

**NEW ERA TECHNOLOGIES LTD.
ANNUAL REPORT
JANUARY-DECEMBER
2004**

*File: New Era
2004*



December 31, 2004

Nova Scotia Department of Environment and Labour
Sunnyside Mall, 1595 Bedford Highway
2nd Floor, Suite 224
Bedford, Nova Scotia
B4A 3Y4

Attention: Mr. Steve Westhaver, P.Eng.

Enclosed in this package is a copy of the Annual Report for 2004. The information supports the following:

1. Compost audits & sampling results (**Attachment 1**)
2. Holding Tank wastewater sampling and results (**Attachment 2**)
3. Revised Monitoring Well Log, sample results and field parameters (**Attachment 3**)
4. Surface Water sample results and field parameters (**Attachment 4**)
5. Dillon's Annual Report (Surface Water/Monitoring Well analysis) (**Attachment 5**)
6. Storm Water Pond effluent Results (**Attachment 6**)

Please note that the first sampling event in March 2005 will reflect the sampling protocol revisions, in terms of filtration, as discussed in the letter dated September 30, 2004.

Additional Items Required Under The Reporting Procedures Are:

1. Total amount of Wastewater taken off-site
2. A summary of Feedstock received/composted/rejected (**Appendix I**)
3. Sample results from LS1 (Liner Sump)
4. Processing/Curing building floor inspections
5. Registered Odour Complaints

Please refer to the following NET summary report for a discussion on the additional items listed above.

If you require additional information, please do not hesitate to contact me.

Yours truly,
New Era Technologies

Gerald Tibbo
General Manager

Introduction

New Era Technologies (NET) Limited operates a source separated composting facility located in Goodwood, Nova Scotia. The technology employed by NET is an In-Vessel containerized technology, utilizing 24 vessels, each with a capacity of approximately 25 tonne payload. The facility operates under Approval 2003-033029-A01 issued by the Nova Scotia Department of the Environment and Labour.

The NSDEL approval requires the submission of annual report that provides the following information:

- a) A summary of feedstock received at the site including:
 - (i) Types of materials received at the Site during the period
 - (ii) Quantities of each specific feedstock received at the Site during the period.
 - (iii) Quantities of feedstock composted.
 - (iv) Quantities of feedstock rejected and sent for disposal.
- b) Compost quality testing results and sampling audits
- c) A summary of the monitoring results from surface/groundwater and pond discharge testing, as well as, liner sump and holding tank testing
- d) Any registered complaints and the actions taken
- e) Reports for Receiving and Curing Building floor inspections and repairs

This report covers the operating period January 01 to December 31 2004.

Summary Feedstock Received

Types of Material

New Era Technologies (NET) Limited receives source separated organic materials from the following principal sources and is generally comprised of material as described:

- a) Residential Green Cart – consists of households, and to a lesser degree, apartments and condominiums in the Regional Municipality of Halifax. The waste stream is comprised of food waste, leaf and yard waste and boxboard, along with significant other fiber and contaminating materials (ie./plastics).
- b) Commercial Waste - Separated organics from in the Regional Municipality of Halifax . Generally this stream is generated from commercial

sources such as restaurants, corner stores, grocery stores, fish processing facilities, and again, to a lesser degree; parks, apartments and condominiums.

Generally the HRM Residential green cart material is paper rich resulting a high carbon to nitrogen ratio. The material from the HRM commercial sector is reasonably clean. HRM banned corrugated cardboard from the IC&I sector in late September of 2001 and are currently attempting to alleviate the plastic wrapped and packaged material from that sector through the education process.

Quantities of Feedstock Received and Composted

Table 1. Outlines the material received from both sources, material rejected and tonnage composted. The total tonnage composted is equal to the material received less the material rejected. (Appendix I - represents all monthly totals for each stream).

Source	Tonnage
HRM Residential	13617.23
HRM Commercial	4898.47
Total Received	18515.7
Tonnes Rejected	1522.76
Total Tonnes Composted	16992.94

NET received 18515.7 tonnes of feedstock in the year 2004. NET sorted (front end) and rejected 1230.88 tonnes of this feedstock.

These rejected materials were sent to Mirror Nova Scotia for disposal and consisted predominately of fibrous materials and other non-compostables such as corrugated cardboard, metals, fabric, construction debris and plastics.

NET shipped an additional 291.88 tonnes of rejected material from our back end process, consisting primarily of plastics, fabric, rock, metals and other non-compostables (Foreign Matter). Lined or waxed fibrous materials, protected from proper decomposition/composting, are rejected as well. These rejected materials were shipped to the Queen's County Landfill for disposal.

Thus a total of 1522.76 tonnes were rejected, leaving 16992.94 tonnes of material composted by the facility in 2004. This is significantly less than the permitted capacity.

New Era Technologies – Year In Review

The Year 2004 has seen on-going improvements to the plant and operations. Significant changes in the operation has seen major increases in the quantities of approved product leaving the facility as well as tremendous reductions in the oversized unfinished product which previously required landfilling.

Summary of Results:

Total Amount of Wastewater Taken Off-site

The total amount of wastewater removed from site between Januaryst to December 31st, 2004 is as followed:

Leachate from the In-Vessel system, 398,600 gallons. All of this leachate was removed for system cleaning and maintenance. This liquid was taken to the Aerotech Lagoon for disposal.

Compost Testing and Quality

NET is required to sample each 1000 tonnes of finished compost shipped from site. The product being shipped from the facility between January and December met all the requirements for Class "A" product and was approved by NSDEL.

Trained on-site staff were used exclusively to collect and manage all samples for lab analyses by Philip Analytical. Dr. Paul Arnold, of Bio-logic, continues to carry out all germination testing on the compost product.

A couple of samples through the year exhibited lower than Class "A" levels for Fecal Coliforms & Germination test requirements. Required re-tested samples of the same product, indicated that these tests were anomalies and the product was acceptable as Class "A", stabilised product.

Audits, typical results and analytical data are presented via attached letters from Dr. Paul Arnold (see Attachment 1). Results are compared against the Canadian Council of Ministers Environment (CCME) guidelines for Class A Compost

Annual Holding Tank Monitoring

Please find the attached Analytical results for the Biowater tank and Well Water. The Liner Sump (LS1) has remained dry, thus warranted no testing. There have been no significant changes in results when compared to historical data (see Attachment 2).

Ground and Surface Water Quality Monitoring

NET staff conducted the sampling for these events at several principle locations across the site. These locations were determined by NSDEL and are sampled during periods outlined in the permit. The samples are submitted to Philip Analytical Services for analysis. Philip employs accepted analytical methods.

MW#1R (monitoring well) was re-drilled south east of the new Screening Building to yield a more accurate property boundary analysis. Please refer to the new attached log of sampling locations.

Ground and Surface Water sampling results are attached for your review. (see Attachments 3 & 4). Upon comparing the results of the parameters tested during 2004, to the historical data compiled, there have been no significant changes in water quality.

A certified Hydrogeologist from Dillon Consulting, has provided an Annual report, with analysis and comparisons of all historical data to date. (see Attachment 5) Copies of all data are also filed in the NET and Dillon offices.

Sampling Rain Events for Pond Discharge

SW3 continuously met permit requirements before water discharge by authorised staff. The sample results have been included for review (see Attachment 6).

Summary of Registered Complaints

NET maintains a log of complaints made to the site regarding off site odours and the actions taken to resolve the concern. There were no off-site odour issues in 2004. The newly implemented communications system and material delivery protocol has proved successful in alleviating odour escape from the buildings.

Building Floor Inspections and Repairs

The bulk of Curing Building Floor was inspected and repaired as per permit requirements in 2003. The remaining 100 foot section was completed the end of February 2004. The Receiving building floor was also inspected and repaired during that period.

(See below for the inspection results, (Wilcraft's report) & the revised repair schedule 2006-2007):

Curing/Receiving Building Repair Schedule 2003-2004

East End	Curing Building			West End
Mar 7-8 2003 150 ft inspected/repared Wilcraft	Feb16-22 2004 100 ft section inspected/repared Wilcraft	Feb 27-28 2003 50 ft inspected/ repaired Wilcraft	Feb 20-21 2003 60 ft inspected/ repaired Wilcraft	Feb 13-15 2003 80 ft inspected/ repaired Wilcraft

The above schedule summarizes work completed in 2003, with one highlighted 100 foot section, completed February 16-22, 2004. Inspection and repairs of 440 feet of Curing Building floor was entirely completed at the end of that period. Minor repairs of the Receiving Building floor was also completed at that time. (refer to Wilcraft report for details).

An up-dated - Curing Building Inspection and Repair Schedule has been included for your files. As well, a complete inspection and any necessary repairs of the Receiving Building will be conducted during that period. Necessary reports will follow any repairs.



WILCRAFT

CONCRETE SERVICES LTD.

P.O. BOX 8686
HALIFAX, NOVA SCOTIA B3K 5M4
(902) 453-2500 FAX: (902) 429-1552

"CONCRETE RESTORATION SPECIALISTS"

March 08, 2004

New Era Technologies
61 Evergreen Place
Goodwood, N.S., B3T 1P2

ATT: Mr. Gerald Tibbo

PH: 876-5185 FAX: 876-5163

**RE: Repair of cracks in concrete slab in main compost
Curing/receiving buildings as part of 2003/2004
maintenance program.**

Dear Gerald,

Wilcraft has repaired cracks along the complete length of the "Curing Building" as per the schedule attached, supplied by New Era Technologies, in the time frames shown.

Wilcraft participated in the inspection and selection of cracks to be repaired in the concrete floor as per the attached schedule.

The receiving building floor was inspected and a small area repaired as part of the 2004 maintenance program.

Injection of the cracks was completed using polyurethane flexible resin as supplied by "Multiurethanes Ltd." of Missisauga, Ontario.

Due to the use of the floor, your ongoing regularly scheduled maintenance inspections are recommended.

Should you have any questions on the foregoing, please do not hesitate to call.

Yours truly,

D.W.Wilson, P.Eng.

Curing Building Check/Repair Schedule

0 - 21.5 M 70 Ft. Due Mar. 2007	21.5 - 88.5 M = 70M 230 Ft. Due Feb 2006	88.5 - 134 M = 45.5 M 150 Ft. Due Feb. 2007
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100 Foot Centre Completed
In February 2004

Receiving Building To be Checked Feb 2006

Attachment 1
Compost Sampling Results & Audits

Bio-Logic Environmental Systems

Responsible Waste & Resource Management
18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

July 20, 2004

Environmental Monitoring and Compliance
Nova Scotia Department of Environment and Labour
Sunnyside Mall, Suite 224
1595 Bedford Highway
Bedford, NS
B4A 3Y4

Re: Confirmation of Sampling Audit

A sampling audit of testing practices took place on June 21st between Suzanne Musolino, Darren Evans and myself in the sampling of compost for the purposes of testing at the New Era facility. The exercise is a continuation of the bi-annual check of sampling practices that began in May 2003 in which a written procedure was developed and applied.

The demonstrated sampling practices fully satisfied the exercise's requirements. Foreign matter analyses are taking place before the screening stage and still remain within the provincial standards and are reported in terms of foreign matter greater than 25 mm (provincial criteria) as well as total foreign matter. Please feel free to give me a call if there are any questions or directives arising from the submitted report.



Paul Arnold, P.Eng, MBA, PhD
Bio-Logic Environmental Systems

Bio-Logic Environmental Systems

Responsible Waste & Resource Management
18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

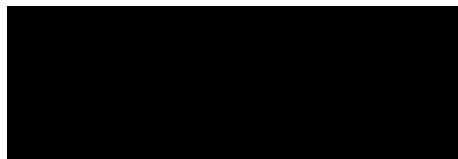
December 21, 2004

Environmental Monitoring and Compliance
Nova Scotia Department of Environment and Labour
Sunnyside Mall, Suite 224
1595 Bedford Highway
Bedford, NS
B4A 3Y4

Re: Confirmation of Sampling Audit

A sampling audit of testing practices took place on December 21st with Darren Evans and myself in the sampling of compost for the purposes of testing at the New Era facility. The exercise is a continuation of the bi-annual check of sampling practices that began in May 2003 in which a written procedure was developed and applied.

The demonstrated sampling practices fully satisfied the exercise's requirements. Foreign matter analyses are now taking place after the screening stage for a better reflection of product quality and are reported in terms of foreign matter greater than 25 mm (provincial criteria) as well as total foreign matter. Please feel free to give me a call if there are any questions or directives arising from the submitted report.



Paul Arnold, P.Eng, MBA, PhD
Bio-Logic Environmental Systems

Bio-Logic Environmental Systems
 Responsible Waste & Resource Management
 18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

February 17, 2004

New Era Farms Ltd.
 61 Evergreen Place
 Goodwood, NS
 B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on January 9/04 are complete. Samples were obtained from a batch representing approximately 1000 tonnes. The metals and pathogen concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines, and the compost stability test consisting of the C:N ratio and the germination and growth tests comply with the Provincial standards.

Summary Analyses of Sample from January 9/04

	Germination /10 seeds		Growth g/plant		C:N Ratio	Fecal Coliform CFU/g DS	Salmonella MPN/4 g DS	Foreign Matter
	Cress	Radish	Cress	Radish				
Standard	5.6	7.9	0.032	0.103	25:1	<1000	<3	0% (>25mm)
Sample	6.0	9.5	0.058	0.269	11:1	11	-	0%

Please feel free to give me a call if there are any questions or directives arising from the submitted report.



Paul Arnold, P.Eng, MBA, PhD
 Bio-Logic Environmental Systems

Date Generated
11-Feb-2004
Spreadsheet File Name
0401309H.XLS

Client ID: 20040109
Project ID:
PSC Analytical ID: 04-H005103
Matrix: Soil
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H-0 pH Soil	Electrode	1	Units	6.6
C-H-0 Antimony Recovery	ICP-MS	-	%	40
C-H-0 Moisture	Grav.	1	%	45
C-H-0 Mercury	CVAA	0.01	mg/kg	0.07
C-H-0 Potassium	ICP-OES	100	mg/Kg	9550
C-H-0 Chloride	COBAS	5	mg/Kg	7700
C-H-0 Mercury Digestion	Acid	-		20040205-B
C-H-0 HNO3 Peroxide Digestion	EPA 3050A	-		20040204-A
C-H-0 Dry Aqueous Leach	Leach	-		1:5
C-H-0 Phosphorus	ICP-OES	100	mg/Kg	4720
C-H-3 Total Carbon	LECO	0.2	g/kg	330
C-H-3 Nitrogen, Total Kjeldahl		100	mg/Kg	16000
C-H-3 Grind For Prep	Grind	-		Completed
C-H-3 Nitrogen, Total Kjeldahl	Calculated	100	mg/Kg	29000
C-H-3 C:N Ratio	Calculated	-		11
†-Metal Aluminum	ICP-MS	10	mg/kg	2300
†-Metal Antimony	ICP-MS	2	mg/kg	< 2
†-Metal Arsenic	ICP-MS	2	mg/kg	5
†-Metal Barium	ICP-MS	5	mg/kg	74
†-Metal Beryllium	ICP-MS	2	mg/kg	< 2
†-Metal Boron	ICP-MS	5	mg/kg	13
†-Metal Cadmium	ICP-MS	0.3	mg/kg	0.4
†-Metal Chromium	ICP-MS	2	mg/kg	20
†-Metal Cobalt	ICP-MS	1	mg/kg	5
†-Metal Copper	ICP-MS	2	mg/kg	36
†-Metal Iron	ICP-MS	50	mg/kg	5600
†-Metal Iron Recovery	ICP-MS	-	%	90
†-Metal Lead	ICP-MS	0.5	mg/kg	48
†-Metal Manganese	ICP-MS	2	mg/kg	260
†-Metal Molybdenum	ICP-MS	2	mg/kg	2
†-Metal Nickel	ICP-MS	2	mg/kg	8
†-Metal Selenium	ICP-MS	2	mg/kg	< 2
†-Metal Silver	ICP-MS	0.5	mg/kg	< 0.5
†-Metal Strontium	ICP-MS	5	mg/kg	48
†-Metal Thallium	ICP-MS	0.1	mg/kg	< 0.1
†-Metal Uranium	ICP-MS	0.1	mg/kg	0.3
†-Metal Vanadium	ICP-MS	2	mg/kg	6
†-Metal Zinc	ICP-MS	5	mg/kg	120

All results expressed on a dry weight basis for soils and a wet weight (as received) basis for tissues.

Date Generated
20-Jan-2004
Spreadsheet File Name
0400294H-95H.XLS

Client ID:	20031222A	20040109
Project ID:		
PSC Analytical ID:	04-H000956	04-H000957
Matrix:	Microbiology	Microbiology
Duplicate of:		
Date Sampled:	9-Jan-04	9-Jan-04
Client Description:		

Parameters	Method	EQL	Units		
C-H-2 Fecal Coliform (MTM)	MFHPB-19	2	cfu/gram	79	11
C-H-2 Salmonella	MFHPB-20	-		Not Detected	Not Detected

Fecal / sal. pass
for both samples

- ① 20031222A
- ② 20040109

Bio-Logic Environmental Systems

Responsible Waste & Resource Management
18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

April 23, 2004

New Era Farms Ltd.
61 Evergreen Place
Goodwood, NS
B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on February 9/04 are now complete. Although the initial sample failed the germination test, two additional samples were collected as required and subsequently passed. Samples were obtained from a batch representing approximately 1000 tonnes. The metals and pathogen concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines, and the C:N ratio complies with the Provincial standards. The results from PSC and the two germination tests are provided below.

Summary Analyses of Sample from February 9/04

	Germination /10 seeds		Growth g/plant		C:N Ratio	Fecal Coliform MPN/gDS	Salmonella MPN/4 g DS	Foreign Matter (>25mm)
	Cress	Radish	Cress	Radish				
Original Standard	5.2	7.7						
Original Sample	4.5	6.8						
Re-sampled Standard	6.3	5.9	0.03	0.09	25:1	<1000	<3	0%
Re-samples (duplicates)	7.0	6.0	0.10	0.26	13:1	17	-	0%
	7.3	6.5	0.07	0.23				(0.57% total)

Please feel free to give me a call if there are any questions or directives arising from the submitted report.



Paul Arnold, P.Eng, MBA, PhD
Bio-Logic Environmental Systems

Date Generated
2-Apr-2004
Spreadsheet File Name
0404650H.XLS

Client ID: 20040209 Jar
Project ID:
PSC Analytical ID: 04-H018266
Matrix: Compost
Duplicate of:
Date Sampled: 9-Feb-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 pH Soil	Electrode	1	Units	6.3
C-H-0 Antimony Recovery	ICP-MS	-	%	30
C-H-0 Mercury	CVAA	0.01	mg/kg	0.05
C-H-0 Potassium	ICP-OES	100	mg/Kg	8360
C-H-0 Chloride	COBAS	5	mg/Kg	< 500
C-H-0 Mercury Digestion	Acid	-		20040331-A
C-H-0 HNO3 Peroxide Digestion	EPA 3050A	-		20040401-A
C-H-0 Dry Aqueous Leach	Leach	-		1:5
C-H-0 Phosphorus	ICP-OES	100	mg/Kg	3660
C-H-3 Total Carbon	LECO	0.2	g/kg	370
C-H-3 Moisture	ASTMD3173	1	%(w)	62
C-H-3 Nitrogen, Total Kjeldahl		100	mg/Kg	11000
C-H-3 Grind For Prep	Grind	-		Completed
C-H-3 Nitrogen, Total Kjeldahl	Calculated	100	mg/Kg	29000
C-H-3 C:N Ratio	Calculated	-		13
1-Metal Aluminium	ICP-MS	10	mg/kg	2500
1-Metal Antimony	ICP-MS	2	mg/kg	< 2
1-Metal Arsenic	ICP-MS	2	mg/kg	6
1-Metal Barium	ICP-MS	5	mg/kg	92
1-Metal Beryllium	ICP-MS	2	mg/kg	< 2
1-Metal Boron	ICP-MS	5	mg/kg	18
1-Metal Cadmium	ICP-MS	0.3	mg/kg	0.4
1-Metal Chromium	ICP-MS	2	mg/kg	15
1-Metal Cobalt	ICP-MS	1	mg/kg	3
1-Metal Copper	ICP-MS	2	mg/kg	57
1-Metal Iron	ICP-MS	50	mg/kg	5200
1-Metal Iron Recovery	ICP-MS	-	%	90
1-Metal Lead	ICP-MS	0.5	mg/kg	35
1-Metal Manganese	ICP-MS	2	mg/kg	250
1-Metal Molybdenum	ICP-MS	2	mg/kg	2
1-Metal Nickel	ICP-MS	2	mg/kg	8
1-Metal Selenium	ICP-MS	2	mg/kg	< 2
1-Metal Silver	ICP-MS	0.5	mg/kg	< 0.5
1-Metal Strontium	ICP-MS	5	mg/kg	51
1-Metal Thallium	ICP-MS	0.1	mg/kg	< 0.1
1-Metal Uranium	ICP-MS	0.1	mg/kg	0.3
1-Metal Vanadium	ICP-MS	2	mg/kg	6
1-Metal Zinc	ICP-MS	5	mg/kg	130

All results expressed on a dry weight basis for soils and a wet weight (as received) basis for tissues.

Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0401735H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2004/02/18 (Event 604)
Reported : 2004/02/18

04-H006796

20040209

Fecal Coliform (MTM)
Salmonella

Date Sampled : 2004/02/09
Time Sampled : 14:00
Date Received : 2004/02/09
17. cfu/gram
not detected



New Era Technologies

61 Evergreen Place
Goodwood, Nova Scotia, B3T 1P2
Telephone: 902-876-5155 - Fax: 902-876-5163

Mar 10, 2004

Nova Scotia Department of Environment and Labour
Sunnyside Mall
2nd Floor, Suite 224
1595 Bedford Highway
Bedford, Nova Scotia
B4A 3Y4

Attention: Mr. Frank MacNeil, P.Eng.

The compost sample labeled 20040209 passed the fecal and salmonella testing, however, did not pass the germination testing. Paul Arnold indicated that the sample was shy three to four germination's to meet the requirements of a pass. Two subsequent re-samples are currently being performed. New Era will have PSC continue to "Hold" the refrigerated sample to be tested for metals and C:N etc., until the re-sampled germination results are confirmed.

If you have any further questions, please do not hesitate to call.

Regards,
New Era Technologies



Suzanne Musolino
Operations Supervisor

Bio-Logic Environmental Systems
 Responsible Waste & Resource Management
 18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

April 23, 2004

New Era Farms Ltd.
 61 Evergreen Place
 Goodwood, NS
 B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on February 25/03 are complete. Samples were obtained from a batch representing approximately 1000 tonnes. The metals and pathogen concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines, and the compost stability test consisting of the C:N ratio and the germination and growth tests comply with the Provincial standards.

Summary Analyses of Sample from February 25/04

	Germination /10 seeds		Growth g/plant		C:N Ratio	Fecal Coliform MPN/g DS	Salmonella MPN/4 g DS	Foreign Matter
	Cress	Radish	Cress	Radish				
Standard	6.1	7.9	0.06	0.09	25:1	<1000	<3	0% (>25mm)
Sample	6.8	8.5	0.07	0.15	14:1	49	-	0%

Please feel free to give me a call if there are any questions or directives arising from the submitted report.


 Paul Arnold, P.Eng, MBA, PhD
 Bio-Logic Environmental Systems

Date Generated
4-Mar-2004
Spreadsheet File Name
0402629H.XLS

Client ID: 20040225
Project ID:
PSC Analytical ID: 04-H010725
Matrix: Microbiology
Duplicate of:
Date Sampled: 25-Feb-04
Client Description:

Parameters	Method	EQL	Units	
C-H-2 Fecal Coliform (MTM)	MFHPB-19	2	MPNGU/gram	< 2
C-H-2 Salmonella	MFHPB-20	-		not detected

Date Generated
24-Mar-2004
Spreadsheet File Name
0403757H.XLS

Client ID: 20040225 Jar
Project ID:
PSC Analytical ID: 04-H014683
Matrix: Soil
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H:0 pH Soil	Electrode	1	Units	5.2
C-H:0 Antimony Recovery	ICP-MS	-	%	40
C-H:0 Mercury	CVAA	0.01	mg/kg	0.08
C-H:0 Potassium	ICP-OES	100	mg/Kg	7080
C-H:0 Chloride	COBAS	5	mg/Kg	5700
C-H:0 Mercury Digestion	Acid	-		20040323-A
C-H:0 HNO3 Peroxide Digestion	EPA 3050A	-		20040319-A
C-H:0 Dry Aqueous Leach	Leach	-		1:5
C-H:0 Phosphorus	ICP-OES	100	mg/Kg	5470
C-H:3 Total Carbon	LECO	0.2	g/kg	430
C-H:3 Moisture	ASTMD3173	1	%(w)	57
C-H:3 Nitrogen, Total Kjeldahl		100	mg/Kg	12000
C-H:3 Grind For Prep	Grind	-		Completed
C-H:3 Nitrogen, Total Kjeldahl	Calculated	100	mg/Kg	28000
C-H:3 C:N Ratio	Calculated	-		15
†-Metal Aluminum	ICP-MS	10	mg/kg	1600
†-Metal Antimony	ICP-MS	2	mg/kg	< 2
†-Metal Arsenic	ICP-MS	2	mg/kg	4
†-Metal Barium	ICP-MS	5	mg/kg	66
†-Metal Beryllium	ICP-MS	2	mg/kg	< 2
†-Metal Boron	ICP-MS	5	mg/kg	14
†-Metal Cadmium	ICP-MS	0.3	mg/kg	0.5
†-Metal Chromium	ICP-MS	2	mg/kg	13
†-Metal Cobalt	ICP-MS	1	mg/kg	3
†-Metal Copper	ICP-MS	2	mg/kg	43
†-Metal Iron	ICP-MS	50	mg/kg	4100
†-Metal Iron Recovery	ICP-MS	-	%	90
†-Metal Lead	ICP-MS	0.5	mg/kg	31
†-Metal Manganese	ICP-MS	2	mg/kg	210
†-Metal Molybdenum	ICP-MS	2	mg/kg	2
†-Metal Nickel	ICP-MS	2	mg/kg	8
†-Metal Selenium	ICP-MS	2	mg/kg	< 2
†-Metal Silver	ICP-MS	0.5	mg/kg	< 0.5
†-Metal Strontium	ICP-MS	5	mg/kg	56
†-Metal Thallium	ICP-MS	0.1	mg/kg	< 0.1
†-Metal Uranium	ICP-MS	0.1	mg/kg	0.2
†-Metal Vanadium	ICP-MS	2	mg/kg	7
†-Metal Zinc	ICP-MS	5	mg/kg	150

20040225
Pass

Bio-Logic Environmental Systems

Responsible Waste & Resource Management
18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

April 23, 2004

New Era Farms Ltd.
61 Evergreen Place
Goodwood, NS
B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on March 15/03 are complete. Samples were obtained from a batch representing approximately 1000 tonnes. The metals and pathogen concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines, and the compost stability test consisting of the C:N ratio and the germination and growth tests comply with the Provincial standards.

Summary Analyses of Sample from March 15/04

	Germination /10 seeds		Growth g/plant		C:N Ratio	Fecal Coliform MPN/g DS	Salmonella MPN/4 g DS	Foreign Matter (>25mm)
	Cress	Radish	Cress	Radish				
Standard	3.8	8.1	0.03	0.06	25:1	<1000	<3	0%
Sample	4.3	10.0	0.06	0.28	12:1	<2	-	0% (0.87% total)

Please feel free to give me a call if there are any questions or directives arising from the submitted report.


Paul Arnold, P.Eng, MBA, PhD
Bio-Logic Environmental Systems

Date Generated
25-Mar-2004
Spreadsheet File Name
0403690H.XLS

Client ID: 20040315 Bag
Project ID:
PSC Analytical ID: 04-H014340
Matrix: Microbiology
Duplicate of:
Date Sampled: 15-Mar-04
Client Description:

Parameters	Method	EQL	Units	
C-H-2 Fecal Coliform (MTM)	MFHPB-19	2	MPNGU/gram	< 2
C-H-2 Salmonella	MFHPB-20	-		not detected

20040315
PSS

Date Generated
15-Apr-2004
Spreadsheet File Name
0405342H.XLS

Client ID: 20040315 Jar
Project ID:
PSC Analytical ID: 04-H020716
Matrix: Soil
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Antimony Recovery	ICP-MS	-	%	50
C-H-0 Potassium	ICP-OES	100	mg/Kg	4550
C-H-0 HNO3 Peroxide Digestion	EPA 3050A	-		20040413-A
C-H-0 Phosphorus	ICP-OES	100	mg/Kg	4750
C-H-3 Grind For Prep	Grind	-		Completed
+Metal Aluminum	ICP-MS	10	mg/kg	1900
+Metal Antimony	ICP-MS	2	mg/kg	< 2
+Metal Arsenic	ICP-MS	2	mg/kg	3
+Metal Barium	ICP-MS	5	mg/kg	54
+Metal Beryllium	ICP-MS	2	mg/kg	< 2
+Metal Boron	ICP-MS	5	mg/kg	14
+Metal Cadmium	ICP-MS	0.3	mg/kg	0.5
+Metal Chromium	ICP-MS	2	mg/kg	17
+Metal Cobalt	ICP-MS	1	mg/kg	4
+Metal Copper	ICP-MS	2	mg/kg	47
+Metal Iron	ICP-MS	50	mg/kg	4400
+Metal Iron Recovery	ICP-MS	-	%	80
+Metal Lead	ICP-MS	0.5	mg/kg	33
+Metal Manganese	ICP-MS	2	mg/kg	220
+Metal Molybdenum	ICP-MS	2	mg/kg	2
+Metal Nickel	ICP-MS	2	mg/kg	8
+Metal Selenium	ICP-MS	2	mg/kg	< 2
+Metal Silver	ICP-MS	0.5	mg/kg	< 0.5
+Metal Strontium	ICP-MS	5	mg/kg	69
+Metal Thallium	ICP-MS	0.1	mg/kg	< 0.1
+Metal Uranium	ICP-MS	0.1	mg/kg	0.4
+Metal Vanadium	ICP-MS	2	mg/kg	5
+Metal Zinc	ICP-MS	5	mg/kg	140

Date Generated
14-Apr-2004
Spreadsheet File Name
0405337H.XLS

Client ID: 20040315 Jar
Project ID:
PSC Analytical ID: 04-H020686
Matrix: Compost
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H-0 pH Soil	Electrode	1	Units	6
C-H-0 Mercury	CVAA	0.01	mg/kg	0.05
C-H-0 Chloride	COBAS	5	mg/Kg	2900
C-H-0 Mercury Digestion	Acid	-		20040413-A
C-H-0 Dry Aqueous Leach	Leach	-		1:5
C-H-3 Total Carbon	LECO	0.2	g/kg	400
C-H-3 Moisture	ASTMD3173	1	%(w)	64
C-H-3 Nitrogen, Total Kjeldahl		100	mg/Kg	12000
C-H-3 Grind For Prep	Grind	-		Completed
C-H-3 Nitrogen, Total Kjeldahl	Calculated	100	mg/Kg	33000
C-H-3 C:N Ratio	Calculated	-		12
C-H-5 RCap Comments	Comment		Text	ded for CI due to

Bio-Logic Environmental Systems

Responsible Waste & Resource Management
18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

August 4, 2004

New Era Farms Ltd.
61 Evergreen Place
Goodwood, NS
B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on June 21/04 are complete. Samples were obtained from a batch representing approximately 700 tonnes. The metals concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines, and the compost stability test consisting of the C:N ratio and the germination and growth tests comply with the Provincial standards. The initial fecal coliform count was above the allowable limit of 1000 MPN/g, however a subsequent re-test in duplicate produced results below the allowable limit.

Summary Analyses of Sample from June 21/04

	Germination /10 seeds		Growth g/plant		C:N Ratio	Fecal Coliform MPN/g DS	Salmonella MPN/4 g DS	Foreign Matter >25mm
	Cress	Radish	Cress	Radish				
Standard	7.9	8.3	0.021	0.11	<25:1	<1000	<3	0%
Sample	8.8	9.5	0.085	0.43	12:1	9200(Initial) 7(Re-test) 13(Re-test)	-	0% (0.46% total)

Please feel free to give me a call if there are any questions or directives arising from the submitted report.

Paul Arnold, P.Eng, MBA, PhD
Bio-Logic Environmental Systems



New Era Technologies

61 Evergreen Place
Gondwood, Nova Scotia, B3T 1P2
Telephone: 902-876-5185 - Fax: 902-876-5103

July 6, 2004

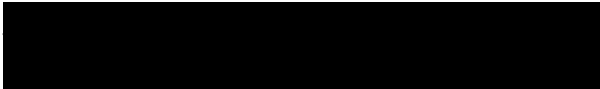
Nova Scotia Department of Environment and Labour
Sunnyside Mall
2nd Floor, Suite 224
1595 Bedford Highway
Bedford, Nova Scotia
B4A 3Y4

Attention: Mr. Steve Westhaver, P.Eng.

The compost sample labeled 20040621, failed to meet the requirements in terms of fecal contamination, for a category A compost. The results have been included for your review. Two subsequent re-samples are currently being performed, as per protocol, to rule out sampler or lab errors and to ensure the quality of material. New Era will have PSC continue to "Hold" the refrigerated sample to be tested for metals, pH and C:N until the fecal re-sample results are confirmed. Once all the testing has been completed and the data collected, the full report will be forwarded for your review.

If you have any further questions, please do not hesitate to call.

Regards,
New Era Technologies


Suzanne Musolino
Operations Supervisor

Date Generated
6-Jul-2004
Spreadsheet File Name
0410828H.XLS

Client ID: 20040621
Project ID:
PSC Analytical ID: 04-H040181
Matrix: Microbiology
Duplicate of:
Date Sampled: 21-Jun-04
Client Description:

Parameters	Method	EQL	Units
C-H-:2 Fecal Coliform (MTM)	MFHPB-19	2	PNGU/gra
C-H-:2 Salmonella	MFHPB-20	.	9200 not detected

failed
Sample 20040621
② Re-samples done July 7/04
(per spec)

Date Generated 15-Jul-2004
Spreadsheet File Name 0412000,106H.XLS

Client ID:	Fecal Coli 200406	al Coli 200406	ample 2004062	ample 2004062
Project ID:				
PSC Analytical ID:	04-H044346	04-H044347	04-H044760	04-H044761
Matrix:	Microbiology	Microbiology	Microbiology	Microbiology
Duplicate of:				
Date Sampled:	7-Jul-04	7-Jul-04	8-Jul-04	8-Jul-04
Client Description:	Resample	Resample		

Parameters	Method	EQL	Units				
C-H-:2 Fecal Coliform (MTM)	MFHPB-19	2	PNGU/gra	7	13	< 2	8

Date Generated
22-Jul-2004
Spreadsheet File Name
0412540H.XLS

Client ID: 20040621
Project ID:
PSC Analytical ID: 04-H046416
Matrix: Soil
Duplicate of:
Date Sampled: 21-Jun-04
Client Description:

Parameters	Method	EQL	Units	
C-H:-0 pH Soil	Electrode	1	Units	6.1
C-H:-0 Antimony Recovery	ICP-MS	-	%	40
C-H:-0 Mercury	CVAA	0.01	mg/kg	0.28
C-H:-0 Potassium	ICP-OES	100	mg/Kg	4380
C-H:-0 Chloride	COBAS	5	mg/Kg	1500
C-H:-0 Mercury Digestion	Acid	-		20040720-A
C-H:-0 HNO3 Peroxide Digestion	EPA 3050A	-		20040720-A
C-H:-0 Dry Aqueous Leach	Leach	-		1:5
C-H:-0 Phosphorus	ICP-OES	100	mg/Kg	2860
C-H:-3 Total Carbon	LECO	0.2	g/kg	320
C-H:-3 Moisture	ASTMD3173	1	%(w)	58
C-H:-3 Nitrogen, Total Kjeldahl		100	mg/Kg	11000
C-H:-3 Grind For Prep	Grind	-		Completed
C-H:-3 Nitrogen, Total Kjeldahl	Calculated	100	mg/Kg	26000
C-H:-3 C:N Ratio	Calculated	-		12
C-H:-5 Inorganic Comment	Comment	-	Text	sample diluted
-Meta Aluminum	ICP-MS	10	mg/kg	2900
-Meta Antimony	ICP-MS	2	mg/kg	< 2
-Meta Arsenic	ICP-MS	2	mg/kg	5
-Meta Barium	ICP-MS	5	mg/kg	70
-Meta Beryllium	ICP-MS	2	mg/kg	< 2
-Meta Boron	ICP-MS	5	mg/kg	11
-Meta Cadmium	ICP-MS	0.3	mg/kg	0.3
-Meta Chromium	ICP-MS	2	mg/kg	16
-Meta Cobalt	ICP-MS	1	mg/kg	6
-Meta Copper	ICP-MS	2	mg/kg	32
-Meta Iron	ICP-MS	50	mg/kg	6600
-Meta Iron Recovery	ICP-MS	-	%	80
-Meta Lead	ICP-MS	0.5	mg/kg	72
-Meta Manganese	ICP-MS	2	mg/kg	280
-Meta Molybdenum	ICP-MS	2	mg/kg	< 2
-Meta Nickel	ICP-MS	2	mg/kg	10
-Meta Selenium	ICP-MS	2	mg/kg	< 2
-Meta Silver	ICP-MS	0.5	mg/kg	< 0.5
-Meta Strontium	ICP-MS	5	mg/kg	46
-Meta Thallium	ICP-MS	0.1	mg/kg	0.1
-Meta Uranium	ICP-MS	0.1	mg/kg	0.5
-Meta Vanadium	ICP-MS	2	mg/kg	10
-Meta Zinc	ICP-MS	5	mg/kg	140

Bio-Logic Environmental Systems
Responsible Waste & Resource Management
18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

November 1, 2004

New Era Farms Ltd.
61 Evergreen Place
Goodwood, NS
B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on September 14/04 are complete. Samples were obtained from a batch representing approximately 1000 tonnes of material. The metals concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines. The compost stability test consisted of "Set 2" within the CCME guidelines in which: 1) the compost was cured for over 21 days in the screener building; and 2) the Dewar flask test developed a maximum temperature differential of 15°C above the ambient temperature which was 5°C below the maximum allowable reheat value. Finally, the fecal coliform count was well below the allowable limit of 1000 MPN/g.

Summary Analyses of Sample from September 14/04

	Curing Period (d)	Dewar Flask Reheat Test	Fecal Coliform MPN/g DS	Salmonella MPN/4 g DS	Foreign Matter >25mm
Standard	>21 d	<20°C	<1000	<3	0%
Sample	40 d	15°C	<2	-	0% (0.3% total)

Please feel free to give me a call if there are any questions or directives arising from the submitted report.


Paul Arnold, P.Eng, MBA, PhD
Bio-Logic Environmental Systems

Date Generated
1-Nov-2004
Spreadsheet File Name
0419638H.XLS

Client ID: 20040914 Jar#2
Project ID:
PSC Analytical ID: 04-H075614
Matrix: Soil
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H-0 pH Soil	Electrode	1	Units	6.7
C-H-0 Antimony Recovery	ICP-MS	-	%	60
C-H-0 Mercury	CVAA	0.01	mg/kg	0.05
C-H-0 Potassium	ICP-OES	100	mg/Kg	7760
C-H-0 Chloride	COBAS	5	mg/Kg	< 5000
C-H-0 Mercury Digestion	Acid	-		20041028-A
C-H-0 HNO3 Peroxide Digestion	EPA 3050A	-		20041027-A
C-H-0 Dry Aqueous Leach	Leach	-		1:5
C-H-0 Phosphorus	ICP-OES	100	mg/Kg	4030
C-H-3 Total Carbon	LECO	0.2	g/kg	270
C-H-3 Moisture	ASTMD3173	1	%(w)	53
C-H-3 Nitrogen, Total Kjeldahl		100	mg/Kg	9300
C-H-3 Grind For Prep	Grind	-		Completed
C-H-3 Nitrogen, Total Kjeldahl	Calculated	100	mg/Kg	20000
C-H-3 C:N Ratio	Calculated	-		14
-Meta Aluminum	ICP-MS	10	mg/kg	4000
-Meta Antimony	ICP-MS	2	mg/kg	< 2
-Meta Arsenic	ICP-MS	2	mg/kg	6
-Meta Barium	ICP-MS	5	mg/kg	63
-Meta Beryllium	ICP-MS	2	mg/kg	< 2
-Meta Boron	ICP-MS	5	mg/kg	8
-Meta Cadmium	ICP-MS	0.3	mg/kg	0.4
-Meta Chromium	ICP-MS	2	mg/kg	11
-Meta Cobalt	ICP-MS	1	mg/kg	3
-Meta Copper	ICP-MS	2	mg/kg	45
-Meta Iron	ICP-MS	50	mg/kg	8500
-Meta Iron Recovery	ICP-MS	-	%	80
-Meta Lead	ICP-MS	0.5	mg/kg	54
-Meta Manganese	ICP-MS	2	mg/kg	340
-Meta Molybdenum	ICP-MS	2	mg/kg	2
-Meta Nickel	ICP-MS	2	mg/kg	9
-Meta Selenium	ICP-MS	2	mg/kg	< 2
-Meta Silver	ICP-MS	0.5	mg/kg	< 0.5
-Meta Strontium	ICP-MS	5	mg/kg	55
-Meta Thallium	ICP-MS	0.1	mg/kg	0.1
-Meta Uranium	ICP-MS	0.1	mg/kg	0.5
-Meta Vanadium	ICP-MS	2	mg/kg	9
-Meta Zinc	ICP-MS	5	mg/kg	130

Date Generated 23-Sep-2004
Spreadsheet File Name 0416593H.XLS

Client ID:	20040914 Jar#1
Project ID:	
PSC Analytical ID:	04-H063043
Matrix:	Soil
Duplicate of:	
Date Sampled:	14-Sep-04
Client Description:	

Parameters	Method	EQL	Units	
C-H-2 Fecal Coliform (MTM)	MFHPB-19	2	MPNGU/gram	< 2
C-H-2 Salmonella	MFHPB-20	-		not detected

Bio-Logic Environmental Systems
 Responsible Waste & Resource Management
 18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

December 21, 2004

New Era Farms Ltd.
 61 Evergreen Place
 Goodwood, NS
 B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on November 1/04 are complete. Samples were obtained from a batch representing approximately 1000 tonnes of material. The metals concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines. The compost stability test consisted of "Set 2" within the CCME guidelines in which: 1) the compost was cured for over 21 days in the screener building; and 2) the Dewar flask test developed a maximum temperature differential of 17.8°C above the ambient temperature which was below the maximum allowable reheat value. Finally, the fecal coliform count was well below the allowable limit of 1000 MPN/g.

