time: 10-22-09 2015	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy
 Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

Phone (203) 929-8140 Fax (203) 929-8142

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact: BOB CARSON	Field Sampler: PAUL HOFFKEN	TAT Required (business days): NORMAL	Lab PM/Contact: Johanna	COC Number: 12268
Company: R+C FORMATION LTD	Mobile/Field Number: 631-224-4857		Lab Job Number (Lab Use Only): 10515	Page 2 of 2
Address:	E-Mail:	Deliverable Type (Report/EDD):	Passed Rad Screen (Lab Use Only): ☒ Yes ☐ No	Carrier Tracking
City, State, Zip:	PO #:	Sample Disposal: ☐ Return to Client ☒ Disposal by Lab	Cooler Temperatures (Lab Use Only): #1 @ 4.1c #2 @ 4.2c	Notes:
Phone: 516 797-7330	WO #:	(☐) Archive for <u> </u> Months (A fee may be assessed if samples are retained for longer than 1 month)	#2 @ 4.2c	
Email:	Project #:	State Regulatory QC Criteria Requirements:	Analysis (Attach list if more space is needed)	
Project Name/Site Location (State): NEDERLAND HARRIMAN NY	SSOW#:		(Pow) (Pow) (Pow) (Pow) (N) () () () () ()	

[illegible]

Relinquished by: 	Date/Time: 10/22/09 1834	Company: HFC Forum LTD	Received by: 	Date/Time: 10/22/09 1834	Company: TCH America
Relinquished by: 	Date/Time: 10/22/09 2015	Company: T/A	Received by: 	Date/Time: 10.22.09 2015	Company:
Relinquished by: 	Date/Time:	Company:	Received by:	Date/Time:	Company:

Comments:

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

Field Sampling / Shipping Instructions and Laboratory Sample Receipt Policy included on Reverse Side of COC

STAMERICA CONNECTICUT
PRESERVATIVE RECORD

JOB Number:
Client: RANDC FORMATION
Client Project:

Lab Number	Preservative	pH	Adjustment (mLs)	pH after Adjustment	Preservative Lot Number	Initials	Date
0515	1	H ₂ SO ₄	L2	NA	NA	ut	10-22-09
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						
0515	1	H ₂ SO ₄	L2	NA	NA	ut	10-22-09
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						
0515	1	HNO ₃	L2	NA	NA	ut	10-22-09
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						
0515	1	HNO ₃	L2	NA	NA	ut	10-22-09
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						
	10						
	11						
	12						

TestAmerica - Connecticut
Internal Chain-of-Custody

220-105
RANC
formation

Trip Blank: #13

Q2:

Air:

Date Received: 10-22-09

FB:

Sample #: 1-13

Soil:

Water: #1-13

Locations: 990, R-10

Laboratory Sample #	Signature-Sample Removal	Date	Time	Reason	Signature-Sample Return	Date	Time
4-2 1/12	~~SM~~	10/23	08:50	NITRATE	SM	10/23/09	1200
1-12	~~SM~~	10-24-09	13:15	EXT	WEO		
1-12	SM	10/26	1600	NH4	SM	10/27	1310
1-5	SM	10/29	17:00	VOA	SM		
6-13	SM	11/2/09	12:05	VOA	SM		
2-10	SM	11/3/09	0847	MTR	SM	11/3/09	1000
1	SM	11/3/09	1003	MTR	SM	11/3/09	1315
1, 2	SM	11/3/09	1128	MTR	SM	11/3/09	1315

Login Sample Receipt Check List

Client: R & C Formation Ltd.

Job Number: 220-10515-1

SDG Number: 220-10515

Login Number: 10515

List Source: TestAmerica Connecticut

Creator: Teixeira, Maria L

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1C/2.9C/4.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

ANALYTICAL REPORT

Job Number: 220-10526-1

SDG Number: 220-10526

Job Description: Nepera Maybrook Semi-Annual Sampling

For:

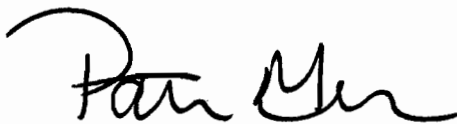
R & C Formation Ltd.

705 Bedford Ave.

Suite 2B

Bellmore, NY 11710

Attention: Mr. Robert Casson



Approved for release.
Patty A. Mercure
11/10/2009 1:26 PM

Designee for
Johanna Dubauskas
Project Manager I

johanna.dubauskas@testamericainc.com
11/10/2009

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Connecticut Certifications and Approvals: CTDOH PH-047, MADEP CT023, RIDOH A43, NYDOH 10602, NY NELAP 10602, NHDES 2528, NJDEP CT410, ME DOH CT023, UT DOH 2032614458

TestAmerica Laboratories, Inc.

TestAmerica Connecticut 128 Long Hill Cross Road, Shelton, CT 06484

Tel (203) 929-8140 Fax (203) 929-8142 www.testamericainc.com



Table of Contents

Cover Title Page	1
Report Narrative	3
Executive Summary	5
Method Summary	8
Method / Analyst Summary	9
Sample Summary	10
Sample Results	11
Sample Datasheets	12
Data Qualifiers	65
Shipping and Receiving Documents	66
Sample Receipt Checklist	70

Case Narrative for Job: 220-10526-1

Client: R & C Formation Ltd.