Summary Analyses of Sample from November 1/04

	Curing Period (d)	Dewar Flask Reheat Test	Fecal Coliform MPN/g DS	Salmonella MPN/4 g DS	Foreign Matter >25mm
Standard	>21 d	<20°C	<1000	<3	0%
Sample	35 d	17.8°C	<2	-	0% (0.4% total)

Please feel free to give me a call if there are any questions or directives arising from the submitted report



Paul Arnold, P.Eng, MBA, PhD
 Bio-Logic Environmental Systems



Inorganic Parameters

page : 1

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0421797H
 Client Project Number :

EVANS, DARREN

FAX # : 876-5163
 Printed : 2004/11/30 (Event 649)
 Reported : 2004/11/30

Matrix
 Philip ID
 Client ID
 Compost
 04-H085652
 20041101

Date Sampled (y/m/d)
 Date Received (y/m/d) 04/11/22

Analyte	Units	EQL	
Chloride	mg/Kg	5.0	1900
HNO3 Peroxide Digestion	-	-	20041125-A
Dry Aqueous Leach	-	-	1:5
Mercury Digestion	-	-	20041129-A
pH Soil	Units	1.0	6.5

Aluminum	mg/kg	10	3500
Antimony	mg/kg	2.	nd
Antimony Recovery	%	-	40.
Arsenic	mg/kg	2.	6.
Barium	mg/kg	5.	62.

Beryllium	mg/kg	2.	nd
Boron	mg/kg	5.	10.
Cadmium	mg/kg	0.3	0.4
Chromium	mg/kg	2.	14.
Cobalt	mg/kg	1.	5.

Copper	mg/kg	2.	44.
Iron	mg/kg	50	7300
Iron Recovery	%	-	80.
Lead	mg/kg	0.5	50.

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

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

page verified /

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0421797H
Client Project Number :

EVANS, DARREN

FAX # : 876-5163
Printed : 2004/11/30 (Event 651)
Reported : 2004/11/30

Matrix	Compost		
Philip ID	04-H085652		
Description			
Client ID	20041101		
Date Sampled (y/m/d)			
Date Received (y/m/d)	04/11/22		
Analyte	Units	EQL	
Total Carbon	g/kg	0.2	280
Moisture	% (w)	1.	51.
Grind For Prep		-	completed
Nitrogen, Total Kjeldahl	mg/Kg	100	24000
C:N Ratio		-	11.

Legend

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

ND () = Not Detected, our instruments did not detect anything above EQL. Raised EQL listed in Parenthesis.

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

Event # = PSC Quality Control Reference number for QC samples run with your sample.

%REC = Surrogate Recovery Values are results of PSC quality control tests.

Note

- : Soil results are expressed on a dry weight basis.
- : Food results are expressed on a wet weight basis.

page verified

Date Generated
10-Nov-2004
Spreadsheet File Name
0420276H.XLS

Client ID: 20041101
Project ID:
PSC Analytical ID: 04-H076626
Matrix: Microbiology
Duplicate of:
Date Sampled: 1-Nov-04
Client Description:

Parameters	Method	EQL	Units	
C-H-2 Fecal Coliform (MTM)	MFHPB-19	2	MPN/gU/gram	< 2
C-H-2 Salmonella	MFHPB-20	-		not detected

PSC ANALYTICAL SERVICES

Prepared For:
Suzanne Musolino

Date Generated
30-Dec-2004
Spreadsheet File Name
0423983H.XLS

Client ID: 20041220
Project ID:
PSC Analytical ID: 04-H094549
Matrix: Microbiology
Duplicate of:
Date Sampled: 20-Dec-04
Client Description:

Parameters	Method	EQL	Units	
C-H-:2 Fecal Coliform (Isogrid)	MFLP 55	10	cfu/gram	< 100
C-H-:2 Salmonella	MFHPB-20	-		not detected

Bio-Logic Environmental Systems
 Responsible Waste & Resource Management
 18 Erin Drive, Dartmouth, NS, B2W 2B8, (902) 449-6910

January 14, 2005

New Era Farms Ltd.
 61 Evergreen Place
 Goodwood, NS
 B3T 1P2

Attention: Gerald Tibbo

Dear Gerald,

The tests from the compost sample obtained from New Era Farms on December 20/04 are complete. Samples were obtained from a batch representing approximately 1000 tonnes. The metals concentrations (undertaken by PSC Analytical Services) were within the CCME guidelines, and the compost stability test consisting of the C:N ratio and the germination and growth tests comply with the Provincial standards. Finally, the fecal coliform count was well below the allowable limit of 1000 MPN/g.

Summary Analyses of Sample from December 20/04

	Germination /10 seeds		Growth g/plant		C:N Ratio	Fecal Coliform MPN/g DS	Salmonella MPN/4 g DS	Foreign Matter >25mm
	Cress	Radish	Cress	Radish				
Standard	7.4	8.3	0.035	0.099	<25:1	<1000	<3	0%
Sample	8.8	8.5	0.068	0.326	13:1	<100	-	0% (0.63% total)

Please feel free to give me a call if there are any questions or directives arising from the submitted report.


 Paul Arnold, P.Eng, MBA, PhD
 Bio-Logic Environmental Systems




Prepared For:
DARREN EVANS

Date Generated
13-Jan-2005
Spreadsheet File Name
0500010H.XLS

Client ID: 20041220
Project ID:
PSC Analytical ID: 05-H000014
Matrix: Compost
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H-0 pH Soil	Electrode	1	Units	5.9
C-H-0 Antimony Recovery	ICP-MS	-	%	30
C-H-0 Mercury	CVAA	0.01	mg/kg	0.04
C-H-0 Potassium	ICP-OES	100	mg/Kg	8580
C-H-0 Chloride	COBAS	5	mg/Kg	5500
C-H-0 Mercury Digestion	Acid	-		20050107-A
C-H-0 HNO3 Peroxide Digestion	EPA 3050A	-		20050108-A
C-H-0 Dry Aqueous Leach	Leach	-		1:5
C-H-0 Phosphorus	ICP-OES	100	mg/Kg	5390
C-H-3 Total Carbon	LECO	0.2	g/kg	350
C-H-3 Moisture	ASTMD3173	1	%(w)	58
C-H-3 Nitrogen, Total Kjeldahl		200	mg/kg	11000
C-H-3 Grind For Prep	Grind	-		Completed
C-H-3 Nitrogen, Total Kjeldahl	Calculated	200	mg/kg	26000
C-H-3 C:N Ratio	Calculated	-		13
+Metal Aluminum	ICP-MS	10	mg/kg	3000
+Metal Antimony	ICP-MS	2	mg/kg	< 2
+Metal Arsenic	ICP-MS	2	mg/kg	5
+Metal Barium	ICP-MS	5	mg/kg	55
+Metal Beryllium	ICP-MS	2	mg/kg	< 2
+Metal Boron	ICP-MS	5	mg/kg	13
+Metal Cadmium	ICP-MS	0.3	mg/kg	0.3
+Metal Chromium	ICP-MS	2	mg/kg	26
+Metal Cobalt	ICP-MS	1	mg/kg	13
+Metal Copper	ICP-MS	2	mg/kg	54
+Metal Iron	ICP-MS	50	mg/kg	7500
+Metal Iron Recovery	ICP-MS	-	%	80
+Metal Lead	ICP-MS	0.5	mg/kg	38
+Metal Manganese	ICP-MS	2	mg/kg	300
+Metal Molybdenum	ICP-MS	2	mg/kg	2
+Metal Nickel	ICP-MS	2	mg/kg	11
+Metal Selenium	ICP-MS	2	mg/kg	< 2
+Metal Silver	ICP-MS	0.5	mg/kg	< 0.5
+Metal Strontium	ICP-MS	5	mg/kg	61
+Metal Thallium	ICP-MS	0.1	mg/kg	< 0.1
+Metal Uranium	ICP-MS	0.1	mg/kg	0.4
+Metal Vanadium	ICP-MS	2	mg/kg	7
+Metal Zinc	ICP-MS	5	mg/kg	140

All results expressed on a dry weight basis for soils and a wet weight (as received) basis for tissues.

	Prepared For: Suzanne Musolino		
	Date Generated 30-Dec-2004	Client ID: 20041220	
Spreadsheet File Name 0423983H.XLS	Project ID: PSC Analytical ID:	04-H094549	
	Matrix: Duplicate of:	Microbiology	
	Date Sampled: Client Description:	20-Dec-04	
Parameters	Method	EQL	Units
C-H-2 Faecal Coliform (Isogrid)	MFLP 55	10	cfu/gram
C-H-2 Salmonella	MFHPB-20	-	< 100 not detected

All results expressed on a dry weight basis for soils and a wet weight (as received) basis for tissues.

PSC ANALYTICAL SERVICES

Prepared For:
DARREN EVANS

Date Generated
13-Jan-2005
Spreadsheet File Name
0500010H.XLS

Client ID: 20041220
Project ID:
PSC Analytical ID: 05-H000014
Matrix: Compost
Duplicate of:
Date Sampled:
Client Description:

Parameters	Method	EQL	Units	
C-H-0 pH Soil	Electrode	1	Units	5.9
C-H-0 Antimony Recovery	ICP-MS	-	%	30
C-H-0 Mercury	CVAA	0.01	mg/kg	0.04
C-H-0 Potassium	ICP-OES	100	mg/Kg	8560
C-H-0 Chloride	COBAS	5	mg/Kg	5500
C-H-0 Mercury Digestion	Acid	-		20050107-A
C-H-0 HNO3 Peroxide Digestion	EPA 3050A	-		20050106-A
C-H-0 Dry Aqueous Leach	Leach	-		1:5
C-H-0 Phosphorus	ICP-OES	100	mg/Kg	5390
C-H-3 Total Carbon	LECO	0.2	g/kg	350
C-H-3 Moisture	ASTMD3173	1	%(w)	58
C-H-3 Nitrogen, Total Kjeldahl		200	mg/kg	11000
C-H-3 Grind For Prep	Grind	-		Completed
C-H-3 Nitrogen, Total Kjeldahl	Calculated	200	mg/kg	26000
C-H-3 C:N Ratio	Calculated	-		13
t-Metal Aluminum	ICP-MS	10	mg/kg	3000
t-Metal Antimony	ICP-MS	2	mg/kg	< 2
t-Metal Arsenic	ICP-MS	2	mg/kg	5
t-Metal Barium	ICP-MS	5	mg/kg	55
t-Metal Beryllium	ICP-MS	2	mg/kg	< 2
t-Metal Boron	ICP-MS	5	mg/kg	13
t-Metal Cadmium	ICP-MS	0.3	mg/kg	0.3
t-Metal Chromium	ICP-MS	2	mg/kg	26
t-Metal Cobalt	ICP-MS	1	mg/kg	13
t-Metal Copper	ICP-MS	2	mg/kg	54
t-Metal Iron	ICP-MS	50	mg/kg	7500
t-Metal Iron Recovery	ICP-MS	-	%	80
t-Metal Lead	ICP-MS	0.5	mg/kg	38
t-Metal Manganese	ICP-MS	2	mg/kg	300
t-Metal Molybdenum	ICP-MS	2	mg/kg	2
t-Metal Nickel	ICP-MS	2	mg/kg	11
t-Metal Selenium	ICP-MS	2	mg/kg	< 2
t-Metal Silver	ICP-MS	0.5	mg/kg	< 0.5
t-Metal Strontium	ICP-MS	5	mg/kg	61
t-Metal Thallium	ICP-MS	0.1	mg/kg	< 0.1
t-Metal Uranium	ICP-MS	0.1	mg/kg	0.4
t-Metal Vanadium	ICP-MS	2	mg/kg	7
t-Metal Zinc	ICP-MS	5	mg/kg	140

Attachment 2
Holding Tank/Wastewater/Well water
Results

Date Generated
12-Mar-2004
Spreadsheet File Name
0402850H.XLS

Client ID:	Biowater	Well Water
Project ID:		
PSC Analytical ID:	04-H011440	04-H011442
Matrix:	Water	Water
Duplicate of:		
Date Sampled:	1-Mar-04	1-Mar-04
Client Description:		

Parameters	Method	EQL	Units		
C-H-0 Ammonia (as N)	Auto Color	0.05	mg/L	520	
C-H-0 pH	Electrode	-	Units	4.4	
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	5320	
C-H-0 E. coli (Colifert)	CSCT	-	cfu/100mL		0
C-H-0 Total Coliform (Colifert)	CSCT	-	cfu/100mL		0
C-H-0 Total Water Digest		-			20040304-B
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	32000	
C-H-2 BOD5 Carbonaceous	APHA 5210B	2	mg/L	31000	
C-H-5 Inorganic Comment	Comment		Text	x	
+RCA Sodium	ICP-OES	0.1	mg/L		13.7
+RCA Potassium	ICP-OES	0.1	mg/L		1.1
+RCA Calcium	ICP-OES	0.1	mg/L		39.9
+RCA Magnesium	ICP-OES	0.1	mg/L		8.1
+RCA Alkalinity (as CaCO3)	COBAS	5	mg/L		130
+RCA Sulfate	COBAS	2	mg/L		5
+RCA Chloride	COBAS	1	mg/L		20
+RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L		15
+RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L		0.04
+RCA Nitrite	COBAS	0.01	mg/L		< 0.01
+RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L		< 0.05
+RCA Nitrate (as N)	COBAS	0.05	mg/L		< 0.05
+RCA Ammonia (as N)	Auto Color	0.05	mg/L		< 0.05
+RCA Color	COBAS	5	TCU		< 5
+RCA Turbidity	NEPH.	0.1	NTU		< 0.1
+RCA Conductance (RCap)	Electrode	1	uS/cm		295
+RCA pH	Electrode	-	Units		7.6
+RCA Hardness (as CaCO3)	Calculated	0.1	mg/L		133
+RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L		129
+RCA Carbonate (as CaCO3)	Calculated	1	mg/L		< 1
+RCA TDS (Calculated)	Calculated	1	mg/L		181
+RCA Cation Sum	Calculated	0.1	meq/L		3.29
+RCA Anion Sum	Calculated	0.1	meq/L		3.27
+RCA Ion Balance	Calculated	-	%		0.21
+RCA Langlier Index @ 4C	Calculated	-			-0.54
+RCA Langlier Index @ 20C	Calculated	-			-0.14
+RCA Saturation pH @ 4C	Calculated	-	Units		8.14
+RCA Saturation pH @ 20C	Calculated	-	Units		7.74
+RCA Aluminum	ICP-MS	10	ug/L		< 10
+RCA Antimony	ICP-MS	2	ug/L		< 2
+RCA Arsenic	ICP-MS	2	ug/L		3
+RCA Barium	ICP-MS	5	ug/L		11
+RCA Beryllium	ICP-MS	2	ug/L		< 2
+RCA Bismuth	ICP-MS	2	ug/L		< 2
+RCA Boron	ICP-MS	5	ug/L		22
+RCA Cadmium	ICP-MS	0.3	ug/L		< 0.3
+RCA Chromium	ICP-MS	2	ug/L		< 2
+RCA Cobalt	ICP-MS	1	ug/L		< 1
+RCA Copper	ICP-MS	2	ug/L		4
+RCA Iron	ICP-MS	50	ug/L		< 50
+RCA Lead	ICP-MS	0.5	ug/L		< 0.5
+RCA Manganese	ICP-MS	2	ug/L		11
+RCA Molybdenum	ICP-MS	2	ug/L		6
+RCA Nickel	ICP-MS	2	ug/L		< 2
+RCA Selenium	ICP-MS	2	ug/L		< 2
+RCA Silver	ICP-MS	0.5	ug/L		< 0.5
+RCA Strontium	ICP-MS	5	ug/L		160
+RCA Thallium	ICP-MS	0.1	ug/L		< 0.1
+RCA Tin	ICP-MS	2	ug/L		< 2
+RCA Titanium	ICP-MS	2	ug/L		< 2
+RCA Uranium	ICP-MS	0.1	ug/L		97
+RCA Vanadium	ICP-MS	2	ug/L		< 2
+RCA Zinc	ICP-MS	5	ug/L		7
+RCA Phosphorus	ICP-OES	0.1	mg/L		< 0.1

All results expressed on a dry weight basis for soils and a wet weight (as received) basis for tissues.

Prepared for:
Gerald Tibbo

Date Generated
12-Mar-2004
Spreadsheet File Name
0402850H.XLS

Client ID:	Blowater	Well Water
Project ID:		
PSC Analytical ID:	04-H011440	04-H011442
Matrix:	Water	Water
Duplicate of:		
Date Sampled:	1-Mar-04	1-Mar-04
Client Description:		

	Parameters	Method	EQL	Units	
+RCA	Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	< 0.5
+RCA	RCAp Comments	Comment		Text	ed to <0.2 due to

Date Generated
16-Mar-2004
Spreadsheet File Name
0402850Ha.XLS

Client ID: Biowater Detect
Project ID:
PSC Analytical ID: 04-H011441
Matrix: Water
Duplicate of:
Date Sampled: 1-Mar-04
Client Description:

Parameters	Method	EQL	Units
C-H-2 BOD5 Carbonaceous	APHA 5210B	2	mg/L 300



200 Bluewater Road, Suite 105
 Bedford, Nova Scotia B4B 1G9
 Tel: 902-420-0203 Fax: 902-420-8612
 Toll Free: 1-800-365-RCAP (7227)
 E-mail: PASI.Halfax@contactPSC.com

Client: New Era Tech PSC Quote #: _____ Client: _____
 Address: 100 Evergreen Pl Client P.O. #: _____
St. John's, N.S. Postal Code: B3V 1J8 Client Project #: _____
 Contact: Carol Tibbo Sampled By: SA Contact: _____

Phone: 709-555-5555 Fax: 709-555-5555 Sampling Date: 04/11/10 Phone: _____ Fax: _____
 E-mail: stjohn@neweratech.com Sampling Time: 13:00 E-mail Results:

**PLEASE PROVIDE
 ADVANCE NOTICE
 FOR RUSH ORDERS**
 Client contacted if RUSH Date cannot be met
RUSH (Extra Cost) Specify Date
 Standard 5-7 Business Days
 10 Business Days

Date Entered	Verified By	W.O. #	Client Code	PSC Sample #	Client Sample I.D.	No. & Type of Bottles	Matrix: Surface/Salt/Crunch/Tapwater Sewage/Effluent/Tissue/Soil	Field Filtered & Preserved	Lab Filtration Required	RCAP-30 Choose: Total or Diss. Metals	RCAP-MS Choose: Total or Diss. Metals	Metals Water (Default Method)	Metals Soil Available (HNO3/H2O2) CCME - Industrial, Commercial Available (HNO3/H2O2) CCME - Residential & Parklands Total (Sediment) Digest (HNO3/HF/HClO4)	TPH MUST (BTEX, C6-C12)	Soil (Potable) TPH MUST C6-C12 and Low Level BTEX	NB Potable Water BTEX & Low Level TPH	TPH Fractionation	PAH	PCB	Volatile Organics (EPA 624, 8260)	Trihalomethanes (THMs)	
					<u>Bioreactor</u>	<u>2x200 mL</u>																
					<u>Bioreactor Dubel</u>	<u>2x200 mL</u>																
					<u>Water Sump</u>	<u>2x200 mL</u>																
					<u>Well Water</u>	<u>2x200 mL</u>																

Water Sump
NOT Sampled. Remains
dry

Analysis or Regulatory Packages (specify Guidelines)
 Comments/Hazards (ie. High Concentration Expected)
 Site Location & Task number

Samples Relinquished to PSC by: _____
 (Client Signature) _____
 Samples Received in Lab by: _____
 Date: 04/11/10 Time: _____
 Date: _____ Time: _____
 Sample Integrity Deficiency? Yes (see attached) No, Initial _____
 Temperature(s): _____

Prepared For:
Gerald Tibbo

Date Generated
9-Jun-2004
Spreadsheet File Name
0409226H.XLS

Client ID: Blowwater
Project ID:
PSC Analytical ID: 04-H035218
Matrix: Water
Duplicate of:
Date Sampled: 1-Jun-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Ammonia (as N)	Auto Color	0.05	mg/L	170
C-H-0 pH	Electrode	-	Units	5.4
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	8380
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	20000

Date Generated
8-Jun-2004
Spreadsheet File Name
0409227H.XLS

Client ID: Blowater
Project ID:
PSC Analytical ID: 04-H035219
Matrix: Water
Duplicate of:
Date Sampled: 1-Jun-04
Client Description:

Parameters	Method	EQL	Units	
C-H-2 BOD5 Carbonaceous	APHA 5210B	2	mg/L	20000

200 Bluewater Road, Suite 105
Bedford, Nova Scotia B4B 1G9
Tel: 902-420-0203 Fax: 902-420-8612
Toll Free: 1-800-565-RCAp (7227)
E-mail: PAsi.Halfax@contactPSC.com

Client: Newcrest Tech PSC Quote #: _____ Client: _____
Address: 601 Gerington Ave Client P.O. #: _____
Postal Code: B3T 1P2 Client Project #: _____
Contact: Stanford Tubb Sampled By: ST Contact: _____

Page 1 of 1 Phone: 276-5185 Fax: 276-5183 Sampling Date: June 14 2011 Phone: _____ Fax: _____
E-mail: glubede@buckeye.com E-mail Results: Fax Sampling Time: 10:30 AM

*Note: 1000 Lump
Remains Dig
No Samples Taken*

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH ORDERS		Client contacted if RUSH Date cannot be met RUSH (Extra Cost) Specify Date _____		No. & Type of Bottles <u>2 X 500 1 X 1 L</u>																																															
Date Entered	Verified By	W.O. #	Client Code																																																
Standard 5-7 Business Days <input type="checkbox"/>				Client Sample I.D. <u>Bioleak</u>																																															
10 Business Days <input type="checkbox"/>																																																			
<table border="1"> <tr> <th>Matrix: Surface/Salt/Ground/Tapwater</th> <th>Field Filtered & Preserved</th> <th>Lab Filtration Required</th> <th>RCAP-30 Choose: Total gr Diss. Metals</th> <th>RCAP-MS Choose: Total gr Diss. Metals</th> <th>Total Digest (Default Method)</th> <th>Metals Water</th> <th>Mercury</th> <th>Mercury is not included in soil or water metals scan</th> <th>Available Metals Digest (Default Method HNO3/H2O2)</th> <th>Total Digest (For Sediments) (HNO3/HF/HClO4)</th> <th>Tm (required for CME soils)</th> <th>Selenium (low level) Req'd for CME Residential, Parks, Agricultural</th> <th>Hot water soluble Boron (required for CME Agricultural)</th> <th>TPH MUST (BTEX, C6-C32)</th> <th>Soil (Potable) TPH MUST (Low level BTEX and C6-C32)</th> <th>New Brunswick Potable Water BTEX & VPH & Low Level TEH</th> <th>TPH Fractionation</th> <th>PAHs</th> <th>PCBs</th> <th>Volatile Organics (EPA 624, 8260)</th> <th>Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (ie. High Concentration Expected)</th> <th>Site Location & Task number</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Matrix: Surface/Salt/Ground/Tapwater	Field Filtered & Preserved	Lab Filtration Required	RCAP-30 Choose: Total gr Diss. Metals	RCAP-MS Choose: Total gr Diss. Metals	Total Digest (Default Method)	Metals Water	Mercury	Mercury is not included in soil or water metals scan	Available Metals Digest (Default Method HNO3/H2O2)	Total Digest (For Sediments) (HNO3/HF/HClO4)	Tm (required for CME soils)	Selenium (low level) Req'd for CME Residential, Parks, Agricultural	Hot water soluble Boron (required for CME Agricultural)	TPH MUST (BTEX, C6-C32)	Soil (Potable) TPH MUST (Low level BTEX and C6-C32)	New Brunswick Potable Water BTEX & VPH & Low Level TEH	TPH Fractionation	PAHs	PCBs	Volatile Organics (EPA 624, 8260)	Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (ie. High Concentration Expected)	Site Location & Task number																								
Matrix: Surface/Salt/Ground/Tapwater	Field Filtered & Preserved	Lab Filtration Required	RCAP-30 Choose: Total gr Diss. Metals	RCAP-MS Choose: Total gr Diss. Metals	Total Digest (Default Method)	Metals Water	Mercury	Mercury is not included in soil or water metals scan	Available Metals Digest (Default Method HNO3/H2O2)	Total Digest (For Sediments) (HNO3/HF/HClO4)	Tm (required for CME soils)	Selenium (low level) Req'd for CME Residential, Parks, Agricultural	Hot water soluble Boron (required for CME Agricultural)	TPH MUST (BTEX, C6-C32)	Soil (Potable) TPH MUST (Low level BTEX and C6-C32)	New Brunswick Potable Water BTEX & VPH & Low Level TEH	TPH Fractionation	PAHs	PCBs	Volatile Organics (EPA 624, 8260)	Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (ie. High Concentration Expected)	Site Location & Task number																													

Samples Relinquished to PSC by _____ Date: _____
(Client Signature) _____ Date: June 14
Samples Received in lab by _____ Date: _____

Sample Integrity Deficiency? Yes (see attached) No, Initial _____
Temperature(s): 7.2

Date Generated
16-Sep-2004
Spreadsheet File Name
0416024H.XLS

Client ID: Blowwater
Project ID:
PSC Analytical ID: 04-H060801
Matrix: Water
Duplicate of:
Date Sampled: 7-Sep-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Ammonia (as N)	Auto Color	0.05	mg/L	0.11
C-H-0 pH	Electrode	-	Units	6.1
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	1460
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	1000
C-H-2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	25000

PSC ANALYTICAL SERVICES

Invoice to (if other than client):

200 Bluewater Road, Suite 105
Bedford, Nova Scotia B4B 1G9
Tel: 902-420-0203 Fax: 902-420-9612
Toll Free: 1-800-565-RCAP (7227)
E-mail: PAsI.Halfax@contactPSC.com

Client: New Era Technologies

PSC Quote #: _____

Client: _____

Address: 61 Succowood Drive

Client P.O. #: _____

Client: _____

Goodview, N.S.

Client Project #: _____

Client: _____

Contact: Serald Tibbo

Sampled By: DS + SDM

Contact: _____

Phone: 876 5185

Fax: 876 5163

Sampling Date: Sept 7/04

Phone: _____

E-mail: glibbo@halfax.ns.ca

E-mail Results

Sampling Time: 10AM

Fax: _____

Page 1 of 1

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH ORDERS

Client contacted if RUSH Date cannot be met

RUSH (Extra Cost) Specify Date: _____

Standard 5-7 Business Days

10 Business Days

Date Entered	Verified By	W.O. #	Client Code	PSC Sample #	Client Sample ID	No. & Type of Bottles	Matrix: Surface/Salt/Ground/Tapwater Sewage/Effluent/Tissue/Soil	Field Filtered & Preserved	Lab Filtration Required	RCAP-30 Choose: Total or Diss. Metals	RCAP-MS Choose: Total or Diss. Metals	Water - Total Metals (Default Method)	Water - Dissolved Metals	Available Default (HNO3/H2O2) CCME - Industrial, Commercial	Available (HNO3/H2O2) CCME - Residential & Parklands	Total (Sediment) Digest (HNO3/HF/HClO4)	TPH MUST (BTEX, C6- C32)	Soil (Potable) TPH MUST C6-C32 and Low level BTEX	NB Potable Water BTEX & Low Level TPH	TPH Fractionation	PAH	PCB	Volatile Organics (EPA 624, 8260)	Trihalomethanes (THMs)	Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (ie. High Concentration Expected) Site Location & Task number

Biowater 1 Liner Sump Samples
Note: immovick + pH taken from same bottle (room temp) (reservative)

TSS, BOD (Fe Col, di), Ammonia + pH

TSS, BOD Fecal coli, Ammonia + pH

** No samples taken Liner Sump Remains Dry **

Samples Reinquished to PSC by: _____
(Client Signature)

Date: Sept 7/04

Time: _____

Temperature(s): _____
Sample Integrity Deficiency? Yes (see attached) No, Initial _____

Date Generated
14-Dec-2004
Spreadsheet File Name
0422526H.XLS

Client ID:	Blowwater	Well Water
Project ID:		
PSC Analytical ID:	04-H088669	04-H088670
Matrix:	Water	Water
Duplicate of:		
Date Sampled:	1-Dec-04	1-Dec-04
Client Description:		

Parameters	Method	EQL	Units		
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	2080	
C-H-0 E. coli (Colifert)	CSCT	-	MPN/100mL		0
C-H-0 Total Coliform (Colifert)	CSCT	-	MPN/100mL		0
C-H-0 Total Water Digest		-			
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	20041207-B	20041202-B
C-H-2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	3800	
+RCA Sodium	ICP-OES	0.1	mg/L	22000	
+RCA Potassium	ICP-OES	0.1	mg/L	1250	15.6
+RCA Calcium	ICP-OES	0.1	mg/L	2240	1.2
+RCA Magnesium	ICP-OES	0.1	mg/L	1250	42.4
+RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	259	7.7
+RCA Sulfate	COBAS	2	mg/L	3800	130
+RCA Chloride	COBAS	1	mg/L	300	3
+RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	2000	22
+RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L	110	16
+RCA Nitrite	COBAS	0.01	mg/L	180	0.07
+RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	< 1	< 0.01
+RCA Nitrate (as N)	COBAS	0.05	mg/L	< 5	< 0.05
+RCA Ammonia (as N)	Auto Color	0.05	mg/L	< 5	< 0.05
+RCA Color	COBAS	5	TCU	660	< 0.05
+RCA Turbidity	NEPH.	0.1	NTU	> 1000	< 5
+RCA Conductance (RCAp)	Electrode	1	uS/cm	945	< 0.1
+RCA pH	Electrode	-	Units	23500	334
+RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	4.6	7.7
+RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	4190	138
+RCA Carbonate (as CaCO3)	Calculated	1	mg/L	3800	129
+RCA TDS (Calculated)	Calculated	1	mg/L	< 1	< 1
+RCA Cation Sum	Calculated	0.1	meq/L	10600	186
+RCA Anion Sum	Calculated	0.1	meq/L	243	3.46
+RCA Ion Balance	Calculated	-	%	139	3.29
+RCA Langlier Index @ 4C	Calculated	-		27.1	2.61
+RCA Langlier Index @ 20C	Calculated	-		-0.85	-0.41
+RCA Saturation pH @ 4C	Calculated	-	Units	-0.45	-0.01
+RCA Saturation pH @ 20C	Calculated	-	Units	5.45	8.11
+RCA Aluminum	ICP-MS	10	ug/L	5.05	7.71
+RCA Antimony	ICP-MS	2	ug/L	1800	< 10
+RCA Arsenic	ICP-MS	2	ug/L	< 20	< 2
+RCA Barium	ICP-MS	2	ug/L	470	3
+RCA Beryllium	ICP-MS	5	ug/L	130	10
+RCA Bismuth	ICP-MS	2	ug/L	< 20	< 2
+RCA Boron	ICP-MS	2	ug/L	< 20	< 2
+RCA Cadmium	ICP-MS	5	ug/L	1800	22
+RCA Chromium	ICP-MS	0.3	ug/L	5.9	< 0.3
+RCA Cobalt	ICP-MS	2	ug/L	85	< 2
+RCA Copper	ICP-MS	1	ug/L	55	< 1
+RCA Iron	ICP-MS	2	ug/L	95	< 2
+RCA Lead	ICP-MS	50	ug/L	6400	< 50
+RCA Manganese	ICP-MS	0.5	ug/L	24	< 0.5
+RCA Molybdenum	ICP-MS	2	ug/L	11000	9
+RCA Nickel	ICP-MS	2	ug/L	77	7
+RCA Selenium	ICP-MS	2	ug/L	190	< 2
+RCA Silver	ICP-MS	2	ug/L	< 20	< 2
+RCA Strontium	ICP-MS	0.5	ug/L	< 5	< 0.5
+RCA Thallium	ICP-MS	5	ug/L	2800	180
+RCA Tin	ICP-MS	0.1	ug/L	1.9	< 0.1
+RCA Titanium	ICP-MS	2	ug/L	< 20	< 2
+RCA Uranium	ICP-MS	2	ug/L	93	< 2
+RCA Vanadium	ICP-MS	0.1	ug/L	3.7	100
+RCA Zinc	ICP-MS	2	ug/L	< 20	< 2
+RCA Phosphorus	ICP-OES	5	ug/L	3500	7
+RCA Total Org. Carbon (by UV)	U.V.-ox	0.1	mg/L	190	< 0.1
+RCA RCAp Comments	Comment	0.5	mg/L	14000	0.8
			Text	Sample dilution	

PSC ANALYTICAL SERVICES

200 Bluewater Road, Suite 105
 Bedford, Nova Scotia B4B 1G9
 Tel: 902-420-0203 Fax: 902-420-8612
 Toll Free: 1-800-585-RCAP (7227)
 E-mail: PASI.Hallifax@contactPSC.com

Client: Novesta Tech. Ltd

Address: bl zuegagn PI

Postal Code: B3T1P2

Contact: S. Musclino

PSC Quote #: _____
 Client P.O. #: _____
 Client Project #: _____

Sampled By: D-E

Client: _____
 Contact: _____

Invoice to (if other than client): _____

Page 1 of 1

Phone: 876-5185
 E-mail: Deborah@nosynoptics.com

Fax: 876-5163
 E-mail: Results@nosynoptics.com

Sampling Date: Dec 14
 Sampling Time: 8:30am

Phone: _____
 Fax: _____

**PLEASE PROVIDE
 ADVANCE NOTICE
 FOR RUSH ORDERS**

Client contacted if RUSH Date cannot be met
 RUSH (Extra Cost) Specify Date: _____
 Standard 5-7 Business Days
 10 Business Days

PSC Sample #	Client Sample I.D.	No. & Type of Bottles	Matrix: Surface/Salt/Ground/Tapwater Sewage/Effluent/Tissue/Soil		Field Filtered & Preserved	Lab Filtration Required	RCAP-30 Choose: Total or Diss. Metals	RCAP-MS Choose: Total or Diss. Metals	Total Digest (Default Method)		Mercury	Available Metals Digest (Default Method (HNO3/H2O2))		Tin (required for CCME soils)	Selenium (low level) Req'd for CCME Residential, Parklands, Agricultural	Hot water soluble Boron (required for CCME Agricultural)	TPH MUST (BTEX, C6-C32)	Soil (Potable) TPH MUST Low level BTEX and C6-C32	New Brunswick Potable Water BTEX & VPH & Low Level TEH	TPH Fractionation	PAH's	PCB's	Volatile Organics (EPA 624, 8260)	Analysis or Regulatory Packages (Specify Guidelines) Comments/Hazards (ie. High Concentration Expected)	Site Location & Tank number	
			Dissolved	Metals Water					Total Digest (For Sediments) (HNO3/HF/HClO4)	Metals Soil																
	<u>Bluewater</u>	<u>2 X 500</u>																								
		<u>1 X 1ED</u>																								
		<u>1 X 200</u>																								
		<u>1 X 100</u>																								
	<u>Well water</u>	<u>1 X 200</u>																								
		<u>1 X 100</u>																								

Send results ASAP (ing. Sec)
**LSI (Liner Sample) Dry. No samples taken.*

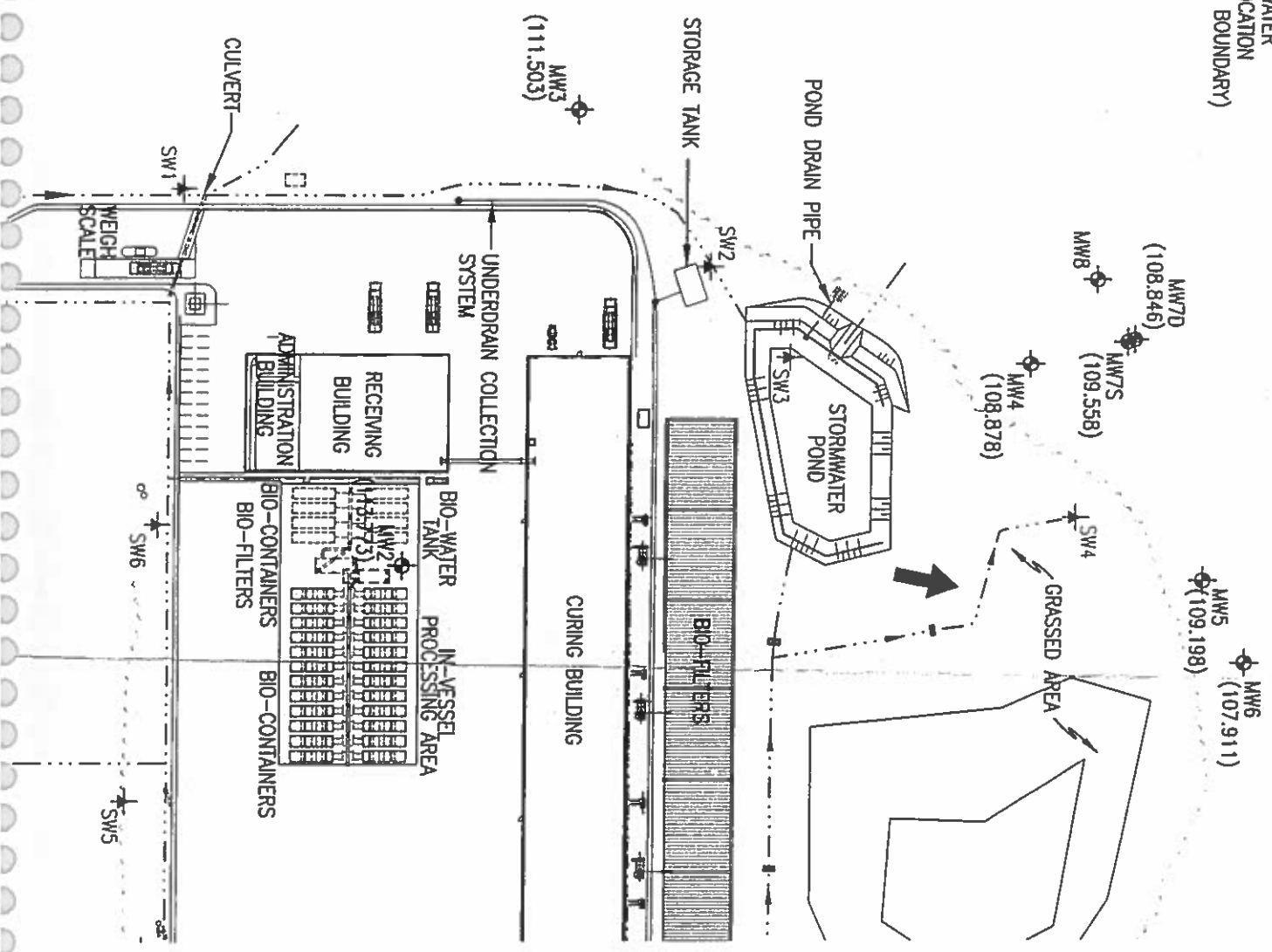
Samples Returned: _____
 (Client Signature) _____
 Samples Received: _____
 Date: Dec 14 Time: 1:45
 Sample Integrity Deficiency? Yes (see attached) No. Initial: _____
 Temperature(s): _____

Attachment 3
Revised Monitoring Well Log, Sampling & Field
Parameter Results



SURFACE WATER
SAMPLE LOCATION
(PROPERTY BOUNDARY)

SURFACE WATER
SAMPLE LOCATION
(PROPERTY BOUNDARY)





Dillon Consulting Limited
Halifax, Nova Scotia

Log of Monitoring Well: MW1R

Project No.: 03-1945-0300

Project: Groundwater Monitoring Program

Client: New Era Farms Ltd

Date: January 19, 2004

Location: Goodwood, NS

Supervisor: Jim Hunter

SUBSURFACE PROFILE				SAMPLE					Well Completion Details	
Depth (m)	Symbol	Description	Elevation (m)	Sample	Method	Recovery (%)	GasTech (ppm)	N-Value		Comments
0		Ground Surface	118.9							
1										
2									Bentonite from surface to 5.18 metres.	
3										
4		<i>Till - Sandy Silt with Clay</i> Reddish brown sandy silt with clay, trace gravel, stiff to hard, damp to moist.								
5										
6										
7									Groundwater Elevation 112.67 metres.	
8										
9			109.8							

Drilling Contractor: Logan Drilling Limited

Top of Casing Elevation: 119.58

Drill Method: Geotech Drill Rig

Stick-up Height

Hole Size: 100 mm

Checked by: GTB

A copy of the Monitoring Well field parameters and sampling results for March have been included for your analysis. Upon comparing the current and past results, there have been no significant changes to report. Slight seasonal variations have been noted. Field parameters such as water levels, pH and conductivity for each well are as follows:

MW#1R	(water level) -- 5.68m, (conductivity) -- .35ms/cm (pH) -- 7.9	MW#6	(water level) -- 3.76m (conductivity) -- .14ms/cm (pH)-- 6.5
MW#2	(water level) -- .80m (conductivity) -- 1.47ms/cm (pH) -- 11.2	MW#7S	(water level) -- 1.06m (conductivity) -- .27ms/cm (pH) --7.2
MW#3	(water level) -- 1.40 (conductivity) -- .34ms/cm (pH) -- 8.1	MW#7D	(water level) -- 1.79 (conductivity) -- 3.2ms/cm (pH) --7.0

March 2004

Monitoring Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1 R	118.920	119.580	5.680	113.90
MW2	115.123	115.023	.800	114.22
MW3	112.438	113.118	1.400	111.72
MW6	111.111	111.671	3.760	107.91
MW7S	110.148	110.768	1.060	109.71
MW7D	110.116	110.696	1.790	108.91

Date Generated
5-Apr-2004
Spreadsheet File Name
0404457H.XLS

Client ID:	MW1R	MW2	MW3
Project ID:			
PSC Analytical ID:	04-H017558	04-H017559	04-H017560
Matrix:	Water	Water	Water
Duplicate of:			
Date Sampled:	25-Mar-04	25-Mar-04	25-Mar-04
Client Description:			

Parameters	Method	EQL	Units			
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	542	89	425
C-H-0 Dissolved Organic Carbon	U.V.-ox	0.5	mg/L	0.5	17	< 0.5
C-H-0 Filtered by Client		-		By Client	By Client	By Client
C-H-0 Filtration for DOC	0.45 um	-		In Lab	In Lab	In Lab
C-H-2 COD (as O2)	COD	5	mg/L	< 15	114	< 5
C-H-5 MicroBiology Sample Com	Comment		Text	e to possible sam		
+RCA Sodium	ICP-OES	0.1	mg/L	11.7	48.2	10
+RCA Potassium	ICP-OES	0.1	mg/L	2.1	2.8	1.5
+RCA Calcium	ICP-OES	0.1	mg/L	38.5	159	38.1
+RCA Magnesium	ICP-OES	0.1	mg/L	6.1	0.6	6.4
+RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	140	39	140
+RCA Sulfate	COBAS	2	mg/L	4	52	3
+RCA Chloride	COBAS	1	mg/L	6	260	6
+RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	9.2	8.6	10
+RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L	0.1	< 0.01	0.02
+RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	< 0.05	< 0.05	< 0.05
+RCA Ammonia (as N)	Auto Color	0.05	mg/L	< 0.05	0.16	< 0.05
+RCA Iron	ICP-OES	0.02	mg/L	0.02	< 0.02	< 0.02
+RCA Manganese	ICP-OES	0.01	mg/L	0.13	< 0.01	0.05
+RCA Copper	ICP-OES	0.01	mg/L	< 0.01	< 0.01	< 0.01
+RCA Zinc	ICP-OES	0.05	mg/L	< 0.05	< 0.05	< 0.05
+RCA Color	COBAS	5	TCU	< 5	18	< 5
+RCA Turbidity	NEPH.	0.1	NTU	0.4	1.1	0.1
+RCA Conductance (RCAp)	Electrode	1	uS/cm	265	1130	261
+RCA pH	Electrode	-	Units	8	7.6	8.1
+RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	121	399	121
+RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	139	39	138
+RCA Carbonate (as CaCO3)	Calculated	1	mg/L	1	< 1	2
+RCA TDS (Calculated)	Calculated	1	mg/L	162	555	159
+RCA Cation Sum	Calculated	0.1	meq/L	2.99	10.2	2.9
+RCA Anion Sum	Calculated	0.1	meq/L	3.06	9.2	3.04
+RCA Ion Balance	Calculated	-	%	1.1	4.99	2.19
+RCA Langelier Index @ 4C	Calculated	-		-0.12	-0.50	-0.02
+RCA Langelier Index @ 20C	Calculated	-		0.28	-0.10	0.38
+RCA Saturation pH @ 4C	Calculated	-	Units	8.12	8.1	8.12
+RCA Saturation pH @ 20C	Calculated	-	Units	7.72	7.7	7.72
+RCA Cadmium	ICP-MS	0.3	ug/L	< 0.3	< 3	< 0.3
+RCA Lead	ICP-MS	0.5	ug/L	< 0.5	< 5	< 0.5
+RCA Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	< 0.5	18.3	< 0.5

	MW6	MW7s	MW7D	MW7D DUP
Date Generated	04-H017561	04-H017562	04-H017563	04-H017564
Spreadsheet File Name	Water	Water	Water	Water
	25-Mar-04	25-Mar-04	25-Mar-04	04-H017563 25-Mar-04
Parameters				
C-H-0 Total Suspended Solids	149	121	2030	
C-H-0 Dissolved Organic Carbon	0.5	0.7	1.1	1.4
C-H-0 Filtered by Client	By Client	By Client	By Client	By Client
C-H-0 Filtration for DOC	In Lab	In Lab	In Lab	In Lab
C-H-2 COD (as O2)	< 5	< 5	< 15	< 15
C-H-5 MicroBiology Sample Com			e to possible same	to possible sam
+RCA Sodium	7.4	9.6	10.1	10.2
+RCA Potassium	0.7	1.1	1.2	1.2
+RCA Calcium	9.8	29.7	20.2	20.3
+RCA Magnesium	2.7	6.6	3.8	3.8
+RCA Alkalinity (as CaCO3)	31	110	57	58
+RCA Sulfate	4	4	7	7
+RCA Chloride	14	14	19	19
+RCA Reactive Silica (as SiO2)	18	17	14	14
+RCA Ortho Phosphate (as P)	< 0.01	0.02	< 0.01	0.02
+RCA Nitrate + Nitrite (as N)	0.07	0.06	0.42	0.44
+RCA Ammonia (as N)	< 0.05	0.05	0.05	< 0.05
+RCA Iron	< 0.02	0.08	< 0.02	< 0.02
+RCA Manganese	0.38	0.05	0.06	0.06
+RCA Copper	< 0.01	< 0.01	< 0.01	< 0.01
+RCA Zinc	< 0.05	< 0.05	< 0.05	< 0.05
+RCA Color	< 5	< 5	< 5	< 5
+RCA Turbidity	0.1	< 0.1	0.4	0.3
+RCA Conductance (RCAp)	110	231	184	183
+RCA pH	6.4	7	7	7
+RCA Hardness (as CaCO3)	35.6	101	66.1	66.3
+RCA Bicarbonate (as CaCO3)	31	110	57	58
+RCA Carbonate (as CaCO3)	< 1	< 1	< 1	< 1
+RCA TDS (Calculated)	76	148	111	112
+RCA Cation Sum	1.06	2.47	1.79	1.8
+RCA Anion Sum	1.1	2.68	1.85	1.87
+RCA Ion Balance	2.22	4.03	1.56	1.88
+RCA Langelier Index @ 4C	-2.95	-1.33	-1.78	-1.77
+RCA Langelier Index @ 20C	-2.55	-0.93	-1.38	-1.37
+RCA Saturation pH @ 4C	9.35	8.33	8.78	8.77
+RCA Saturation pH @ 20C	8.95	7.93	8.38	8.37
+RCA Cadmium	< 0.3	< 0.3	< 0.3	< 0.3
+RCA Lead	< 0.5	< 0.5	< 0.5	< 0.5
+RCA Total Org. Carbon (by UV)	0.5	1.2	1.4	1.2

A copy of the Monitoring Well field parameters and sampling results for June have been included for your analysis. Upon comparing the current and past results, there have been no significant changes to report. Slight seasonal variations have been noted. Field parameters such as water levels, pH and conductivity for each well are as follows:

MW#1R (water level) -- 6.60m,
(conductivity) -- .32ms/cm
(pH) -- 7.4

MW#2 (water level) -- 1.30m
(conductivity) -- 1.24ms/cm
(pH) -- 9.3

MW#3 (water level) -- 1.46m
(conductivity) -- .32ms/cm
(pH) -- 7.4

MW#6 (water level) -- 3.88m
(conductivity) -- .13ms/cm
(pH) -- 5.1

MW#7S (water level) -- 1.15m
(conductivity) -- .23ms/cm
(pH) -- 6.4

MW#7D (water level) -- 1.84m
(conductivity) -- .33ms/cm
(pH) -- 6.5

June 2004

Monitoring Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1 R	118.920	119.580	6.600	112.98
MW2	115.123	115.023	1.300	113.72
MW3	112.438	113.118	1.460	111.66
MW6	111.111	111.671	3.880	107.79
MW7S	110.148	110.768	1.150	109.62
MW7D	110.116	110.696	1.840	108.86

Date Generated
30-Jun-2004
Spreadsheet File Name
0410699H.XLS

Client ID:	MW1R	MW2	MW3	MW6	MW7S	MW7D
Project ID:						
PSC Analytical ID:	04-H039750	04-H039751	04-H039752	04-H039753	04-H039754	04-H039755
Matrix:	Water	Water	Water	Water	Water	Water
Duplicate of:						
Date Sampled:	17-Jun-04	17-Jun-04	17-Jun-04	17-Jun-04	17-Jun-04	17-Jun-04
Client Description:						

Parameters	Method	EQL	Units	Client Description						
				MW1R	MW2	MW3	MW6	MW7S	MW7D	
-H-:0 Total Suspended Solids	Grav.	0.5	mg/L	959	3400	618	393	511	5.8	
-H-:0 Dissolved Organic Carbo	U.V.-ox	0.5	mg/L	0.5	9	0.6	1.1	1.8	0.9	
-H-:0 Filtration for Metals	0.45 um	-	-	-	-	-	-	-	-	
-H-:0 Filtered by Client	-	-	-	-	-	-	-	-	-	
-H-:0 Filtration for DOC	0.45 um	-	-	-	-	-	-	-	-	
-H-:2 COD (as O2)	COD	5	mg/L	< 5	49	< 15	< 5	< 5	< 5	
-RCA Sodium	ICP-OES	0.1	mg/L	10	45.7	9.8	7.1	9.5	9.9	
-RCA Potassium	ICP-OES	0.1	mg/L	1.8	2.9	1.2	0.5	1.5	0.8	
-RCA Calcium	ICP-OES	0.1	mg/L	37.5	140	36.7	9.1	27.5	31	
-RCA Magnesium	ICP-OES	0.1	mg/L	6.2	0.7	6.3	2.6	4.7	7	
-RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	140	24	140	28	66	120	
-RCA Sulfate	COBAS	2	mg/L	4	52	2	4	6	3	
-RCA Chloride	COBAS	1	mg/L	5	270	6	13	19	13	
-RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	8.1	8.5	9.6	16	14	15	
-RCA Ortho Phosphate (as P)	COBAS/811	0.01	mg/L	0.07	0.01	0.03	< 0.01	< 0.01	0.02	
-RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	0.74	< 0.05	
-RCA Ammonia (as N)	Auto Color	0.05	mg/L	< 0.05	0.17	< 0.05	< 0.05	< 0.05	< 0.05	
-RCA Iron	ICP-OES	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	0.02	0.05	
-RCA Manganese	ICP-OES	0.01	mg/L	0.12	< 0.01	0.06	0.34	0.09	0.04	
-RCA Copper	ICP-OES	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.01	
-RCA Zinc	ICP-OES	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
-RCA Color	COBAS	5	TCU	< 5	15	5	< 5	< 5	6	
-RCA Turbidity	NEPH.	0.1	NTU	0.2	0.3	0.3	< 0.1	0.3	2.3	
-RCA Conductance (RCAp)	Electrode	1	uS/cm	272	1060	262	107	206	253	
-RCA pH	Electrode	-	Units	7.4	9.6	8.1	6.8	7.1	7	
-RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	119	352	118	33.4	88	106	
-RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	140	16	138	28	66	120	
-RCA Carbonate (as CaCO3)	Calculated	1	mg/L	< 1	6	2	< 1	< 1	< 1	
-RCA TDS (Calculated)	Calculated	1	mg/L	157	535	156	69	125	152	
-RCA Cation Sum	Calculated	0.1	meq/L	2.87	9.12	2.81	0.99	2.21	2.58	
-RCA Anion Sum	Calculated	0.1	meq/L	3.03	9.18	3.01	1.01	2.03	2.83	
-RCA Ion Balance	Calculated	-	%	2.74	0.33	3.5	0.99	4.26	4.71	
-RCA Langlier Index @ 4C	Calculated	-	-	-0.73	1.23	-0.04	-2.62	-1.49	-1.28	
-RCA Langlier Index @ 20C	Calculated	-	-	-0.33	1.63	0.36	-2.22	-1.09	-0.88	
-RCA Saturation pH @ 4C	Calculated	-	Units	8.13	8.37	8.14	9.42	8.59	8.28	
-RCA Saturation pH @ 20C	Calculated	-	Units	7.73	7.97	7.74	9.02	8.19	7.88	
-RCA Cadmium	ICP-MS	0.3	ug/L	< 0.3	< 3	< 0.3	< 0.3	< 0.3	0.8	
-RCA Lead	ICP-MS	0.5	ug/L	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	
-RCA Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	< 0.5	11.8	< 0.5	0.8	1.6	0.6	

A copy of the Monitoring Well field parameters and sampling results for September have been included for your analysis. Upon comparing the current and past results, there have been no significant changes to report. Slight seasonal variations have been noted. Field parameters such as water levels, pH and conductivity have been included below.

MW1R (water level) -- 6.25m,
(purged) – 55 liters
(conductivity) -- .34ms/cm
(pH) -- 7.3

MW2 (water level) – 1.31m
(purged) – 19 liters
(conductivity) – 1.37ms/cm
(pH) – 10.5

MW3 (water level) -- 1.55m
(purged) – 45 liters
(conductivity) -- .34ms/cm
(pH) – 7.9

MW6 (water level) – 3.86m
(purged) – 32 liters
(conductivity) -- .18ms/cm
(pH) – 6.0

MW7S (water level) -- 1.28m
(purged) – 6 liters
(conductivity) -- .29ms/cm
(pH) – 7.9

MW7D (water level) -- 1.86m
(purged) – 100 liters
(conductivity) -- .31ms/cm
(pH) – 6.4

September 2004

Monitoring Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1 R	118.920	119.580	6.250	113.330
MW2	115.123	115.023	1.310	113.713
MW3	112.438	113.118	1.550	111.568
MW6	111.111	111.671	3.860	107.811
MW7S	110.148	110.768	1.280	109.506
MW7D	110.116	110.696	1.860	108.836

Date Generated
15-Sep-2004
Spreadsheet File Name
0416030H.XLS

Client ID:	MW1R	MW2	MW3
Project ID:			
PSC Analytical ID:	04-H060908	04-H060909	04-H060910
Matrix:	Water	Water	Water
Duplicate of:			
Date Sampled:	7-Sep-04	7-Sep-04	7-Sep-04
Client Description:			

Parameters	Method	EQL	Units			
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	807	273	220
C-H-0 Dissolved Organic Carbon	U.V.-ox	0.5	mg/L	< 0.5	8.4	< 0.5
C-H-0 Filtered by Client		-		By Client	By Client	By Client
C-H-0 Filtration for DOC	0.45 um	-		In Lab	In Lab	In Lab
C-H-2 COD (as O2)	COD	5	mg/L	< 15	50	< 5
C-H-5 MicroBiology Sample Com	Comment		Text	due to possible		
+RCA Sodium	ICP-OES	0.1	mg/L	10.6	53.3	10.7
+RCA Potassium	ICP-OES	0.1	mg/L	1.9	4.1	1.6
+RCA Calcium	ICP-OES	0.1	mg/L	38.5	147	38.6
+RCA Magnesium	ICP-OES	0.1	mg/L	6.4	0.4	6.8
+RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	140	28	130
+RCA Sulfate	COBAS	2	mg/L	3	56	2
+RCA Chloride	COBAS	1	mg/L	5	260	6
+RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	9.6	12	12
+RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L	0.1	< 0.01	0.03
+RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	< 0.05	0.14	< 0.05
+RCA Ammonia (as N)	Auto Color	0.05	mg/L	< 0.05	0.34	0.05
+RCA Iron	ICP-OES	0.02	mg/L	< 0.02	0.06	0.28
+RCA Manganese	ICP-OES	0.01	mg/L	0.06	< 0.01	0.09
+RCA Copper	ICP-OES	0.01	mg/L	< 0.01	< 0.01	< 0.01
+RCA Zinc	ICP-OES	0.05	mg/L	< 0.05	< 0.05	< 0.05
+RCA Color	COBAS	5	TCU	< 5	15	< 5
+RCA Turbidity	NEPH.	0.1	NTU	< 0.1	< 0.1	16.2
+RCA Conductance (RCAp)	Electrode	1	uS/cm	265	1200	267
+RCA pH	Electrode	-	Units	7.8	10.6	8.2
+RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	122	369	124
+RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	139	2	128
+RCA Carbonate (as CaCO3)	Calculated	1	mg/L	< 1	6	2
+RCA TDS (Calculated)	Calculated	1	mg/L	159	551	156
+RCA Cation Sum	Calculated	0.1	meq/L	2.96	9.82	3
+RCA Anion Sum	Calculated	0.1	meq/L	3.01	9.07	2.81
+RCA Ion Balance	Calculated	-	%	0.77	3.97	3.12
+RCA Langlier Index @ 4C	Calculated	-		-0.32	2.32	0.05
+RCA Langlier Index @ 20C	Calculated	-		0.08	2.72	0.45
+RCA Saturation pH @ 4C	Calculated	-	Units	8.12	8.28	8.15
+RCA Saturation pH @ 20C	Calculated	-	Units	7.72	7.88	7.75
+RCA Cadmium	ICP-MS	0.3	ug/L	< 0.3	< 0.3	< 0.3
+RCA Lead	ICP-MS	0.5	ug/L	< 0.5	< 0.5	< 0.5
+RCA Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	< 0.5	9	0.6

	MW6	MW7S	MW7D	MW7D DUP
Date Generated 15-Sep-2004	04-H060911	04-H060912	04-H060913	04-H060914
Spreadsheet File Name 0416030H.XLS	Water	Water	Water	Water
	7-Sep-04	7-Sep-04	7-Sep-04	7-Sep-04
Parameters				
C-H-0 Total Suspended Solids	247	602	54.8	
C-H-0 Dissolved Organic Carbon	< 0.5	0.5	< 0.5	0.6
C-H-0 Filtered by Client	By Client	By Client	By Client	By Client
C-H-0 Filtration for DOC	In Lab	In Lab	In Lab	In Lab
C-H-2 COD (as O2)	< 5	< 5	< 5	< 5
C-H-5 MicroBiology Sample Com				
+RCA Sodium	8.3	10.4	9.7	9.6
+RCA Potassium	0.8	1.3	1	1
+RCA Calcium	12.8	16.5	31.7	31.3
+RCA Magnesium	3.8	3.4	7.3	7.3
+RCA Alkalinity (as CaCO3)	42	44	110	110
+RCA Sulfate	4	8	3	3
+RCA Chloride	15	18	13	13
+RCA Reactive Silica (as SiO2)	19	18	17	17
+RCA Ortho Phosphate (as P)	< 0.01	< 0.01	0.03	0.09
+RCA Nitrate + Nitrite (as N)	0.32	0.71	< 0.05	< 0.05
+RCA Ammonia (as N)	0.08	< 0.05	< 0.05	< 0.05
+RCA Iron	< 0.02	< 0.02	0.05	0.06
+RCA Manganese	0.5	0.02	0.06	0.06
+RCA Copper	< 0.01	< 0.01	< 0.01	< 0.01
+RCA Zinc	< 0.05	< 0.05	< 0.05	< 0.05
+RCA Color	< 5	< 5	< 5	< 5
+RCA Turbidity	0.2	< 0.1	< 0.1	< 0.1
+RCA Conductance (RCAp)	141	167	266	263
+RCA pH	6.8	6.8	6.9	7
+RCA Hardness (as CaCO3)	47.6	55.2	109	108
+RCA Bicarbonate (as CaCO3)	42	44	110	110
+RCA Carbonate (as CaCO3)	< 1	< 1	< 1	< 1
+RCA TDS (Calculated)	90	105	149	148
+RCA Cation Sum	1.34	1.59	2.63	2.61
+RCA Anion Sum	1.37	1.6	2.63	2.63
+RCA Ion Balance	1.11	0.38	0.02	0.44
+RCA Langlier Index @ 4C	-2.31	-2.18	-1.41	-1.31
+RCA Langlier Index @ 20C	-1.91	-1.78	-1.01	-0.91
+RCA Saturation pH @ 4C	9.11	8.98	8.31	8.31
+RCA Saturation pH @ 20C	8.71	8.58	7.91	7.91
+RCA Cadmium	< 0.3	< 0.3	< 0.3	< 0.3
+RCA Lead	< 0.5	< 0.5	< 0.5	< 0.5
+RCA Total Org. Carbon (by UV)	< 0.5	0.6	< 0.5	0.7

A copy of the Monitoring Well field parameters and sampling results for December have been included for your analysis. Upon comparing the current and past results, there have been no significant changes to report. Slight seasonal variations have been noted. Field parameters such as water levels, pH and conductivity have been included below.

MW1R (water level) -- 5.42m,
(purged) – 80 liters
(conductivity) -- .35ms/cm
(pH) – 7.2

MW2 (water level) – 1.30m
(purged) – 12 liters
(conductivity) – 1.46ms/cm
(pH) – 10.4

Brown water- no clearing with purging

Brown water- no clearing with purging

MW3 (water level) -- 1.44m
(purged) – 42 liters
(conductivity) -- .38ms/cm
(pH) – 6.6

MW6 (water level) – 3.70m
(purged) – 15 liters
(conductivity) -- .26ms/cm
(pH) – 5.8

Brown water- slight clearing with purging

Pale Yellow water- clearing with purging

MW7S (water level) -- 1.08m
(purged) – 8 liters
(conductivity) -- .22ms/cm
(pH) – 5.9

MW7D (water level) -- 1.60m
(purged) – 100 liters
(conductivity) -- .35ms/cm
(pH) – 5.8

Clear Water

Clear Water

December 2004

Monitoring Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1 R	118.920	119.580	5.420	114.160
MW2	115.123	115.023	1.300	113.723
MW3	112.438	113.118	1.440	111.678
MW6	111.111	111.671	3.700	107.971
MW7S	110.148	110.768	1.080	109.688
MW7D	110.116	110.696	1.600	109.096

Date Generated
15-Dec-2004
Spreadsheet File Name
0423038H.XLS

Client ID:	MW#1R	MW#3	MW#6	MW#7S
Project ID:				
PSC Analytical ID:	04-H090874	04-H090875	04-H090876	04-H090877
Matrix:	Water	Water	Water	Water
Duplicate of:				
Date Sampled:	7-Dec-04	7-Dec-04	7-Dec-04	7-Dec-04
Client Description:				

Parameters	Method	EQL	Units				
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	257	1380	234	220
C-H-0 Mercury	CVAAs	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
C-H-0 Dissolved Organic Carbon	U.V.-ox	0.5	mg/L	< 0.5	1.1	0.8	< 0.05
C-H-0 Phenolics	4-AAP	0.001	mg/L	< 0.001	< 0.001	< 0.001	2
C-H-0 Total Water Digest							< 0.001
C-H-0 Filtration for DOC	0.45 um	-		20041209-B	20041209-B	20041209-B	20041209-B
C-H-0 Mercury Digestion		-		In Lab	In Lab	In Lab	In Lab
C-H-2 COD (as O2)	COD	5	mg/L	20041210-C	20041210-C	20041210-C	20041210-C
C-H-3 Total Phosphorous	Colorimetr	0.02	mg/L	< 5	< 5	< 5	< 5
C-H-5 Inorganic Comment	Comment		Text	0.36	1.4	0.36	0.13
1-RCA Sodium	ICP-OES	0.1	mg/L	Phenolics:	Phenolics:	Phenolics:	Phenolics:
1-RCA Potassium	ICP-OES	0.1	mg/L	10.9	11.4	9.1	11.3
1-RCA Calcium	ICP-OES	0.1	mg/L	1.9	1.7	1	1.5
1-RCA Magnesium	ICP-OES	0.1	mg/L	41.5	40	22.7	28.2
1-RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	6.7	6.9	5	4.8
1-RCA Sulfate	COBAS	2	mg/L	150	160	83	84
1-RCA Chloride	COBAS	1	mg/L	3	2	4	6
1-RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	5	6	15	18
1-RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L	9.9	12	22	17
1-RCA Nitrite	COBAS	0.01	mg/L	0.07	< 0.01	< 0.01	< 0.01
1-RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
1-RCA Nitrate (as N)	COBAS	0.05	mg/L	0.12	< 0.05	< 0.05	0.46
1-RCA Ammonia (as N)	Auto Color	0.05	mg/L	0.12	< 0.05	< 0.05	0.46
1-RCA Color	COBAS	5	TCU	0.27	0.05	< 0.05	< 0.05
1-RCA Turbidity	NEPH.	0.1	NTU	< 5	< 5	< 5	< 5
1-RCA Conductance (RCap)	Electrode	1	uS/cm	0.6	< 0.1	0.4	< 0.1
1-RCA pH	Electrode	-	Units	289	282	198	222
1-RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	7.9	8	7.2	7.2
1-RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	131	128	77.3	90.2
1-RCA Carbonate (as CaCO3)	Calculated	1	mg/L	149	158	83	84
1-RCA TDS (Calculated)	Calculated	1	mg/L	1	1	< 1	< 1
1-RCA Cation Sum	Calculated	0.1	meq/L	170	176	129	139
1-RCA Anion Sum	Calculated	0.1	meq/L	3.16	3.11	1.97	2.34
1-RCA Ion Balance	Calculated	-	%	3.21	3.41	2.17	2.35
1-RCA Langelier Index @ 4C	Calculated	-		0.75	4.72	4.84	0.2
1-RCA Langelier Index @ 20C	Calculated	-		-0.16	-0.05	-1.37	-1.27
1-RCA Saturation pH @ 4C	Calculated	-		0.24	0.35	-0.97	-0.87
1-RCA Saturation pH @ 20C	Calculated	-	Units	8.06	8.05	8.57	8.47
1-RCA Aluminum	ICP-MS	10	ug/L	7.66	7.65	8.17	8.07
1-RCA Antimony	ICP-MS	2	ug/L	80	< 10	10	< 10
1-RCA Arsenic	ICP-MS	2	ug/L	< 2	< 2	< 2	< 2
1-RCA Barium	ICP-MS	5	ug/L	2	14	< 2	< 2
1-RCA Beryllium	ICP-MS	2	ug/L	31	30	23	43
1-RCA Bismuth	ICP-MS	2	ug/L	< 2	< 2	< 2	< 2
1-RCA Boron	ICP-MS	2	ug/L	< 2	< 2	< 2	< 2
1-RCA Cadmium	ICP-MS	0.3	ug/L	14	20	6	10
1-RCA Chromium	ICP-MS	2	ug/L	< 0.3	< 0.3	< 0.3	< 0.3
1-RCA Cobalt	ICP-MS	1	ug/L	4	< 2	< 2	< 2
1-RCA Copper	ICP-MS	2	ug/L	< 1	< 1	1	< 1
1-RCA Iron	ICP-MS	50	ug/L	< 2	< 2	< 2	2
1-RCA Lead	ICP-MS	0.5	ug/L	80	< 50	< 50	< 50
1-RCA Manganese	ICP-MS	2	ug/L	< 0.5	< 0.5	< 0.5	0.8
1-RCA Molybdenum	ICP-MS	2	ug/L	39	88	870	42
1-RCA Nickel	ICP-MS	2	ug/L	5	5	< 2	< 2
1-RCA Selenium	ICP-MS	2	ug/L	< 2	< 2	< 2	2
1-RCA Silver	ICP-MS	2	ug/L	< 2	< 2	< 2	< 2
1-RCA Strontium	ICP-MS	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5
1-RCA Thallium	ICP-MS	5	ug/L	140	110	70	70
1-RCA Tin	ICP-MS	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1
1-RCA Titanium	ICP-MS	2	ug/L	< 2	< 2	< 2	< 2
1-RCA Uranium	ICP-MS	2	ug/L	3	< 2	< 2	< 2
1-RCA Vanadium	ICP-MS	0.1	ug/L	15	17	0.4	0.2
1-RCA Zinc	ICP-MS	5	ug/L	< 2	< 2	< 2	< 2
1-RCA Phosphorus	ICP-OES	0.1	mg/L	< 5	6	6	13
1-RCA Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	0.1	< 0.1	< 0.1	< 0.1

	MW#7D	MW#2	MW#2 DUP
Date Generated	04-H090878	04-H090879	04-H090880
15-Dec-2004	Water	Water	Water
Spreadsheet File Name	7-Dec-04	7-Dec-04	04-H090879
0423038H.XLS			7-Dec-04

Parameters				
C-H-0	Total Suspended Solids	4.2	6160	
C-H-0	Mercury	< 0.05		
C-H-0	Dissolved Organic Carbon	1	13	13.3
C-H-0	Phenolics	< 0.001		
C-H-0	Total Water Digest	20041209-B	20041209-B	20041209-B
C-H-0	Filtration for DOC	In Lab	In Lab	In Lab
C-H-0	Mercury Digestion	20041210-C		
C-H-2	COD (as O2)	< 5	48	44
C-H-3	Total Phosphorous	0.08		
C-H-5	Inorganic Comment			
1-RCA	Sodium	10	56.5	58.1
1-RCA	Potassium	1	3.5	3.6
1-RCA	Calcium	31.3	148	153
1-RCA	Magnesium	6.9	0.5	0.5
1-RCA	Alkalinity (as CaCO3)	110	37	35
1-RCA	Sulfate	3	64	64
1-RCA	Chloride	14	260	290
1-RCA	Reactive Silica (as SiO2)	18	9.7	9.6
1-RCA	Ortho Phosphate (as P)	0.04	< 0.01	< 0.01
1-RCA	Nitrite	< 0.03	< 0.03	< 0.03
1-RCA	Nitrate + Nitrite (as N)	< 0.05	< 0.05	< 0.05
1-RCA	Nitrate (as N)	< 0.05	< 0.05	< 0.05
1-RCA	Ammonia (as N)	0.08	0.22	0.24
1-RCA	Color	< 5	13	13
1-RCA	Turbidity	0.5	2.4	2.7
1-RCA	Conductance (RCAp)	256	1240	1230
1-RCA	pH	7	9.6	9.6
1-RCA	Hardness (as CaCO3)	107	372	384
1-RCA	Bicarbonate (as CaCO3)	110	25	24
1-RCA	Carbonate (as CaCO3)	< 1	10	9
1-RCA	TDS (Calculated)	151	565	600
1-RCA	Cation Sum	2.6	9.99	10.3
1-RCA	Anion Sum	2.66	9.41	10.2
1-RCA	Ion Balance	1.23	3	0.49
1-RCA	Langlier Index @ 4C	-1.31	1.44	1.43
1-RCA	Langlier Index @ 20C	-0.91	1.84	1.83
1-RCA	Saturation pH @ 4C	8.31	8.16	8.17
1-RCA	Saturation pH @ 20C	7.91	7.76	7.77
1-RCA	Aluminum	< 10	220	220
1-RCA	Antimony	< 2	< 20	< 20
1-RCA	Arsenic	< 2	< 20	< 20
1-RCA	Barium	14	57	57
1-RCA	Beryllium	< 2	< 20	< 20
1-RCA	Bismuth	< 2	< 20	< 20
1-RCA	Boron	8	< 50	< 50
1-RCA	Cadmium	< 0.3	< 3	< 3
1-RCA	Chromium	< 2	< 20	< 20
1-RCA	Cobalt	< 1	< 10	< 10
1-RCA	Copper	< 2	< 20	< 20
1-RCA	Iron	80	< 500	< 500
1-RCA	Lead	< 0.5	< 5	< 5
1-RCA	Manganese	63	< 20	< 20
1-RCA	Molybdenum	< 2	< 20	< 20
1-RCA	Nickel	< 2	< 20	< 20
1-RCA	Selenium	< 2	< 20	< 20
1-RCA	Silver	< 0.5	< 5	< 5
1-RCA	Strontium	94	510	520
1-RCA	Thallium	< 0.1	< 1	< 1
1-RCA	Tin	< 2	< 20	< 20
1-RCA	Titanium	< 2	< 20	< 20
1-RCA	Uranium	3.8	< 1	< 1
1-RCA	Vanadium	< 2	22	22
1-RCA	Zinc	< 5	< 50	< 50
1-RCA	Phosphorus	< 0.1	< 0.1	< 0.1
1-RCA	Total Org. Carbon (by UV)	0.8	13.6	13.9

All results expressed on a dry weight basis for soils and a wet weight (as received) basis for tissues.
page 2 of 2



Prepared For:
SUZANNE MUSOLINO

Date Generated
23-Dec-2004
Spreadsheet File Name
0423039H.XLS

Client ID:	MW#1R	MW#3	MW#6
Project ID:			
PSC Analytical ID:	04-H090887	04-H090888	04-H090889
Matrix:	Water	Water	Water
Duplicate of:			
Date Sampled:	7-Dec-04	7-Dec-04	7-Dec-04
Client Description:			

Parameters	Method	EQL	Units			
C-H-:2 Kjeldahl Nitrogen Sub	London	0.1	mg/L	0.2	0.2	0.2



	MW#7S	MW#7D
<u>Date Generated</u> 23-Dec-2004	04-H090890 Water	04-H090891 Water
<u>Spreadsheet File Name</u> 0423039H.XLS	7-Dec-04	7-Dec-04
<u>Parameters</u>		
C-H-:2 Kjeldahl Nitrogen Sub	0.3	0.3

Attachment 4
Surface Water Sampling & Field Parameter Results

A copy of the Surface Water results for June has been included for your analysis. Upon comparing the current and past results, there have been no significant changes to report. Field parameters such as temperature, pH and conductivity for each sample area are as follows:

SW#5 (temperature) -- 5 degrees
 (conductivity) -- .21ms/cm
 (pH) -- 6.8

SW#7 (temperature) -- 6 degrees
 (conductivity) -- .86ms/cm
 (pH) -- 4.8

SW#8 (temperature) -- 2 degrees
 (conductivity) -- .62ms/cm
 (pH) -- 3.0

SW#9 was not sampled due to the absence of water/flow at any of the marked sample points.

Date Generated
13-Jun-2004
Spreadsheet File Name
0409531H.XLS

Client ID:	SW5	SW8	SW7
Project ID:			
PSC Analytical ID:	04-H036144	04-H036145	04-H036146
Matrix:	Water	Water	Water
Duplicate of:			
Date Sampled:	3-Jun-04	3-Jun-04	3-Jun-04
Client Description:			

Parameters	Method	EQL	Units	SW5	SW8	SW7
C-H-0 Kjeldahl Nitrogen	Blk Digest	0.1	mg/L	1.2	1.1	0.9
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	7.2	< 2	8.4
C-H-0 Total Dissolved Solids	Grav.	10	mg/L	130	90	390
C-H-0 Mercury	CVAA	0.05	ug/L	< 0.05	< 0.05	< 0.05
C-H-0 Phenolics	4-AAP	0.001	mg/L	0.001	< 0.001	< 0.001
C-H-0 Total Water Digest		-		20040605-A	20040605-A	20040605-A
C-H-0 Mercury Digestion		-		20040607-A	20040607-A	20040607-A
C-H-2 COD (as O2)	COD	5	mg/L	25	45	30
C-H-3 Tannin & Lignin	SM 5550	0.1	mg/L	0.9	3	1.1
C-H-3 Total Phosphorous	Colorimetr	0.02	mg/L	0.06	0.03	0.06
C-H-5 Inorganic Comment	Comment		Text			Elevated
+RCA Sodium	ICP-OES	0.1	mg/L	8.5	13.2	128
+RCA Potassium	ICP-OES	0.1	mg/L	2.5	2.8	3.4
+RCA Calcium	ICP-OES	0.1	mg/L	27.3	4.5	24.1
+RCA Magnesium	ICP-OES	0.1	mg/L	2.3	0.9	2.6
+RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	64	18	160
+RCA Sulfate	COBAS	2	mg/L	20	7	25
+RCA Chloride	COBAS	1	mg/L	3	16	140
+RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	4.2	4.7	3.5
+RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L	0.01	0.02	0.05
+RCA Nitrite	COBAS	0.01	mg/L	0.02	0.01	0.01
+RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	1.5	1.4	0.1
+RCA Nitrate (as N)	COBAS	0.05	mg/L	1.48	1.39	0.09
+RCA Ammonia (as N)	Auto Color	0.05	mg/L	< 0.05	< 0.05	< 0.05
+RCA Color	COBAS	5	TCU	22	72	58
+RCA Turbidity	NEPH.	0.1	NTU	4.8	1.2	24.4
+RCA Conductance (RCAp)	Electrode	1	uS/cm	181	95	705
+RCA pH	Electrode	-	Units	7.3	6.6	7.4
+RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	77.6	14.9	70.9
+RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	64	18	160
+RCA Carbonate (as CaCO3)	Calculated	1	mg/L	< 1	< 1	< 1
+RCA TDS (Calculated)	Calculated	1	mg/L	113	66	423
+RCA Cation Sum	Calculated	0.1	meq/L	1.99	0.95	7.08
+RCA Anion Sum	Calculated	0.1	meq/L	1.89	1.06	7.68
+RCA Ion Balance	Calculated	-	%	2.61	5.41	4.07
+RCA Langelier Index @ 4C	Calculated	-		-1.30	-3.32	-0.90
+RCA Langelier Index @ 20C	Calculated	-		-0.90	-2.92	-0.50
+RCA Saturation pH @ 4C	Calculated	-	Units	8.6	9.92	8.3
+RCA Saturation pH @ 20C	Calculated	-	Units	8.2	9.52	7.9
+RCA Aluminum	ICP-MS	10	ug/L	290	440	1000
+RCA Antimony	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Arsenic	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Barium	ICP-MS	5	ug/L	12	7	35
+RCA Beryllium	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Bismuth	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Boron	ICP-MS	5	ug/L	10	9	18
+RCA Cadmium	ICP-MS	0.3	ug/L	< 0.3	< 0.3	< 0.3
+RCA Chromium	ICP-MS	2	ug/L	< 2	< 2	2
+RCA Cobalt	ICP-MS	1	ug/L	< 1	< 1	1
+RCA Copper	ICP-MS	2	ug/L	4	< 2	4
+RCA Iron	ICP-MS	50	ug/L	410	350	1200
+RCA Lead	ICP-MS	0.5	ug/L	< 0.5	1	1.5
+RCA Manganese	ICP-MS	2	ug/L	21	14	150
+RCA Molybdenum	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Nickel	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Selenium	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Silver	ICP-MS	0.5	ug/L	< 0.5	< 0.5	< 0.5
+RCA Strontium	ICP-MS	5	ug/L	83	19	72
+RCA Thallium	ICP-MS	0.1	ug/L	< 0.1	< 0.1	< 0.1
+RCA Tin	ICP-MS	2	ug/L	< 2	< 2	< 2
+RCA Titanium	ICP-MS	2	ug/L	10	5	31
+RCA Uranium	ICP-MS	0.1	ug/L	0.9	0.3	10
+RCA Vanadium	ICP-MS	2	ug/L	< 2	2	2

All results expressed on a dry weight basis for soils and on a wet weight (as received) basis for tissues.

Date Generated
13-Jun-2004
Spreadsheet File Name
0409531H.XLS

Client ID:	SW5	SW8	SW7
Project ID:			
PSC Analytical ID:	04-H036144	04-H036145	04-H036146
Matrix:	Water	Water	Water
Duplicate of:			
Date Sampled:	3-Jun-04	3-Jun-04	3-Jun-04
Client Description:			

Parameters	Method	EQL	Units			
+RCA Zinc	ICP-MS	5	ug/L	7	10	9
+RCA Phosphorus	ICP-OES	0.1	mg/L	0.1	< 0.1	0.1
+RCA Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	4	11	6.1

Date Generated
10-Jun-2004
Spreadsheet File Name
0409530H.XLS

Client ID:	SW5	SW8	SW7
Project ID:			
PSC Analytical ID:	04-H036141	04-H036142	04-H036143
Matrix:	Water	Water	Water
Duplicate of:			
Date Sampled:	3-Jun-04	3-Jun-04	3-Jun-04
Client Description:			

Parameters	Method	EQL	Units			
C-H-2 BOD5 Carbonaceous	APHA 5210B	2	mg/L	4	<5	<5

PSC ANALYTICAL SERVICES

200 Blawater Road, Suite 105
 Bedford, Nova Scotia B4B 1G9
 Tel: 902-420-0203 Fax: 902-420-8612
 Toll Free: 1-800-566-RCAP (7227)
 E-mail: PASI.Halfax@contactPSC.com

Client: New Sea Technologies
 Address: 141 Sverdrup Place
Bedford, N.S.
 Postal Code: B3T 1P2
 Contact: Carole Tibbo

PSC Quote #: _____
 Client P.O. #: _____
 Client Project #: _____
 Sampled By: _____

Client: _____
 Contact: _____

Invoice to (if other than client): _____

Page 1 of 2

Phone: 902-516-5163 Fax: 902-516-5163
 E-mail: gibb@shelburne.com Results Sampling Date: June 3rd
 Sampling Time: 12:00

Phone: _____ Fax: _____

**PLEASE PROVIDE
 ADVANCE NOTICE
 FOR RUSH ORDERS**

Client contacted if RUSH Date cannot be met
 RUSH (Extra Cost) Specify Date _____

Standard 5-7 Business Days
 10 Business Days

Date Entered	Verified By	W.O. #	Client Code	PSC Sample #	Client Sample I.D.	No. & Type of Bottles	Matrix: Surface Soil/Groundwater/Sewage Effluent/Tissue/Soil	Field Filtered & Preserved	Lab Filtration Required	RCAp-30 Choose: Total or Diss. Metals	RCAp-MS Choose: Total or Diss. Metals	Total Digest (Default Method) Dissolved	Mercury Mercury is not included in soil or water metals scan	Available Metals Digest Default Method (HNO3/H2O2)	Total Digest (For Sediments) (HNO3/RF/HClO4)	Tin (required for CCME soils)	Selenium (low level) Req'd for CCME Residential, Parklands, Agricultural	Hot water soluble Boron (required for CCME Agricultural)	TPH MUST (BTEX, C6-C32)	Soil (Potable) TPH MUST Low level BTEX and C6-C32	New Brunswick Potable Water BTEX & VPH & Low Level TEH	TPH Fractionation	PAH's	PCB's	Volatile Organics (EPA 624, 8260)	Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (i.e. High Concentration Expected)	Site Location & Task number	
					SWB	1 X 20 (L)	Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
					SWB	1 X 20 (L)	Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
					SWB	5 X 100	Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
					SWB	1 X 50 (L)	Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			

Note: Lab filtration required for RCAp-MS (Mercury & metals)

2 more samples due to water samples

2004 JUN 3 PM 1:02

Samples Returned by _____
 Client Signature _____
 Samples Received in Lab by _____

Date: June 3rd
 Time: _____

Date: _____
 Time: _____

Sample Integrity Deficiency? Yes (see attached) No, Initial _____
 Temperature(s): _____

200 Blawater Road, Suite 105
Bedford, Nova Scotia B4B 1G9
Tel: 902-420-0203 Fax: 902-420-8612
Toll Free: 1-800-565-RCAP (7227)
E-mail: PCSI.Hallifax@contactPSC.com

Invoice to (if other than client):

Client: Musgrave Park
Address: 41 Musgrave Park
Postal Code: B3J 1P2
Client Project #: _____
PSC Quote #: _____
Client P.O. #: _____
Contact: Cecelia Tcheb
Sampled By: SM
Contact: _____

Phone: 876-5185 Fax: 876-5163
E-mail: gibb@hatch.ca E-mail Results: 4 fax
Sampling Date: June 3rd
Sampling Time: 10am
Phone: _____ Fax: _____

**PLEASE PROVIDE
ADVANCE NOTICE
FOR RUSH ORDERS**

Client Code: _____
Standard 5-7 Business Days
10 Business Days
RUSH (Extra Cost) Specify Date: _____
Client contacted if RUSH Date cannot be met

Date Entered	Verified By	W.O. #	PSC Sample #	Client Sample I.D.	No. & Type of Bottles	Matrix: Surface/Salt/Ground/Tapwater Sewage/Effluent/Tissue/Soil	Field Filtered & Preserved	Lab Filtration Required	RCAp-30 Choose: Total or Diss. Metals	RCAp-MS Choose: Total or Diss. Metals	Total Digest (Default Method)	Dissolved	Mercury	Mercury is not included in soil or water metals scan	Available Metals Digest Default Method (HNO3/H2O2)	Total Digest (For Sediments) (HNO3/HF/HClO4)	Tin (required for CCME soils)	Selenium (low level) Req'd for CCME Residential, Parklands, Agricultural	Hot water soluble Boron (required for CCME Agricultural)	TPH MUST (BTEX, C6-C32)	Soil (Potable) TPH MUST Low level BTEX and C6-C32	New Brunswick Potable Water BTEX & VPH & Low Level TEH	TPH Fractionation	PAH's	PCB's	Volatile Organics (EPA 624, 8260)	Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (ie. High Concentration Expected)	Site Location & Task number	
			SWT		1 x 20	Soil		<input checked="" type="checkbox"/>																					
			SWT		1 x 20	Soil		<input checked="" type="checkbox"/>																					
			SWT		1 x 20	Soil		<input checked="" type="checkbox"/>																					

samples Relinquished to PSC by _____
Client Signature) _____
samples Received in lab by _____

Date: June 3rd Time: _____
Temperature(s): _____
Sample Integrity Deficiency? Yes (see attached) No, Initial _____

Note: Please Lab Filter, metals, PCB's, TPH, PAH's, etc. before analysis.
Surface water sampling, etc. etc. etc.