Date: November 10, 2009

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Lawrence Decker
Laboratory Director

November 10, 2009

Date

Job Narrative
220-10526-1

Comments

No additional comments.

Receipt

All samples were received at the laboratory outside the required temperature criteria. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

All other samples were received in good condition within temperature requirements.

GC/MS VOA

Method(s) 8260B: The sample MW-20D (220-10526-2) was run straight and diluted 1:2. The diluted run has target compounds on the lower side.

There was no more sample for re-analysis. Both sets of data have been reported.

No other analytical or quality issues were noted.

GC/MS Semi VOA

No analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
220-10526-1	MW-12S				
Iron		13500	250	ug/L	6010B
Manganese		941	16.0	ug/L	6010B
Sulfate		0.20 J	1.0	mg/L	300.0
Nitrate as N		0.018 J	0.10	mg/L	300.0
Ammonia		0.20	0.10	mg/L	350.1
220-10526-2	MW-20D				
Benzene		60	5.0	ug/L	8260B
Toluene		230 E	5.0	ug/L	8260B
Ethylbenzene		1.3 J	5.0	ug/L	8260B
Xylenes, Total		2.6 J	5.0	ug/L	8260B
Pyridine		70 J	110	ug/L	8270C
.alpha.-Picoline		67	54	ug/L	8270C
2-Aminopyridine		210	54	ug/L	8270C
Iron		543	250	ug/L	6010B
Manganese		13.1 J	16.0	ug/L	6010B
Sulfate		52.9	1.0	mg/L	300.0
Nitrate as N		0.018 J	0.10	mg/L	300.0
Ammonia		26.8	5.0	mg/L	350.1
220-10526-3	MW-33S				
Benzene		20	5.0	ug/L	8260B
Toluene		2.2 J	5.0	ug/L	8260B
Iron		827000	1250	ug/L	6010B
Manganese		13200	80.0	ug/L	6010B
Sulfate		5.1	1.0	mg/L	300.0
Nitrate as N		0.018 J	0.10	mg/L	300.0
Ammonia		369	10.0	mg/L	350.1
220-10526-4	MW-53D				
Benzene		48	5.0	ug/L	8260B
Iron		5310	250	ug/L	6010B
Manganese		241	16.0	ug/L	6010B
Sulfate		0.60 J	1.0	mg/L	300.0
Nitrate as N		0.043 J	0.10	mg/L	300.0
Ammonia		30.7	5.0	mg/L	350.1

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
220-10526-5	MW-16S				
Benzene		30	5.0	ug/L	8260B
.alpha.-Picoline		4.4 J	10	ug/L	8270C
Iron		7220	250	ug/L	6010B
Manganese		554	16.0	ug/L	6010B
Sulfate		9.4	1.0	mg/L	300.0
Nitrate as N		0.23	0.10	mg/L	300.0
Ammonia		14.8	0.50	mg/L	350.1
220-10526-6	MW-37S				
Benzene		3.1 J	5.0	ug/L	8260B
Iron		5530	250	ug/L	6010B
Manganese		955	16.0	ug/L	6010B
Sulfate		21.6	1.0	mg/L	300.0
Nitrate as N		0.035 J	0.10	mg/L	300.0
Ammonia		53.6	5.0	mg/L	350.1
220-10526-7	MW-25S				
Benzene		290	20	ug/L	8260B
.alpha.-Picoline		54	10	ug/L	8270C
Iron		7920	250	ug/L	6010B
Manganese		1720	16.0	ug/L	6010B
Sulfate		55.4	1.0	mg/L	300.0
Nitrate as N		0.086 J	0.10	mg/L	300.0
Ammonia		4.1	0.50	mg/L	350.1
220-10526-8	OW-6				
Benzene		6800	500	ug/L	8260B
.alpha.-Picoline		1300	210	ug/L	8270C
Iron		24700	250	ug/L	6010B
Manganese		7710	16.0	ug/L	6010B
Sulfate		5.8	1.0	mg/L	300.0
Nitrate as N		0.018 J	0.10	mg/L	300.0
Ammonia		7.8	0.50	mg/L	350.1

EXECUTIVE SUMMARY - Detections

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
220-10526-9	OW-7					
Benzene		3100		250	ug/L	8260B
.alpha.-Picoline		280		53	ug/L	8270C
Iron		21000		250	ug/L	6010B
Manganese		5010		16.0	ug/L	6010B
Sulfate		9.7		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		3.6		0.10	mg/L	350.1
220-10526-10	MW-DUP					
Benzene		31		5.0	ug/L	8260B
.alpha.-Picoline		6.4	J	10	ug/L	8270C
2-Aminopyridine		1.4	J	10	ug/L	8270C
Iron		7040		250	ug/L	6010B
Manganese		559		16.0	ug/L	6010B
Sulfate		8.4		1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		14.4		0.50	mg/L	350.1
220-10526-11	FB 10-23					
Sulfate		0.16	J	1.0	mg/L	300.0
Nitrate as N		0.018	J	0.10	mg/L	300.0
Ammonia		0.035	J	0.10	mg/L	350.1
220-10526-13	MW-103					
Iron		1260		250	ug/L	6010B
Manganese		433		16.0	ug/L	6010B
Sulfate		19.6		1.0	mg/L	300.0
Nitrate as N		0.22		0.10	mg/L	300.0
Ammonia		0.12		0.10	mg/L	350.1