2004 JUN 3 PM 1:02

A copy of the Surface Water results for December have been included for your analysis. Upon comparing the current and past results, there have been no significant changes to report. Field parameters such as temperature, pH and conductivity for each sample area are as follows:

SW#5 (temperature) -- 0 degrees
 (conductivity) -- .12ms/cm
 (pH) – 4.0

SW#8 (temperature) – 0 degrees
 (conductivity) -- .10ms/cm
 (pH) – 3.7

Notes:

Samples taken after heavy rains/winds. Woody debris flowing in stream as well as snow from last storm at SW#5. SW#8 had a lot of falling debris floating in stream.

SW#7 & SW9 were not sampled due to the absence of water/flow at any of the marked sample points.

Date Generated
21-Dec-2004
Spreadsheet File Name
0422801H.XLS

Client ID:	SW5	SW8
Project ID:		
PSC Analytical ID:	04-H089823	04-H089824
Matrix:	Water	Water
Duplicate of:		
Date Sampled:	3-Dec-04	3-Dec-04
Client Description:		

Parameters	Method	EQL	Units		
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	< 2	< 2
C-H-0 Total Dissolved Solids	Grav.	10	mg/L	50	50
C-H-0 Mercury	CVAA	0.05	ug/L	< 0.05	< 0.05
C-H-0 Phenolics	4-AAP	0.001	mg/L	< 0.001	< 0.001
C-H-0 Total Water Digest		-		20041207-B	20041208-A
C-H-0 Mercury Digestion		-		20041213-A	20041213-A
C-H-2 Kjeldahl Nitrogen Sub	London	0.1	mg/L	1.6	1.8
C-H-2 COD (as O2)	COD	5	mg/L	25	35
C-H-2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	< 5	< 5
C-H-3 Tannin & Lignin	SM 5550	0.1	mg/L	3.1	3.2
C-H-3 Total Phosphorous	Colorimetr	0.02	mg/L	0.03	0.03
C-H-5 Inorganic Comment	Comment		Text	ng limit for Potas	
+RCA Sodium	ICP-OES	0.1	mg/L	7.1	5.9
+RCA Potassium	ICP-OES	0.1	mg/L	1	2.1
+RCA Calcium	ICP-OES	0.1	mg/L	4.9	3.6
+RCA Magnesium	ICP-OES	0.1	mg/L	0.8	0.9
+RCA Alkalinity (as CaCO3)	COBAS	5	mg/L	< 5	6
+RCA Sulfate	COBAS	2	mg/L	6	7
+RCA Chloride	COBAS	1	mg/L	10	9
+RCA Reactive Silica (as SiO2)	COBAS	0.5	mg/L	3.4	4.3
+RCA Ortho Phosphate (as P)	COBAS/911	0.01	mg/L	< 0.02	< 0.01
+RCA Nitrite	COBAS	0.01	mg/L	0.02	< 0.01
+RCA Nitrate + Nitrite (as N)	COBAS	0.05	mg/L	1.7	1.7
+RCA Nitrate (as N)	COBAS	0.05	mg/L	1.68	1.7
+RCA Ammonia (as N)	Auto Color	0.05	mg/L	0.31	0.97
+RCA Color	COBAS	5	TCU	67	77
+RCA Turbidity	NEPH.	0.1	NTU	3	2.1
+RCA Conductance (RCap)	Electrode	1	uS/cm	76	77
+RCA pH	Electrode	-	Units	5.6	5.2
+RCA Hardness (as CaCO3)	Calculated	0.1	mg/L	15.5	12.7
+RCA Bicarbonate (as CaCO3)	Calculated	1	mg/L	< 5	6
+RCA Carbonate (as CaCO3)	Calculated	1	mg/L	< 5	< 1
+RCA TDS (Calculated)	Calculated	1	mg/L	44	45
+RCA Cation Sum	Calculated	0.1	meq/L	0.67	0.64
+RCA Anion Sum	Calculated	0.1	meq/L	0.63	0.64
+RCA Ion Balance	Calculated	-	%	3.18	0.09
+RCA Langlier Index @ 4C	Calculated	-		-4.83	-5.29
+RCA Langlier Index @ 20C	Calculated	-		-4.43	-4.89
+RCA Saturation pH @ 4C	Calculated	-	Units	10.4	10.5
+RCA Saturation pH @ 20C	Calculated	-	Units	10	10.1
+RCA Aluminum	ICP-MS	10	ug/L	470	420
+RCA Antimony	ICP-MS	2	ug/L	< 2	< 2
+RCA Arsenic	ICP-MS	2	ug/L	< 2	< 2
+RCA Barium	ICP-MS	5	ug/L	9	8
+RCA Beryllium	ICP-MS	2	ug/L	< 2	< 2
+RCA Bismuth	ICP-MS	2	ug/L	< 2	< 2
+RCA Boron	ICP-MS	5	ug/L	9	6
+RCA Cadmium	ICP-MS	0.3	ug/L	< 0.3	< 0.3
+RCA Chromium	ICP-MS	2	ug/L	< 2	< 2
+RCA Cobalt	ICP-MS	1	ug/L	< 1	< 1
+RCA Copper	ICP-MS	2	ug/L	< 2	< 2
+RCA Iron	ICP-MS	50	ug/L	270	300
+RCA Lead	ICP-MS	0.5	ug/L	0.6	1.1
+RCA Manganese	ICP-MS	2	ug/L	22	14
+RCA Molybdenum	ICP-MS	2	ug/L	< 2	< 2
+RCA Nickel	ICP-MS	2	ug/L	< 2	< 2
+RCA Selenium	ICP-MS	2	ug/L	< 2	< 2
+RCA Silver	ICP-MS	0.5	ug/L	< 0.5	< 0.5
+RCA Strontium	ICP-MS	5	ug/L	19	18
+RCA Thallium	ICP-MS	0.1	ug/L	< 0.1	< 0.1
+RCA Tin	ICP-MS	2	ug/L	< 2	< 2
+RCA Titanium	ICP-MS	2	ug/L	7	5
+RCA Uranium	ICP-MS	0.1	ug/L	0.1	0.2
+RCA Vanadium	ICP-MS	2	ug/L	2	2
+RCA Zinc	ICP-MS	5	ug/L	8	7

Date Generated 21-Dec-2004
Spreadsheet File Name 0422801H.XLS

Client ID:	SW5	SW8
Project ID:		
PSC Analytical ID:	04-H089823	04-H089824
Matrix:	Water	Water
Duplicate of:		
Date Sampled:	3-Dec-04	3-Dec-04
Client Description:		

Parameters	Method	EQL	Units		
1-RCA Phosphorus	ICP-OES	0.1	mg/L	0.1	0.1
1-RCA Total Org. Carbon (by UV)	U.V.-ox	0.5	mg/L	13.9	15.3



200 Bluewater Road, Suite 105
Bedford, Nova Scotia B4B 1G9
Tel: 902-420-0203 Fax: 902-420-8612
Toll Free: 1-800-565-RCAP (7227)
E-mail: PASC.Hallfax@contactPSC.com

Client: New Era Tech Ltd PSC Quote #: _____ Client: _____
Address: Bedford, Nova Scotia Client P.O. #: _____
Postal Code: B3T 1P2 Client Project #: _____
Contact: Elizabeth Musolino Sampled By: EM Contact: _____

Invoice to (if other than client)

Phone: 276 5165 Fax: 276 5163 Sampling Date: Dec 3/01 Phone: _____ Fax: _____
E-mail: NewEra@NewEraTech.com Results Sampling Time: 14:30

Note
No samples taken for SW1 & SW2 (No flow at water)

Date Entered	Verified By	W.O. #	Client Code	PLEASE PROVIDE ADVANCE NOTICE FOR RUSH ORDERS		Client Sample I.D.	No. & Type of Bottles	Metals		Metals Soil	Mercury	TPH MUST (BTEX, C6-C32)	Soil (Potable) TPH MUST Low Level BTEX and C6-C32	New Brunswick Potable Water BTEX & VPH & Low Level TPH Fractionation	PAH's	PCB's	Volatile Organics (EPA 624, 8260)	Analysis or Regulatory Packages (specify Guidelines) Comments/Hazards (ie. High Concentration Expected)	Site Location & Task number		
				Client contacted if RUSH Date cannot be met RUSH (Extra Cost) Specify Date	Standard 5-7 Business Days <input type="checkbox"/> 10 Business Days <input type="checkbox"/>			Total Digest (Default Method)	Metals Water												
						SW5	1X100, 1X50														
						↓	3X100 (initial)														
						SW2	1X100, 1X50														
						↓	1X100, 1X50														

Temperature(s): _____
Time: _____
Date: Dec 3/01
Sample integrity Deficiency? Yes (see attached) No, Initial _____
Samples Relinquished to PSC by: _____
(Client Signature) _____
Samples Received in lab by: _____

Attachment 5
**Dillon Consulting Annual Report consisting of Ground
and Surface Water Data and Analysis**

January 31, 2005



NEW ERA TECHNOLOGIES LIMITED
61 Evergreen Place
Goodwood, Nova Scotia
B3T 1P2

ATTENTION: Mr. Gerald Tibbo
Plant Manager

Groundwater and Surface Water Monitoring - 2004 Annual Report

This correspondence presents the results of the groundwater and surface water monitoring events conducted in 2004 at the New Era Technologies Limited facility. The monitoring program was conducted by New Era Technologies personnel. The program involved four (4) monitoring events on either a quarterly or annual basis, in accordance with the 1998 Nova Scotia Department of Environment Composting Facility Guidelines. These Guidelines (Schedule 1) are attached in **Attachment 1** for reference.

The initial monitoring event was conducted in March with subsequent events in June, September and December 2004. Groundwater and surface water samples were collected from the designated locations. Static water levels were measured in each well, and surface and groundwater samples were collected and submitted to PSC Analytical Services in Bedford, Nova Scotia for analysis. Select samples were analyzed for either general chemistry, metals, total phosphorus, TSS, TOC, DOC, COD, BOD, total kjeldahl nitrogen, phenolics and tannin/lignins. Due to the nature of the facility, samples were not submitted for volatile organic compounds. Copies of the laboratory certificates of analysis have been attached for reference.

The new data has been compiled in conjunction with historic data for comparison in tabular format in **Attachment 2**. Although Canadian Water Quality Guidelines are also included for reference, they may not be directly applicable in all cases. This letter provides an assessment of the data, identifying reference guideline exceedences, changes in static water levels, and surface or groundwater chemistry that may have occurred since the project began. Site features and surface water sampling and monitor well locations, are provided in **Attachment 3**.

Groundwater Elevation

Groundwater elevation data is provided in **Attachment 4**. The elevations were comparable to previous results. Slight variation in depth to water observed at all locations is attributed to seasonal influences and is typical in aquifers throughout the province of Nova Scotia. Based on the data to date, flow direction has been consistently to the north to northwest.

L:\PROJECTS\FINAL\054185\text\Tibbo 1 Letter.doc

137
Chain Lake Drive
Suite 100
Halifax
Nova Scotia
Canada
B3S 1B3
Telephone
(902) 450-4000
Fax
(902) 450-2008

ISO 9001 Registered

Dillon Consulting
Limited

Surface Water Chemistry

Surface water samples were collected on a semi-annual basis (June and December) from monitoring stations SW5, SW7, SW8, and SW9. During the June monitoring event stations SW 5, SW7 and SW8 were sampled, however, no sample could be collected at SW9 due to low flow. During the December monitoring event stations SW5 and SW8 were sampled, however, no samples were collected at SW7 and SW9 due to low flow conditions. All stations were sampled as per Schedule 1, Column 3 of the NSDEL Compost Guidelines. Tabulated data is provided in **Attachment 2**. Laboratory certificates of analysis are included in **Attachment 5**. A discussion of the results is as follows.

General Chemistry

The laboratory pH result from surface water sampling stations SW-5, and SW-8 in December 2004 were reported as 5.6 and 5.2 units respectively, which are below the FWAL guideline range (6.5-9.0 units). Low pH has been recorded in all of these stations in the majority of preceding samples. The lowest concentration during this event (5.2 units) occurred in SW-8. All other monitoring locations were within the guideline.

Metals

Aluminum exceeded the guideline (0.005 mg/L to 0.1 mg/L) in SW-5 (0.29 mg/L), SW-7 (1.0 mg/L) and SW-8 (0.44 mg/L) during the June 2004 event, and SW-5 (0.47 mg/L) and SW-8 (0.42 mg/L) during the December 2004 sampling events. Elevated aluminum has been observed in all of the preceding samples.

Iron exceeded the guideline (0.3 mg/L) in SW-5 (0.41 mg/L), SW-7 (1.2 mg/L) and SW-8 (0.35 mg/L) during the June 2004 event. Elevated iron has been observed in all of these stations during previous sampling events, however the most recent data does not represent the highest or lowest concentrations to date.

Copper exceeded the guideline (0.002 mg/L to 0.004 mg/L) in SW-5 (0.004 mg/L) and SW-7 (0.004 mg/L) during the June 2004 sampling event. Elevated copper in SW-5 has been observed during September 2001, however the most recent result is only slightly above the 0.002 mg/L FWAL guideline. Elevated copper in SW-7 has occurred in the majority of preceding samples. This most recent result does not represent the highest or lowest to date.

Lead exceeded the guideline (0.001mg/L to 0.007 mg/L) in SW-8 (0.0011 mg/L). This result is only slightly above the 0.001 mg/L FWAL guideline.

These exceedences do not represent a significant change from the previous results and all other metals were within their respective FWAL guideline. Variations noted could be attributed to seasonal and sediment/turbidity related influences.

TSS/COD/BOD

Surface water stations SW-5, SW-7 and SW-8 were sampled and analyzed for TSS, COD and BOD during the 2004 monitoring period. Total suspended solids were consistently low at all surface water locations (i.e., <10 mg/L). There are no associated FWAL guidelines for these parameters.

Tannin and Lignin

Surface water stations SW-5, SW-7 and SW-8 were sampled and analyzed for tannin and lignin during the 2004 monitoring period. There are no associated FWAL guidelines for these parameters.

Total Kjeldahl Nitrogen, Phenolics and Total phosphorous

Surface water stations SW-5, SW-7 and SW-8 were sampled and analyzed for phenolics and total kjeldahl nitrogen during the 2004 monitoring period. Total phosphorous and total kjeldahl nitrogen do not have an associated guideline. Reported analytical results for phenolics are all within the associated FWAL guideline concentration.

Groundwater Chemistry

Groundwater samples were collected from monitoring wells MW-1R, MW-2, MW-3, MW-6, MW-7S and MW-7D on either a quarterly basis (March, June and September) or on an annual basis (December) during the 2004 groundwater monitoring program. All monitoring wells were sampled as per Schedule 1, Column 1 for the annual event and Column 2 for the quarterly events. Tabulated data is provided in **Attachment 2** and compared to the CDWQG. Laboratory certificates of analysis are included in **Attachment 5**. A discussion of the results follows.

General Chemistry

The laboratory pH results from monitoring well MW-2 was above the CDWQG in the June, September and December 2004 events. Elevated pH has been recorded at this location during the majority of preceding events. The results range from 9.6 units to 10.6 units, respectively. pH was slightly below the CDWQG in MW-6 (6.4 units) during the March 2004 sampling event.

Chloride exceeded the guideline (250 mg/L) in MW2 during all 2004 sampling events. Results were only slightly above the CDWQG and ranged from 260 mg/l to 270 mg/L. The 2004 concentrations of chloride are comparable to preceding sampling events.

Colour exceeded the CDWQG (15 TCU) in MW-2 (18 TCU) during the March 2004 sampling event. This is not a first time occurrence and does not represent the highest concentration to date.

Turbidity was elevated above the 1 NTU guideline in MW-2 (2.4 NTU) during December, MW-3 (16.2 NTU) during September and MW-7D (2.3 NTU) during June 2004. Exceedance of turbidity has occurred in these monitor wells during preceding sampling events.

TDS exceeded the guideline (500 mg/L) in MW-2 during all 2004 monitoring events. Results range from 551 mg/L in September to 565 mg/L in December 2004, respectively.

Metals

Manganese exceeded the guideline (0.05 mg/L) in monitor wells MW1R, MW2, MW3, MW6, MW7S, and MW7D during one or more of the sampling events scheduled for 2004. The highest manganese concentration (0.87 mg/L) occurred in MW6 during the December 2004 event. The lowest manganese concentration (0.06 mg/L) occurred in the background well (MW1R), during September, monitor well MW3 during June and MW7D during the March and September 2004 sampling events.

Manganese is commonly elevated in Nova Scotia groundwaters, particularly in monitoring wells. Limits are in effect for aesthetic reasons only and presence is not necessarily indicative of inferior water quality.

DOC, TSS, COD

Monitoring wells MW-1R, MW-2, MW-3, MW-6, MW-7S, and MW-7D were sampled and analyzed for DOC, TSS and COD during the 2004 monitoring events. Tabular results can be found in **Attachment 2**. There is no recommended CDWQG for these parameters.

Total Kjeldahl Nitrogen, Total phosphorous and Phenolics

During the December 2004 annual event, monitor wells MW1R, MW3, MW6, MW7S and MS7D were sampled for total kjeldahl nitrogen, total phosphorous and phenolics. There is no recommended CDWQG for these parameters. Tabular results can be found in **Attachment 2**.

Summary

The following briefly summarizes the 2004 results:

- The general chemistry results from the select surface water samples revealed that parameters were within their associated FWAL guideline, with the exception of pH at two monitoring locations.
- The metals results from the select surface water samples revealed aluminum concentrations in excess of its guideline limit in three locations during one or both 2004 events. Iron exceeded its respective guidelines at three locations while copper

exceeded the guideline at two locations during the June 2004 event. Lead exceeded in one location only.

- The general chemistry results from the select groundwater samples revealed that parameters were within their associated CDWQG, with the exception of pH at two monitoring locations; chloride, color and TDS at one location, and turbidity at three locations.
- The metals results from select monitoring well locations revealed manganese exceedances in all six of the monitoring wells sampled during 2004.

Upon review of the results for those parameters tested during the 2004 monitoring program and comparison of these results to historic data, no significant changes of concern in water quality have been noted, in fact, most results are very comparable to historic data. The minor variations in groundwaters may reflect seasonal influences as well as adherence to fine particulate matter (created during well purging) that is not completely removed during field filtration of the sample.

We trust that this is adequate for your purposes at this time. Should you have questions or comments, please contact the undersigned at your earliest convenience.

Yours truly,

DILLON CONSULTING LIMITED


Michael Black, B.Sc.H.
Project Manager

TLV:jep
Attachments
Our File: 05-4185-0100

Attachment 1
NSDEL Composting Facility Guidelines (1998)

Schedule 1
Groundwater, Leachate and Surface Water Monitoring Parameters

Parameter				
Parameter Group	Column 1	Column 2	Column 3	Column 4
	Comprehensive List for Groundwater and Leachate	Indicator List for Groundwater and Leachate	Comprehensive List for Surface Water	Indicator List for Surface Water
	Alkalinity	Alkalinity	Alkalinity	Alkalinity
	Ammonia		Ammonia	Ammonia
	Arsenic		Arsenic	
	Barium		Barium	
	Boron		Boron	
	Cadmium	Cadmium	Cadmium	
	Calcium	Calcium		
	Chloride	Chloride	Chloride	Chloride
	Chromium		Chromium	
	Conductivity	Conductivity	Conductivity	Conductivity
	Copper		Copper	
	Iron	Iron	Iron	
	Lead	Lead	Lead	
	Magnesium	Magnesium		
	Manganese			
	Mercury		Mercury	
	Nitrate	Nitrate	Nitrate	Nitrate

Parameter				
Parameter Group	Column 1	Column 2	Column 3	Column 4
	Comprehensive List for Groundwater and Leachate	Indicator List for Groundwater and Leachate	Comprehensive List for Surface Water	Indicator List for Surface Water
	Nitrite		Nitrite	Nitrite
	Total Kjeldahl Nitrogen		Total Kjeldahl Nitrogen	Total Kjeldahl Nitrogen
	pH	pH	pH	pH
	Total Phosphorus		Total Phosphorus	Total Phosphorus
	Potassium	Potassium		
	Sodium	Sodium		
	Suspended Solids	Suspended Solids	Suspended Solids	Suspended Solids
	Total Dissolved Solids	Total Dissolved Solids	Total Dissolved Solids	Total Dissolved Solids
	Sulphate	Sulphate	Sulphate	Sulphate
	Zinc		Zinc	
	Benzene		Benzene	
	1, 4 Dichlorobenzene		1, 4 Dichlorobenzene	
	Dichloromethane		Dichloromethane	
	Toluene		Toluene	
	Vinyl Chloride			

Parameter				
Parameter Group	Column 1	Column 2	Column 3	Column 4
	Comprehensive List for Groundwater and Leachate	Indicator List for Groundwater and Leachate	Comprehensive List for Surface Water	Indicator List for Surface Water
Off-Organics				
			Biochemical Oxygen Demand (BOD ₅)	Biochemical Oxygen Demand (BOD ₅)
	Chemical Oxygen Demand	Chemical Oxygen Demand	Chemical Oxygen Demand	Chemical Oxygen Demand
	Dissolved Organic Carbon	Dissolved Organic Carbon	Total Organic Carbon & S ₂	
	Phenol		Phenol	Phenol
			Tannins/Lignins	
Field Parameters				
			Temperature	Temperature
	pH	pH	pH	pH
	Conductivity	Conductivity	Conductivity	Conductivity
			Dissolved Oxygen	Dissolved Oxygen
			Flow	Flow

Attachment 2
Surface/Groundwater Chemistry Data

Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-1 Apr 30, 01	MW-1 Sept 7, 01	MW-1 Dec 4, 01	MW-1 Mar 25, 02	MW-1 Jun 26, 02	MW-1 Sept 30, 03
Sodium	mg/L	200	7.1	12.7	11.9	13.4	12.8	
Potassium	mg/L	**	1.4	2.8	2.1	2.2	2.6	
Calcium	mg/L	**	22.3	50.1	48.1	44.7	41.6	
Magnesium	mg/L	**	3.2	9.5	8.8	8.1	7.8	
Alkalinity as (CaCO3)	mg/L	**	60	178	163	130	130	
Sulfate	mg/L	500	7	7	9	13	12	
Chloride	mg/L	250	6.1	5	5.8	8	7	
Reactive Silica	mg/L	**	7.3	11.8	11.8	9.2	11	
Ortho Phosphate (as P)	mg/L	**	nd	nd	0.01	nd	0.01	
Phosphorus	mg/L	**	nd	nd	nd	0.1	0.1	
Total Phosphorus	mg/L	**	-	-	-	-	-	
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	nd	1.5	0.26	
Nitrate (as N)	mg/L	10	nd	nd	nd	1.48	0.21	
Nitrite	mg/L	**	nd	nd	<0.02	0.02	0.05	
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	nd	
Kjeldahl Nitrogen	mg/L	**	<0.5	-	-	-	-	
Color	TCU	15	8	<5	8	8	nd	
Dissolved Organic Carbon	mg/L	**	1.9	2.8	-	-	-	
Turbidity	NTU	1	336	>1000	>1000	>1000	<1000	
TDS	mg/L	500	91	206	196	183	174	
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	
Conductance (RCap)	us/cm	**	156	379	343	332	343	
pH (field)	units	6.5 - 8.5	-	-	-	-	-	
pH (lab)	units	6.5 - 8.5	7.2	8	7.6	7.7	7.8	
Total Organic Carbon	mg/L	**	7	-	<50	nd	nd	
Hardness (as CaCO3)	mg/L	**	68.9	164	156	145	136	
Bicarbonate (as CaCO3)	mg/L	**	60	176	162	129	129	
Carbonate (as CaCO3)	mg/L	**	<1.0	2	<1	nd	nd	
Ion Balance	mg/L	**	6.26	0.77	1.16	5	4.35	
Cation Sum	meq/L	**	1.72	3.91	3.7	3.54	3.34	
Anion Sum	meq/L	**	1.52	3.85	3.61	3.2	3.07	
Langlier Index (4C)	units	**	-1.51	0.09	-0.36	-0.39	-0.32	
Langlier Index (20C)	units	**	-1.11	0.49	0.04	0.01	0.08	
Saturation pH @ 4C	units	**	8.71	7.91	7.96	8.09	8.12	
Saturation pH @ 20C	units	**	8.31	7.51	7.56	7.69	7.72	
Total Suspended Solids	mg/L	**	464	-	-	-	-	
METALS								
Aluminum	mg/L	**	0.03	0.02	<0.01	0.06	0.002	
Antimony	mg/L	0.006	0.014	<0.002	<0.002	nd	nd	
Arsenic	mg/L	0.025	<0.002	0.003	<0.002	nd	nd	
Barium	mg/L	1	0.017	0.03	0.032	0.029	0.026	
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	
Boron	mg/L	5	0.007	0.012	0.011	0.011	0.012	
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	nd	nd	
Chromium	mg/L	0.05	<0.002	<0.002	<0.002	nd	nd	
Cobalt	mg/L	**	<0.001	<0.001	<0.001	nd	nd	
Copper	mg/L	1	<0.002	<0.002	0.002	0.002	0.002	
Iron	mg/L	0.3	<0.02	<0.02	<0.02	0.07	nd	
Lead	mg/L	0.01	<0.0005	0.0005	<0.0005	0.0014	0.0013	
Manganese	mg/L	0.05	0.072	0.3	0.089	0.091	0.074	
Mercury	mg/L	0.001	-	-	-	-	0.0001	
Molybdenum	mg/L	**	0.002	0.008	0.004	0.004	0.005	
Nickel	mg/L	**	<0.002	0.002	<0.002	0.004	0.003	
Selenium	mg/L	0.01	<0.002	<0.002	<0.002	nd	nd	
Silver	mg/L	**	<0.0005	<0.0005	<0.0005	nd	nd	
Strontium	mg/L	**	0.053	0.12	0.12	0.12	0.11	
Thallium	mg/L	**	<0.0001	<0.0001	<0.0001	nd	nd	
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	
Titanium	mg/L	**	<0.002	<0.002	<0.002	0.006	nd	
Uranium	mg/L	0.02	0.0013	0.0026	0.0028	0.0031	0.0033	
Vanadium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	
Zinc	mg/L	5	0.006	0.011	0.003	0.009	0.011	
Carbonaceous BOD	mg/L	**	-	-	-	-	-	
COD	mg/L	**	-	-	-	-	-	
Phenolics	mg/L	**	-	-	-	-	-	
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	<10	0	0	0	0	
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	10	0	0	200	45	

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter

Shading Indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-1R* Jan. 23, 04	MW-1R Mar. 25, 04	MW-1R Jun. 17, 04	MW-1R Sept. 7, 04	MW-1R Dec. 7, 04
Sodium	mg/L	200	12.6	11.7	10	10.6	10.9
Potassium	mg/L	**	2.1	2.1	1.8	1.9	1.9
Calcium	mg/L	**	36.4	38.5	37.5	38.5	41.5
Magnesium	mg/L	**	5.8	6.1	6.2	6.4	6.7
Alkalinity as (CaCO3)	mg/L	**	150	140	140	140	150
Sulfate	mg/L	500	nd	4	4	3	3
Chloride	mg/L	250	8	6	5	5	5
Reactive Silica	mg/L	**	9.8	9.2	8.1	9.6	9.9
Ortho Phosphate (as P)	mg/L	**	0.11	0.1	0.07	0.1	0.07
Phosphorus	mg/L	**	-	-	-	-	0.01
Total Phosphorus	mg/L	**	-	-	-	-	0.36
Nitrate+Nitrite (as N)	mg/L	**	nd	<0.05	<0.05	<0.05	0.12
Nitrate (as N)	mg/L	10	-	-	-	-	<0.03
Nitrite	mg/L	**	-	-	-	-	0.12
Ammonia (as N)	mg/L	**	nd	<0.05	<0.05	<0.05	0.27
Kjeldahl Nitrogen	mg/L	**	-	-	-	-	0.2
Color	TCU	15	nd	<5	<5	<5	<5
Dissolved Organic Carbon	mg/L	**	nd	0.5	0.5	<0.5	<0.5
Turbidity	NTU	1	0.2	0.4	0.2	<0.1	0.6
TDS	mg/L	500	167	162	157	159	170
Specific Conductance (field)	ms/cm	**	0.25	0.35	0.32	0.34	0.35
Conductance (RCap)	us/cm	**	294	265	272	265	289
pH (field)	units	6.5 - 8.5	8	7.9	7.4	7.3	7.2
pH (lab)	units	6.5 - 8.5	8	8	7.4	7.8	7.9
Total Organic Carbon	mg/L	**	nd	<0.5	<0.5	<0.5	<0.0005
Hardness (as CaCO3)	mg/L	**	115	121	119	122	131
Bicarbonate (as CaCO3)	mg/L	**	149	139	140	139	149
Carbonate (as CaCO3)	mg/L	**	1	1	<1	<1	1
Ion Balance	mg/L	**	6.02	1.1	2.74	0.77	0.75
Cation Sum	meq/L	**	2.9	2.99	2.87	2.96	3.16
Anion Sum	meq/L	**	3.27	3.06	3.03	3.01	3.21
Langlier Index (4C)	units	**	-0.11	-0.12	-0.73	-0.32	-0.16
Langlier Index (20C)	units	**	0.29	0.28	-0.33	0.08	0.24
Saturation pH @ 4C	units	**	8.11	8.12	8.13	8.12	7.06
Saturation pH @ 20C	units	**	7.71	7.72	7.73	7.72	7.66
Total Suspended Solids	mg/L	**	1830	542	959	807	257
METALS							
Aluminum	mg/L	**	-	-	-	-	0.08
Antimony	mg/L	0.006	-	-	-	-	<0.002
Arsenic	mg/L	0.025	-	-	-	-	0.002
Barium	mg/L	1	-	-	-	-	0.031
Beryllium	mg/L	**	-	-	-	-	<0.002
Bismuth	mg/L	**	-	-	-	-	<0.002
Boron	mg/L	5	-	-	-	-	0.014
Cadmium	mg/L	0.005	nd	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.05	-	-	-	-	0.004
Cobalt	mg/L	**	-	-	-	-	<0.001
Copper	mg/L	1	nd	<0.01	<0.01	<0.01	<0.002
Iron	mg/L	0.3	0.02	0.02	<0.02	<0.02	0.08
Lead	mg/L	0.01	nd	<0.0005	<0.0005	<0.0005	<0.0005
Manganese	mg/L	0.05	0.06	0.13	0.12	0.06	0.039
Mercury	mg/L	0.001	-	-	-	-	<0.00005
Molybdenum	mg/L	**	-	-	-	-	0.005
Nickel	mg/L	**	-	-	-	-	<0.002
Selenium	mg/L	0.01	-	-	-	-	<0.002
Silver	mg/L	**	-	-	-	-	<0.0005
Strontium	mg/L	**	-	-	-	-	0.14
Thallium	mg/L	**	-	-	-	-	<0.0001
Tin	mg/L	**	-	-	-	-	<0.002
Titanium	mg/L	**	-	-	-	-	0.003
Uranium	mg/L	0.02	-	-	-	-	0.015
Vanadium	mg/L	**	-	-	-	-	<0.002
Zinc	mg/L	5	nd	<0.05	<0.05	<0.05	<0.005
Carbonaceous BOD	mg/L	**	-	-	-	-	-
COD	mg/L	**	-	<15	<5	<15	<5
Phenolics	mg/L	**	-	-	-	-	<0.001
Fecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-2 Apr 30, 01	MW-2 Sept 7, 01	MW-2 Dec 4, 01	MW-2 Mar 25 02	MW-2 Jun 26, 02	MW-2 July 2, 03
Sodium	mg/L	200	35.8	42	42	40.6	44.1	41.1
Potassium	mg/L	**	3.3	4.4	3.5	2.6	3.2	2.8
Calcium	mg/L	**	146	157	160	131	133	131
Magnesium	mg/L	**	2.9	0.7	0.7	1.8	2.6	1.3
Alkalinity as (CaCO3)	mg/L	**	69	66	35	34	34	34
Sulfate	mg/L	500	48	56	61	46	66	61
Chloride	mg/L	250	214	253	236	200	220	230
Reactive Silica	mg/L	**	8	13	9.4	8	9.2	9.2
Ortho Phosphate (as P)	mg/L	**	nd	nd	0.02	nd	nd	0.02
Phosphorus	mg/L	**	nd	nd	nd	nd	0.1	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	nd	nd	nd	nd
Nitrate (as N)	mg/L	10	nd	nd	nd	nd	nd	-
Nitrite	mg/L	**	nd	nd	<0.02	nd	nd	-
Ammonia (as N)	mg/L	**	0.06	0.32	0.17	0.07	0.06	0.1
Kjeldahl Nitrogen	mg/L	**	1.1	-	-	-	-	-
Color	TCU	15	9	12	20	16	14	11
Dissolved Organic Carbon	mg/L	**	23.7	8.4	-	-	-	-
Turbidity	NTU	1	298	108	>1000	62.7	440	0.4
TDS	mg/L	500	500	566	534	451	499	497
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-
Conductance (RCap)	us/cm	**	1100	1210	1200	925	1140	1220
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (lab)	units	6.5 - 8.5	10.1	10.5	9.9	10	9.7	9.8
Total Organic Carbon	mg/L	**	46	-	<50	8.5	11.9	9
Hardness (as CaCO3)	mg/L	**	376	395	402	335	343	332
Bicarbonate (as CaCO3)	mg/L	**	29	13	18	15	21	19
Carbonate (as CaCO3)	mg/L	**	34	38	13	14	10	11
Ion Balance	mg/L	**	4.28	1.19	7.22	7.86	3.48	0.43
Cation Sum	meq/L	**	9.17	9.85	9.97	8.52	8.86	8.51
Anion Sum	meq/L	**	8.42	9.62	8.63	7.28	8.26	8.44
Langelier Index (4C)	units	**	2.21	2.62	1.75	1.76	1.46	1.56
Langelier Index (20C)	units	**	2.61	3.02	2.15	2.16	1.86	1.96
Saturation pH @ 4C	units	**	7.89	7.88	8.15	8.24	8.24	8.24
Saturation pH @ 20C	units	**	7.49	7.48	8.75	7.84	7.84	7.84
Total Suspended Solids	mg/L	**	528	-	-	-	-	1180
METALS								
Aluminum	mg/L	**	0.16	0.73	0.51	0.23	0.15	-
Antimony	mg/L	0.006	0.006	<0.02	<0.002	nd	nd	-
Arsenic	mg/L	0.025	0.008	<0.02	0.01	0.008	0.009	-
Barium	mg/L	1	0.038	<0.05	0.033	0.027	0.03	-
Beryllium	mg/L	**	<0.005	<0.05	<0.005	nd	nd	-
Bismuth	mg/L	**	<0.002	<0.02	<0.002	nd	nd	-
Boron	mg/L	5	0.018	<0.05	0.021	0.02	0.022	-
Cadmium	mg/L	0.005	<0.0003	<0.003	<0.0003	nd	nd	nd(0.003)
Chromium	mg/L	0.05	<0.002	<0.02	<0.002	nd	nd	-
Cobalt	mg/L	**	<0.001	<0.01	<0.001	nd	nd	-
Copper	mg/L	1	0.002	<0.02	<0.002	nd	nd	<0.01
Iron	mg/L	0.3	<0.02	<0.2	<0.02	nd	nd	<0.02
Lead	mg/L	0.01	<0.0005	<0.005	<0.0005	0.0005	nd	nd(0.005)
Manganese	mg/L	0.05	0.002	<0.02	0.002	0.004	0.016	<0.01
Mercury	mg/L	0.001	-	-	-	-	0.00006	-
Molybdenum	mg/L	**	0.017	<0.02	0.018	0.015	0.017	-
Nickel	mg/L	**	<0.002	<0.02	0.003	0.003	0.003	-
Selenium	mg/L	0.01	<0.002	<0.02	<0.002	nd	nd	-
Silver	mg/L	**	<0.0005	<0.005	<0.0005	nd	nd	-
Strontium	mg/L	**	0.34	0.44	0.44	0.34	0.33	-
Thallium	mg/L	**	<0.0001	<0.001	<0.0001	nd	nd	-
Tin	mg/L	**	<0.002	<0.02	<0.002	nd	nd	-
Titanium	mg/L	**	<0.002	<0.02	<0.002	0.002	0.002	-
Uranium	mg/L	0.02	0.0011	<0.001	0.0002	0.0004	0.0003	-
Vanadium	mg/L	**	0.007	<0.02	0.017	0.006	0.005	-
Zinc	mg/L	5	0.002	0.039	0.002	0.005	0.004	0.1
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	-	-	-	-	-	35
Phenolics	mg/L	**	-	-	-	-	-	-
Fecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	<10	0	0	0	0	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	<10	0	0	0	62	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-2 Jan 12, 04	MW-2 Mar 25, 04	MW-2 Jun 17, 04	MW-2 Sept 7, 04	MW-2 Dec 7, 04	MW-2 Dup LTD
Sodium	mg/L	200	47.8	48.2	45.7	53.3	56.5	58.1
Potassium	mg/L	**	3.2	2.8	2.9	4.1	3.5	3.6
Calcium	mg/L	**	160	159	140	147	148	153
Magnesium	mg/L	**	1.1	0.6	0.7	0.4	0.5	0.5
Alkalinity as (CaCO3)	mg/L	**	30	39	24	28	37	35
Sulfate	mg/L	500	160	52	52	56	64	64
Chloride	mg/L	250	250	260	270	260	260	290
Reactive Silica	mg/L	**	9.5	8.6	8.5	12	9.7	9.6
Ortho Phosphate (as P)	mg/L	**	nd	<0.1	0.01	<0.01	<0.01	<0.01
Phosphorus	mg/L	**	-	-	-	-	<0.1	<0.1
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	nd	<0.05	<0.05	0.14	<0.05	<0.05
Nitrate (as N)	mg/L	10	-	-	-	-	<0.05	<0.05
Nitrite	mg/L	**	-	-	-	-	<0.03	<0.03
Ammonia (as N)	mg/L	**	0.25	0.16	0.17	0.34	0.22	0.24
Kjeldahl Nitrogen	mg/L	**	-	-	-	-	-	-
Color	TCU	15	13	18	15	15	13	13
Dissolved Organic Carbon	mg/L	**	5.6	17	9	8.4	13	13.3
Turbidity	NTU	1	0.1	1.1	0.3	<0.1	2.4	2.7
TDS	mg/L	500	650	555	535	551	565	600
Specific Conductance (field)	ms/cm	**	1.42	1.47	1.24	1.37	1.46	-
Conductance (RCap)	us/cm	**	1310	1130	1060	1200	1240	1230
pH (field)	units	6.5 - 8.5	10.4	11.2	9.3	10.5	10.4	-
pH (lab)	units	6.5 - 8.5	7.7	7.6	9.6	10.6	9.6	9.6
Total Organic Carbon	mg/L	**	6.1	18.3	11.8	9	13.6	13.9
Hardness (as CaCO3)	mg/L	**	404	399	352	369	372	384
Bicarbonate (as CaCO3)	mg/L	**	30	39	16	2	25	24
Carbonate (as CaCO3)	mg/L	**	nd	<1	6	6	10	9
Ion Balance	mg/L	**	3.43	4.99	0.33	3.97	3	0.49
Cation Sum	meq/L	**	10.3	10.2	9.12	9.82	9.99	10.3
Anion Sum	meq/L	**	11	9.2	9.18	9.01	9.41	10.2
Langlier Index (4C)	units	**	-0.52	-0.5	1.23	2.32	1.44	1.43
Langlier Index (20C)	units	**	-0.12	-0.1	1.63	2.72	1.84	1.83
Saturation pH @ 4C	units	**	8.22	8.1	8.37	8.28	8.16	8.17
Saturation pH @ 20C	units	**	7.82	7.7	7.97	7.88	7.76	7.77
Total Suspended Solids	mg/L	**	370	89	3400	273	6160	-
METALS								
Aluminum	mg/L	**	-	-	-	-	0.22	0.22
Antimony	mg/L	0.006	-	-	-	-	<0.02	<0.02
Arsenic	mg/L	0.025	-	-	-	-	<0.02	<0.02
Barium	mg/L	1	-	-	-	-	0.057	0.057
Beryllium	mg/L	**	-	-	-	-	<0.02	<0.02
Bismuth	mg/L	**	-	-	-	-	<0.02	<0.02
Boron	mg/L	5	-	-	-	-	<0.05	<0.05
Cadmium	mg/L	0.005	nd(0.003)	nd(0.003)	nd(0.003)	<0.0003	<0.003	<0.003
Chromium	mg/L	0.05	-	-	-	-	<0.02	<0.02
Cobalt	mg/L	**	-	-	-	-	<0.01	<0.01
Copper	mg/L	1	nd	<0.01	<0.01	<0.01	<0.02	<0.02
Iron	mg/L	0.3	0.22	0.02	<0.02	0.06	<0.5	<0.5
Lead	mg/L	0.01	0.041	nd(0.005)	nd(0.005)	<0.0005	<0.005	<0.005
Manganese	mg/L	0.05	0.03	0.13	<0.01	<0.01	<0.02	<0.02
Mercury	mg/L	0.001	-	-	-	-	-	-
Molybdenum	mg/L	**	-	-	-	-	<0.02	<0.02
Nickel	mg/L	**	-	-	-	-	<0.02	<0.02
Selenium	mg/L	0.01	-	-	-	-	<0.02	<0.02
Silver	mg/L	**	-	-	-	-	<0.005	<0.005
Strontium	mg/L	**	-	-	-	-	0.51	0.52
Thallium	mg/L	**	-	-	-	-	<0.001	<0.001
Tin	mg/L	**	-	-	-	-	<0.02	<0.02
Titanium	mg/L	**	-	-	-	-	<0.02	<0.02
Uranium	mg/L	0.02	-	-	-	-	<0.001	<0.001
Vanadium	mg/L	**	-	-	-	-	0.022	0.022
Zinc	mg/L	5	nd	<0.05	<0.05	<0.05	<0.05	<0.05
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	-	114	49	50	48	44
Phenolics	mg/L	**	-	-	-	-	-	-
Fecal Coliform (Collert)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-3 Apr.30, 01	MW-3 Sept.7, 01	MW-3 Dec.4, 01	MW-3 Mar.25.02	MW-3 Jun.26, 02	MW-3 Mar.3, 03	MW-3 Jun.30, 03	
Sodium	mg/L	200	11.3	11	11	11.7	10.6	-	10	
Potassium	mg/L	**	2.6	2.1	2.2	2	2.2	-	1.7	
Calcium	mg/L	**	35.4	39.8	43.4	42	38.3	-	38.4	
Magnesium	mg/L	**	6.3	7	7.1	7	6.9	-	6.7	
Alkalinity as (CaCO3)	mg/L	**	131	138	147	130	130	-	130	
Sulfate	mg/L	500	4	4	3	3	3	-	3	
Chloride	mg/L	250	7.5	6	5.4	6	7	6	7	
Reactive Silica	mg/L	**	11	11.4	12	11	12	-	11	
Ortho Phosphate (as P)	mg/L	**	nd	0.02	0.02	nd	nd	-	nd(0.03)	
Phosphorus	mg/L	**	nd	nd	nd	0.1	nd	-	-	
Total Phosphorus	mg/L	**	-	-	-	-	-	-	-	
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	nd	nd	nd	-	nd(0.03)	
Nitrate (as N)	mg/L	10	nd	nd	nd	nd	nd	-	-	
Nitrite	mg/L	**	nd	nd	<0.02	nd	nd	-	-	
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	nd	-	-	
Kjeldahl Nitrogen	mg/L	**	<0.5	-	-	-	-	-	nd	
Color	TCU	15	<5	<5	6	nd	nd	-	6	
Dissolved Organic Carbon	mg/L	**	1.4	<0.5	-	-	-	-	-	
Turbidity	NTU	1	>1000	>1000	605	122	790	-	0.1	
TDS	mg/L	500	157	164	173	161	158	-	156	
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-	-	
Conductance (RCap)	us/cm	**	278	274	258	272	284	272	278	
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-	-	
pH (lab)	units	6.5 - 8.5	7.9	8.1	7.8	8	7.9	-	8	
Total Organic Carbon	mg/L	**	4	-	<5	nd	nd	-	nd	
Hardness (as CaCO3)	mg/L	**	114	128	138	134	124	-	123	
Bicarbonate (as CaCO3)	mg/L	**	130	136	146	129	129	-	129	
Carbonate (as CaCO3)	mg/L	**	<1.0	2	<1	1	nd	-	1	
Ion Balance	mg/L	**	1.24	1.34	2.02	6.6	2.33	-	1.48	
Cation Sum	meq/L	**	2.85	3.10	3.29	3.24	3	-	2.95	
Anion Sum	meq/L	**	2.92	3.02	3.16	2.84	2.86	-	2.86	
Langlier Index (4C)	units	**	-0.28	-0.01	-0.25	-0.11	-0.25	-	-0.15	
Langlier Index (20C)	units	**	0.12	0.39	0.15	0.29	0.15	-	0.25	
Saturation pH @ 4C	units	**	8.18	8.11	8.05	8.11	8.15	-	8.15	
Saturation pH @ 20C	units	**	7.76	7.71	7.65	7.71	7.75	-	7.75	
Total Suspended Solids	mg/L	**	2800	-	-	-	-	-	3210	
METALS										
Aluminum	mg/L	**	0.09	<0.01	0.01	nd	nd	-	-	
Antimony	mg/L	0.006	0.009	<0.002	<0.002	nd	nd	-	-	
Arsenic	mg/L	0.025	0.003	0.01	0.004	0.01	0.006	-	-	
Barium	mg/L	1	0.026	0.029	0.033	0.028	0.033	-	-	
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	-	-	
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-	
Boron	mg/L	5	0.015	0.017	0.019	0.018	0.017	-	-	
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	nd	nd	-	<0.0003	
Chromium	mg/L	0.05	<0.002	<0.002	<0.002	nd	nd	-	-	
Cobalt	mg/L	**	0.001	<0.001	<0.001	nd	nd	-	-	
Copper	mg/L	1	<0.002	<0.002	0.002	0.002	nd	-	<0.01	
Iron	mg/L	0.3	0.04	<0.02	0.02	nd	nd	-	<0.02	
Lead	mg/L	0.01	<0.0005	<0.0005	0.0006	nd	nd	-	<0.0005	
Manganese	mg/L	0.05	0.11	0.24	0.2	0.14	0.1	-	0.12	
Mercury	mg/L	0.001	-	-	-	-	nd	-	-	
Molybdenum	mg/L	**	0.005	0.005	0.007	0.005	0.006	-	-	
Nickel	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-	
Selenium	mg/L	0.01	<0.002	<0.002	<0.002	nd	nd	-	-	
Silver	mg/L	**	<0.0005	<0.0005	<0.0005	nd	nd	-	-	
Strontium	mg/L	**	0.084	0.091	0.09	0.091	0.096	-	-	
Thallium	mg/L	**	<0.0001	<0.0001	<0.0001	nd	nd	-	-	
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-	
Titanium	mg/L	**	0.002	<0.002	<0.002	nd	nd	-	-	
Uranium	mg/L	0.02	0.0081	0.012	0.0093	0.012	0.011	-	-	
Vanadium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-	
Zinc	mg/L	5	0.006	0.012	0.007	0.008	0.008	-	<0.05	
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-	-	
COD	mg/L	**	-	-	-	-	-	-	-	
Phenolics	mg/L	**	-	-	-	-	-	-	<15	
Fecal Coliform (Colliert)	cfu/100 ml	0 cfu/100 ml	<10	0	0	0	<10	<10	-	
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	<10	0	0	0	<10	<10	-	

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading Indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-3 Sept. 30, 03	MW-3 Jan 12, 04	MW-3 Mar. 25, 04	MW-3 Jan. 17, 04	MW-3 Sept. 7, 04	MW-3 Dec. 7, 04
Sodium	mg/L	200	10.3	10.7	10	9.8	10.7	11.4
Potassium	mg/L	**	1.9	1.7	1.5	1.2	1.6	1.7
Calcium	mg/L	**	37.1	38.1	38.1	36.7	38.6	40
Magnesium	mg/L	**	6.2	6.6	6.4	6.3	6.8	6.9
Alkalinity as (CaCO3)	mg/L	**	130	150	140	140	130	160
Sulfate	mg/L	500	nd(5)	3	3	2	2	2
Chloride	mg/L	250	6	6	6	6	6	6
Reactive Silica	mg/L	**	12	11	10	9.6	12	12
Ortho Phosphate (as P)	mg/L	**	0.02	nd	0.02	0.03	0.03	<0.01
Phosphorus	mg/L	**	nd	-	-	-	-	<0.1
Total Phosphorus	mg/L	**	nd(0.02)	-	-	-	-	1.4
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	<0.05	<0.05	<0.05	<0.05
Nitrate (as N)	mg/L	10	nd	-	-	-	-	<0.05
Nitrite	mg/L	**	nd	-	-	-	-	<0.03
Ammonia (as N)	mg/L	**	nd	nd	<0.05	<0.05	0.05	0.05
Kjeldahl Nitrogen	mg/L	**	0.2	-	-	-	-	0.2
Color	TCU	15	nd	nd	<5	5	<5	<5
Dissolved Organic Carbon	mg/L	**	-	nd	<0.5	0.6	<0.5	1.1
Turbidity	NTU	1	nd	nd	0.1	0.3	16.2	<0.1
TDS	mg/L	500	157	167	159	156	158	176
Specific Conductance (field)	ms/cm	**	-	0.26	0.34	0.32	0.34	0.38
Conductance (RCap)	us/cm	**	282	274	261	262	267	282
pH (field)	units	6.5 - 8.5	-	7.6	8.1	7.4	7.9	6.6
pH (lab)	units	6.5 - 8.5	8.3	8	8.1	8.1	8.2	8
Total Organic Carbon	mg/L	**	nd	1.2	<0.5	<0.5	0.6	5.2
Hardness (as CaCO3)	mg/L	**	118	122	121	<0.5	124	128
Bicarbonate (as CaCO3)	mg/L	**	128	149	138	138	128	158
Carbonate (as CaCO3)	mg/L	**	2	1	2	2	2	1
Ion Balance	mg/L	**	0.03	4.49	2.19	3.5	3.12	4.72
Cation Sum	meq/L	**	2.87	2.96	2.9	2.81	3	3.11
Anion Sum	meq/L	**	2.86	3.24	3.04	3.01	2.81	3.41
Langlier Index (4C)	units	**	0.13	-0.09	-0.02	-0.04	0.05	-0.05
Langlier Index (20C)	units	**	0.53	0.31	0.38	0.36	0.45	0.35
Saturation pH @ 4C	units	**	8.17	8.09	8.12	8.14	8.15	8.05
Saturation pH @ 20C	units	**	7.77	7.69	7.72	7.74	7.75	7.65
Total Suspended Solids	mg/L	**	4310	964	425	618	220	1380
METALS								
Aluminum	mg/L	**	nd	-	-	-	-	<0.01
Antimony	mg/L	0.006	nd	-	-	-	-	<0.002
Arsenic	mg/L	0.025	0.01	-	-	-	-	0.014
Barium	mg/L	1	0.03	-	-	-	-	0.03
Beryllium	mg/L	**	nd	-	-	-	-	<0.002
Bismuth	mg/L	**	nd	-	-	-	-	<0.002
Boron	mg/L	5	0.02	-	-	-	-	0.02
Cadmium	mg/L	0.005	nd	nd	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.05	nd	-	-	-	-	<0.002
Cobalt	mg/L	**	nd	-	-	-	-	<0.001
Copper	mg/L	1	nd	nd	<0.01	<0.01	<0.01	<0.002
Iron	mg/L	0.3	nd	nd	<0.02	<0.02	0.28	<0.05
Lead	mg/L	0.01	nd	nd	<0.0005	<0.0005	<0.0005	<0.0005
Manganese	mg/L	0.05	0.084	0.08	0.05	0.06	0.09	0.088
Mercury	mg/L	0.001	nd	-	-	-	-	<0.00005
Molybdenum	mg/L	**	0.005	-	-	-	-	0.005
Nickel	mg/L	**	nd	-	-	-	-	<0.002
Selenium	mg/L	0.01	nd	-	-	-	-	<0.002
Silver	mg/L	**	nd	-	-	-	-	<0.0005
Strontium	mg/L	**	0.095	-	-	-	-	0.11
Thallium	mg/L	**	0.0001	-	-	-	-	<0.0001
Tin	mg/L	**	nd	-	-	-	-	<0.002
Titanium	mg/L	**	nd	-	-	-	-	<0.002
Uranium	mg/L	0.02	0.015	-	-	-	-	0.017
Vanadium	mg/L	**	nd	-	-	-	-	<0.002
Zinc	mg/L	5	0.005	nd	<0.05	<0.05	<0.05	0.006
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	<5	-	<5	<15	<5	<5
Phenolics	mg/L	**	0.001	-	-	-	-	<0.001
Fecal Coliform (Colliert)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GDWQ 2002	MW-4 Apr 30, 01	MW-4 Sept 7, 01	MW-4 Dec 4, 01	MW-4 Mar 25, 02	MW-4 Jun 26, 02	MW-4 Mar 3, 03
Sodium	mg/L	200	11.9	7.7	8.1	8.2	7.4	-
Potassium	mg/L	**	4	1.5	1.3	1.3	1.2	-
Calcium	mg/L	**	11.9	11.6	9.9	10.6	9	-
Magnesium	mg/L	**	3.9	3.7	3.6	3.6	3	-
Alkalinity as (CaCO3)	mg/L	**	50	42	40	39	35	-
Sulfate	mg/L	500	7	5	7	5	3	-
Chloride	mg/L	250	12.4	10.4	10.8	10	11	10
Reactive Silica	mg/L	**	15.7	16.4	16.8	15	15	-
Ortho Phosphate (as P)	mg/L	**	nd	nd	0.03	nd	nd	-
Phosphorus	mg/L	**	nd	nd	nd	nd	nd	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	0.14	0.09	0.17	0.1	0.09	-
Nitrate (as N)	mg/L	10	0.14	0.09	0.17	0.08	0.09	-
Nitrite	mg/L	**	nd	nd	<0.02	0.02	nd	-
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	nd	-
Kjeldahl Nitrogen	mg/L	**	<0.5	-	-	-	-	-
Color	TCU	15	<5	<5	17	10	nd	-
Dissolved Organic Carbon	mg/L	**	4.4	<0.5	-	-	-	-
Turbidity	NTU	1	>1000	459	735	106	211	-
TDS	mg/L	500	97	82	82	78	71	-
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-
Conductance (RCap)	us/cm	**	168	121	119	116	115	116
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (lab)	units	6.5 - 8.5	7	7	6.6	6.7	6.6	-
Total Organic Carbon	mg/L	**	13	-	<5	nd	nd	-
Hardness (as CaCO3)	mg/L	**	45.8	44.2	39.5	41.3	34.8	-
Bicarbonate (as CaCO3)	mg/L	**	50	42	40	39	35	-
Carbonate (as CaCO3)	mg/L	**	<1.0	<1	<1	nd	nd	-
Ion Balance	mg/L	**	1.09	0.67	3.38	1.92	1.25	-
Cation Sum	meq/L	**	1.54	1.26	1.18	1.22	1.05	-
Anion Sum	meq/L	**	1.51	1.24	1.26	1.17	1.08	-
Langlier Index (4C)	units	**	-2.06	-2.15	-2.64	-2.52	-2.73	-
Langlier Index (20C)	units	**	-1.66	-1.75	-2.24	-2.12	-2.33	-
Saturation pH @ 4C	units	**	9.06	9.15	9.24	9.22	9.33	-
Saturation pH @ 20C	units	**	8.66	8.75	8.84	8.82	8.93	-
Total Suspended Solids	mg/L	**	11300	-	-	-	-	-
METALS								
Aluminum	mg/L	**	0.01	0.04	0.01	0.01	0.02	-
Antimony	mg/L	0.006	0.032	0.031	0.018	nd	nd	-
Arsenic	mg/L	0.025	<0.002	<0.002	<0.002	nd	nd	-
Barium	mg/L	1	0.016	0.014	0.018	0.016	0.015	-
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	-
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Boron	mg/L	5	0.024	0.006	0.008	0.005	0.006	-
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	0.0003	nd	-
Chromium	mg/L	0.05	<0.002	<0.002	<0.002	nd	nd	-
Cobalt	mg/L	**	0.026	0.004	0.003	0.015	0.008	-
Copper	mg/L	1	<0.002	<0.002	<0.002	nd	nd	-
Iron	mg/L	0.3	<0.02	0.08	<0.02	nd	nd	-
Lead	mg/L	0.01	<0.0005	<0.0005	<0.0005	nd	nd	-
Manganese	mg/L	0.05	0.81	0.54	0.14	0.14	0.094	-
Mercury	mg/L	0.001	-	-	-	-	nd	-
Molybdenum	mg/L	**	0.006	<0.002	<0.002	nd	nd	-
Nickel	mg/L	**	0.012	0.003	0.004	0.01	0.008	-
Selenium	mg/L	0.01	<0.002	<0.002	<0.002	nd	nd	-
Silver	mg/L	**	<0.0005	<0.0005	<0.0005	nd	nd	-
Strontium	mg/L	**	0.051	0.042	0.044	0.045	0.041	-
Thallium	mg/L	**	<0.0001	<0.0001	<0.0001	nd	nd	-
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Titanium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Uranium	mg/L	0.02	0.0002	0.0001	0.0001	nd	nd	-
Vanadium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Zinc	mg/L	5	0.006	0.03	0.013	0.006	0.01	-
Carbonaceous BOD	mg/L	**	<5	-	-	-	-	-
COD	mg/L	**	-	-	-	-	-	-
Phenolics	mg/L	**	6-	-	-	-	-	-
Fecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	<100	0	0	0	0	<10
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	<100	0	1	0	0	<10

GDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCOWQ 2002	MW-5 Apr 30, 01	MW-5 Sept 7, 01	MW-5 Dec 4, 01	MW-5 Mar 25, 02	MW-5 June 26, 02	MW-5 Mar 3, 03
Sodium	mg/L	200	12.6	9.3	10	9.9	11.4	-
Potassium	mg/L	**	1	1.2	1	1.2	1.5	-
Calcium	mg/L	**	19.1	19.1	19.8	24.4	24.2	-
Magnesium	mg/L	**	5.1	5.2	6	7.5	7.4	-
Alkalinity as (CaCO3)	mg/L	**	74	64	68	67	79	-
Sulfate	mg/L	500	3	5	5	3	nd	-
Chloride	mg/L	250	31.6	19.3	23.1	31	31	37
Reactive Silica	mg/L	**	17.5	23.2	24.1	23	24	-
Ortho Phosphate (as P)	mg/L	**	nd	nd	0.03	nd	nd	-
Phosphorus	mg/L	**	nd	nd	nd	nd	nd	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	0.05	nd	nd	-
Nitrate (as N)	mg/L	10	nd	nd	0.05	nd	nd	-
Nitrite	mg/L	**	nd	nd	<0.02	nd	nd	-
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	nd	-
Kjeldahl Nitrogen	mg/L	**	1	-	-	-	-	-
Color	TCU	15	5	<5	17	nd	nd	-
Dissolved Organic Carbon	mg/L	**	6.4	0.09	-	-	-	-
Turbidity	NTU	1	>1000	>1000	>1000	348	580	-
TDS	mg/L	500	-	121	130	140	149	-
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-
Conductance (RCap)	us/cm	**	265	185	195	239	242	260
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (lab)	units	6.5 - 8.5	6.3	6.7	6.2	6.5	6.1	-
Total Organic Carbon	mg/L	**	48	-	<50	0.8	nd	-
Hardness (as CaCO3)	mg/L	**	68.7	69.1	74.1	91.8	90.9	-
Bicarbonate (as CaCO3)	mg/L	**	74	64	68	67	79	-
Carbonate (as CaCO3)	mg/L	**	<1.0	<1	<1	nd	nd	-
Ion Balance	mg/L	**	11.1	2.98	4.24	-2.13	2.97	-
Cation Sum	meq/L	**	1.95	1.82	1.95	2.3	2.36	-
Anion Sum	meq/L	**	2.44	1.93	2.12	2.28	2.5	-
Langlier Index (4C)	units	**	-2.4	-2.06	-2.52	-2.13	-2.47	-
Langlier Index (20C)	units	**	-2	-1.66	-2.12	-1.73	-2.07	-
Saturation pH @ 4C	units	**	8.7	8.76	8.72	8.63	8.57	-
Saturation pH @ 20C	units	**	8.3	8.36	8.32	8.23	8.17	-
Total Suspended Solids	mg/L	**	15200	-	-	-	-	-
METALS								
Aluminum	mg/L	**	0.19	0.2	<0.01	nd	0.02	-
Antimony	mg/L	0.006	0.002	<0.002	<0.002	nd	nd	-
Arsenic	mg/L	0.025	0.002	0.004	0.002	0.002	0.002	-
Barium	mg/L	1	0.7	0.02	0.023	0.032	0.032	-
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	-
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Boron	mg/L	5	0.078	0.008	0.008	0.006	0.007	-
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	nd	nd	-
Chromium	mg/L	0.05	<0.002	<0.002	<0.002	nd	nd	-
Cobalt	mg/L	**	0.014	0.004	0.004	0.005	0.004	-
Copper	mg/L	1	<0.002	<0.002	<0.002	nd	nd	-
Iron	mg/L	0.3	2.1	2.8	1.1	1.5	0.83	-
Lead	mg/L	0.01	<0.0005	<0.0005	<0.0005	nd	nd	-
Manganese	mg/L	0.05	2.4	1.2	1	1.1	1	-
Mercury	mg/L	0.001	-	-	-	-	0.00006	-
Molybdenum	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Nickel	mg/L	**	0.005	0.003	0.003	0.006	0.006	-
Selenium	mg/L	0.01	<0.002	<0.002	<0.002	nd	nd	-
Silver	mg/L	**	<0.0005	<0.0005	<0.0005	nd	nd	-
Strontium	mg/L	**	0.08	0.065	0.068	0.092	0.094	-
Thallium	mg/L	**	<0.0001	<0.0001	<0.0001	nd	nd	-
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Titanium	mg/L	**	0.012	<0.002	<0.002	nd	nd	-
Uranium	mg/L	0.02	0.0001	0.0002	0.0001	0.0001	0.0001	-
Vanadium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Zinc	mg/L	5	0.19	0.013	0.003	0.025	0.007	-
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	-	-	-	-	-	-
Phenolics	mg/L	**	-	-	-	-	-	-
Fecal Coliform (Coliart)	cfu/100 ml	0 cfu/100 ml	<100	0	0	0	0	<10
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	<100	0	0	0	4	<10

GCOWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-4 Jun 22, 01	MW-5 Sept 7, 01	MW-6 Dec 4, 01	MW-8 Mar 25, 02	MW-8 Jun 26, 02	MW-8 Mar 3, 03	MW-8 Jun 30, 03
Sodium	mg/L	200	7.8	7.1	7.8	8.1	8.4	-	7.2
Potassium	mg/L	**	1.4	1.1	0.8	0.9	1.1	-	0.7
Calcium	mg/L	**	20.4	18.1	13.1	9.4	8	-	7.7
Magnesium	mg/L	**	3.9	3.8	3.5	3	2.7	-	2.4
Alkalinity as (CaCO3)	mg/L	**	77	69	37	24	18	-	26
Sulfate	mg/L	500	6	6	4	3	2	-	nd
Chloride	mg/L	250	11	8.6	16.2	17	18	14	15
Reactive Silica	mg/L	**	22.4	24.1	22.2	18	18	-	18
Ortho Phosphate (as P)	mg/L	**	0.02	nd	nd	nd	nd	-	nd(0.03)
Phosphorus	mg/L	**	<0.5	nd	nd	nd	nd	-	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	nd	nd	nd	-	nd
Nitrate (as N)	mg/L	10	nd	nd	nd	nd	nd	-	nd
Nitrite	mg/L	**	nd	nd	<0.02	nd	nd	-	-
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	nd	-	nd
Kjeldahl Nitrogen	mg/L	**	0.4	-	-	-	-	-	-
Color	TCU	15	<5	<5	<5	nd	nd	-	nd
Dissolved Organic Carbon	mg/L	**	1.8	0.5	-	-	-	-	-
Turbidity	NTU	1	271	186	78	31.3	73.8	-	0.2
TDS	mg/L	500	119	110	90	74	69	-	69
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-	-
Conductance (RCap)	us/cm	**	188	155	130	111	108	121	104
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-	-
pH (lab)	units	6.5 - 8.5	7.1	7.2	6.2	6.2	5.9	-	6.6
Total Organic Carbon	mg/L	**	4	-	1.3	0.7	1.2	-	0.6
Hardness (as CaCO3)	mg/L	**	67	60.8	47.1	35.8	31.1	-	29.1
Bicarbonate (as CaCO3)	mg/L	**	77	69	37	24	18	-	26
Carbonate (as CaCO3)	mg/L	**	<1	<1	<1	<1	<1	-	<1
Ion Balance	mg/L	**	7.06	5.88	0.85	-3.28	5.54	-	3.75
Cation Sum	meq/L	**	1.72	1.56	1.31	1.1	1.02	-	0.92
Anion Sum	meq/L	**	1.98	1.75	1.28	1.03	0.91	-	0.99
Langlier Index (4C)	units	**	-1.55	-1.54	-2.95	-3.28	-3.77	-	-2.93
Langlier Index (20C)	units	**	-1.15	-1.14	-2.55	-2.88	-3.37	-	-2.53
Saturation pH @ 4C	units	**	8.65	8.74	9.15	9.48	9.67	-	9.53
Saturation pH @ 20C	units	**	8.25	8.34	8.75	9.08	9.27	-	9.13
Total Suspended Solids	mg/L	**	164	-	-	-	-	-	1970
METALS									
Aluminum	mg/L	**	<0.01	<0.01	0.01	0.02	0.06	-	-
Antimony	mg/L	0.006	<0.002	<0.002	<0.002	nd	nd	-	-
Arsenic	mg/L	0.025	<0.002	<0.002	<0.002	nd	nd	-	-
Barium	mg/L	1	0.016	0.018	0.017	0.085	0.018	-	-
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	-	-
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-
Boron	mg/L	5	0.012	0.006	0.007	nd	0.005	-	-
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	nd	nd	-	<0.0003
Chromium	mg/L	0.05	<0.002	<0.002	<0.002	nd	0.004	-	-
Cobalt	mg/L	**	0.004	0.001	0.003	0.002	0.002	-	-
Copper	mg/L	1	<0.002	<0.002	<0.002	nd	0.002	-	<0.01
Iron	mg/L	0.3	0.14	0.09	0.06	0.25	0.11	-	<0.02
Lead	mg/L	0.01	<0.0005	<0.0005	<0.0005	nd	nd	-	<0.0005
Manganese	mg/L	0.05	0.9	0.84	0.48	0.33	0.28	-	0.28
Mercury	mg/L	0.001	-	-	-	-	nd	-	-
Molybdenum	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-
Nickel	mg/L	**	0.003	<0.002	0.002	0.002	0.002	-	-
Selenium	mg/L	0.01	<0.002	<0.002	<0.002	nd	nd	-	-
Silver	mg/L	**	<0.0005	<0.0005	<0.0005	nd	nd	-	-
Strontium	mg/L	**	0.056	0.048	0.052	0.049	0.045	-	-
Thallium	mg/L	**	<0.0001	<0.0001	<0.0001	nd	nd	-	-
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-
Titanium	mg/L	**	<0.002	<0.002	<0.002	nd	0.003	-	-
Uranium	mg/L	0.02	0.0001	0.0002	0.0001	nd	nd	-	-
Vanadium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-	-
Zinc	mg/L	5	0.008	0.016	0.006	0.016	0.012	-	<0.05
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-	-
COD	mg/L	**	-	-	-	-	-	-	-
Phenolics	mg/L	**	-	-	-	-	-	-	<5
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	<10	0	0	0	0	<10	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	<10	170	100	3	4	<10	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-8 Sept 30, 03	MW-6 Jan 12, 04	MW-8 Mar. 25, 04	MW-8 Jun. 17, 04	MW-6 Sept. 7, 04	MW-6 Dec. 7/04
Sodium	mg/L	200	7.8	7.7	7.4	7.1	8.3	9.1
Potassium	mg/L	**	0.8	0.7	0.7	0.5	0.8	1
Calcium	mg/L	**	7.2	8.6	9.8	9.1	12.8	22.7
Magnesium	mg/L	**	2.4	2.6	2.7	2.6	3.8	5
Alkalinity as (CaCO3)	mg/L	**	14	32	31	28	42	8.3
Sulfate	mg/L	500	nd	5	4	4	4	4
Chloride	mg/L	250	15	14	14	13	15	15
Reactive Silica	mg/L	**	18	19	18	16	19	22
Ortho Phosphate (as P)	mg/L	**	nd(0.02)	nd	<0.01	<0.01	<0.01	<0.01
Phosphorus	mg/L	**	nd	-	-	-	-	<0.1
Total Phosphorus	mg/L	**	0.02	-	-	-	-	0.36
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	0.07	<0.05	0.32	<0.05
Nitrate (as N)	mg/L	10	nd	-	-	-	-	<0.05
Nitrite	mg/L	**	nd	-	-	-	-	<0.03
Ammonia (as N)	mg/L	**	nd	nd	<0.05	<0.05	0.08	<0.05
Kjeldahl Nitrogen	mg/L	**	nd	-	-	-	-	0.2
Color	TCU	15	nd	nd	<5	<5	<5	<5
Dissolved Organic Carbon	mg/L	**	-	0.5	0.5	1.1	<0.5	0.8
Turbidity	NTU	1	nd	nd	0.1	<0.1	0.2	0.4
TDS	mg/L	500	62	77	76	69	90	129
Specific Conductance (field)	ms/cm	**	-	0.07	0.14	0.13	0.18	0.26
Conductance (RCap)	us/cm	**	93	110	11	107	141	198
pH (field)	units	6.5 - 8.5	-	5.5	6.5	5.1	6	5.8
pH (lab)	units	6.5 - 8.5	7	6.2	6.4	6.8	6.8	7.2
Total Organic Carbon	mg/L	**	0.7	1.4	0.5	0.8	<0.5	0.9
Hardness (as CaCO3)	mg/L	**	27.9	32.2	35.6	33.4	47.6	77.3
Bicarbonate (as CaCO3)	mg/L	**	14	32	31	28	42	83
Carbonate (as CaCO3)	mg/L	**	nd	nd	<1	<1	<1	<1
Ion Balance	mg/L	**	10.3	6.64	2.22	0.99	1.11	4.84
Cation Sum	meq/L	**	0.92	1	1.06	0.99	1.34	1.97
Anion Sum	meq/L	**	0.75	1.14	1.1	1.01	1.37	2.17
Langlier Index (4C)	units	**	-2.83	-3.19	-2.95	-2.62	-2.31	-1.37
Langlier Index (20C)	units	**	-2.43	-2.79	-2.55	-2.22	-1.91	-0.97
Saturation pH @ 4C	units	**	9.83	9.39	9.35	9.42	9.11	8.57
Saturation pH @ 20C	units	**	9.43	8.99	8.95	9.02	8.71	8.17
Total Suspended Solids	mg/L	**	1330	1020	149	393	247	234
METALS								
Aluminum	mg/L	**	0.02	-	-	-	-	0.01
Antimony	mg/L	0.006	nd	-	-	-	-	<0.002
Arsenic	mg/L	0.025	nd	-	-	-	-	<0.002
Barium	mg/L	1	0.018	-	-	-	-	0.023
Beryllium	mg/L	**	nd	-	-	-	-	<0.002
Bismuth	mg/L	**	nd	-	-	-	-	<0.002
Boron	mg/L	5	0.007	-	-	-	-	0.006
Cadmium	mg/L	0.005	nd	nd	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.05	nd	-	-	-	-	<0.002
Cobalt	mg/L	**	0.002	-	-	-	-	0.001
Copper	mg/L	1	nd	nd	<0.01	<0.01	<0.01	<0.002
Iron	mg/L	0.3	nd	nd	<0.02	<0.02	<0.02	<0.05
Lead	mg/L	0.01	nd	nd	<0.0005	<0.0005	<0.0005	<0.0005
Manganese	mg/L	0.05	0.24	0.34	0.38	0.34	0.5	0.87
Mercury	mg/L	0.001	nd	-	-	-	-	<0.00005
Molybdenum	mg/L	**	nd	-	-	-	-	<0.002
Nickel	mg/L	**	0.002	-	-	-	-	<0.002
Selenium	mg/L	0.01	nd	-	-	-	-	<0.002
Silver	mg/L	**	nd	-	-	-	-	<0.0005
Strontium	mg/L	**	0.044	-	-	-	-	0.07
Thallium	mg/L	**	0.0001	-	-	-	-	<0.0001
Tin	mg/L	**	nd	-	-	-	-	<0.002
Titanium	mg/L	**	nd	-	-	-	-	<0.002
Uranium	mg/L	0.02	0.0002	-	-	-	-	0.0004
Vanadium	mg/L	**	nd	-	-	-	-	<0.002
Zinc	mg/L	5	0.009	nd	<0.05	<0.05	<0.05	0.005
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	<5	-	<5	<5	<5	<5
Phenolics	mg/L	**	0.006	-	-	-	-	<0.001
Fecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-7S Sept. 7, 01	MW-7S Dec 4, 01	MW-7S Mar 25, 02	MW-7S Jun 28, 02	MW-7S Mar 3, 03	MW-7S July 2, 03
Sodium	mg/L	200	17.3	16.1	14.9	15.5	-	12.1
Potassium	mg/L	**	2.9	1.9	2	2	-	1.5
Calcium	mg/L	**	47.8	41.3	47.8	20.6	-	25.1
Magnesium	mg/L	**	9.8	8.1	9.2	4.7	-	5.4
Alkalinity as (CaCO3)	mg/L	**	169	131	150	120	-	78
Sulfate	mg/L	500	17	12	8	8	-	10
Chloride	mg/L	250	18.2	18.7	16	19	18	19
Reactive Silica	mg/L	**	16.7	15.4	14	14	-	15
Ortho Phosphate (as P)	mg/L	**	nd	nd	nd	nd	-	0.01
Phosphorus	mg/L	**	nd	<0.1	nd	nd	-	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	0.38	1.02	0.54	0.49	-	0.36
Nitrate (as N)	mg/L	10	0.38	1.02	0.53	0.49	-	-
Nitrite	mg/L	**	nd	<0.02	0.01	nd	-	-
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	-	nd
Kjeldahl Nitrogen	mg/L	**	-	-	-	-	-	-
Color	TCU	15	<5	10	nd	nd	-	nd
Dissolved Organic Carbon	mg/L	**	1.1	-	-	-	-	-
Turbidity	NTU	1	534	221	71.9	138	-	0.4
TDS	mg/L	500	233	197	204	158	-	137
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-
Conductance (RCap)	us/cm	**	434	324	375	297	238	239
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (lab)	units	6.5 - 8.5	7.7	7.2	7.4	7	-	7.4
Total Organic Carbon	mg/L	**	-	<5	0.9	1	-	1.2
Hardness (as CaCO3)	mg/L	**	160	136	157	70.8	-	84.9
Bicarbonate (as CaCO3)	mg/L	**	168	131	150	120	-	78
Carbonate (as CaCO3)	mg/L	**	<1	<1	nd	nd	-	<1
Ion Balance	mg/L	**	3.04	0.15	-0.6	18.8	-	1.4
Cation Sum	meq/L	**	4.02	3.48	3.85	2.14	-	2.27
Anion Sum	meq/L	**	4.27	3.47	3.66	3.14	-	2.33
Langlier Index (4C)	units	**	-0.25	-0.92	-0.6	-1.46	-	-1.15
Langlier Index (20C)	units	**	0.15	-0.52	-0.2	-1.06	-	-0.75
Saturation pH @ 4C	units	**	7.95	8.12	8	8.46	-	8.55
Saturation pH @ 20C	units	**	7.55	7.72	7.6	8.06	-	8.15
Total Suspended Solids	mg/L	**	-	-	-	-	-	2730
METALS								
Aluminum	mg/L	**	<0.01	0.21	0.01	0.28	-	-
Antimony	mg/L	0.006	<0.002	<0.002	nd	nd	-	-
Arsenic	mg/L	0.025	<0.002	<0.002	nd	nd	-	-
Barium	mg/L	1	0.066	0.045	0.055	0.041	-	-
Beryllium	mg/L	**	<0.005	<0.005	nd	nd	-	-
Bismuth	mg/L	**	<0.002	<0.002	nd	nd	-	-
Boron	mg/L	5	0.016	0.01	0.008	0.008	-	-
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	<0.0003	-	<0.0003
Chromium	mg/L	0.05	<0.002	<0.002	nd	0.068	-	-
Cobalt	mg/L	**	0.001	0.001	nd	nd	-	-
Copper	mg/L	1	<0.002	<0.002	nd	0.002	-	<0.01
Iron	mg/L	0.3	<0.02	0.14	nd	0.37	-	<0.02
Lead	mg/L	0.01	<0.0005	<0.0005	nd	0.0018	-	0.0013
Manganese	mg/L	0.05	0.57	0.42	0.59	0.094	-	0.25
Mercury	mg/L	0.001	-	-	-	nd	-	-
Molybdenum	mg/L	**	<0.002	0.004	nd	nd	-	-
Nickel	mg/L	**	0.002	0.002	0.002	0.003	-	-
Selenium	mg/L	0.01	<0.002	<0.002	nd	nd	-	-
Silver	mg/L	**	<0.0005	<0.0005	nd	nd	-	-
Strontium	mg/L	**	0.12	0.11	0.12	0.07	-	-
Thallium	mg/L	**	<0.0001	<0.0001	nd	nd	-	-
Tin	mg/L	**	0.002	<0.002	nd	nd	-	-
Titanium	mg/L	**	<0.002	0.009	nd	0.015	-	-
Uranium	mg/L	0.02	0.0011	0.0011	0.0007	0.0001	-	-
Vanadium	mg/L	**	<0.002	<0.002	nd	nd	-	-
Zinc	mg/L	5	0.014	0.008	0.008	0.021	-	<0.05
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	-	-	-	-	-	<15
Phenolics	mg/L	**	-	-	-	-	-	-
Faecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	0	0	<10	0	<10	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	note	note	<10	59	<10	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading Indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-7S Sept 30, 03	MW-7S Jan 12, 04	MW-7S Mar 25, 04	MW-7S Jun 17, 04	MW-7S Sept 7, 04	MW-7S Dec 7, 04
Sodium	mg/L	200	11.6	10.9	9.6	9.5	10.4	11.3
Potassium	mg/L	**	1.6	1.4	1.1	1.5	1.3	1.5
Calcium	mg/L	**	23.4	22.7	29.7	27.5	16.5	28.2
Magnesium	mg/L	**	4.7	4.2	6.6	4.7	3.4	4.8
Alkalinity as (CaCO3)	mg/L	**	61	85	110	66	44	84
Sulfate	mg/L	500	7	9	4	6	8	6
Chloride	mg/L	250	19	15	14	19	18	18
Reactive Silica	mg/L	**	16	15	17	14	18	17
Ortho Phosphate (as P)	mg/L	**	nd	nd	0.02	<0.01	<0.01	<0.01
Phosphorus	mg/L	**	nd	-	-	-	-	<0.1
Total Phosphorus	mg/L	**	nd(0.02)	-	-	-	-	0.13
Nitrate+Nitrite (as N)	mg/L	**	0.47	0.37	0.06	0.74	0.71	0.46
Nitrate (as N)	mg/L	10	0.46	-	-	-	-	0.46
Nitrite	mg/L	**	0.01	-	-	-	-	<0.03
Ammonia (as N)	mg/L	**	nd	nd	0.05	<0.05	<0.05	<0.05
Kjeldahl Nitrogen	mg/L	**	0.1	-	-	-	-	0.3
Color	TCU	15	6	nd	<5	<5	<5	<5
Dissolved Organic Carbon	mg/L	**	-	0.8	0.7	1.8	0.5	2
Turbidity	NTU	1	nd	nd	<0.1	0.3	<0.1	<0.1
TDS	mg/L	500	122	131	148	125	105	139
Specific Conductance (field)	ms/cm	**	-	0.14	0.27	0.23	0.29	0.22
Conductance (RCap)	us/cm	**	215	207	231	206	167	222
pH (field)	units	6.5 - 8.5	-	6.8	7.2	6.4	7.9	5.9
pH (lab)	units	6.5 - 8.5	7.9	7.4	7	7.1	6.8	7.2
Total Organic Carbon	mg/L	**	2.6	1.1	1.2	1.6	0.6	1.7
Hardness (as CaCO3)	mg/L	**	77.8	74	101	88	55.2	90.2
Bicarbonate (as CaCO3)	mg/L	**	61	85	110	66	44	84
Carbonate (as CaCO3)	mg/L	**	nd	nd	<1	<1	<1	<1
Ion Balance	mg/L	**	4.18	7.96	4.03	4.26	0.38	0.2
Cation Sum	meq/L	**	2.1	1.99	2.47	2.21	1.59	2.34
Anion Sum	meq/L	**	1.93	2.34	2.68	2.03	1.6	2.35
Langlier Index (4C)	units	**	-0.79	-1.16	-1.33	-1.49	-2.18	-1.27
Langlier Index (20C)	units	**	-0.39	-0.76	-0.93	-1.09	-1.78	-0.87
Saturation pH @ 4C	units	**	8.69	8.56	8.33	8.59	8.98	8.47
Saturation pH @ 20C	units	**	8.29	8.16	7.93	8.19	8.58	8.07
Total Suspended Solids	mg/L	**	787	1840	121	511	602	220
METALS								
Aluminum	mg/L	**	nd	-	-	-	-	<0.01
Antimony	mg/L	0.006	nd	-	-	-	-	<0.002
Arsenic	mg/L	0.025	nd	-	-	-	-	<0.002
Barium	mg/L	1	0.036	-	-	-	-	0.043
Beryllium	mg/L	**	nd	-	-	-	-	<0.002
Bismuth	mg/L	**	nd	-	-	-	-	<0.002
Boron	mg/L	5	0.008	-	-	-	-	0.01
Cadmium	mg/L	0.005	nd	nd	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.05	nd	-	-	-	-	<0.002
Cobalt	mg/L	**	nd	-	-	-	-	<0.001
Copper	mg/L	1	nd	nd	<0.01	0.01	<0.01	0.002
Iron	mg/L	0.3	nd	nd	0.08	0.02	<0.02	<0.05
Lead	mg/L	0.01	nd	nd	<0.0005	<0.0005	<0.0005	0.0008
Manganese	mg/L	0.05	0.25	0.3	0.05	0.09	0.02	0.042
Mercury	mg/L	0.001	nd	-	-	-	-	<0.00005
Molybdenum	mg/L	**	nd	-	-	-	-	<0.002
Nickel	mg/L	**	nd	-	-	-	-	0.002
Selenium	mg/L	0.01	nd	-	-	-	-	<0.002
Silver	mg/L	**	nd	-	-	-	-	<0.0005
Strontium	mg/L	**	0.068	-	-	-	-	0.07
Thallium	mg/L	**	nd	-	-	-	-	<0.0001
Tin	mg/L	**	nd	-	-	-	-	<0.002
Titanium	mg/L	**	nd	-	-	-	-	<0.002
Uranium	mg/L	0.02	0.0002	-	-	-	-	0.0002
Vanadium	mg/L	**	nd	-	-	-	-	<0.002
Zinc	mg/L	5	0.006	nd	<0.05	<0.05	<0.05	0.013
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	<5	-	-	<5	<5	<5
Phenolics	mg/L	**	0.006	-	-	-	-	<0.001
Fecal Coliform (Collert)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shaded mg Indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D	MW-7D
			Jun 22, 01	Sept 7, 01	Dec 4, 01	Mar 25, 02	Jun 26, 02	Mar 3, 03
Sodium	mg/L	200	6.8	7.7	9	9.4	9.5	-
Potassium	mg/L	**	0.7	0.8	0.9	1	1.1	-
Calcium	mg/L	**	11	15.5	20.2	20.6	20.7	-
Magnesium	mg/L	**	2.6	3.9	4.7	4.6	4.9	-
Alkalinity as (CaCO3)	mg/L	**	37	49	61	70	77	-
Sulfate	mg/L	500	7	12	10	5	3	-
Chloride	mg/L	250	11.1	10.1	10.5	9	11	12
Reactive Silica	mg/L	**	14.3	15.3	17.2	16	17	-
Ortho Phosphate (as P)	mg/L	**	0.02	0.05	0.05	nd	0.03	-
Phosphorus	mg/L	**	<0.5	nd	nd	nd	0.1	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	0.16	0.12	0.13	nd	nd	-
Nitrate (as N)	mg/L	10	0.16	0.1	0.1	nd	nd	-
Nitrite	mg/L	**	nd	0.02	0.03	nd	nd	-
Ammonia (as N)	mg/L	**	nd	nd	nd	nd	nd	-
Kjeldahl Nitrogen	mg/L	**	0.5	-	-	-	-	-
Color	TCU	15	<5	23	32	17	nd	-
Dissolved Organic Carbon	mg/L	**	1.1	<0.5	-	-	-	-
Turbidity	NTU	1	47.4	38.7	56	23.7	4.9	-
TDS	mg/L	500	76	95	110	108	114	-
Specific Conductance (field)	ms/cm	**	-	-	-	-	-	-
Conductance (RCap)	us/cm	**	123	142	153	167	174	221
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (lab)	units	6.5 - 8.5	6.9	7.3	6.7	7	6.8	-
Total Organic Carbon	mg/L	**	5	-	0.6	0.7	nd	-
Hardness (as CaCO3)	mg/L	**	38.2	54.8	69.8	70.4	71.9	-
Bicarbonate (as CaCO3)	mg/L	**	37	49	61	70	77	-
Carbonate (as CaCO3)	mg/L	**	<1	<1	<1	nd	nd	-
Ion Balance	mg/L	**	5.66	2.34	2.25	-1.68	0.92	-
Cation Sum	meq/L	**	1.08	1.45	1.81	1.84	1.88	-
Anion Sum	meq/L	**	1.21	1.52	1.73	1.76	1.92	-
Langlier Index (4C)	units	**	-2.42	-1.66	-2.05	-1.68	-1.84	-
Langlier Index (20C)	units	**	-2.02	-1.26	-1.65	-1.28	-1.44	-
Saturation pH @ 4C	units	**	9.22	8.96	8.75	8.68	8.64	-
Saturation pH @ 20C	units	**	8.82	8.56	8.35	8.28	8.24	-
Total Suspended Solids	mg/L	**	264	-	-	-	-	-
METALS								
Aluminum	mg/L	**	0.01	<0.01	<0.01	nd	0.24	-
Antimony	mg/L	0.006	<0.002	<0.002	0.008	nd	nd	-
Arsenic	mg/L	0.025	<0.002	<0.002	<0.002	nd	nd	-
Barium	mg/L	1	0.008	0.008	0.008	0.009	0.011	-
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	-
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Boron	mg/L	5	0.009	0.006	0.008	0.006	0.007	-
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	-
Chromium	mg/L	0.05	<0.002	<0.002	<0.002	nd	0.002	-
Cobalt	mg/L	**	0.001	<0.001	<0.001	nd	nd	-
Copper	mg/L	1	0.002	<0.002	<0.002	nd	0.005	-
Iron	mg/L	0.3	<0.02	<0.02	0.13	0.23	0.8	-
Lead	mg/L	0.01	<0.0005	<0.0005	<0.0005	nd	0.001	-
Manganese	mg/L	0.05	0.02	0.038	0.046	0.038	0.031	-
Mercury	mg/L	0.001	-	-	-	-	nd	-
Molybdenum	mg/L	**	0.02	0.003	0.002	0.002	nd	-
Nickel	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Selenium	mg/L	0.01	<0.002	<0.002	<0.002	nd	nd	-
Silver	mg/L	**	<0.0005	<0.0005	<0.0005	nd	nd	-
Strontium	mg/L	**	0.035	0.047	0.054	0.056	0.065	-
Thallium	mg/L	**	<0.0001	<0.0001	<0.0001	nd	nd	-
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Titanium	mg/L	**	<0.002	<0.002	<0.002	nd	0.008	-
Uranium	mg/L	0.02	0.0002	0.0006	0.0009	0.0007	0.0009	-
Vanadium	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Zinc	mg/L	5	0.006	0.024	0.008	0.008	0.013	-
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	-	-	-	-	-	-
Phenolics	mg/L	**	-	-	-	-	-	-
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	<1	0	0	0	0	0
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	3	note	0	0	0	0