METHOD SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds (GC/MS)	TAL CT	SW846 8260B	
Purge and Trap	TAL CT		SW846 5030B
Semivolatle Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	TAL CT	SW846 8270C	
Liquid-Liquid Extraction (Separatory Funnel)	TAL CT		SW846 3510C
Metals (ICP)	TAL CT	SW846 6010B	
Preparation, Total Metals	TAL CT		SW846 3010A
Nitrate	TAL CT	MCAWW 300.0	
Anions, Ion Chromatography	TAL CT	MCAWW 300.0	
Nitrogen, Ammonia	TAL CT	MCAWW 350.1	
Distillation, Ammonia	TAL CT		Distill/Ammonia

Lab References:

TAL CT = TestAmerica Connecticut

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Method	Analyst	Analyst ID
SW846 8260B	Kostrzewska, Barbara	BK
SW846 8270C	Jonas, Stephan	SJ
SW846 6010B	Petronchak, Nestor	NP
MCAWW 300.0	Madumadu, Dave	DM
MCAWW 350.1	Natoli, Richard A	RN

SAMPLE SUMMARY

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
220-10526-1	MW-12S	Water	10/23/2009 0827	10/23/2009 1515
220-10526-2	MW-20D	Water	10/23/2009 0912	10/23/2009 1515
220-10526-3	MW-33S	Water	10/23/2009 0855	10/23/2009 1515
220-10526-4	MW-53D	Water	10/23/2009 0951	10/23/2009 1515
220-10526-5	MW-16S	Water	10/23/2009 1019	10/23/2009 1515
220-10526-6	MW-37S	Water	10/23/2009 1102	10/23/2009 1515
220-10526-7	MW-25S	Water	10/23/2009 1145	10/23/2009 1515
220-10526-8	OW-6	Water	10/23/2009 0000	10/23/2009 1515
220-10526-9	OW-7	Water	10/23/2009 1206	10/23/2009 1515
220-10526-10	MW-DUP	Water	10/23/2009 0000	10/23/2009 1515
220-10526-11	FB 10-23	Water	10/23/2009 1100	10/23/2009 1515
220-10526-12TB	TB 10-23	Water	10/23/2009 0000	10/23/2009 1515
220-10526-13	MW-103	Water	10/23/2009 0754	10/23/2009 1515

SAMPLE RESULTS

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-12S

Lab Sample ID: 220-10526-1

Date Sampled: 10/23/2009 0827

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32788	Instrument ID:	MSL
Preparation:	5030B		Lab File ID:	L8790.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	10/28/2009 1913		Final Weight/Volume:	5 mL
Date Prepared:	10/28/2009 1913			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	107		63 - 127
1,2-Dichloroethane-d4 (Surr)	111		65 - 136
4-Bromofluorobenzene	95		51 - 142
Dibromofluoromethane	112		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-20D

Lab Sample ID: 220-10526-2

Client Matrix: Water

Date Sampled: 10/23/2009 0912

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32824	Instrument ID:	MSL
Preparation:	5030B		Lab File ID:	L8839.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	10/29/2009 2041		Final Weight/Volume:	5 mL
Date Prepared:	10/29/2009 2041			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	60		0.74	5.0
Toluene	230	E	0.72	5.0
Ethylbenzene	1.3	J	0.87	5.0
Xylenes, Total	2.6	J	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	107		63 - 127
1,2-Dichloroethane-d4 (Surr)	110		65 - 136
4-Bromofluorobenzene	105		51 - 142
Dibromofluoromethane	109		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-20D

Lab Sample ID: 220-10526-2

Date Sampled: 10/23/2009 0912

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32950

Instrument ID: MSL

Preparation: 5030B

Lab File ID: L8873.D

Dilution: 2.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1514

Run Type: DL

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1514

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	42		1.5	10
Toluene	140		1.4	10
Ethylbenzene	10	U	1.7	10
Xylenes, Total	10	U	4.5	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	94		63 - 127
1,2-Dichloroethane-d4 (Surr)	122		65 - 136
4-Bromofluorobenzene	91		51 - 142
Dibromofluoromethane	113		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-33S

Lab Sample ID: 220-10526-3

Client Matrix: Water

Date Sampled: 10/23/2009 0855

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32824

Instrument ID: MSL

Preparation: 5030B

Lab File ID: L8840.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/29/2009 2104

Final Weight/Volume: 5 mL

Date Prepared: 10/29/2009 2104

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	20		0.74	5.0
Toluene	2.2	J	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	105		63 - 127
1,2-Dichloroethane-d4 (Surr)	115		65 - 136
4-Bromofluorobenzene	99		51 - 142
Dibromofluoromethane	109		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-53D

Lab Sample ID: 220-10526-4

Date Sampled: 10/23/2009 0951

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32820	Instrument ID:	MSV
Preparation:	5030B		Lab File ID:	V7604.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	10/29/2009 1203		Final Weight/Volume:	5 mL
Date Prepared:	10/29/2009 1203			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	48		0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	90		63 - 127
1,2-Dichloroethane-d4 (Surr)	98		65 - 136
4-Bromofluorobenzene	88		51 - 142
Dibromofluoromethane	94		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-16S