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-7D Jun 30, 03	MW-7D Sept 30, 03	MW-7D Jan 12, 04	MW-7D Mar. 25, 04	MW-7D L/D	MW-7D Jun. 17, 04
Sodium	mg/L	200	9.1	9.4	10	10.1	10.2	9.9
Potassium	mg/L	**	0.9	0.9	1	1.2	1.2	0.8
Calcium	mg/L	**	28.1	27.9	30.2	20.2	20.3	31
Magnesium	mg/L	**	6.8	6.4	6.8	3.8	3.8	7
Alkalinity as (CaCO3)	mg/L	**	94	71	120	57	58	120
Sulfate	mg/L	500	nd	4	4	7	7	3
Chloride	mg/L	250	12	10	12	19	19	13
Reactive Silica	mg/L	**	17	17	17	14	14	15
Ortho Phosphate (as P)	mg/L	**	0.07	nd	0.03	<0.01	0.02	0.02
Phosphorus	mg/L	**	-	nd	-	-	-	-
Total Phosphorus	mg/L	**	-	nd(0.02)	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	nd	nd	nd	0.42	0.44	<0.05
Nitrate (as N)	mg/L	10	-	nd	-	-	-	-
Nitrite	mg/L	**	-	nd	-	-	-	-
Ammonia (as N)	mg/L	**	nd	nd	nd	0.05	<0.05	<0.05
Kjeldahl Nitrogen	mg/L	**	-	nd	-	-	-	-
Color	TCU	15	nd	nd	nd	<5	<5	6
Dissolved Organic Carbon	mg/L	**	-	-	0.7	1.1	1.4	0.9
Turbidity	NTU	1	0.7	0.3	0.1	0.4	0.3	2.3
TDS	mg/L	500	133	118	153	111	112	152
Specific Conductance (field)	ms/cm	**	-	-	0.16	0.32	-	0.33
Conductance (RCap)	us/cm	**	237	236	250	184	183	253
pH (field)	units	6.5 - 8.5	-	-	6.4	7	-	6.5
pH (lab)	units	6.5 - 8.5	7	7.9	7	7	7	7
Total Organic Carbon	mg/L	**	nd	0.6	0.9	1.4	1.2	0.6
Hardness (as CaCO3)	mg/L	**	98.2	96	103	66.1	66.3	106
Bicarbonate (as CaCO3)	mg/L	**	94	70	120	57	58	120
Carbonate (as CaCO3)	mg/L	**	nd	nd	nd	<1	<1	<1
Ion Balance	mg/L	**	2.6	13.7	5.49	1.56	1.88	4.71
Cation Sum	meq/L	**	2.38	2.35	2.53	1.79	1.8	2.58
Anion Sum	meq/L	**	2.26	1.79	2.83	1.85	1.87	2.83
Langlier Index (4C)	units	**	-1.42	-0.65	-1.29	-1.78	-1.77	-1.28
Langlier Index (20C)	units	**	-1.02	-0.25	-0.89	-1.38	-1.37	-0.88
Saturation pH @ 4C	units	**	8.42	8.55	8.29	8.78	8.77	8.28
Saturation pH @ 20C	units	**	8.02	8.15	7.89	8.38	8.37	7.88
Total Suspended Solids	mg/L	**	16.8	21.8	11.5	2030	-	5.8
METALS								
Aluminum	mg/L	**	-	nd	-	-	-	-
Antimony	mg/L	0.006	-	nd	-	-	-	-
Arsenic	mg/L	0.025	-	nd	-	-	-	-
Barium	mg/L	1	-	0.013	-	-	-	-
Beryllium	mg/L	**	-	nd	-	-	-	-
Bismuth	mg/L	**	-	nd	-	-	-	-
Boron	mg/L	5	-	0.007	-	-	-	-
Cadmium	mg/L	0.005	<0.0003	nd	-	<0.0003	<0.0003	0.0008
Chromium	mg/L	0.05	-	nd	-	-	-	-
Cobalt	mg/L	**	-	nd	-	-	-	-
Copper	mg/L	1	<0.01	nd	nd	<0.01	<0.01	0.01
Iron	mg/L	0.3	0.14	0.16	0.07	<0.02	<0.02	0.05
Lead	mg/L	0.01	<0.0005	nd	nd	<0.0005	<0.0005	<0.0005
Manganese	mg/L	0.05	0.03	0.03	0.04	0.05	0.06	0.04
Mercury	mg/L	0.001	-	nd	-	-	-	-
Molybdenum	mg/L	**	-	nd	-	-	-	-
Nickel	mg/L	**	-	nd	-	-	-	-
Selenium	mg/L	0.01	-	nd	-	-	-	-
Silver	mg/L	**	-	nd	-	-	-	-
Strontium	mg/L	**	-	0.091	-	-	-	-
Thallium	mg/L	**	-	nd	-	-	-	-
Tin	mg/L	**	-	nd	-	-	-	-
Titanium	mg/L	**	-	nd	-	-	-	-
Uranium	mg/L	0.02	-	0.0029	-	-	-	-
Vanadium	mg/L	**	-	nd	-	-	-	-
Zinc	mg/L	5	<0.05	nd	nd	<0.05	<0.05	<0.05
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	<5	<5	-	<15	<15	<5
Phenolics	mg/L	**	-	nd	-	-	-	-
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	-	-	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-7D	MW-7D	MW-7D	MW-8	MW-8	MW-8 dup
			Sept. 7, 04	L/D	Dec. 7/04	Jun 22, 01	Sept 7, 01	Sept 7, 01
Sodium	mg/L	200	9.7	9.6	10	7.8	7.7	7.6
Potassium	mg/L	**	1	1	1	1.6	1.1	1.1
Calcium	mg/L	**	31.7	31.3	31.3	13.9	17	16.9
Magnesium	mg/L	**	7.3	7.3	6.9	3	4	4
Alkalinity as (CaCO3)	mg/L	**	110	110	110	49	62	60
Sulfate	mg/L	500	3	3	3	10	8	10
Chloride	mg/L	250	13	13	14	9.1	9.4	9.3
Reactive Silica	mg/L	**	17	17	18	10.8	17.9	17.9
Ortho Phosphate (as P)	mg/L	**	0.03	0.09	0.04	0.02	0.04	0.04
Phosphorus	mg/L	**	-	-	<0.1	<0.5	nd	nd
Total Phosphorus	mg/L	**	-	-	0.08	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	<0.05	<0.05	<0.05	0.06	0.08	0.08
Nitrate (as N)	mg/L	10	-	-	<0.05	0.06	0.07	0.08
Nitrite	mg/L	**	-	-	<0.03	nd	0.01	nd
Ammonia (as N)	mg/L	**	<0.05	<0.05	<0.05	nd	nd	nd
Kjeldahl Nitrogen	mg/L	**	-	-	0.3	0.9	-	-
Color	TCU	15	<5	<5	<5	6	13	15
Dissolved Organic Carbon	mg/L	**	<0.5	0.6	1	1.4	<0.5	<0.5
Turbidity	NTU	1	<0.1	<0.1	0.5	112	16.7	17.9
TDS	mg/L	500	149	148	151	86	103	103
Specific Conductance (field)	ms/cm	**	0.31	-	0.35	-	-	-
Conductance (RCap)	us/cm	**	2.66	263	256	148	147	146
pH (field)	units	6.5 - 8.5	6.4	-	5.8	-	-	-
pH (lab)	units	6.5 - 8.5	6.9	7	7	7.2	7.4	7.4
Total Organic Carbon	mg/L	**	<0.5	0.7	0.8	3	-	-
Hardness (as CaCO3)	mg/L	**	109	108	107	47.1	58.9	58.7
Bicarbonate (as CaCO3)	mg/L	**	110	110	110	49	62	60
Carbonate (as CaCO3)	mg/L	**	<1	<1	<1	<1	<1	<1
Ion Balance	mg/L	**	0.02	0.44	1.23	4.82	4.13	4.39
Cation Sum	meq/L	**	2.63	2.61	2.6	1.32	1.54	1.53
Anion Sum	meq/L	**	2.63	2.63	2.66	1.45	1.68	1.68
Langlier Index (4C)	units	**	-1.41	-1.31	-1.31	-1.8	-1.42	-1.63
Langlier Index (20C)	units	**	-1.01	-0.91	-0.91	-1.4	-1.02	-1.23
Saturation pH @ 4C	units	**	8.31	8.31	8.31	9	8.82	8.83
Saturation pH @ 20C	units	**	7.91	7.91	7.91	8.6	8.42	8.43
Total Suspended Solids	mg/L	**	54.8	-	4.2	81.5	-	-
METALS								
Aluminum	mg/L	**	-	-	<0.01	0.07	0.02	0.01
Antimony	mg/L	0.006	-	-	<0.002	<0.002	<0.002	<0.002
Arsenic	mg/L	0.025	-	-	<0.002	<0.002	<0.002	<0.002
Barium	mg/L	1	-	-	0.014	0.013	0.012	0.013
Beryllium	mg/L	**	-	-	<0.002	<0.005	<0.005	<0.005
Bismuth	mg/L	**	-	-	<0.002	<0.002	<0.002	<0.002
Boron	mg/L	5	-	-	0.008	0.013	0.006	0.006
Cadmium	mg/L	0.005	<0.0003	<0.0003	<0.0003	0.0007	<0.0003	<0.0003
Chromium	mg/L	0.05	-	-	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	**	-	-	<0.001	0.001	0.002	0.002
Copper	mg/L	1	<0.01	<0.01	<0.002	<0.002	0.002	0.002
Iron	mg/L	0.3	0.05	0.06	0.08	<0.02	0.06	0.06
Lead	mg/L	0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Manganese	mg/L	0.05	0.06	0.06	0.063	0.032	0.048	0.048
Mercury	mg/L	0.001	-	-	<0.00005	-	-	-
Molybdenum	mg/L	**	-	-	<0.002	0.55	0.054	0.053
Nickel	mg/L	**	-	-	<0.002	0.003	0.003	0.003
Selenium	mg/L	0.01	-	-	<0.002	<0.002	<0.002	<0.002
Silver	mg/L	**	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Strontium	mg/L	**	-	-	0.094	0.04	0.046	0.046
Thallium	mg/L	**	-	-	<0.0001	<0.0001	<0.0001	<0.0001
Tin	mg/L	**	-	-	<0.002	<0.002	<0.002	<0.002
Titanium	mg/L	**	-	-	<0.002	<0.002	<0.002	<0.002
Uranium	mg/L	0.02	-	-	0.0038	0.0002	0.0008	0.0008
Vanadium	mg/L	**	-	-	<0.002	<0.002	<0.002	<0.002
Zinc	mg/L	5	<0.05	<0.05	<0.005	0.014	0.045	0.042
Carbonaceous BOD	mg/L	**	-	-	-	-	-	-
COD	mg/L	**	<5	<5	<5	-	-	-
Phenolics	mg/L	**	-	-	<0.001	-	-	-
Fecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	-	-	-	<1	0	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	-	-	-	<1	0	-

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GDWQ 2002	MW-8 Dec 4, 01	MW-8 dup Dec 4, 01	MW-8 Mar.25.02	MW-8 dup Mar.25.02
Sodium	mg/L	200	8.1	7.8	8.5	9.3
Potassium	mg/L	**	1	1	1.2	1.2
Calcium	mg/L	**	19.1	18.7	21.6	22.7
Magnesium	mg/L	**	4.2	4.2	4.9	4.9
Alkalinity as (CaCO3)	mg/L	**	68	66	79	77
Sulfate	mg/L	500	5	6	4	4
Chloride	mg/L	250	9.2	9.1	9	9
Reactive Silica	mg/L	**	18.5	18.4	17	17
Ortho Phosphate (as P)	mg/L	**	0.02	0.02	nd	nd
Phosphorus	mg/L	**	nd	nd	nd	nd
Total Phosphorus	mg/L	**	-	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	0.1	0.11	nd	nd
Nitrate (as N)	mg/L	10	0.1	0.11	nd	nd
Nitrite	mg/L	**	<0.02	<0.02	nd	0.02
Ammonia (as N)	mg/L	**	nd	nd	nd	nd
Kjeldahl Nitrogen	mg/L	**	-	-	-	-
Color	TCU	15	8	9	nd	nd
Dissolved Organic Carbon	mg/L	**	-	-	-	-
Turbidity	NTU	1	25	25.8	7.9	8.4
TDS	mg/L	500	106	105	114	115
Specific Conductance (field)	ms/cm	**	-	-	-	-
Conductance (RCap)	us/cm	**	156	156	182	183
pH (field)	units	6.5 - 8.5	-	-	-	-
pH (lab)	units	6.5 - 8.5	6.8	6.9	7.1	7.1
Total Organic Carbon	mg/L	**	<0.5	<0.5	nd	nd
Hardness (as CaCO3)	mg/L	**	65	64	74.1	76.9
Bicarbonate (as CaCO3)	mg/L	**	68	66	79	77
Carbonate (as CaCO3)	mg/L	**	<1	<1	nd	nd
Ion Balance	mg/L	**	1.47	1.84	0.93	2.45
Cation Sum	meq/L	**	1.68	1.65	1.89	1.97
Anion Sum	meq/L	**	1.73	1.71	1.92	1.88
Langlier Index (4C)	units	**	-1.93	-1.85	-1.51	-1.5
Langlier Index (20C)	units	**	-1.53	-1.45	-1.11	-1.1
Saturation pH @ 4C	units	**	8.73	8.75	8.61	8.6
Saturation pH @ 20C	units	**	8.33	8.35	8.21	8.2
Total Suspended Solids	mg/L	**	-	-	-	-
METALS						
Aluminum	mg/L	**	<0.01	<0.01	nd	nd
Antimony	mg/L	0.006	<0.002	<0.002	nd	nd
Arsenic	mg/L	0.025	<0.002	<0.002	nd	nd
Barium	mg/L	1	0.013	0.013	0.021	0.015
Beryllium	mg/L	**	<0.005	<0.005	nd	nd
Bismuth	mg/L	**	<0.002	<0.002	nd	nd
Boron	mg/L	5	0.008	0.008	0.008	0.007
Cadmium	mg/L	0.005	<0.0003	<0.0003	nd	nd
Chromium	mg/L	0.05	<0.002	<0.002	nd	nd
Cobalt	mg/L	**	0.002	0.002	0.002	0.002
Copper	mg/L	1	<0.002	<0.002	nd	nd
Iron	mg/L	0.3	0.06	0.06	0.17	0.18
Lead	mg/L	0.01	<0.0005	<0.0005	nd	nd
Manganese	mg/L	0.05	0.032	0.032	0.071	0.07
Mercury	mg/L	0.001	-	-	-	-
Molybdenum	mg/L	**	0.02	0.02	0.029	0.029
Nickel	mg/L	**	0.002	0.002	0.002	0.002
Selenium	mg/L	0.01	<0.002	<0.002	nd	nd
Silver	mg/L	**	<0.0005	<0.0005	nd	nd
Strontium	mg/L	**	0.048	0.047	0.056	0.055
Thallium	mg/L	**	<0.0001	<0.0001	nd	nd
Tin	mg/L	**	<0.002	<0.002	nd	nd
Titanium	mg/L	**	<0.002	<0.002	nd	nd
Uranium	mg/L	0.02	0.0009	0.0009	0.0018	0.0017
Vanadium	mg/L	**	<0.002	<0.002	nd	nd
Zinc	mg/L	5	0.005	0.006	0.005	0.006
Carbonaceous BOD	mg/L	**	-	-	-	-
COD	mg/L	**	-	-	-	-
Phenolics	mg/L	**	-	-	-	-
Fecal Coliform (Colifert)	cfu/100 ml	0 cfu/100 ml	0	-	0	-
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	0	-	0	-

GDWQ - Guidelines for Canadian Drinking Water Quality, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading Indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 2
General Chemistry & Metals - Groundwater
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	GCDWQ 2002	MW-8 Jun 26, 02	MW-8 Dup1 Jun 26, 02	MW-8 Mar 3, 03
Sodium	mg/L	200	8.6	9.7	-
Potassium	mg/L	**	1.1	1.2	-
Calcium	mg/L	**	21	25.1	-
Magnesium	mg/L	**	4.2	4	-
Alkalinity as (CaCO3)	mg/L	**	69	73	-
Sulfate	mg/L	500	3	3	-
Chloride	mg/L	250	10	10	10
Reactive Silica	mg/L	**	17	17	-
Ortho Phosphate (as P)	mg/L	**	nd	nd	-
Phosphorus	mg/L	**	nd	0.1	-
Total Phosphorus	mg/L	**	-	-	-
Nitrate+Nitrite (as N)	mg/L	**	nd	0.07	-
Nitrate (as N)	mg/L	10	nd	0.07	-
Nitrite	mg/L	**	nd	nd	-
Ammonia (as N)	mg/L	**	nd	nd	-
Kjeldahl Nitrogen	mg/L	**	-	-	-
Color	TCU	15	nd	nd	-
Dissolved Organic Carbon	mg/L	**	-	-	-
Turbidity	NTU	1	1.3	1.9	-
TDS	mg/L	500	107	114	-
Specific Conductance (field)	ms/cm	**	-	-	-
Conductance (RCap)	us/cm	**	162	171	172
pH (field)	units	6.5 - 8.5	-	-	-
pH (lab)	units	6.5 - 8.5	6.9	6.9	-
Total Organic Carbon	mg/L	**	0.6	nd	-
Hardness (as CaCO3)	mg/L	**	69.7	79.1	-
Bicarbonate (as CaCO3)	mg/L	**	69	73	-
Carbonate (as CaCO3)	mg/L	**	nd	nd	-
Ion Balance	mg/L	**	2.03	5.94	-
Cation Sum	meq/L	**	1.8	2.04	-
Anion Sum	meq/L	**	1.73	1.81	-
Langlier Index (4C)	units	**	-1.78	-1.68	-
Langlier Index (20C)	units	**	-1.36	-1.28	-
Saturation pH @ 4C	units	**	8.68	8.56	-
Saturation pH @ 20C	units	**	8.28	8.18	-
Total Suspended Solids	mg/L	**	-	-	-
METALS					
Aluminum	mg/L	**	0.02	0.04	-
Antimony	mg/L	0.006	nd	nd	-
Arsenic	mg/L	0.025	nd	nd	-
Barium	mg/L	1	0.014	0.016	-
Beryllium	mg/L	**	nd	nd	-
Bismuth	mg/L	**	nd	nd	-
Boron	mg/L	5	0.006	0.008	-
Cadmium	mg/L	0.005	nd	nd	-
Chromium	mg/L	0.05	nd	0.007	-
Cobalt	mg/L	**	nd	nd	-
Copper	mg/L	1	0.002	0.002	-
Iron	mg/L	0.3	0.03	0.07	-
Lead	mg/L	0.01	nd	nd	-
Manganese	mg/L	0.05	0.032	0.037	-
Mercury	mg/L	0.001	nd	nd	-
Molybdenum	mg/L	**	0.013	0.013	-
Nickel	mg/L	**	nd	nd	-
Selenium	mg/L	0.01	nd	nd	-
Silver	mg/L	**	nd	nd	-
Strontium	mg/L	**	0.056	0.075	-
Thallium	mg/L	**	nd	nd	-
Tin	mg/L	**	nd	nd	-
Titanium	mg/L	**	0.002	0.002	-
Uranium	mg/L	0.02	0.0013	0.0013	-
Vanadium	mg/L	**	nd	nd	-
Zinc	mg/L	5	0.005	0.007	-
Carbonaceous BOD	mg/L	**	-	-	-
COD	mg/L	**	-	-	-
Phenolics	mg/L	**	-	-	-
Fecal Coliform (Colliert)	cfu/100 ml	0 cfu/100 ml	0	0	0
Total Coliform (mpn)	cfu/100 ml	0 cfu/100 ml	48	0	0

GCDWQ - Guidelines for Canadian Drinking Water Quality, 2002

** No applicable guideline established.

- Did not sample for this parameter.

Shading indicates concentration above guideline.

cfu/100 ml - coliform results expressed as colony forming units per 100 ml

As of April 2002 the guideline for total coliform has changed from 10 cfu/100ml to 0 cfu/100ml.

note - total coliform was not possible because of the over growth of the total bacteria in the sample.

* MW-1 was replaced during January 2004 with MW-1R.

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Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-1 Apr 30, 01	SW-1 dup Apr 30, 01	SW-1 Jun 6, 01	SW-1 Sept 7, 01	SW-1 Dec 4, 01	SW-1 Mar 25, 02	SW-1 Jun 26, 02	SW-1 Mar 3, 03
Sodium	mg/L	**	11	10.9	14.1	37.9	12.2	44.9	26.9	-
Potassium	mg/L	**	2.8	2.8	15.4	15.9	16.7	4.5	12.3	-
Calcium	mg/L	**	8.1	8	30.1	36.9	47.8	20.3	33.4	-
Magnesium	mg/L	**	0.7	0.7	2	4.3	1.1	2.3	2.8	-
Alkalinity as (CaCO3)	mg/L	**	17	25	130	96	125	41	110	-
Sulfate	mg/L	**	16	18	21	37	31	17	20	-
Chloride	mg/L	**	17.2	17	20.2	42.8	15.3	70	7	68
Reactive Silica	mg/L	**	3.2	3.2	8.3	10.9	9.6	4.2	8.3	-
Ortho Phosphate (as P)	mg/L	**	0.03	0.04	0.18	0.08	0.02	nd	0.1	-
Phosphorus	mg/L	**	<0.1	<0.1	<0.5	0.6	0.2	nd	0.5	-
Nitrate+Nitrite (as N)	mg/L	**	<0.05	0.07	0.06	1.14	0.37	0.29	0.06	-
Nitrate (as N)	mg/L	**	<0.05	0.07	<0.05	1.1	0.35	0.25	0.06	-
Nitrite	mg/L	0.06	<0.01	<0.01	0.04	0.04	0.02	0.04	nd	-
Ammonia (as N)	mg/L	**	0.74	0.78	10.6	0.09	0.07	0.18	1.8	-
Kjeldahl Nitrogen	mg/L	**	1.6	1.4	12	-	-	-	-	-
Color	TCU	**	64	74	140	31	86	41	77	-
Dissolved Organic Carbon	mg/L	**	16.2	8.8	40.4	8	-	-	-	-
Turbidity	NTU	**	8.3	8.4	10.2	415	13.4	11.4	11.7	-
TDS	mg/L	**	-	-	203	248	210	189	207	-
Specific Conductance (field)	uS/cm	**	-	-	-	-	-	-	-	-
Conductance (RCap)	uS/cm	**	124	124	399	438	291	358	372	275
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-	-	-
pH (laboratory)	units	6.5 - 9.0	6.8	6.7	7.1	7.8	10	7.4	7.5	-
Hardness (as CaCO3)	mg/L	**	23.1	22.9	83.4	110	124	60.2	94.9	-
Bicarbonate (as CaCO3)	mg/L	**	17	25	130	95	62	41	110	-
Carbonate (as CaCO3)	mg/L	**	<1.0	<1.0	<1	<1	58	nd	nd	-
Ion Balance	mg/L	**	4.33	12.4	2.55	3.39	2.32	1.79	1.36	-
Cation Sum	meq/L	**	1.06	1.06	3.43	4.26	3.44	3.28	3.51	-
Anion Sum	meq/L	**	1.16	1.36	3.61	3.98	3.6	3.17	3.61	-
Langlier Index (4C)	units	**	-2.89	-2.83	-1.17	-0.51	1.92	-1.54	-0.79	-
Langlier Index (20C)	units	**	-2.49	-2.43	-0.77	-0.11	2.32	-1.14	-0.39	-
Saturation pH @ 4C	units	**	9.69	9.53	8.27	8.31	8.08	8.94	8.29	-
Saturation pH @ 20C	units	**	9.29	9.13	7.87	7.91	7.68	8.54	7.89	-
Total Organic Carbon	mg/L	**	-	-	-	-	18.4	8.1	20.6	-
Total Suspended Solids	mg/L	**	-	-	-	-	-	-	-	-
Phenolics	mg/L	0.004	-	-	-	-	-	-	-	-
COD (as O2)	mg/L	**	69	-	270	-	-	-	-	-
Carbonaceous BOD	mg/L	**	34	-	120	-	-	-	-	-
Tannin & Lignin	mg/L	**	-	-	-	-	-	-	-	-
Total Phosphorous	mg/L	**	-	-	-	-	-	-	-	-
Fecal Coliform (Coli fert)	cfu/100 ml	0 cfu/100 ml	-	-	1330	5	0	1	109	65
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	-	-	>24200	12	6	52	>200	>200
Metals										
Aluminum	mg/L	0.005-0.1	0.28	0.3	0.18	5.4	1.1	0.44	0.69	-
Antimony	mg/L	**	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	-
Arsenic	mg/L	0.005	<0.002	<0.002	0.002	0.009	<0.002	nd	0.004	-
Barium	mg/L	**	0.008	0.009	0.023	0.068	0.024	0.018	0.024	-
Beryllium	mg/L	**	<0.005	<0.005	<0.005	<0.005	<0.005	nd	nd	-
Bismuth	mg/L	**	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	-
Boron	mg/L	**	0.009	0.009	0.026	0.032	0.021	0.013	0.025	-
Cadmium	mg/L	0.000017	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	nd	nd	-
Chromium	mg/L	0.0089	<0.002	<0.002	0.003	0.009	0.004	nd	0.002	-
Cobalt	mg/L	**	<0.001	<0.001	0.001	0.005	<0.001	nd	0.001	-
Copper	mg/L	0.002 - 0.004	0.002	0.002	0.009	0.031	0.005	0.005	0.014	-
Iron	mg/L	0.3	0.5	0.52	2.2	9.5	0.55	0.52	2.7	-
Lead	mg/L	0.001 - 0.007	<0.0005	<0.0005	0.0008	0.011	0.001	0.0006	0.0032	-
Manganese	mg/L	**	0.092	0.095	0.32	0.36	0.029	0.075	0.3	-
Mercury	mg/L	0.0001	-	-	-	-	-	-	nd	-
Molybdenum	mg/L	0.073	<0.002	<0.002	0.002	0.004	0.003	nd	0.002	-
Nickel	mg/L	0.025 - 0.15	<0.0005	<0.0005	0.004	0.009	<0.002	nd	0.004	-
Selenium	mg/L	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	-
Silver	mg/L	0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	nd	nd	-
Strontium	mg/L	**	0.041	0.042	0.18	0.2	0.18	0.098	0.17	-
Thallium	mg/L	0.0008	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	nd	nd	-
Tin	mg/L	**	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	-
Titanium	mg/L	**	0.004	0.005	0.004	0.18	0.015	0.011	0.023	-
Uranium	mg/L	**	0.0001	0.0002	0.0009	0.0024	0.0004	0.0006	0.0038	-
Vanadium	mg/L	**	<0.002	<0.002	0.002	0.014	0.004	0.002	0.003	-
Zinc	mg/L	0.03	0.069	0.073	0.082	1.1	0.017	0.05	0.17	-

FWAL - Canadian Water Quality Guidelines for the
Protection of Freshwater Aquatic Life, 2002.

** No applicable guideline established.
- Did not sample for this parameter.
Shading - Indicates concentration above guideline.
TDS - Total Dissolved Solids
cfu/100 ml - coliform results expressed ygrife
forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-2 Apr. 30, 01	SW-2 Sept 7, 01	SW-2 Dec 4, 01	SW-2 Mar 25, 02	SW-2 Jun 26, 02	SW-2 Mar 3, 03
Sodium	mg/L	**	148	41.1	52.5	109	80.8	68.2
Potassium	mg/L	**	131	22.5	44	38.6	35.2	16.8
Calcium	mg/L	**	267	49.6	26.1	69.8	104	33.5
Magnesium	mg/L	**	22.3	2.4	1.9	4.6	10.8	3
Alkalinity as (CaCO3)	mg/L	**	912	124	111	230	380	130
Sulfate	mg/L	**	48	21	37	16	14	17
Chloride	mg/L	**	210	67.5	75.6	140	110	75
Reactive Silica	mg/L	**	19.7	4.8	6.1	6.6	18	3.4
Ortho Phosphate (as P)	mg/L	**	4.3	0.04	0.05	nd	0.05	0.01
Phosphorus	mg/L	**	6.8	0.1	<0.1	0.3	0.7	0.4
Nitrate+Nitrite (as N)	mg/L	**	<0.05	0.08	0.82	nd	nd	nd
Nitrate (as N)	mg/L	**	<0.05	0.07	0.17	nd	nd	nd
Nitrite	mg/L	0.06	0.05	0.01	0.65	nd	nd	nd
Ammonia (as N)	mg/L	**	39.7	0.09	1.65	7.5	7.5	5
Kjeldahl Nitrogen	mg/L	**	100	-	-	-	-	-
Color	TCU	**	24	31	74	35	72	28
Dissolved Organic Carbon	mg/L	**	1100	9.3	-	-	-	-
Turbidity	NTU	**	68.5	2	32.2	55	37.5	6.7
TDS	mg/L	**	1310	284	316	532	611	302
Specific Conductance (field)	uS/cm	**	-	-	-	-	-	-
Conductance (RCap)	uS/cm	**	2930	525	540	1060	1190	545
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (laboratory)	units	6.5 - 9.0	6.3	7.6	8.2	7.8	7.4	7.3
Hardness (as CaCO3)	mg/L	**	758	134	73	193	304	96
Bicarbonate (as CaCO3)	mg/L	**	912	124	109	229	379	130
Carbonate (as CaCO3)	mg/L	**	<1.0	<1	2	1	nd	nd
Ion Balance	mg/L	**	13.9	2.2	1.9	6.54	0.15	5.59
Cation Sum	meq/L	**	27.8	5.04	4.99	10.1	11	5.67
Anion Sum	meq/L	**	21	4.83	5.18	8.88	11	5.07
Langlier Index (4C)	units	**	-0.34	-0.48	-0.21	0.11	0.1	-0.93
Langlier Index (20C)	units	**	0.06	-0.08	0.19	0.51	0.5	-0.53
Saturation pH @ 4C	units	**	6.64	8.08	8.41	7.69	7.3	8.23
Saturation pH @ 20C	units	**	6.24	7.68	8.01	7.29	6.9	7.83
Total Organic Carbon	mg/L	**	-	-	10.8	75.1	59.7	66.2
Total Suspended Solids	mg/L	**	-	-	-	-	-	-
Phenolics	mg/L	0.004	-	-	-	-	-	-
COD (as O2)	mg/L	**	3240	-	-	-	-	-
Carbonaceous BOD	mg/L	**	330	-	-	-	-	-
Tannin & Lignin	mg/L	**	-	-	-	-	-	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Fecal Coliform (Coli)ert)	cfu/100 ml	0 cfu/100 ml	-	13	0	0	<10	>200
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	-	2700	59	420	>2000	>200
Metals								
Aluminum	mg/L	0.005-0.1	0.61	0.12	1.3	2.2	0.93	0.15
Antimony	mg/L	**	<0.02	<0.002	<0.002	nd	nd	nd
Arsenic	mg/L	0.005	<0.02	0.004	0.003	0.004	0.014	0.003
Barium	mg/L	**	0.063	0.058	0.031	0.064	0.12	0.022
Beryllium	mg/L	**	<0.05	<0.005	<0.005	nd	nd	nd
Bismuth	mg/L	**	<0.02	<0.002	<0.002	nd	nd	nd
Boron	mg/L	**	0.12	0.018	0.02	0.027	0.053	0.019
Cadmium	mg/L	0.000017	<0.003	<0.0003	<0.0003	nd	nd	nd
Chromium	mg/L	0.0089	<0.02	<0.002	0.002	0.004	0.005	nd
Cobalt	mg/L	**	0.012	0.001	0.002	0.004	0.003	0.002
Copper	mg/L	0.002 - 0.004	<0.02	0.003	0.011	0.008	0.006	0.009
Iron	mg/L	0.3	8.6	1.3	1.1	3.5	1.1	0.48
Lead	mg/L	0.001 - 0.007	<0.005	0.0008	0.0013	0.003	0.0026	0.0005
Manganese	mg/L	**	3	0.37	0.14	0.84	3	0.32
Mercury	mg/L	0.0001	-	-	-	-	nd	-
Molybdenum	mg/L	0.073	<0.02	0.002	0.007	0.002	nd	nd
Nickel	mg/L	0.025 - 0.15	0.031	0.003	0.006	0.008	0.005	0.003
Selenium	mg/L	0.001	<0.02	<0.002	<0.002	nd	nd	nd
Silver	mg/L	0.0001	<0.005	<0.0005	<0.0005	nd	nd	nd
Strontium	mg/L	**	0.92	0.34	0.22	0.45	0.52	0.13
Thallium	mg/L	0.0008	<0.001	<0.0001	<0.0001	nd	nd	nd
Tin	mg/L	**	<0.02	<0.002	<0.002	nd	nd	nd
Titanium	mg/L	**	0.11	0.004	0.043	0.055	0.037	0.009
Uranium	mg/L	**	0.0018	0.001	0.001	0.0007	0.0008	0.0008
Vanadium	mg/L	**	<0.02	0.002	0.005	0.006	0.004	0.002
Zinc	mg/L	0.03	0.55	0.027	0.012	0.042	0.023	0.05

FWAL - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life, 2002.

** - No applicable guideline established.

- Did not sample for this parameter.