Lab Sample ID: 220-10526-5

Date Sampled: 10/23/2009 1019

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32820	Instrument ID:	MSV
Preparation:	5030B		Lab File ID:	V7606.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	10/29/2009 1256		Final Weight/Volume:	5 mL
Date Prepared:	10/29/2009 1256			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	30		0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	91		63 - 127
1,2-Dichloroethane-d4 (Surr)	97		65 - 136
4-Bromofluorobenzene	85		51 - 142
Dibromofluoromethane	94		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-37S

Lab Sample ID: 220-10526-6

Client Matrix: Water

Date Sampled: 10/23/2009 1102

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32829

Instrument ID:

MSV

Preparation: 5030B

Lab File ID:

V7582.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/28/2009 2007

Final Weight/Volume: 5 mL

Date Prepared: 10/28/2009 2007

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	3.1	J	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	83		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	85		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-25S

Lab Sample ID: 220-10526-7

Client Matrix: Water

Date Sampled: 10/23/2009 1145

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7651.D

Dilution: 4.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1528

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1528

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	290		3.0	20
Toluene	20	U	2.9	20
Ethylbenzene	20	U	3.5	20
Xylenes, Total	20	U	9.1	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	104		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	99		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-6

Lab Sample ID: 220-10526-8

Client Matrix: Water

Date Sampled: 10/23/2009 0000

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	220-33080	Instrument ID:	MSL
Preparation:	5030B			Lab File ID:	L9055.D
Dilution:	10			Initial Weight/Volume:	5 mL
Date Analyzed:	11/06/2009 1241			Final Weight/Volume:	5 mL
Date Prepared:	11/06/2009 1241				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	4900	E	7.4	50
Toluene	50	U	7.2	50
Ethylbenzene	50	U	8.7	50
Xylenes, Total	50	U	23	50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	110		63 - 127
1,2-Dichloroethane-d4 (Surr)	122		65 - 136
4-Bromofluorobenzene	95		51 - 142
Dibromofluoromethane	115		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-6

Lab Sample ID: 220-10526-8

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	220-32829	Instrument ID:	MSV
Preparation:	5030B			Lab File ID:	V7583.D
Dilution:	100			Initial Weight/Volume:	5 mL
Date Analyzed:	10/28/2009 2033	Run Type:	DL	Final Weight/Volume:	5 mL
Date Prepared:	10/28/2009 2033				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	6800		74	500
Toluene	500	U	72	500
Ethylbenzene	500	U	87	500
Xylenes, Total	500	U	230	500

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	86		63 - 127
1,2-Dichloroethane-d4 (Surr)	84		65 - 136
4-Bromofluorobenzene	83		51 - 142
Dibromofluoromethane	87		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-7

Lab Sample ID: 220-10526-9

Date Sampled: 10/23/2009 1206

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7661.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 1954

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 1954

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	460	E	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		63 - 127
1,2-Dichloroethane-d4 (Surr)	109		65 - 136
4-Bromofluorobenzene	85		51 - 142
Dibromofluoromethane	94		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-7

Lab Sample ID: 220-10526-9

Date Sampled: 10/23/2009 1206

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch:	220-32829	Instrument ID:	MSV
Preparation:	5030B			Lab File ID:	V7584.D
Dilution:	50			Initial Weight/Volume:	5 mL
Date Analyzed:	10/28/2009 2100	Run Type:	DL	Final Weight/Volume:	5 mL
Date Prepared:	10/28/2009 2100				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	3100		37	250
Toluene	250	U	36	250
Ethylbenzene	250	U	44	250
Xylenes, Total	250	U	110	250

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	85		65 - 136
4-Bromofluorobenzene	84		51 - 142
Dibromofluoromethane	85		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-DUP

Lab Sample ID: 220-10526-10

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32788

Instrument ID: MSL

Preparation: 5030B

Lab File ID: L8791.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/28/2009 1936

Final Weight/Volume: 5 mL

Date Prepared: 10/28/2009 1936

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	31		0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	110		63 - 127
1,2-Dichloroethane-d4 (Surr)	113		65 - 136
4-Bromofluorobenzene	97		51 - 142
Dibromofluoromethane	119		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: FB 10-23

Lab Sample ID: 220-10526-11

Date Sampled: 10/23/2009 1100

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 220-32824	Instrument ID:	MSL
Preparation:	5030B		Lab File ID:	L8836.D
Dilution:	1.0		Initial Weight/Volume:	5 mL
Date Analyzed:	10/29/2009 1930		Final Weight/Volume:	5 mL
Date Prepared:	10/29/2009 1930			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	105		63 - 127
1,2-Dichloroethane-d4 (Surr)	107		65 - 136
4-Bromofluorobenzene	97		51 - 142
Dibromofluoromethane	108		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: TB 10-23

Lab Sample ID: 220-10526-12TB

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32824

Instrument ID:

MSL

Preparation: 5030B

Lab File ID:

L8837.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 10/29/2009 1953

Final Weight/Volume: 5 mL

Date Prepared: 10/29/2009 1953

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	106		63 - 127
1,2-Dichloroethane-d4 (Surr)	113		65 - 136
4-Bromofluorobenzene	104		51 - 142
Dibromofluoromethane	109		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-103

Lab Sample ID: 220-10526-13

Client Matrix: Water

Date Sampled: 10/23/2009 0754

Date Received: 10/23/2009 1515

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B

Analysis Batch: 220-32894

Instrument ID: MSV

Preparation: 5030B

Lab File ID: V7664.D

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 11/02/2009 2114

Final Weight/Volume: 5 mL

Date Prepared: 11/02/2009 2114

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	5.0	U	0.74	5.0
Toluene	5.0	U	0.72	5.0
Ethylbenzene	5.0	U	0.87	5.0
Xylenes, Total	5.0	U	2.3	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		63 - 127
1,2-Dichloroethane-d4 (Surr)	108		65 - 136
4-Bromofluorobenzene	82		51 - 142
Dibromofluoromethane	101		68 - 132

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-12S

Lab Sample ID: 220-10526-1

Date Sampled: 10/23/2009 0827

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14515.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1142		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	37		13 - 120
Terphenyl-d14	84		10 - 120
Phenol-d5	25		10 - 120
Nitrobenzene-d5	64		40 - 120
2-Fluorobiphenyl	64		39 - 120
2,4,6-Tribromophenol	81		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-20D

Lab Sample ID: 220-10526-2

Date Sampled: 10/23/2009 0912

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	220-33155	Instrument ID:	MSC
Preparation:	3510C	Prep Batch:	220-33083	Lab File ID:	C14591.D
Dilution:	5.0			Initial Weight/Volume:	950 mL
Date Analyzed:	11/10/2009 1044	Run Type:	RE	Final Weight/Volume:	1.0 mL
Date Prepared:	11/06/2009 1951			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	59	J H	20	110
.alpha.-Picoline	61	H	6.3	53
2-Aminopyridine	280	H	5.9	53

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	40		13 - 120
Terphenyl-d14	75		10 - 120
Phenol-d5	1	*	10 - 120
Nitrobenzene-d5	67		40 - 120
2-Fluorobiphenyl	72		39 - 120
2,4,6-Tribromophenol	80		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-20D

Lab Sample ID: 220-10526-2

Date Sampled: 10/23/2009 0912

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33155	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14592.D
Dilution:	5.0		Initial Weight/Volume:	930 mL
Date Analyzed:	11/10/2009 1115		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	70	J	21	110
.alpha.-Picoline	67		6.5	54
2-Aminopyridine	210		6.1	54

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	44		13 - 120
Terphenyl-d14	81		10 - 120
Phenol-d5	1	*	10 - 120
Nitrobenzene-d5	72		40 - 120
2-Fluorobiphenyl	77		39 - 120
2,4,6-Tribromophenol	87		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-33S

Lab Sample ID: 220-10526-3

Date Sampled: 10/23/2009 0855

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14517.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1244		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	42		13 - 120
Terphenyl-d14	84		10 - 120
Phenol-d5	14		10 - 120
Nitrobenzene-d5	74		40 - 120
2-Fluorobiphenyl	74		39 - 120
2,4,6-Tribromophenol	84		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-53D

Lab Sample ID: 220-10526-4

Date Sampled: 10/23/2009 0951

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14518.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1315		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	42		13 - 120
Terphenyl-d14	87		10 - 120
Phenol-d5	28		10 - 120
Nitrobenzene-d5	72		40 - 120
2-Fluorobiphenyl	73		39 - 120
2,4,6-Tribromophenol	84		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-16S

Lab Sample ID: 220-10526-5

Date Sampled: 10/23/2009 1019

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14519.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1346		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	4.4	J	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	14		13 - 120
Terphenyl-d14	78		10 - 120
Phenol-d5	24		10 - 120
Nitrobenzene-d5	64		40 - 120
2-Fluorobiphenyl	64		39 - 120
2,4,6-Tribromophenol	73		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-37S

Lab Sample ID: 220-10526-6

Date Sampled: 10/23/2009 1102

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14520.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	11/05/2009 1417		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	44		13 - 120
Terphenyl-d14	87		10 - 120
Phenol-d5	30		10 - 120
Nitrobenzene-d5	74		40 - 120
2-Fluorobiphenyl	73		39 - 120
2,4,6-Tribromophenol	80		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-25S

Lab Sample ID: 220-10526-7

Date Sampled: 10/23/2009 1145

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14521.D
Dilution:	1.0		Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1448		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	54		1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	40		13 - 120
Terphenyl-d14	82		10 - 120
Phenol-d5	27		10 - 120
Nitrobenzene-d5	69		40 - 120
2-Fluorobiphenyl	69		39 - 120
2,4,6-Tribromophenol	78		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-6

Lab Sample ID: 220-10526-8

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33114	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14579.D
Dilution:	20		Initial Weight/Volume:	960 mL
Date Analyzed:	11/09/2009 1842		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	420	U	81	420
.alpha.-Picoline	1300		25	210
2-Aminopyridine	210	U	24	210

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	43		13 - 120
Terphenyl-d14	74		10 - 120
Phenol-d5	30		10 - 120
Nitrobenzene-d5	63		40 - 120
2-Fluorobiphenyl	68		39 - 120
2,4,6-Tribromophenol	67		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-7