Shading - indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed in forming units per 100 ml

Table 3
 General Chemistry - Surface Water
 New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-3 Apr 30, 01	SW-3 Sept 7, 01	SW-3 Dec 4, 01	SW-3 Mar 25, 02	SW-3 Jun 26, 02	SW-3 Dup2 Jun 26, 02	SW-3 Mar 3, 03
Sodium	mg/L	**	24.9	19.7	23.1	137	28.1	29	19.2
Potassium	mg/L	**	25.1	21.3	24.7	37.2	27.8	27	7
Calcium	mg/L	**	101	34.7	39.1	86.5	45.9	47	14.8
Magnesium	mg/L	**	4.4	3.5	7.7	8.5	5.5	5.5	1.5
Alkalinity as (CaCO3)	mg/L	**	310	121	116	280	190	160	50
Sulfate	mg/L	**	7	8	27	17	12	12	13
Chloride	mg/L	**	37.8	29.3	29.2	200	39	38	25
Reactive Silica	mg/L	**	8.5	8.2	7	7.9	6.5	6.4	2.3
Ortho Phosphate (as P)	mg/L	**	0.14	0.02	0.08	nd	nd	nd	nd
Phosphorus	mg/L	**	0.6	0.6	0.5	0.8	0.9	0.9	0.1
Nitrate+Nitrite (as N)	mg/L	**	<0.05	<0.05	<0.05	nd	nd	nd	0.22
Nitrate (as N)	mg/L	**	<0.05	<0.05	<0.05	nd	nd	nd	0.2
Nitrite	mg/L	0.06	<0.01	<0.01	0.03	0.01	nd	nd	0.02
Ammonia (as N)	mg/L	**	11.7	2.49	2.16	11	8.4	8.8	2.8
Kjeldahl Nitrogen	mg/L	**	17	-	-	-	-	-	-
Color	TCU	**	53	120	78	150	43	44	24
Dissolved Organic Carbon	mg/L	**	149	19.1	-	-	-	-	-
Turbidity	NTU	**	13.7	12.9	615	78.9	61	72	31.9
TDS	mg/L	**	410	201	230	676	290	284	117
Specific Conductance (field)	uS/cm	**	-	-	-	-	-	-	-
Conductance (RCap)	uS/cm	**	835	382	356	1320	566	584	212
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-	-
pH (laboratory)	units	6.5 - 9.0	7.1	7.6	7.3	7.1	7.5	7.5	7.3
Hardness (as CaCO3)	mg/L	**	270	101	129	251	137	140	43.1
Bicarbonate (as CaCO3)	mg/L	**	310	121	116	280	189	179	50
Carbonate (as CaCO3)	mg/L	**	<1.0	<1	<1	nd	nd	nd	nd
Ion Balance	mg/L	**	3.56	2.61	8.26	4.59	1.19	4.41	2.1
Cation Sum	meq/L	**	7.96	3.6	4.38	12.7	5.28	5.38	2.08
Anion Sum	meq/L	**	7.42	3.42	3.71	11.8	5.15	4.92	1.99
Langlier Index (4C)	units	**	-0.29	-0.63	-0.9	-0.42	-0.43	-0.44	-1.67
Langlier Index (20C)	units	**	0.11	-0.23	-0.5	-0.02	-0.03	-0.04	-1.27
Saturation pH @ 4C	units	**	7.39	8.23	8.2	7.52	7.93	7.94	8.97
Saturation pH @ 20C	units	**	6.99	7.83	7.8	7.12	7.53	7.54	8.57
Total Organic Carbon	mg/L	**	-	-	16	140	52.5	55.5	29.2
Total Suspended Solids	mg/L	**	-	-	-	-	-	-	-
Phenolics	mg/L	0.004	-	-	-	-	-	-	-
COD (as O2)	mg/L	**	577	-	-	-	-	-	-
Carbonaceous BOD	mg/L	**	410	-	-	-	-	-	-
Tannin & Lignin	mg/L	**	-	-	-	-	-	-	-
Total Phosphorous	mg/L	**	-	-	-	-	-	-	-
Fecal Coliform (Coli fert)	cfu/100 ml	0 cfu/100 ml	-	1	31	0	1300	1330	109
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	-	510	1600	5300	>2000	>2000	>200
Metals									
Aluminum	mg/L	0.005-0.1	0.07	0.2	12	1.4	1.1	0.74	0.26
Antimony	mg/L	**	<0.002	<0.002	<0.002	nd	nd	nd	nd
Arsenic	mg/L	0.005	0.003	0.007	0.009	0.009	0.009	0.009	0.002
Barium	mg/L	**	0.036	0.2	0.13	0.11	0.067	0.065	0.016
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	nd	nd
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	nd	nd
Boron	mg/L	**	0.022	0.031	0.024	0.036	0.029	0.029	0.008
Cadmium	mg/L	0.000017	<0.0003	<0.0003	<0.0003	nd	nd	nd	nd
Chromium	mg/L	0.0089	0.002	<0.002	0.015	0.004	0.003	0.003	nd
Cobalt	mg/L	**	0.004	0.001	0.009	0.005	0.003	0.003	0.001
Copper	mg/L	0.002 - 0.004	0.003	0.003	0.021	0.008	0.007	0.006	0.004
Iron	mg/L	0.3	4.4	1.5	15	4.4	2.8	2.6	0.5
Lead	mg/L	0.001 - 0.007	<0.0005	0.0009	0.012	0.0033	0.0026	0.0026	0.0008
Manganese	mg/L	**	1.7	0.55	0.87	1.4	1	1	0.33
Mercury	mg/L	0.0001	-	-	-	-	nd	nd	-
Molybdenum	mg/L	0.073	<0.002	0.002	<0.002	0.002	nd	nd	nd
Nickel	mg/L	0.025 - 0.15	0.006	0.003	0.019	0.009	0.005	0.005	nd
Selenium	mg/L	0.001	<0.002	<0.002	<0.002	nd	nd	nd	nd
Silver	mg/L	0.0001	<0.0005	<0.0005	<0.0005	nd	nd	nd	nd
Strontium	mg/L	**	0.53	0.31	0.17	0.36	0.2	0.2	0.04
Thallium	mg/L	0.0008	<0.0001	<0.0001	0.0002	nd	nd	nd	nd
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	nd	nd
Titanium	mg/L	**	0.002	0.009	0.21	0.053	0.05	0.036	0.013
Uranium	mg/L	**	0.0003	0.0004	0.0017	0.0013	0.0007	0.0007	0.0002
Vanadium	mg/L	**	<0.002	0.002	0.019	0.006	0.004	0.004	nd
Zinc	mg/L	0.03	0.013	0.014	0.095	0.038	0.038	0.042	0.011

FWAL - Canadian Water Quality Guidelines for the
 Protection of Freshwater Aquatic Life, 2002.
 ** No applicable guideline established.
 - Did not sample for this parameter
 Shading - Indicates concentration above guideline.
 TDS - Total Dissolved Solids
 cfu/100 ml - coliform results expressed ygrise
 forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-4 Apr.30, 01	SW-4 Sept.7, 01	SW-4 Dec.4, 01	SW-4 Mar.25, 02	SW-4 Jun.26, 02
Sodium	mg/L	**	7.7	38.3	21.6	17.4	16.2
Potassium	mg/L	**	5.2	30.5	12.9	13.9	14.3
Calcium	mg/L	**	30	57.1	59.9	34.7	48.8
Magnesium	mg/L	**	5	14.6	12	5.2	6.5
Alkalinity as (CaCO3)	mg/L	**	128	189	143	120	150
Sulfate	mg/L	**	12	<10	25	18	15
Chloride	mg/L	**	15	96.6	52.6	31	18
Reactive Silica	mg/L	**	4.4	8.6	8.8	6	0.5
Ortho Phosphate (as P)	mg/L	**	0.04	0.25	0.01	0.01	0.1
Phosphorus	mg/L	**	<0.1	0.7	0.1	nd	0.3
Nitrate+Nitrite (as N)	mg/L	**	<0.05	<0.2	<0.05	0.15	nd
Nitrate (as N)	mg/L	**	<0.05	<0.2	<0.05	0.15	nd
Nitrite	mg/L	0.06	<0.01	<0.05	<0.02	nd	nd
Ammonia (as N)	mg/L	**	<0.05	8.06	<0.05	2.5	0.18
Kjeldahl Nitrogen	mg/L	**	1.8	-	-	-	-
Color	TCU	**	46	310	57	33	44
Dissolved Organic Carbon	mg/L	**	9.7	50	-	-	-
Turbidity	NTU	**	83	53.7	85.5	86.9	14
TDS	mg/L	**	140	381	279	202	210
Specific Conductance (field)	uS/cm	**	-	-	-	-	-
Conductance (RCap)	uS/cm	**	242	755	509	406	408
pH (field)	units	6.5 - 8.5	-	-	-	-	-
pH (laboratory)	units	6.5 - 9.0	7.2	7.8	7.3	7.6	7.4
Hardness (as CaCO3)	mg/L	**	95.5	203	199	108	149
Bicarbonate (as CaCO3)	mg/L	**	128	188	143	120	150
Carbonate (as CaCO3)	mg/L	**	<1.0	1	<1	nd	nd
Ion Balance	mg/L	**	6.36	2.49	3.79	2.93	2.93
Cation Sum	meq/L	**	2.38	7.07	5.25	3.45	4.05
Anion Sum	meq/L	**	2.7	6.73	4.87	3.66	3.82
Langlier Index (4C)	units	**	-1.15	-0.05	-0.64	-0.64	-0.59
Langlier Index (20C)	units	**	-0.75	0.35	-0.24	-0.24	-0.19
Saturation pH @ 4C	units	**	8.35	7.85	7.94	8.24	7.99
Saturation pH @ 20C	units	**	7.95	7.45	7.54	7.84	78.59
Total Organic Carbon	mg/L	**	-	-	22.8	27.7	20.4
Total Suspended Solids	mg/L	**	-	-	-	-	-
Phenolics	mg/L	0.004	-	-	-	-	-
COD (as O2)	mg/L	**	61	-	-	-	-
Carbonaceous BOD	mg/L	**	24	-	-	-	-
Tannin & Lignin	mg/L	**	-	-	-	-	-
Total Phosphorous	mg/L	**	-	-	-	-	-
Fecal Coliform (Collieri)	cfu/100 ml	0 cfu/100 ml	-	57	0	0	27
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	-	note	9	9	>200
Metals							
Aluminum	mg/L	0.005-0.1	0.24	0.94	3.6	1	0.16
Antimony	mg/L	**	<0.002	<0.002	<0.002	nd	nd
Arsenic	mg/L	0.005	0.004	0.05	0.005	0.003	0.009
Barium	mg/L	**	0.034	0.11	0.1	0.052	0.053
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd
Boron	mg/L	**	0.007	0.043	0.017	0.012	0.026
Cadmium	mg/L	0.000017	<0.0003	<0.0003	<0.0003	nd	0.0004
Chromium	mg/L	0.0089	<0.002	0.002	0.004	0.002	nd
Cobalt	mg/L	**	0.004	0.002	0.004	0.003	0.001
Copper	mg/L	0.002 - 0.004	0.002	0.004	0.007	0.004	0.003
Iron	mg/L	0.3	1.4	15	4.6	3.3	3.2
Lead	mg/L	0.001 - 0.007	<0.0005	0.0023	0.0021	0.0017	nd
Manganese	mg/L	**	1.5	0.19	1.9	0.93	0.25
Mercury	mg/L	0.0001	-	-	-	-	nd
Molybdenum	mg/L	0.073	<0.002	<0.002	<0.002	nd	nd
Nickel	mg/L	0.025 - 0.15	0.003	0.007	0.009	0.004	0.002
Selenium	mg/L	0.001	<0.002	<0.002	<0.002	nd	nd
Silver	mg/L	0.0001	<0.0005	<0.0005	<0.0005	nd	nd
Strontium	mg/L	**	0.066	0.16	0.14	0.11	0.17
Thallium	mg/L	0.0008	<0.0001	<0.0001	<0.0001	nd	nd
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd
Titanium	mg/L	**	0.014	0.069	0.13	0.025	0.007
Uranium	mg/L	**	0.0002	0.0008	0.0011	0.001	0.0009
Vanadium	mg/L	**	<0.002	0.006	0.006	0.002	nd
Zinc	mg/L	0.03	0.004	0.036	0.012	0.35	0.006

FWAL - Canadian Water Quality Guidelines for the
Protection of Freshwater Aquatic Life, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading - Indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed ygrille

forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-5 Jun 5, 01	SW-5 Sept 7, 01	SW-5 Dec 4, 01	SW-5 Mar 25, 02	SW-5 Dec 12, 03	SW-5 Jun 3, 04	SW-5 Dec 3 04
Sodium	mg/L	**	12.1	12.2	12.7	55	20.4	8.5	7.1
Potassium	mg/L	**	0.6	5.9	0.7	1.2	1.4	2.5	1
Calcium	mg/L	**	2.4	29.1	2.8	8.4	8	27.3	4.9
Magnesium	mg/L	**	0.4	4.2	0.7	1.7	1.9	2.3	0.8
Alkalinity as (CaCO3)	mg/L	**	<1	84	<5	nd	nd	64	<5
Sulfate	mg/L	**	21	17	27	16	nd(10)	20	6
Chloride	mg/L	**	16.7	13.2	14.7	91	45	3	10
Reactive Silica	mg/L	**	4.6	5.2	5.3	3.5	3.2	4.2	3.4
Ortho Phosphate (as P)	mg/L	**	0.02	0.01	0.01	nd	nd	0.01	nd(0.02)
Phosphorus	mg/L	**	<0.5	0.3	<0.1	nd	nd	0.1	0.1
Nitrate+Nitrite (as N)	mg/L	**	<0.05	<0.05	<0.05	0.11	nd	1.5	1.7
Nitrate (as N)	mg/L	**	<0.05	<0.05	<0.05	0.11	nd	1.48	1.68
Nitrite	mg/L	0.06	0.01	<0.01	<0.02	nd	nd	0.02	0.02
Ammonia (as N)	mg/L	**	<0.05	0.11	<0.05	nd	nd	<0.05	0.31
Kjeldahl Nitrogen	mg/L	**	0.6	-	-	-	0.7	1.2	1.6
Color	TCU	**	93	99	100	34	55	22	67
Dissolved Organic Carbon	mg/L	**	12.2	21.2	-	-	-	-	-
Turbidity	NTU	**	7.3	268	5.1	4.5	6.9	4.8	3
TDS	mg/L	**	61	126	67	181	120	113	44
Specific Conductance (field)	uS/cm	**	-	-	-	-	-	0.21	0.12
Conductance (RCap)	uS/cm	**	88	202	81	348	180	181	76
pH (field)	units	6.5 - 8.5	-	-	-	-	-	6.8	4
pH (laboratory)	units	6.5 - 9.0	5.9	7.6	5.3	5	5.5	7.3	5.6
Hardness (as CaCO3)	mg/L	**	7.6	89.9	9.9	28	27.8	77.6	15.5
Bicarbonate (as CaCO3)	mg/L	**	<5	64	<5	nd	nd(5)	64	nd(5)
Carbonate (as CaCO3)	mg/L	**	<5	<1	<5	nd	nd(5)	<1	nd(5)
Ion Balance	mg/L	**	18.2	10.6	16.3	0.05	3.1	2.61	3.18
Cation Sum	meq/L	**	0.7	2.49	0.78	3.01	1.49	1.99	0.67
Anion Sum	meq/L	**	1.01	2.01	1.08	3.01	1.58	1.89	0.63
Langlier Index (4C)	units	**	-4.85	-0.97	-5.38	-5.23	-4.74	-1.3	-4.83
Langlier Index (20C)	units	**	-4.45	-0.57	-4.98	-4.83	-4.34	-0.9	-4.43
Saturation pH @ 4C	units	**	10.7	8.57	10.7	10.2	10.2	8.6	10.4
Saturation pH @ 20C	units	**	10.3	8.17	10.3	9.83	9.84	8.2	10
Total Organic Carbon	mg/L	**	-	-	18.2	5.2	11.2	4	13.9
Total Suspended Solids	mg/L	**	-	-	-	-	3	7.2	nd(2)
Phenolics	mg/L	0.004	-	-	-	-	nd	0.001	<0.001
COD (as O2)	mg/L	**	52	-	-	-	29	25	25
Carbonaceous BOD	mg/L	**	<5	-	-	-	<5	4	<5
Tannin & Lignin	mg/L	**	-	-	-	-	2.7	0.9	3.1
Total Phosphorus	mg/L	**	-	-	-	-	0.04	0.06	0.03
Fecal Coliform (Coli fert)	cfu/100 ml	0 cfu/100 ml	20	880	1	0	-	-	-
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	15500	note	3	3	-	-	-
Metals									
Aluminum	mg/L	0.005-0.1	0.56	7.1	0.89	0.28	0.54	0.29	0.47
Antimony	mg/L	**	<0.002	<0.002	<0.002	nd	nd	<0.002	<0.002
Arsenic	mg/L	0.005	<0.002	0.005	<0.002	nd	nd	<0.002	<0.002
Barium	mg/L	**	0.005	0.067	0.008	0.016	0.018	0.012	0.009
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	<0.002	<0.002
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	<0.002	<0.002
Boron	mg/L	**	0.009	0.029	0.02	0.012	0.012	0.01	0.009
Cadmium	mg/L	0.000017	<0.0003	<0.0003	<0.0003	nd	nd	<0.0003	<0.0003
Chromium	mg/L	0.0089	0.002	0.008	<0.002	nd	nd	<0.002	<0.002
Cobalt	mg/L	**	<0.001	0.004	<0.001	nd	nd	<0.001	<0.001
Copper	mg/L	0.002 - 0.004	<0.002	0.011	<0.002	nd	0.002	0.004	<0.002
Iron	mg/L	0.3	0.58	9.8	0.68	0.2	0.36	0.41	0.27
Lead	mg/L	0.001 - 0.007	0.0011	0.0066	0.0013	0.0005	0.0006	<0.0005	0.0006
Manganese	mg/L	**	0.008	0.21	0.011	0.011	0.046	0.021	0.022
Mercury	mg/L	0.0001	-	-	-	-	nd	<0.00005	<0.00005
Molybdenum	mg/L	0.073	<0.002	<0.002	<0.002	nd	nd	<0.002	<0.002
Nickel	mg/L	0.025 - 0.15	<0.002	0.008	<0.002	nd	nd	<0.002	<0.002
Selenium	mg/L	0.001	<0.002	<0.002	<0.002	nd	nd	<0.002	<0.002
Silver	mg/L	0.0001	<0.0005	<0.0005	<0.0005	nd	nd	<0.0005	<0.0005
Strontium	mg/L	**	0.008	0.062	0.01	0.029	0.03	0.083	0.019
Thallium	mg/L	0.0008	<0.0001	0.0001	<0.0001	nd	nd	<0.0001	<0.0001
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	<0.002	<0.002
Titanium	mg/L	**	0.009	0.19	0.016	0.004	0.008	0.01	0.007
Uranium	mg/L	**	0.0002	0.0009	0.0001	nd	0.0001	0.0009	0.0001
Vanadium	mg/L	**	0.002	0.012	0.003	nd	0.002	<0.002	0.002
Zinc	mg/L	0.03	0.012	0.039	0.006	0.016	0.014	0.007	0.008

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** No applicable guideline established.

- Did not sample for this parameter.

Shading - Indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed ygirle
forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-5 Jun 5, 01	SW-6 Sept 7, 01	SW-8 Dec 4, 01	SW-6 Mar 25, 02	SW-5 Jun 26, 02	SW-5 Mar 3, 03
Sodium	mg/L	**	10.9	31	12.3	47.8	12.9	-
Potassium	mg/L	**	8.4	35.3	16.1	3.8	2.2	-
Calcium	mg/L	**	16.8	39.5	61.3	21	15	-
Magnesium	mg/L	**	1.1	1.5	0.6	2.9	1.5	-
Alkalinity as (CaCO3)	mg/L	**	44	118	109	36	37	-
Sulfate	mg/L	**	22	18	32	16	21	-
Chloride	mg/L	**	15.2	49.9	14.4	72	13	70
Reactive Silica	mg/L	**	5.6	9.9	8	4.1	5	-
Ortho Phosphate (as P)	mg/L	**	0.01	<0.01	0.01	0.04	0.02	-
Phosphorus	mg/L	**	<0.5	0.2	<0.1	0.9	0.1	-
Nitrate+Nitrite (as N)	mg/L	**	0.1	<0.05	0.35	nd	nd	-
Nitrate (as N)	mg/L	**	0.06	<0.05	0.33	nd	nd	-
Nitrite	mg/L	0.06	0.04	<0.01	0.02	nd	nd	-
Ammonia (as N)	mg/L	**	<0.05	0.06	<0.05	nd	0.07	-
Kjeldahl Nitrogen	mg/L	**	1	-	-	-	-	-
Color	TCU	**	58	39	82	30	110	-
Dissolved Organic Carbon	mg/L	**	14.6	13.2	-	-	-	-
Turbidity	NTU	**	8.3	28.5	19	34.7	7.1	-
TDS	mg/L	**	107	256	202	190	93	-
Specific Conductance (field)	uS/cm	**	-	-	-	-	-	-
Conductance (RCap)	uS/cm	**	184	465	411	359	134	274
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-
pH (laboratory)	units	6.5 - 9.0	7.6	7.9	10.4	6.9	7.1	-
Hardness (as CaCO3)	mg/L	**	46.5	105	131	64.4	43.6	-
Bicarbonate (as CaCO3)	mg/L	**	44	117	29	36	37	-
Carbonate (as CaCO3)	mg/L	**	<1	<1	68	nd	nd	-
Ion Balance	mg/L	**	4.47	2.42	4.14	6	1.73	-
Cation Sum	meq/L	**	1.62	4.35	3.56	3.48	1.49	-
Anion Sum	meq/L	**	1.77	4.15	3.28	3.09	1.55	-
Langlier Index (4C)	units	**	-1.37	-0.3	2.29	-2.08	-1.99	-
Langlier Index (20C)	units	**	-0.97	0.1	2.69	-1.68	-1.59	-
Saturation pH @ 4C	units	**	8.97	8.2	8.11	8.98	9.09	-
Saturation pH @ 20C	units	**	8.57	7.8	7.71	8.58	8.69	-
Total Organic Carbon	mg/L	**	-	-	18.6	15.9	19.2	-
Total Suspended Solids	mg/L	**	-	-	-	-	-	-
Phenolics	mg/L	0.004	-	-	-	-	-	-
COD (as O2)	mg/L	**	57	-	-	-	-	-
Carbonaceous BOD	mg/L	**	4	-	-	-	-	-
Tannin & Lignin	mg/L	**	-	-	-	-	-	-
Total Phosphorus	mg/L	**	-	-	-	-	-	-
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	272	9	0	0	53	5
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	>24200	note	0	75	>2000	>200
Metals								
Aluminum	mg/L	0.005-0.1	0.45	0.57	1.3	3.7	0.47	-
Antimony	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Arsenic	mg/L	0.005	0.002	0.003	<0.002	0.003	0.002	-
Barium	mg/L	**	0.018	0.055	0.031	0.09	0.013	-
Beryllium	mg/L	**	<0.005	<0.005	<0.005	nd	nd	-
Bismuth	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Boron	mg/L	**	0.015	0.017	0.019	0.018	0.018	-
Cadmium	mg/L	0.000017	<0.0003	<0.0003	<0.0003	0.0004	nd	-
Chromium	mg/L	0.0089	0.002	0.002	0.005	0.008	nd	-
Cobalt	mg/L	**	<0.001	0.001	<0.001	0.003	nd	-
Copper	mg/L	0.002 - 0.004	0.004	0.014	0.003	0.072	0.004	-
Iron	mg/L	0.3	0.8	3	0.79	5.6	1.9	-
Lead	mg/L	0.001 - 0.007	0.0005	0.0028	0.0011	0.02	0.0016	-
Manganese	mg/L	**	0.19	0.18	0.032	0.18	0.12	-
Mercury	mg/L	0.0001	-	-	-	-	nd	-
Molybdenum	mg/L	0.073	<0.002	0.003	0.004	nd	nd	-
Nickel	mg/L	0.025 - 0.15	<0.002	0.003	<0.002	0.008	0.002	-
Selenium	mg/L	0.001	<0.002	<0.002	<0.002	nd	nd	-
Silver	mg/L	0.0001	<0.0005	<0.0005	<0.0005	nd	nd	-
Strontium	mg/L	**	0.13	0.43	0.18	0.11	0.053	-
Thallium	mg/L	0.0008	<0.0001	<0.0001	<0.0001	0.0001	nd	-
Tin	mg/L	**	<0.002	<0.002	<0.002	nd	nd	-
Titanium	mg/L	**	0.005	0.017	0.029	0.16	0.014	-
Uranium	mg/L	**	0.0002	0.0005	0.0002	0.0029	0.0003	-
Vanadium	mg/L	**	0.002	0.003	0.004	0.014	0.002	-
Zinc	mg/L	0.03	0.006	0.048	0.007	0.28	0.024	-

FWAL - Canadian Water Quality Guidelines for the
Protection of Freshwater Aquatic Life, 2002

** No applicable guideline established
- Did not sample for this parameter.

Shading - indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed yearly
forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-7 Jun. 6, 01	SW-7 Sept. 7, 01	SW-7 dup Sept. 7, 01	SW-7 Dec. 4, 01	SW-7, dup Dec. 4, 01	SW-7 Mar. 25, 02	SW-7 dup Mar. 25, 02	
Sodium	mg/L	**	145	160	158	56.3	53.6	327	318	
Potassium	mg/L	**	3.9	3.5	3.6	3.9	3.6	4	3.8	
Calcium	mg/L	**	22.6	28	28.4	24.5	23.3	45.7	45.4	
Magnesium	mg/L	**	3.1	5	5.2	3.6	3.4	3.8	3.8	
Alkalinity as (CaCO3)	mg/L	**	101	143	149	96	96	25	25	
Sulfate	mg/L	**	36	12	13	27	27	31	35	
Chloride	mg/L	**	194	174	173	42.1	41.9	550	540	
Reactive Silica	mg/L	**	4.6	7.2	7.1	5.6	5.6	1.6	1.7	
Ortho Phosphate (as P)	mg/L	**	0.03	<0.01	<0.01	0.02	0.02	0.01	0.04	
Phosphorus	mg/L	**	<0.5	0.2	0.3	0.1	0.1	nd	nd	
Nitrate+Nitrite (as N)	mg/L	**	0.4	<0.05	<0.05	0.08	0.09	0.87	0.92	
Nitrate (as N)	mg/L	**	0.36	<0.05	<0.05	0.08	0.09	0.87	0.91	
Nitrite	mg/L	0.06	0.04	<0.01	<0.01	<0.02	<0.02	nd	0.01	
Ammonia (as N)	mg/L	**	0.29	<0.05	<0.05	<0.05	<0.05	nd	nd	
Kjeldahl Nitrogen	mg/L	**	1.2	-	-	-	-	-	-	
Color	TCU	**	56	100	110	41	40	21	42	
Dissolved Organic Carbon	mg/L	**	9.3	18.7	20	-	-	-	-	
Turbidity	NTU	**	44.2	333	342	56	54	26.4	28	
TDS	mg/L	**	472	476	478	221	216	982	967	
Specific Conductance (field)	uS/cm	**	-	-	-	-	-	-	-	
Conductance (RCap)	uS/cm	**	962	949	939	355	360	2000	2000	
pH (field)	units	6.5 - 8.5	-	-	-	-	-	-	-	
pH (laboratory)	units	6.5 - 9.0	7.4	7.7	7.7	7.7	7.7	7.3	7.4	
Hardness (as CaCO3)	mg/L	**	69.2	90.5	92.3	76	72.2	130	129	
Bicarbonate (as CaCO3)	mg/L	**	101	142	148	96	96	25	25	
Carbonate (as CaCO3)	mg/L	**	<1	<1	<1	<1	<1	nd	nd	
Ion Balance	mg/L	**	2.84	4.89	4.02	5.12	2.66	0.66	0.01	
Cation Sum	meq/L	**	7.81	8.86	8.81	4.07	3.87	16.9	16.5	
Anion Sum	meq/L	**	8.27	8.02	8.13	3.67	3.67	16.7	18.5	
Langlier Index (4C)	units	**	-1.13	-0.59	-0.56	-0.79	-0.81	-1.57	-1.47	
Langlier Index (20C)	units	**	-0.73	-0.19	-0.16	-0.39	-0.41	-1.17	-1.07	
Saturation pH @ 4C	units	**	8.53	8.29	8.26	8.49	8.51	8.87	8.87	
Saturation pH @ 20C	units	**	8.13	7.89	7.86	8.09	8.11	8.47	8.47	
Total Organic Carbon	mg/L	**	-	-	-	7.9	7.7	1.9	1.9	
Total Suspended Solids	mg/L	**	-	-	-	-	-	-	-	
Phenolics	mg/L	0.004	-	-	-	-	-	-	-	
COD (as O2)	mg/L	**	36	-	-	-	-	-	-	
Carbonaceous BOD	mg/L	**	4	-	-	-	-	-	-	
Tannin & Lignin	mg/L	**	-	-	-	-	-	-	-	
Total Phosphorous	mg/L	**	-	-	-	-	-	-	-	
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	378	0	-	0	-	0	-	
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	>24200	note	-	86	-	63	-	
Metals										
Aluminum	mg/L	0.005-0.1	0.45	4.9	5.2	3	2.8	0.76	0.83	
Antimony	mg/L	**	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	
Arsenic	mg/L	0.005	0.002	0.008	0.008	0.003	0.003	nd	nd	
Barium	mg/L	**	0.025	0.086	0.087	0.061	0.062	0.073	0.073	
Beryllium	mg/L	**	<0.005	<0.005	<0.005	<0.005	<0.005	nd	nd	
Bismuth	mg/L	**	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	
Boron	mg/L	**	0.04	0.042	0.042	0.028	0.027	0.011	0.011	
Cadmium	mg/L	0.000017	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	nd	nd	
Chromium	mg/L	0.0089	0.002	0.006	0.007	0.003	0.003	nd	nd	
Cobalt	mg/L	**	0.001	0.006	0.007	0.003	0.003	nd	nd	
Copper	mg/L	0.002 - 0.004	0.004	0.01	0.01	0.007	0.006	0.003	0.003	
Iron	mg/L	0.3	0.57	8.4	8.8	4.1	3.8	0.84	0.93	
Lead	mg/L	0.001 - 0.007	0.0008	0.0059	0.0058	0.0042	0.0039	0.0016	0.0016	
Manganese	mg/L	**	2.4	4.3	4.3	0.57	0.54	0.051	0.052	
Mercury	mg/L	0.0001	-	-	-	-	-	-	-	
Molybdenum	mg/L	0.073	0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	
Nickel	mg/L	0.025 - 0.15	<0.002	0.008	0.009	0.004	0.004	nd	nd	
Selenium	mg/L	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	
Silver	mg/L	0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	nd	nd	
Strontium	mg/L	**	0.078	0.078	0.078	0.065	0.061	0.14	0.14	
Thallium	mg/L	0.0008	<0.0001	0.0001	0.0001	<0.0001	<0.0001	nd	nd	
Tin	mg/L	**	<0.002	<0.002	<0.002	<0.002	<0.002	nd	nd	
Titanium	mg/L	**	0.019	0.16	0.18	0.082	0.074	0.026	0.027	
Uranium	mg/L	**	0.009	0.0074	0.0075	0.014	0.013	0.005	0.0051	
Vanadium	mg/L	**	<0.002	0.011	0.012	0.006	0.005	nd	0.002	
Zinc	mg/L	0.03	0.006	0.036	0.038	0.028	0.025	0.012	0.013	

FWAL - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading - indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed ygfils forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-7 Mar 3, 03	SW-7 Jun. 3, 04	SW-7 Dec. 3, 04	SW-8 Dec 12, 03	SW-8 Jun. 3, 04	SW-8 Dec. 3, 04
Sodium	mg/L	**	147	128	L O C A T I O N	9	13.2	5.9
Potassium	mg/L	**	1.1	3.4		2.8	2.8	2.1
Calcium	mg/L	**	17	24.1		4.5	4.5	3.6
Magnesium	mg/L	**	1	2.6		1.2	0.9	0.9
Alkalinity as (CaCO3)	mg/L	**	6	160		nd	18	8
Sulfate	mg/L	**	30	25		nd(5)	7	7
Chloride	mg/L	**	210	140		18	16	9
Reactive Silica	mg/L	**	1.2	3.5		3.8	4.7	4.3
Ortho Phosphate (as P)	mg/L	**	0.02	0.05		nd	0.02	<0.01
Phosphorus	mg/L	**	nd	0.1		nd	<0.1	0.1
Nitrate+Nitrite (as N)	mg/L	**	0.23	0.1	D R Y	1.3	1.4	1.7
Nitrate (as N)	mg/L	**	0.23	0.09		1.3	1.39	1.7
Nitrite	mg/L	0.06	nd	0.01		nd	0.01	<0.01
Ammonia (as N)	mg/L	**	nd	<0.05		0.29	<0.05	0.97
Kjeldahl Nitrogen	mg/L	**	-	0.9		1.2	1.1	1.8
Color	TCU	**	27	58		61	72	77
Dissolved Organic Carbon	mg/L	**	-	-		-	-	-
Turbidity	NTU	**	108	24.4		7.6	1.2	2.1
TDS	mg/L	**	412	423		80	66	50
Specific Conductance (field)	uS/cm	**	-	0.86		-	0.62	0.1
Conductance (RCap)	uS/cm	**	836	705	103	95	77	
pH (field)	units	6.5 - 8.5	-	4.8	-	3	3.7	
pH (laboratory)	units	6.5 - 9.0	6.7	7.4	5.2	6.6	5.2	
Hardness (as CaCO3)	mg/L	**	46.6	70.9	16.2	14.9	12.7	
Bicarbonate (as CaCO3)	mg/L	**	6	160	nd(5)	18	6	
Carbonate (as CaCO3)	mg/L	**	nd	<1	nd(5)	<1	<1	
Ion Balance	mg/L	**	4.81	4.07	0.56	5.41	0.09	
Cation Sum	meq/L	**	7.36	7.08	0.81	0.95	0.64	
Anion Sum	meq/L	**	6.68	7.68	0.8	1.06	0.64	
Langlier Index (4C)	units	**	-3.17	-0.9	-5.27	-3.32	-5.29	
Langlier Index (20C)	units	**	-2.77	0.5	-4.87	-2.92	-4.89	
Saturation pH @ 4C	units	**	9.87	8.3	10.5	9.92	10.5	
Saturation pH @ 20C	units	**	9.47	7.9	10.1	9.52	10.1	
Total Organic Carbon	mg/L	**	1.8	6.1	12.6	11	15.3	
Total Suspended Solids	mg/L	**	-	8.4	6	nd(2)	<2	
Phenolics	mg/L	0.004	-	<0.001	nd	<0.001	<0.001	
COD (as O2)	mg/L	**	-	30	28	45	35	
Carbonaceous BOD	mg/L	**	-	<5	<5	<5	<5	
Tannin & Lignin	mg/L	**	-	1.1	3.1	3	3.2	
Total Phosphorous	mg/L	**	-	0.06	0.05	0.03	0.03	
Fecal Coliform (Coliert)	cfu/100 ml	0 cfu/100 ml	0	-	-	-	-	
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	>200	-	-	-	-	
Metals								
Aluminum	mg/L	0.005-0.1	0.2	1	0.54	0.44	0.42	
Antimony	mg/L	**	nd	<0.002	nd	<0.002	<0.002	
Arsenic	mg/L	0.005	nd	0.002	nd	<0.002	<0.002	
Barium	mg/L	**	0.025	0.035	0.009	0.007	0.008	
Beryllium	mg/L	**	nd	<0.002	nd	<0.002	<0.002	
Bismuth	mg/L	**	nd	<0.002	nd	<0.002	<0.002	
Boron	mg/L	**	0.005	0.018	0.006	0.009	0.008	
Cadmium	mg/L	0.000017	nd	<0.0003	nd	<0.0003	<0.0003	
Chromium	mg/L	0.0089	nd	0.002	nd	<0.002	<0.002	
Cobalt	mg/L	**	nd	0.001	nd	<0.001	<0.001	
Copper	mg/L	0.002 - 0.004	nd	0.004	0.002	<0.002	<0.002	
Iron	mg/L	0.3	0.18	1.2	0.4	0.35	0.3	
Lead	mg/L	0.001 - 0.007	nd	0.0015	0.0034	0.001	0.0011	
Manganese	mg/L	**	0.058	0.15	0.021	0.014	0.014	
Mercury	mg/L	0.0001	-	<0.00005	nd	<0.00005	<0.00005	
Molybdenum	mg/L	0.073	nd	<0.002	nd	<0.002	<0.002	
Nickel	mg/L	0.025 - 0.15	nd	<0.002	nd	<0.002	<0.002	
Selenium	mg/L	0.001	nd	<0.002	nd	<0.002	<0.002	
Silver	mg/L	0.0001	nd	<0.0005	nd	<0.0005	<0.0005	
Strontium	mg/L	**	0.058	0.072	0.019	0.019	0.018	
Thallium	mg/L	0.0008	nd	<0.0001	nd	<0.0001	<0.0001	
Tin	mg/L	**	nd	<0.002	nd	<0.002	<0.002	
Titanium	mg/L	**	0.01	0.031	0.008	0.005	0.005	
Uranium	mg/L	**	0.0002	0.01	0.0001	0.0003	0.0002	
Vanadium	mg/L	**	nd	0.002	0.002	0.002	0.002	
Zinc	mg/L	0.03	0.01	0.009	0.009	0.01	0.007	

FWAL - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life, 2002.

** No applicable guideline established.

- Did not sample for this parameter.

Shading - indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed ypic forming units per 100 ml

Table 3
General Chemistry - Surface Water
New Era Technologies, Goodwood, Nova Scotia

Parameter	UNITS	FWAL 2002	SW-9 Dec. 12, 03	SW-9 Jun. 3, 04	SW-9 Dec. 4, 04	Pond Apr. 30, 01
Sodium	mg/L	**	12.3			26.9
Potassium	mg/L	**	5.3	L	L	24.6
Calcium	mg/L	**	9.4	O	O	62.9
Magnesium	mg/L	**	2.1	C	C	5.4
Alkalinity as (CaCO ₃)	mg/L	**	15	A	A	250
Sulfate	mg/L	**	nd(10)	T	T	16
Chloride	mg/L	**	24	I	I	33.4
Reactive Silica	mg/L	**	3.1	O	O	4.7
Ortho Phosphate (as P)	mg/L	**	0.01	N	N	0.05
Phosphorus	mg/L	**	nd			1
Nitrate+Nitrite (as N)	mg/L	**	0.75	D	D	nd
Nitrate (as N)	mg/L	**	0.75	R	R	nd
Nitrite	mg/L	0.06	nd	Y	Y	nd
Ammonia (as N)	mg/L	**	nd			5.76
Kjeldahl Nitrogen	mg/L	**	1			24
Color	TCU	**	43			95
Dissolved Organic Carbon	mg/L	**	-			13.8
Turbidity	NTU	**	25.6			157
TDS	mg/L	**	120			332
Specific Conductance (field)	uS/cm	**	-			-
Conductance (RCap)	uS/cm	**	137			612
pH (field)	units	6.5 - 8.5	-			-
pH (laboratory)	units	6.5 - 9.0	6.7			6.8
Hardness (as CaCO ₃)	mg/L	**	32.1			179
Bicarbonate (as CaCO ₃)	mg/L	**	15			250
Carbonate (as CaCO ₃)	mg/L	**	nd			nd
Ion Balance	mg/L	**	3.05			4.01
Cation Sum	meq/L	**	1.32			5.79
Anion Sum	meq/L	**	1.24			6.28
Langlier Index (4C)	units	**	-2.98			-0.88
Langlier Index (20C)	units	**	-2.58			-0.48
Saturation pH @ 4C	units	**	9.68			7.68
Saturation pH @ 20C	units	**	9.28			7.28
Total Organic Carbon	mg/L	**	6.4			-
Total Suspended Solids	mg/L	**	9			-
Phenolics	mg/L	0.004	nd			-
COD (as O ₂)	mg/L	**	44			757
Carbonaceous BOD	mg/L	**	<5			490
Tannin & Lignin	mg/L	**	1.5			-
Total Phosphorous	mg/L	**	0.08			-
Fecal Coliform (Colilert)	cfu/100 ml	0 cfu/100 ml	-			>2000
Total Coliform (mpn)	cfu/100 ml	10 cfu/100 ml	-			>2000
Metals						
Aluminum	mg/L	0.005-0.1	0.58			0.62
Antimony	mg/L	**	nd			<0.002
Arsenic	mg/L	0.005	nd			0.004
Barium	mg/L	**	0.01			0.042
Beryllium	mg/L	**	nd			<0.005
Bismuth	mg/L	**	nd			<0.002
Boron	mg/L	**	0.006			0.036
Cadmium	mg/L	0.000017	nd			<0.0003
Chromium	mg/L	0.0089	nd			0.003
Cobalt	mg/L	**	nd			0.004
Copper	mg/L	0.002 - 0.004	0.003			0.002
Iron	mg/L	0.3	0.72			4.8
Lead	mg/L	0.001 - 0.007	0.0007			0.0008
Manganese	mg/L	**	0.017			1
Mercury	mg/L	0.0001	nd			-
Molybdenum	mg/L	0.073	nd			<0.002
Nickel	mg/L	0.025 - 0.15	nd			0.006
Selenium	mg/L	0.001	nd			<0.002
Silver	mg/L	0.0001	nd			<0.0005
Strontium	mg/L	**	0.023			0.2
Thallium	mg/L	0.0008	nd			<0.0001
Tin	mg/L	**	nd			<0.002
Titanium	mg/L	**	0.017			0.033
Uranium	mg/L	**	0.0001			0.0002
Vanadium	mg/L	**	nd			0.004
Zinc	mg/L	0.03	0.005			0.071

FWAL - Canadian Water Quality Guidelines for the
Protection of Freshwater Aquatic Life, 2002.

** No applicable guideline established.

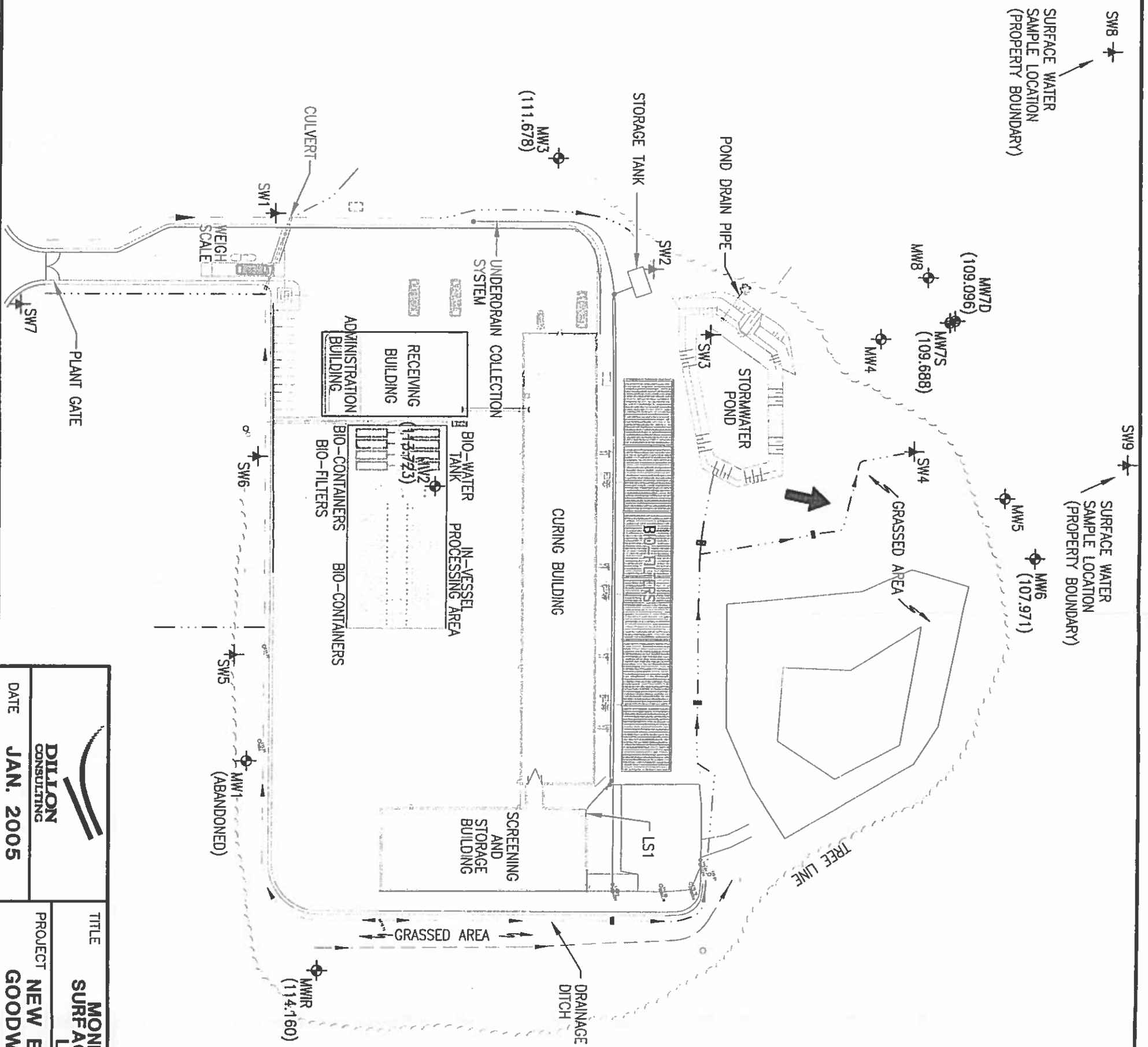
- Did not sample for this parameter.

Shading - indicates concentration above guideline.