Lab Sample ID: 220-10526-9

Date Sampled: 10/23/2009 1206

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	220-33114	Instrument ID:	MSC
Preparation:	3510C	Prep Batch:	220-32719	Lab File ID:	C14580.D
Dilution:	5.0			Initial Weight/Volume:	950 mL
Date Analyzed:	11/09/2009 1912			Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	110	U	20	110
.alpha.-Picoline	280		6.3	53
2-Aminopyridine	53	U	5.9	53

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	41		13 - 120
Terphenyl-d14	76		10 - 120
Phenol-d5	28		10 - 120
Nitrobenzene-d5	65		40 - 120
2-Fluorobiphenyl	70		39 - 120
2,4,6-Tribromophenol	70		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-DUP

Lab Sample ID: 220-10526-10

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch:	220-32719	Lab File ID:	C14524.D
Dilution:	1.0			Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1621			Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	6.4	J	1.2	10
2-Aminopyridine	1.4	J	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	14		13 - 120
Terphenyl-d14	79		10 - 120
Phenol-d5	28		10 - 120
Nitrobenzene-d5	69		40 - 120
2-Fluorobiphenyl	67		39 - 120
2,4,6-Tribromophenol	70		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: FB 10-23

Lab Sample ID: 220-10526-11

Date Sampled: 10/23/2009 1100

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch:	220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch:	220-32719	Lab File ID:	C14525.D
Dilution:	1.0			Initial Weight/Volume:	960 mL
Date Analyzed:	11/05/2009 1652			Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312			Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	21	U	4.0	21
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.2	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	37		13 - 120
Terphenyl-d14	78		10 - 120
Phenol-d5	24		10 - 120
Nitrobenzene-d5	64		40 - 120
2-Fluorobiphenyl	62		39 - 120
2,4,6-Tribromophenol	71		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-103

Lab Sample ID: 220-10526-13

Date Sampled: 10/23/2009 0754

Client Matrix: Water

Date Received: 10/23/2009 1515

8270C Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Method:	8270C	Analysis Batch: 220-33014	Instrument ID:	MSC
Preparation:	3510C	Prep Batch: 220-32719	Lab File ID:	C14526.D
Dilution:	1.0		Initial Weight/Volume:	1000 mL
Date Analyzed:	11/05/2009 1722		Final Weight/Volume:	1 mL
Date Prepared:	10/27/2009 1312		Injection Volume:	

Analyte	Result (ug/L)	Qualifier	MDL	RL
Pyridine	20	U	3.9	20
.alpha.-Picoline	10	U	1.2	10
2-Aminopyridine	10	U	1.1	10

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	39		13 - 120
Terphenyl-d14	82		10 - 120
Phenol-d5	26		10 - 120
Nitrobenzene-d5	69		40 - 120
2-Fluorobiphenyl	69		39 - 120
2,4,6-Tribromophenol	76		36 - 120

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-12S

Lab Sample ID: 220-10526-1

Date Sampled: 10/23/2009 0827

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1443

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	13500		30.0	250
Manganese	941		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-20D

Lab Sample ID: 220-10526-2

Date Sampled: 10/23/2009 0912

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1446

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	543		30.0	250
Manganese	13.1	J	0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-33S

Lab Sample ID: 220-10526-3

Date Sampled: 10/23/2009 0855

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 5.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1449

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	827000		150	1250
Manganese	13200		2.5	80.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-53D

Lab Sample ID: 220-10526-4

Date Sampled: 10/23/2009 0951

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1452

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	5310		30.0	250
Manganese	241		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-16S

Lab Sample ID: 220-10526-5

Date Sampled: 10/23/2009 1019

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1455

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	7220		30.0	250
Manganese	554		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-37S

Lab Sample ID: 220-10526-6

Date Sampled: 10/23/2009 1102

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1459

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte

Result (ug/L)

Qualifier

MDL

RL

Iron

5530

30.0

250

Manganese

955

0.50

16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-25S

Lab Sample ID: 220-10526-7

Date Sampled: 10/23/2009 1145

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1508

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	7920		30.0	250
Manganese	1720		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-6

Lab Sample ID: 220-10526-8

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1511

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	24700		30.0	250
Manganese	7710		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: OW-7

Lab Sample ID: 220-10526-9

Date Sampled: 10/23/2009 1206

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1514

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	21000		30.0	250
Manganese	5010		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: MW-DUP

Lab Sample ID: 220-10526-10

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1517

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	7040		30.0	250
Manganese	559		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: FB 10-23

Lab Sample ID: 220-10526-11

Date Sampled: 10/23/2009 1100

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1520

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	250	U	30.0	250
Manganese	16.0	U	0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Client Sample ID: **MW-103**

Lab Sample ID: 220-10526-13

Date Sampled: 10/23/2009 0754

Client Matrix: Water

Date Received: 10/23/2009 1515

6010B Metals (ICP)

Method: 6010B

Analysis Batch: 220-33046

Instrument ID: ICAP3

Preparation: 3010A

Prep Batch: 220-32992

Lab File ID: N/A

Dilution: 1.0

Initial Weight/Volume: 50 mL

Date Analyzed: 11/05/2009 1524

Final Weight/Volume: 50 mL

Date Prepared: 11/04/2009 1135

Analyte	Result (ug/L)	Qualifier	MDL	RL
Iron	1260		30.0	250
Manganese	433		0.50	16.0

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: **MW-12S**

Lab Sample ID: 220-10526-1

Date Sampled: 10/23/2009 0827

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.20		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1007					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	0.20	J	mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 1705					
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 1705					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: **MW-20D**

Lab Sample ID: 220-10526-2

Client Matrix: Water

Date Sampled: 10/23/2009 0912

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	26.8		mg/L	1.6	5.0	50	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1007					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	52.9		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 1719					
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 1719					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: MW-33S

Lab Sample ID: 220-10526-3

Date Sampled: 10/23/2009 0855

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	369		mg/L	3.3	10.0	100	350.1
Analysis Batch: 220-32892		Date Analyzed: 11/02/2009 1126					
Prep Batch: 220-32856		Date Prepared: 10/29/2009 1730					
Sulfate	5.1		mg/L	0.040	1.0	1.0	300.0
Analysis Batch: 220-32744		Date Analyzed: 10/23/2009 1732					
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
Analysis Batch: 220-32745		Date Analyzed: 10/23/2009 1732					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: MW-53D

Lab Sample ID: 220-10526-4

Date Sampled: 10/23/2009 0951

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	30.7		mg/L	1.6	5.0	50	350.1
	Analysis Batch: 220-32892		Date Analyzed: 11/02/2009 1017				
	Prep Batch: 220-32856		Date Prepared: 10/29/2009 1730				
Sulfate	0.60	J	mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744		Date Analyzed: 10/23/2009 1746				
Nitrate as N	0.043	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745		Date Analyzed: 10/23/2009 1746				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: MW-16S

Lab Sample ID: 220-10526-5

Date Sampled: 10/23/2009 1019

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	14.8		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1018					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	9.4		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 1759					
Nitrate as N	0.23		mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 1759					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: **MW-37S**

Lab Sample ID: 220-10526-6

Date Sampled: 10/23/2009 1102

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	53.6		mg/L	1.6	5.0	50	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1018					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	21.6		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 1813					
Nitrate as N	0.035	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 1813					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: **MW-25S**

Lab Sample ID: 220-10526-7

Date Sampled: 10/23/2009 1145

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	4.1		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1018					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	55.4		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 1826					
Nitrate as N	0.086	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 1826					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: OW-6

Lab Sample ID: 220-10526-8

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	7.8		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32892		Date Analyzed: 11/02/2009 1018				
	Prep Batch: 220-32856		Date Prepared: 10/29/2009 1730				
Sulfate	5.8		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744		Date Analyzed: 10/23/2009 1840				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745		Date Analyzed: 10/23/2009 1840				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: OW-7

Lab Sample ID: 220-10526-9

Date Sampled: 10/23/2009 1206

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	3.6		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1018					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	9.7		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 1854					
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 1854					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: MW-DUP

Lab Sample ID: 220-10526-10

Date Sampled: 10/23/2009 0000

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	14.4		mg/L	0.16	0.50	5.0	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1018					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	8.4		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 2001					
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 2001					

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: FB 10-23

Lab Sample ID: 220-10526-11

Date Sampled: 10/23/2009 1100

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.035	J	mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32892		Date Analyzed: 11/02/2009 1018				
	Prep Batch: 220-32856		Date Prepared: 10/29/2009 1730				
Sulfate	0.16	J	mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744		Date Analyzed: 10/23/2009 2015				
Nitrate as N	0.018	J	mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745		Date Analyzed: 10/23/2009 2015				

Analytical Data

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

General Chemistry

Client Sample ID: MW-103

Lab Sample ID: 220-10526-13

Date Sampled: 10/23/2009 0754

Client Matrix: Water

Date Received: 10/23/2009 1515

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Ammonia	0.12		mg/L	0.033	0.10	1.0	350.1
	Analysis Batch: 220-32892	Date Analyzed: 11/02/2009 1018					
	Prep Batch: 220-32856	Date Prepared: 10/29/2009 1730					
Sulfate	19.6		mg/L	0.040	1.0	1.0	300.0
	Analysis Batch: 220-32744	Date Analyzed: 10/23/2009 2028					
Nitrate as N	0.22		mg/L	0.0051	0.10	1.0	300.0
	Analysis Batch: 220-32745	Date Analyzed: 10/23/2009 2028					

DATA REPORTING QUALIFIERS

Client: R & C Formation Ltd.

Job Number: 220-10526-1

Sdg Number: 220-10526

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	E	Compound concentration exceeds the upper level of the calibration range of the instrument for that specific analysis.
	J	Indicates an estimated value.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.
	H	Sample was prepped or analyzed beyond the specified holding time
	*	Surrogate exceeds the control limit
Metals		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL
General Chemistry		
	U	Indicates analyzed for but not detected.
	J	Sample result is greater than the MDL but below the CRDL

MISCELLANEOUS DOCUMENTS

TestAmerica Connecticut

128 Long Hill Cross Road

Shelton, CT 06484

Phone (203) 929-8140 Fax (203) 929-8142

Client Contact:

BOB CARSON

Company:

R+C FORMATION, LTD

Address:

705 BEDFORD AVE. Suite 208

City, State, Zip:

BELLMORE, NY 11710

Phone:

(516) 797-7330

Email:

rcarson@rcformationltd.com

Project Name/Site Location (State):

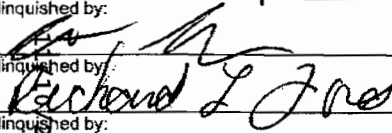
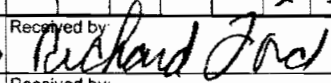
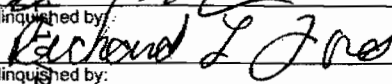
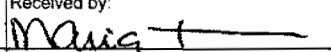
NEPERA / HARRIMAN, NY

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Field Sampler: PHIL HOFFKEN	TAT Required (business days): NORMAL	Lab PM/Contact:	COC Number: 12267
Mobila/Field Number: 631-487-7438	Deliverable Type (Report/EDD):	Lab Job Number (Lab Use Only): 10526	Page 1 of 2
E-Mail:	Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for ___ Months (A fee may be assessed if samples are retained for longer than 1 month)	Passed Rad Screen (Lab Use Only): ☒ Yes ☐ No	Carrier Tracking Notes:
PO #:	State Regulatory QC Criteria Requirements:	Cooler Temperatures (Lab Use Only): 100°C / 7.2°C / 8.0°C / 7.0°C	Comments
WO #:	No. of Containers/Preservatives	Analysis (Attach list if more space is needed)	
Project #:			
SSOW#:			

TA #	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	6010B	Ammon	8260B	8270B	Aluminum	Sulfate	8260					
1	MW-125	10/23/09	0827	AQ		3	1	1	2				x	x	x	x	x	x						
2	MW-200		0912										x	x	x	x	x	x						
3	MW-335		0855										x	x	x	x	x	x						
4	MW-530		0951										x	x	x	x	x	x						
5	MW-165		1019										x	x	x	x	x	x						
6	MW-375		1102										x	x	x	x	x	x						
7	MW-255		1145										x	x	x	x	x	x						
8	OW-6												x	x	x	x	x	x						
9	OW-7		1206										x	x	x	x	x	x						
10	MW-Dup		0000										x	x	x	x	x	x						
Relinquished by: 		Date/Time: 10/23/09 1300		Company: R+C Form Ltd		Received by: 		Date/Time: 10/23/09 1300		Company: T.A.														
Relinquished by: 		Date/Time: 10-23-09 1515		Company: TA		Received by: 		Date/Time: 10-23-09 1515		Company: TA														
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:														

Comments:

TestAmerica Connecticut

128 Long Hill Cross Road

Shelton, CT 06484

Phone (203) 929-8140 Fax (203) 929-8142

Client Contact:

BOB CARSON

Company:

RLC FORMATION, LTA

Address:

City, State, Zip:

Phone:

Email:

Project Name/Site Location (State):

NEPERA

Chain of Custody Record

Field Sampler:

PHIL HOFFMAN

Mobile/Field Number:

E-Mail:

PO #:

WO #:

Project #:

SSOW#:

TAT Required (business days):

Normal

Deliverable Type (Report/EDD):

Sample Disposal: [] Return to Client

[X] Disposal by Lab

[] Archive for ___ Months

(A fee may be assessed if samples are retained for longer than 1 month)

State Regulatory QC Criteria Requirements:

No. of Containers/Preservatives

Lab PM/Contact:

Lab Job Number (Lab Use Only):

10526

Passed Rad Screen (Lab Use Only):

[X] Yes [] No

Cooler Temperatures (Lab Use Only):

10.0°C / 7.2°C / 8.0°C / 7.0°C

Analysis (Attach list if more space is needed)

COC Number:

12278

Page 2 of 2

Carrier Tracking

Notes:

Comments

TA #	Page	Field Sample Identification (Containers for each sample may be combined on one line)	Collection Date	Collection Time (24-Hour Clock)	Matrix Aq=Aqueous, S=Solid, W=Waste/Oil, O=Other	MS/ MSD (Yes or No)	Unpreserved	H2SO4	HNO3	HCL	NaOH	ZnAc/NaOH	Other	60106 (MOB)	Ammonia	8260B (MOB)	8270B (MOB)	NITRATE AS N	SULFATE	8260A
11	68	FB 10-23	10/23/09	1100	AQ		3	1	1	2				X	X	X	X	X	X	
12	69	FB 10-23								2										X
13	70	MW-103		0754			3	1	1	2				X	X	X	X	X	X	

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Company

Company

Company

Company

Company

Received by:

Received by:

Received by:

Received by:

Received by:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Company

Company

Company

Company

Company

Comments:

220-10526
R+C formatio

QC:

Air:

Date Received: 10-23-09

~~FB:~~

Sample #s: 1-13

Soil

Water: #1-13

Locations: 98B, R-15

11/10/2009

Login Sample Receipt Check List

Client: R & C Formation Ltd.

Job Number: 220-10526-1

SDG Number: 220-10526

Login Number: 10526

List Source: TestAmerica Connecticut

Creator: Teixeira, Maria L

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	10.0C/7.2C/8.0C/7.0C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	