TDS - Total Dissolved Solids

cfu/100 ml - coliform results expressed in
forming units per 100 ml

Attachment 3
Site Features and Monitor Well Locations



SW8 + SURFACE WATER SAMPLE LOCATION (PROPERTY BOUNDARY)

SW9 + SURFACE WATER SAMPLE LOCATION (PROPERTY BOUNDARY)

LEGEND:
 ⊕ MONITORING WELL LOCATION
 + SURFACE WATER SAMPLE LOCATION
 • MANHOLE LOCATION
 □ LINER SUMP
 ↑ INTERRUPTED GROUNDWATER FLOW DIRECTION
 (114.160) GROUNDWATER ELEVATION IN METERS (DEC. 1, 2004)

DILLON CONSULTING	
DATE	JAN. 2005

TITLE	MONITORING WELL AND SURFACE WATER SAMPLING LOCATION PLAN
PROJECT	NEW ERA TECHNOLOGIES GOODWOOD, NOVA SCOTIA

APPROXIMATE SCALE: 1:1250

PROJECT No.	05-4185
FIGURE No.	1

Attachment 4
Groundwater Elevation Data

Table 1
Hydraulic Head Data
New Era Technologies, Goodwood, Nova Scotia

Monitor Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	April 26, 2001		June 26, 2001		September 7, 2001		December 4, 2001	
			Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1	115.718	116.338	0.665	115.673	-	-	1.388	114.95	0.979	115.359
MW1R	118.92	119.58	-	-	-	-	-	-	-	-
MW2	115.123	115.023	0.886	114.137	-	-	1.235	113.788	1	114.023
MW3	112.438	113.118	1.272	111.846	-	-	1.682	111.436	1.362	111.756
MW4	110.418	111.018	1.175	109.943	-	-	2.38	108.638	1.9	109.118
MW5	112.048	112.748	1.51	111.238	-	-	3.515	109.233	3.418	109.33
MW6	111.111	111.671	-	-	3.737	107.934	4.025	107.646	3.575	108.096
MW7S	110.148	110.768	-	-	3.078	107.69	2.16	108.608	1.105	109.663
MW7D	110.116	110.696	-	-	1.828	108.868	1.54	109.156	1.686	109.01
MW8	109.318	109.988	-	-	1.647	108.341	1.9	108.088	1.468	108.52

Table 1
 Hydraulic Head Data
 New Era Technologies, Goodwood, Nova Scotia

Monitor Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	March 25, 2002		June 26, 2002		March 3, 2003	
			Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1	115.718	116.338	1.245	115.093	1.363	114.975	Not located	-
MW1R	118.92	119.58	-	-	-	-	Ice covered	-
MW2	115.123	115.023	1.14	113.983	1.058	113.965	1.212	111.906
MW3	112.438	113.118	1.333	111.785	1.212	111.906	1.759	109.259
MW4	110.418	111.018	1.845	109.173	1.842	109.176	3.164	109.584
MW5	112.048	112.748	3.238	109.51	3.304	109.444	3.451	108.22
MW6	111.111	111.671	3.518	108.153	3.536	108.135	0.918	109.85
MW7S	110.148	110.768	1.006	109.762	1.069	109.699	1.485	109.211
MW7D	110.116	110.696	1.599	109.097	1.599	109.097	0.377	109.611
MW8	109.318	109.988	1.402	108.586	1.455	108.533	-	-

Table 1
Hydraulic Head Data
New Era Technologies, Goodwood, Nova Scotia

Monitor Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	June 30, 2003		September 30, 2003		January 12, 2004	
			Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1	115.718	116.338	Damaged	-	Damaged	-	Abandoned	-
MW1R	118.92	119.58	-	-	-	-	6.25	113.33
MW2	115.123	115.023	1.231	113.792	0.72	114.303	1.25	113.773
MW3	112.438	113.118	1.46	111.658	1.47	111.648	1.615	111.503
MW4	110.418	111.018	2.112	108.906	2.14	108.878	2.14	108.878
MW5	112.048	112.748	3.579	109.169	3.799	108.949	3.55	109.198
MW6	111.111	111.671	3.777	107.894	3.916	107.755	3.76	107.911
MW7S	110.148	110.768	1.251	109.517	1.199	109.569	1.21	109.558
MW7D	110.116	110.696	1.823	108.873	1.856	108.84	1.85	108.846
MW8	109.318	109.988	1.671	108.317	1.69	108.298	-	-

Table 1
 Hydraulic Head Data
 New Era Technologies, Goodwood, Nova Scotia

Monitor Well Designation	Ground Surface Elevation (m)	Measuring Point Elevation (m)	March 1, 2004		June 1, 2004		September 1, 2004		December 1, 2004	
			Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)	Depth to Water (m)	Groundwater Elevation (m)
MW1	115.718	116.338	Abandoned	-	Abandoned	-	Abandoned	-	Abandoned	-
MW1R	118.92	119.58	5.68	113.9	6.6	112.98	6.25	113.33	5.42	114.16
MW2	115.123	115.023	0.8	114.223	1.3	113.723	1.31	113.713	1.3	113.723
MW3	112.438	113.118	1.4	111.718	1.46	111.658	1.55	111.568	1.44	111.678
MW4	110.418	111.018	-	-	-	-	-	-	-	-
MW5	112.048	112.748	-	-	-	-	-	-	-	-
MW6	111.111	111.671	3.76	107.911	3.88	107.791	3.86	107.811	3.7	107.971
MW7S	110.148	110.768	1.06	109.708	1.15	109.618	1.28	109.488	1.08	109.688
MW7D	110.115	110.696	1.79	108.906	1.84	108.856	1.86	108.836	1.6	109.096
MW8	109.318	109.988	-	-	-	-	-	-	-	-

Attachment 5
Laboratory Certificates of Analysis

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0404457H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 (Event 486)
 Reported : 2004/04/02

Matrix	Water	Water	Water	Water
Philip ID	04-H017558	04-H017559	04-H017560	04-H017561
Client ID	MW1R	MW2	MW3	MW6
Date Sampled (y/m/d)	04/03/25	04/03/25	04/03/25	04/03/25
Date Received (y/m/d)	04/03/25	04/03/25	04/03/25	04/03/25

Analyte	Units	EQL				
Sodium	mg/L	0.1	11.7	48.2	10.0	7.4
Potassium	mg/L	0.1	2.1	2.8	1.5	0.7
Calcium	mg/L	0.1	38.5	159.	38.1	9.8
Magnesium	mg/L	0.1	6.1	0.6	6.4	2.7
Alkalinity (as CaCO3)	mg/L	5.	140	39.	140	31.

Sulfate	mg/L	2.	4.	52.	3.	4.
Chloride	mg/L	1.	6.	260	6.	14.
Reactive Silica (as SiO2)	mg/L	0.5	9.2	8.6	10.	18.
Ortho Phosphate (as P)	mg/L	0.01	0.10	nd	0.02	nd
Nitrate + Nitrite (as N)	mg/L	0.05	nd	nd	nd	0.07

Ammonia (as N)	mg/L	0.05	nd	0.16	nd	nd
Iron	mg/L	0.02	0.02	nd	nd	nd
Manganese	mg/L	0.01	0.13	nd	0.05	0.38
Copper	mg/L	0.01	nd	nd	nd	nd
Zinc	mg/L	0.05	nd	nd	nd	nd

Color	TCU	5.	nd	18.	nd	nd
Total Org. Carbon (by UV)	mg/L	0.5	nd	18.3	nd	0.5
Turbidity	NTU	0.1	0.4	1.1	0.1	0.1
Conductance (RCAp)	uS/cm	1.	265.	1130	261.	110.

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

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

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

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0404457H
 Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
 Printed : 2005/01/18 E486
 Reported : 2004/04/02

Matrix	Water	Water	Water	Water
Philip ID	04-H017558	04-H017559	04-H017560	04-H017561
Client ID	MW1R	MW2	MW3	MW6
Date Sampled (y/m/d)	04/03/25	04/03/25	04/03/25	04/03/25
Date Received (y/m/d)	04/03/25	04/03/25	04/03/25	04/03/25

Analyte	Units	EQL	(Continued from previous page)			
pH	Units	-	8.0	7.6	8.1	6.4
Hardness (as CaCO3)	mg/L	0.1	121.	399.	121.	35.6
Bicarbonate (as CaCO3)	mg/L	1.	139.	39.	138.	31.
Carbonate (as CaCO3)	mg/L	1.	1.	nd	2.	nd
TDS (Calculated)	mg/L	1.	162.	555.	159.	76.
Cation Sum	meq/L	0.10	2.99	10.2	2.90	1.06
Anion Sum	meq/L	0.10	3.06	9.20	3.04	1.10
Ion Balance	%	-	1.10	4.99	2.19	2.22
Langlier Index @ 4C		-	-0.12	-0.50	-0.02	-2.95
Langlier Index @ 20C		-	0.28	-0.10	0.38	-2.55
Saturation pH @ 4C	Units	-	8.12	8.10	8.12	9.35
Saturation pH @ 20C	Units	-	7.72	7.70	7.72	8.95
Total Suspended Solids	mg/L	0.5	542.	89.0	425.	149.
Cadmium	ug/L	0.3	nd	nd(3.)	nd	nd
Lead	ug/L	0.5	nd	nd(5.)	nd	nd
Dissolved Organic Carbon	mg/L	0.5	0.5	17.0	nd	0.5
Filtered by Client		-	By Client	By Client	By Client	By Client
Filtration for DOC		-	In Lab	In Lab	In Lab	In Lab
04-H017559 MW2			Elevated reporting limits for trace metals due to a high calcium content.			

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

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

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

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0404457H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 E486
 Reported : 2004/04/02

Matrix	Water	Water	Water
Philip ID	04-H017562	04-H017563	04-H017564
Client ID	MW7s	MW7D	MW7D DUP
Date Sampled (y/m/d)	04/03/25	04/03/25	04/03/25
Date Received (y/m/d)	04/03/25	04/03/25	04/03/25

Analyte	Units	EQL			DUP
Sodium	mg/L	0.1	9.6	10.1	10.2
Potassium	mg/L	0.1	1.1	1.2	1.2
Calcium	mg/L	0.1	29.7	20.2	20.3
Magnesium	mg/L	0.1	6.6	3.8	3.8
Alkalinity (as CaCO3)	mg/L	5.	110	57.	58.

Sulfate	mg/L	2.	4.	7.	7.
Chloride	mg/L	1.	14.	19.	19.
Reactive Silica (as SiO2)	mg/L	0.5	17.	14.	14.
Ortho Phosphate (as P)	mg/L	0.01	0.02	nd	0.02
Nitrate + Nitrite (as N)	mg/L	0.05	0.06	0.42	0.44

Ammonia (as N)	mg/L	0.05	0.05	0.05	nd
Iron	mg/L	0.02	0.08	nd	nd
Manganese	mg/L	0.01	0.05	0.06	0.06
Copper	mg/L	0.01	nd	nd	nd
Zinc	mg/L	0.05	nd	nd	nd

Color	TCU	5.	nd	nd	nd
Total Org. Carbon (by UV)	mg/L	0.5	1.2	1.4	1.2
Turbidity	NTU	0.1	nd	0.4	0.3
Conductance (RCAp)	uS/cm	1.	231.	184.	183.
pH	Units	-	7.0	7.0	7.0

Hardness (as CaCO3)	mg/L	0.1	101.	66.1	66.3

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
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Note : Soil results are expressed as air dry weight basis.
 : Biota results are expressed on a wet weight basis unless otherwise stated.

PSC Analytical Services
 200 Bluewater Road
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 Tel (902) 420-0203
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Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0404457H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 E486
 Reported : 2004/04/02

Matrix	Water	Water	Water
Philip ID	04-H017562	04-H017563	04-H017564
Client ID	MW7s	MW7D	MW7D DUP
Date Sampled (y/m/d)	04/03/25	04/03/25	04/03/25
Date Received (y/m/d)	04/03/25	04/03/25	04/03/25

Analyte Units EQL (Continued from previous page)

Bicarbonate (as CaCO3)	mg/L	1.	110.	57.	58.
Carbonate (as CaCO3)	mg/L	1.	nd	nd	nd
TDS (Calculated)	mg/L	1.	148.	111.	112.
Cation Sum	meq/L	0.10	2.47	1.79	1.80

Anion Sum	meq/L	0.10	2.68	1.85	1.87
Ion Balance	%	-	4.03	1.56	1.88
Langlier Index @ 4C		-	-1.33	-1.78	-1.77
Langlier Index @ 20C		-	-0.93	-1.38	-1.37
Saturation pH @ 4C	Units	-	8.33	8.78	8.77

Saturation pH @ 20C	Units	-	7.93	8.38	8.37
Total Suspended Solids	mg/L	0.5	121.	2030	-
Cadmium	ug/L	0.3	nd	nd	nd
Lead	ug/L	0.5	nd	nd	nd
Dissolved Organic Carbon	mg/L	0.5	0.7	1.1	1.4

Filtered by Client		-	By Client	By Client	By Client
Filtration for DOC		-	In Lab	In Lab	In Lab

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NS B3T 1P2
PSC Project Number : 0404457H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2005/01/18 E486
Reported : 2004/04/02

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
 - Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
 - Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
 - Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
 - Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
 - NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colormetric Analyser. Ref. USEPA Method #353.1
 - pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
 - Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
 - Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
 - Total Suspended Solids: Gravimetric. Ref: USEPA Method #160.2
 - Turbidity: Nephelometric. Ref: USEPA Method #180.1
 - Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
 - Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
 - Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
 - Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
-

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PSC Project Number : 0404457H
Client Project Number :

TIBBO, GERALD
FAX # : 876-5163
Printed : 2005/01/18 E486
Reported : 2004/04/02

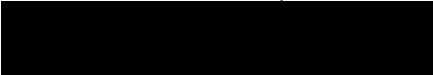
Certificate of Analysis

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

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

Analyses reviewed by:

Inorganics Manager :


for Jerry Arenovich

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0404457H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 (Event 489)
 Reported : 2004/04/02

04-H017558	MW1R		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) < 15 mg/L	EQL = 5.
		Comment: Elevated COD EQL due to possible sample matrix interference.	
04-H017559	MW2		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) 114. mg/L	EQL = 5.
04-H017560	MW3		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) < 5 mg/L	EQL = 5.
04-H017561	MW6		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) < 5 mg/L	EQL = 5.
04-H017562	MW7s		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) < 5 mg/L	EQL = 5.
04-H017563	MW7D		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) < 15 mg/L	EQL = 5.
		Comment: Elevated COD EQL due to possible sample matrix interference.	
04-H017564	MW7D DUP		
		Date Sampled : 2004/03/25	
		Time Sampled : 8:30	
		Date Received : 2004/03/25	
		COD (as O2) < 15 mg/L	EQL = 5.

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TIBBO, GERALD

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Comment: Elevated COD EQL due to possible sample matrix interference.

EQL = Estimated Quantitation Limit for routine analysis

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PSC Project Number : 0404457H
Client Project Number :

TIBBO, GERALD

Printed : 2005/01/18
Reported : 2004/04/02

Certificate of Analysis

Method Summaries:

- COD: Closed reflux digestion method with Colorimetric Analysis. Ref: USEPA 410.4

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

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Analyses reviewed by:

Microbiology Supervisor :

[Redacted Signature]
Patti Denmore

Client : New Era Technologies Ltd.
 61 Evergreen Place
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 NS B3T 1P2
 PSC Project Number : 0409531H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 (Event 487)
 Reported : 2004/06/11

Matrix	Water	Water	Water
Philip ID	04-H036144	04-H036145	04-H036146
Client ID	SW5	SW8	SW7
Date Sampled (y/m/d)	04/06/03	04/06/03	04/06/03
Date Received (y/m/d)	04/06/03	04/06/03	04/06/03

Analyte	Units	EQL			
Total Water Digest		-	20040605-A	20040605-A	20040605-A
Sodium	mg/L	0.1	8.5	13.2	128.
Potassium	mg/L	0.1	2.5	2.8	3.4
Calcium	mg/L	0.1	27.3	4.5	24.1
Magnesium	mg/L	0.1	2.3	0.9	2.6

Alkalinity (as CaCO3)	mg/L	5.	64.	18.	160
Sulfate	mg/L	2.	20.	7.	25.
Chloride	mg/L	1.	3.	16.	140
Reactive Silica (as SiO2)	mg/L	0.5	4.2	4.7	3.5
Ortho Phosphate (as P)	mg/L	0.01	0.01	0.02	0.05

Phosphorus	mg/L	0.1	0.1	nd	0.1
Nitrate + Nitrite (as N)	mg/L	0.05	1.5	1.4	0.10
Nitrate (as N)	mg/L	0.05	1.48	1.39	0.09
Nitrite	mg/L	0.01	0.02	0.01	0.01
Ammonia (as N)	mg/L	0.05	nd	nd	nd

Kjeldahl Nitrogen	mg/L	0.1	1.2	1.1	0.9
Color	TCU	5.	22.	72.	58.
Total Org. Carbon (by UV)	mg/L	0.5	4.0	11.0	6.1
Turbidity	NTU	0.1	4.8	1.2	24.4

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
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TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/06/11

Matrix	Water	Water	Water
Philip ID	04-H036144	04-H036145	04-H036146
Client ID	SW5	SW8	SW7
Date Sampled (y/m/d)	04/06/03	04/06/03	04/06/03
Date Received (y/m/d)	04/06/03	04/06/03	04/06/03

Analyte Units EQL (Continued from previous page)

Conductance (RCap) uS/cm 1. 181. 95. 705.

pH Units - 7.3 6.6 7.4
 Hardness (as CaCO3) mg/L 0.1 77.6 14.9 70.9
 Bicarbonate (as CaCO3) mg/L 1. 64. 18. 160.
 Carbonate (as CaCO3) mg/L 1. nd nd nd
 TDS (Calculated) mg/L 1. 113. 66. 423.

Cation Sum meq/L 0.10 1.99 0.95 7.08
 Anion Sum meq/L 0.10 1.89 1.06 7.68
 Ion Balance % - 2.61 5.41 4.07
 Langlier Index @ 4C - -1.30 -3.32 -0.90
 Langlier Index @ 20C - -0.90 -2.92 -0.50

Saturation pH @ 4C Units - 8.60 9.92 8.30
 Saturation pH @ 20C Units - 8.20 9.52 7.90
 Total Suspended Solids mg/L 0.5 7.2 nd(2.) 8.4
 Total Dissolved Solids mg/L 10 130 90 390
 Aluminum ug/L 10 290 440 1000

Antimony ug/L 2. nd nd nd
 Arsenic ug/L 2. nd nd 2.
 Barium ug/L 5. 12. 7. 35.
 Beryllium ug/L 2. nd nd nd
 Bismuth ug/L 2. nd nd nd

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TIBBO, GERALD

FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/06/11

Matrix	Water	Water	Water
Philip ID	04-H036144	04-H036145	04-H036146
Client ID	SW5	SW8	SW7
Date Sampled (y/m/d)	04/06/03	04/06/03	04/06/03
Date Received (y/m/d)	04/06/03	04/06/03	04/06/03

Analyte Units EQL (Continued from previous page)

Boron	ug/L	5.	10.	9.	18.
Cadmium	ug/L	0.3	nd	nd	nd
Chromium	ug/L	2.	nd	nd	2.
Cobalt	ug/L	1.	nd	nd	1.
Copper	ug/L	2.	4.	nd	4.

Iron	ug/L	50	410	350	1200
Lead	ug/L	0.5	nd	1.0	1.5
Manganese	ug/L	2.	21.	14.	150
Mercury	ug/L	0.05	nd	nd	nd
Molybdenum	ug/L	2.	nd	nd	nd

Nickel	ug/L	2.	nd	nd	nd
Selenium	ug/L	2.	nd	nd	nd
Silver	ug/L	0.5	nd	nd	nd
Strontium	ug/L	5.	83.	19.	72.
Thallium	ug/L	0.1	nd	nd	nd

Tin	ug/L	2.	nd	nd	nd
Titanium	ug/L	2.	10.	5.	31.
Uranium	ug/L	0.1	0.9	0.3	10.
Vanadium	ug/L	2.	nd	2.	2.
Zinc	ug/L	5.	7.	10.	9.

Mercury Digestion		-	20040607-A	20040607-A	20040607-A
Phenolics	mg/L	0.001	0.001	nd	nd

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TIBBO, GERALD
FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/06/11

04-H036146 SW7

Elevated reporting limits for TOC due to matrix interferences.

- Legend
- EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 - ND = Not Detected, instrument did not detect anything above standard EQL.
 - ND () = Not Detected at the elevated EQL specified, due to matrix interferences or sample pre-dilution.
 - = Dash is reported when parameter not requested in sample.
- Note
- : Soil results are expressed as air dry weight basis.
 - : Biota results are expressed on a wet weight basis unless otherwise stated.

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 PSC Project Number : 0409531H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/06/11

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
 - Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
 - Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
 - Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
 - Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
 - Total Recoverable Metals Digest: Homogenization/Digestion. Ref: USEPA Method #200.2
 - Mercury: Digestion/Cold Vapour Atomic Absorption. Ref: USEPA Method #245.1 SOP 3420 V1R3/ 3425 V1R2
 - NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colormetric Analyser. Ref. USEPA Method #353.1
 - pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
 - Phosphorus: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
 - Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
 - Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
 - Total Dissolved Solids: Gravimetric. Ref: USEPA Method #160.1
 - Total Suspended Solids: Gravimetric. Ref: USEPA Method #160.2
 - Turbidity: Nephelometric. Ref: USEPA Method #180.1
 - Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
 - Phenolics in Water: On-line Distillation and 4-AAP Colorimetric Analysis using Technicon AAI. Ref: USEPA Method #420.2
 - Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
 - Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
 - Nitrite. Roche Cobas/BMC Hitachi 911 Automated Colormetric Analyser. Ref: USEPA Method #354.1
 - Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
 - Total Metals in Water: Digestion/ICP-MS. Ref: USEPA 200.8
-

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Client : New Era Technologies Ltd.
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PSC Project Number : 0409531H
Client Project Number :

TIBBO, GERALD
FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/06/11


Certificate of Analysis

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

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Analyses reviewed by:

Inorganics Manager :


Jerry Arenovich



Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
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NS B3T 1P2
PSC Project Number : 0409530H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2005/01/18 (Event 512)
Reported : 2004/06/09

04-H036141	SW5		
		Date Sampled	: 2004/06/03
		Time Sampled	: 10:00
		Date Received	: 2004/06/03
	BOD5 Carbonaceous	4. mg/L	EQL = 2.
04-H036142	SW8		
		Date Sampled	: 2004/06/03
		Time Sampled	: 10:00
		Date Received	: 2004/06/03
	BOD5 Carbonaceous	< 5 mg/L	EQL = 2.
04-H036143	SW7		
		Date Sampled	: 2004/06/03
		Time Sampled	: 10:00
		Date Received	: 2004/06/03
	BOD5 Carbonaceous	< 5 mg/L	EQL = 2.

EQL = Estimated Quantitation Limit for routine analysis

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TIBBO, GERALD

PSC Project Number : 0409530H

Client Project Number :

Printed : 2005/01/18

Reported : 2004/06/09

Certificate of Analysis

Method Summaries:

- Carbonaceous BOD: 5 day oxygen depletion. Ref: APHA Standard Methods, 20th Edition, 1998, Method 5210 B

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

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Analyses reviewed by:

Microbiology Supervisor : _____


for Patti Densmore



Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0409531H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/19 (Event 562)
 Reported : 2004/06/11

Matrix	Water	Water	Water
Philip ID	04-H036144	04-H036145	04-H036146
Description			
Client ID	SW5	SW8	SW7
Date Sampled (y/m/d)	04/06/03	04/06/03	04/06/03
Date Received (y/m/d)	04/06/03	04/06/03	04/06/03

Analyte	Units	EQL			
Tannin & Lignin	mg/L	0.1	0.9	3.0	1.1
Total Phosphorous	mg/L	0.02	0.06	0.03	0.06

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND () = Not Detected, our instruments did not detect anything above EQL. Raised EQL listed in Parenthesis.
 - = Dash is reported when parameter not requested in sample.
 Event # = PSC Quality Control Reference number for QC samples run with your sample.
 %REC = Surrogate Recovery Values are results of PSC quality control tests.

Note : Soil results are expressed on a dry weight basis.
 : Food results are expressed on a wet weight basis.

page verified XXXXXXXXXX

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

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0409531H
Client Project Number :

TIBBO, GERALD
FAX # : 876-5163
Printed : 2005/01/19 E562
Reported : 2004/06/11

Certificate of Analysis

Method Summaries:

- Standard Methods for the Examination of Water and Wastewater 19th ed, 1995 Method 5550B Colormetric Method is developed by reacting with Folin phenol reagent, this reaction is not specific for lignin or tannin and therefore materials with aromatic hydroxyl groups or reducing materials may provide a positive interference. Therefore results are reported as substances reducing Folin Reagent in mg phenol/L compared to standards prepared with Tannic Acid.

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

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Analyses reviewed by:
Industrial Chemistry Manager :


for Robert K. Boss



Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0409531H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2005/01/19 (Event 626)
Reported : 2004/06/11

04-H036144 SW5

Date Sampled : 2004/06/03
Time Sampled : 10:00
Date Received : 2004/06/03
25. mg/L EQL = 5.

COD (as O2)

04-H036145 SW8

Date Sampled : 2004/06/03
Time Sampled : 10:00
Date Received : 2004/06/03
45. mg/L EQL = 5.

COD (as O2)

04-H036146 SW7

Date Sampled : 2004/06/03
Time Sampled : 10:00
Date Received : 2004/06/03
30. mg/L EQL = 5.

COD (as O2)

EQL = Estimated Quantitation Limit for routine analysis



Microbiology Parameters

page : 2

PSC Analytical Services
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Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0409531H
Client Project Number :

TIBBO, GERALD

Printed : 2005/01/19
Reported : 2004/06/11

Certificate of Analysis**Method Summaries:**

- COD: Closed reflux digestion method with Colorimetric Analysis. Ref: USEPA 410.4

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

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Analyses reviewed by:

Microbiology Supervisor :


Patti Densmore
Patti Densmore

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0410699H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 (Event 487)
 Reported : 2004/06/29

Matrix	Water	Water	Water	Water
Philip ID	04-H039750	04-H039751	04-H039752	04-H039753
Client ID	MW1R	MW2	MW3	MW6
Date Sampled (y/m/d)	04/06/17	04/06/17	04/06/17	04/06/17
Date Received (y/m/d)	04/06/17	04/06/17	04/06/17	04/06/17

Analyte	Units	EQL				
Sodium	mg/L	0.1	10.0	45.7	9.8	7.1
Potassium	mg/L	0.1	1.8	2.9	1.2	0.5
Calcium	mg/L	0.1	37.5	140.	36.7	9.1
Magnesium	mg/L	0.1	6.2	0.7	6.3	2.6
Alkalinity (as CaCO3)	mg/L	5.	140	24.	140	28.

Sulfate	mg/L	2.	4.	52.	2.	4.
Chloride	mg/L	1.	5.	270	6.	13.
Reactive Silica (as SiO2)	mg/L	0.5	8.1	8.5	9.6	16.
Ortho Phosphate (as P)	mg/L	0.01	0.07	0.01	0.03	nd
Nitrate + Nitrite (as N)	mg/L	0.05	nd	nd	nd	nd

Ammonia (as N)	mg/L	0.05	nd	0.17	nd	nd
Iron	mg/L	0.02	nd	nd	nd	nd
Manganese	mg/L	0.01	0.12	nd	0.06	0.34
Copper	mg/L	0.01	nd	nd	nd	nd
Zinc	mg/L	0.05	nd	nd	nd	nd

Color	TCU	5.	nd	15.	5.	nd
Total Org. Carbon (by UV)	mg/L	0.5	nd	11.8	nd	0.8
Turbidity	NTU	0.1	0.2	0.3	0.3	nd
Conductance (RCap)	uS/cm	1.	272.	1060	262.	107.

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

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

page verified XXXXXXXXXX

PSC Analytical Services
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Inorganic Parameters page : 2
 Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0410699H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/06/29

Matrix	Water	Water	Water	Water
Philip ID	04-H039750	04-H039751	04-H039752	04-H039753
Client ID	MW1R	MW2	MW3	MW6
Date Sampled (y/m/d)	04/06/17	04/06/17	04/06/17	04/06/17
Date Received (y/m/d)	04/06/17	04/06/17	04/06/17	04/06/17

Analyte	Units	EQL	(Continued from previous page)			
pH	Units	-	7.4	9.6	8.1	6.8
Hardness (as CaCO3)	mg/L	0.1	119.	352.	118.	33.4
Bicarbonate (as CaCO3)	mg/L	1.	140.	16.	138.	28.
Carbonate (as CaCO3)	mg/L	1.	nd	6.	2.	nd
TDS (Calculated)	mg/L	1.	157.	535.	156.	69.
Cation Sum	meq/L	0.10	2.87	9.12	2.81	0.99
Anion Sum	meq/L	0.10	3.03	9.18	3.01	1.01
Ion Balance	%	-	2.74	0.33	3.50	0.99
Langlier Index @ 4C		-	-0.73	1.23	-0.04	-2.62
Langlier Index @ 20C		-	-0.33	1.63	0.36	-2.22
Saturation pH @ 4C	Units	-	8.13	8.37	8.14	9.42
Saturation pH @ 20C	Units	-	7.73	7.97	7.74	9.02
Total Suspended Solids	mg/L	0.5	959.	3400	618.	393.
Cadmium	ug/L	0.3	nd	nd(3.)	nd	nd
Lead	ug/L	0.5	nd	nd(5.)	nd	nd
Dissolved Organic Carbon	mg/L	0.5	0.5	9.0	0.6	1.1
Filtered by Client		-	By Client	By Client	By Client	By Client
Filtration for DOC		-	In Lab	In Lab	In Lab	In Lab
04-H039751 MW2			Elevated reporting limits for trace metals due to a high calcium content.			

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

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

PSC Analytical Services
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Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0410699H
 Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/06/29

Matrix	Water	Water
Philip ID	04-H039754	04-H039755
Client ID	MW7S	MW7D
Date Sampled (y/m/d)	04/06/17	04/06/17
Date Received (y/m/d)	04/06/17	04/06/17

Analyte	Units	EQL		
Sodium	mg/L	0.1	9.5	9.9
Potassium	mg/L	0.1	1.5	0.8
Calcium	mg/L	0.1	27.5	31.0
Magnesium	mg/L	0.1	4.7	7.0
Alkalinity (as CaCO3)	mg/L	5.	66.	120

Sulfate	mg/L	2.	6.	3.
Chloride	mg/L	1.	19.	13.
Reactive Silica (as SiO2)	mg/L	0.5	14.	15.
Ortho Phosphate (as P)	mg/L	0.01	nd	0.02
Nitrate + Nitrite (as N)	mg/L	0.05	0.74	nd

Ammonia (as N)	mg/L	0.05	nd	nd
Iron	mg/L	0.02	0.02	0.05
Manganese	mg/L	0.01	0.09	0.04
Copper	mg/L	0.01	0.01	0.01
Zinc	mg/L	0.05	nd	nd

Color	TCU	5.	nd	6.
Total Org. Carbon (by UV)	mg/L	0.5	1.6	0.6
Turbidity	NTU	0.1	0.3	2.3
Conductance (RCAP)	uS/cm	1.	206.	253.
pH	Units	-	7.1	7.0

Hardness (as CaCO3)	mg/L	0.1	88.0	106.

Legend

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

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

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

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

Note

: Soil results are expressed as air dry weight basis.

: Biota results are expressed on a wet weight basis unless otherwise stated.

PSC Analytical Services
 200 Bluewater Road
 Bedford, NS Canada B4B 1G9
 Tel (902) 420-0203
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Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0410699H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/06/29

Matrix	Water	Water
Philip ID	04-H039754	04-H039755
Client ID	MW7S	MW7D
Date Sampled (y/m/d)	04/06/17	04/06/17
Date Received (y/m/d)	04/06/17	04/06/17

Analyte Units EQL (Continued from previous page)

Bicarbonate (as CaCO3)	mg/L	1.	66.	120.
Carbonate (as CaCO3)	mg/L	1.	nd	nd
TDS (Calculated)	mg/L	1.	125.	152.
Cation Sum	meq/L	0.10	2.21	2.58

Anion Sum	meq/L	0.10	2.03	2.83
Ion Balance	%	-	4.26	4.71
Langlier Index @ 4C		-	-1.49	-1.28
Langlier Index @ 20C		-	-1.09	-0.88
Saturation pH @ 4C	Units	-	8.59	8.28

Saturation pH @ 20C	Units	-	8.19	7.88
Total Suspended Solids	mg/L	0.5	511.	5.8
Cadmium	ug/L	0.3	nd	0.8
Lead	ug/L	0.5	nd	nd
Dissolved Organic Carbon	mg/L	0.5	1.8	0.9

Filtration for Metals		-	-	In Lab
Filtered by Client		-	By Client	-
Filtration for DOC		-	In Lab	In Lab

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

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

PSC Analytical Services
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Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0410699H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/06/29

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
- Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
- Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
- Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
- Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
- NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #353.1
- pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
- Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
- Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
- Total Suspended Solids: Gravimetric. Ref: USEPA Method #160.2
- Turbidity: Nephelometric. Ref: USEPA Method #180.1
- Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
- Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
- Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
- Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
- Dissolved Metals in Water: Filtration/ICP-MS, Ref: USEPA 200.8

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Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0410699H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/06/29

Certificate of Analysis

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

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

Analyses reviewed by:

Inorganics Manager :


Jerry Arenovich
for

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood

MUSOLINO, SUZANNE

NS B3T 1P2
PSC Project Number : 0410699H
Client Project Number :

FAX # : 876-5163
Printed : 2005/01/18 (Event 489)
Reported : 2004/06/29

04-H039750	MW1R	Date Sampled : 2004/06/17
		Time Sampled : 9:00
		Date Received : 2004/06/17
COD (as O2)		< 5 mg/L EQL = 5.
04-H039751	MW2	Date Sampled : 2004/06/17
		Time Sampled : 9:00
		Date Received : 2004/06/17
COD (as O2)		49. mg/L EQL = 5.
04-H039752	MW3	Date Sampled : 2004/06/17
		Time Sampled : 9:00
		Date Received : 2004/06/17
COD (as O2)		< 15 mg/L EQL = 5.
04-H039753	MW6	Date Sampled : 2004/06/17
		Time Sampled : 9:00
		Date Received : 2004/06/17
COD (as O2)		< 5 mg/L EQL = 5.
04-H039754	MW7S	Date Sampled : 2004/06/17
		Time Sampled : 9:00
		Date Received : 2004/06/17
COD (as O2)		< 5 mg/L EQL = 5.
04-H039755	MW7D	Date Sampled : 2004/06/17
		Time Sampled : 9:00
		Date Received : 2004/06/17
COD (as O2)		< 5 mg/L EQL = 5.

EQL = Estimated Quantitation Limit for routine analysis

PSC Analytical Services
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Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0410699H
Client Project Number :

MUSOLINO, SUZANNE

Printed : 2005/01/18
Reported : 2004/06/29

Certificate of Analysis

Method Summaries:

- COD: Closed reflux digestion method with Colorimetric Analysis. Ref: USEPA 410.4

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

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Analyses reviewed by:

Microbiology Supervisor :


for Patti Densmore

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0416030H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 (Event 487)
 Reported : 2004/09/14

Matrix	Water	Water	Water	Water
Philip ID	04-H060908	04-H060909	04-H060910	04-H060911
Client ID	MW1R	MW2	MW3	MW6
Date Sampled (y/m/d)	04/09/07	04/09/07	04/09/07	04/09/07
Date Received (y/m/d)	04/09/07	04/09/07	04/09/07	04/09/07

Analyte	Units	EQL				
Sodium	mg/L	0.1	10.6	53.3	10.7	8.3
Potassium	mg/L	0.1	1.9	4.1	1.6	0.8
Calcium	mg/L	0.1	38.5	147.	38.6	12.8
Magnesium	mg/L	0.1	6.4	0.4	6.8	3.8
Alkalinity (as CaCO3)	mg/L	5.	140	28.	130	42.
Sulfate	mg/L	2.	3.	56.	2.	4.
Chloride	mg/L	1.	5.	260	6.	15.
Reactive Silica (as SiO2)	mg/L	0.5	9.6	12.	12.	19.
Ortho Phosphate (as P)	mg/L	0.01	0.10	nd	0.03	nd
Nitrate + Nitrite (as N)	mg/L	0.05	nd	0.14	nd	0.32
Ammonia (as N)	mg/L	0.05	nd	0.34	0.05	0.08
Iron	mg/L	0.02	nd	0.06	0.28	nd
Manganese	mg/L	0.01	0.06	nd	0.09	0.50
Copper	mg/L	0.01	nd	nd	nd	nd
Zinc	mg/L	0.05	nd	nd	nd	nd
Color	TCU	5.	nd	15.	nd	nd
Total Org. Carbon (by UV)	mg/L	0.5	nd	9.0	0.6	nd
Turbidity	NTU	0.1	nd	nd	16.2	0.2
Conductance (RCAp)	uS/cm	1.	265.	1200	267.	141.

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

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

PSC Analytical Services
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Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0416030H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/09/14

Matrix	Water	Water	Water	Water
Philip ID	04-H060908	04-H060909	04-H060910	04-H060911
Client ID	MW1R	MW2	MW3	MW6
Date Sampled (y/m/d)	04/09/07	04/09/07	04/09/07	04/09/07
Date Received (y/m/d)	04/09/07	04/09/07	04/09/07	04/09/07

Analyte	Units	EQL	(Continued from previous page)			
pH	Units	-	7.8	10.6	8.2	6.8
Hardness (as CaCO3)	mg/L	0.1	122.	369.	124.	47.6
Bicarbonate (as CaCO3)	mg/L	1.	139.	2.	128.	42.
Carbonate (as CaCO3)	mg/L	1.	nd	6.	2.	nd
TDS (Calculated)	mg/L	1.	159.	551.	156.	90.
Cation Sum	meq/L	0.10	2.96	9.82	3.00	1.34
Anion Sum	meq/L	0.10	3.01	9.07	2.81	1.37
Ion Balance	%	-	0.77	3.97	3.12	1.11
Langlier Index @ 4C		-	-0.32	2.32	0.05	-2.31
Langlier Index @ 20C		-	0.08	2.72	0.45	-1.91
Saturation pH @ 4C	Units	-	8.12	8.28	8.15	9.11
Saturation pH @ 20C	Units	-	7.72	7.88	7.75	8.71
Total Suspended Solids	mg/L	0.5	807.	273.	220.	247.
Cadmium	ug/L	0.3	nd	nd	nd	nd
Lead	ug/L	0.5	nd	nd	nd	nd
Dissolved Organic Carbon	mg/L	0.5	nd	8.4	nd	nd
Filtered by Client		-	By Client	By Client	By Client	By Client
Filtration for DOC		-	In Lab	In Lab	In Lab	In Lab

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

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

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Inorganic Parameters page : 3
Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0416030H
Client Project Number :

TIBBO, GERALD
FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/09/14

pH value is outside linear calibration range (4.0 - 10.0). Possible increased error in this range. Value of linear range check pH 12.45 buffer is acceptable.

04-H060908 - Bottle Label description different than Chain of Custody paperwork.

Sample Integrity form faxed on day sample received, may contain more details.

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

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

page verified 

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Inorganic Parameters page : 5
 Client : New Era Technologies Ltd.
 61 Evergreen Place
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 NS B3T 1P2
 PSC Project Number : 0416030H
 Client Project Number :

TIBBO, GERALD
 FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/09/14

Matrix	Water	Water	Water
Philip ID	04-H060912	04-H060913	04-H060914
Client ID	MW7S	MW7D	MW7D DUP
Date Sampled (y/m/d)	04/09/07	04/09/07	04/09/07
Date Received (y/m/d)	04/09/07	04/09/07	04/09/07

Analyte Units EQL (Continued from previous page)

Bicarbonate (as CaCO3)	mg/L	1.	44.	110.	110.
Carbonate (as CaCO3)	mg/L	1.	nd	nd	nd
TDS (Calculated)	mg/L	1.	105.	149.	148.
Cation Sum	meq/L	0.10	1.59	2.63	2.61

Anion Sum	meq/L	0.10	1.60	2.63	2.63
Ion Balance	%	-	0.38	0.02	0.44
Langlier Index @ 4C		-	-2.18	-1.41	-1.31
Langlier Index @ 20C		-	-1.78	-1.01	-0.91
Saturation pH @ 4C	Units	-	8.98	8.31	8.31

Saturation pH @ 20C	Units	-	8.58	7.91	7.91
Total Suspended Solids	mg/L	0.5	602.	54.8	-
Cadmium	ug/L	0.3	nd	nd	nd
Lead	ug/L	0.5	nd	nd	nd
Dissolved Organic Carbon	mg/L	0.5	0.5	nd	0.6

Filtered by Client		-	By Client	By Client	By Client
Filtration for DOC		-	In Lab	In Lab	In Lab

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

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

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Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0416030H
 Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
 Printed : 2005/01/18 E487
 Reported : 2004/09/14

Matrix	Water	Water	Water
Philip ID	04-H060912	04-H060913	04-H060914
Client ID	MW7S	MW7D	MW7D DUP
Date Sampled (y/m/d)	04/09/07	04/09/07	04/09/07
Date Received (y/m/d)	04/09/07	04/09/07	04/09/07

Analyte	Units	EQL			DUP
Sodium	mg/L	0.1	10.4	9.7	9.6
Potassium	mg/L	0.1	1.3	1.0	1.0
Calcium	mg/L	0.1	16.5	31.7	31.3
Magnesium	mg/L	0.1	3.4	7.3	7.3
Alkalinity (as CaCO ₃)	mg/L	5.	44.	110	110

Sulfate	mg/L	2.	8.	3.	3.
Chloride	mg/L	1.	18.	13.	13.
Reactive Silica (as SiO ₂)	mg/L	0.5	18.	17.	17.
Ortho Phosphate (as P)	mg/L	0.01	nd	0.03	0.09
Nitrate + Nitrite (as N)	mg/L	0.05	0.71	nd	nd

Ammonia (as N)	mg/L	0.05	nd	nd	nd
Iron	mg/L	0.02	nd	0.05	0.06
Manganese	mg/L	0.01	0.02	0.06	0.06
Copper	mg/L	0.01	nd	nd	nd
Zinc	mg/L	0.05	nd	nd	nd

Color	TCU	5.	nd	nd	nd
Total Org. Carbon (by UV)	mg/L	0.5	0.6	nd	0.7
Turbidity	NTU	0.1	nd	nd	nd
Conductance (RCap)	uS/cm	1.	167.	266.	263.
pH	Units	-	6.8	6.9	7.0

Hardness (as CaCO ₃)	mg/L	0.1	55.2	109.	108.

Legend

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

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

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

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

Note

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

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Client : New Era Technologies Ltd.
61 Evergreen Place
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PSC Project Number : 0416030H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/09/14

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
 - Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
 - Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
 - Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
 - Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
 - NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colormetric Analyser. Ref. USEPA Method #353.1
 - pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
 - Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
 - Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
 - Total Suspended Solids: Gravimetric. Ref: USEPA Method #160.2
 - Turbidity: Nephelometric. Ref: USEPA Method #180.1
 - Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
 - Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
 - Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
 - Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
-

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Client : New Era Technologies Ltd.
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Client Project Number :

TIBBO, GERALD
FAX # : 876-5163
Printed : 2005/01/18 E487
Reported : 2004/09/14

Certificate of Analysis

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

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

Analyses reviewed by:

Inorganics Manager :


Jerry Arenovich

for

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0416030H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2005/01/18 (Event 490)
Reported : 2004/09/14

04-H060908 MW1R

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) < 15 mg/L EQL = 5.
Comment: Elevated COD EQL due to possible matrix interference.

04-H060909 MW2

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) 50. mg/L EQL = 5.

04-H060910 MW3

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) < 5 mg/L EQL = 5.

04-H060911 MW6

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) < 5 mg/L EQL = 5.

04-H060912 MW7S

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) < 5 mg/L EQL = 5.

04-H060913 MW7D

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) < 5 mg/L EQL = 5.

04-H060914 MW7D DUP

Date Sampled : 2004/09/07
Time Sampled : 10:00
Date Received : 2004/09/07
COD (as O2) < 5 mg/L EQL = 5.

EQL = Estimated Quantitation Limit for routine analysis

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Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0416030H
Client Project Number :

TIBBO, GERALD

Printed : 2005/01/18
Reported : 2004/09/14

Certificate of Analysis

Method Summaries:

- COD: Closed reflux digestion method with Colorimetric Analysis. Ref: USEPA 410.4

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

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

Analyses reviewed by:

Microbiology Supervisor :


for Patti Densmore

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0422801H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 (Event 488)
 Reported : 2004/12/20

Matrix	Water	Water
Philip ID	04-H089823	04-H089824
Client ID	SW5	SW8
Date Sampled (y/m/d)	04/12/03	04/12/03
Date Received (y/m/d)	04/12/03	04/12/03

Analyte	Units	EQL		
Total Water Digest		-	20041207-B	20041208-A
Sodium	mg/L	0.1	7.1	5.9
Potassium	mg/L	0.1	1.0	2.1
Calcium	mg/L	0.1	4.9	3.6
Magnesium	mg/L	0.1	0.8	0.9

Alkalinity (as CaCO3)	mg/L	5.	nd	6.
Sulfate	mg/L	2.	6.	7.
Chloride	mg/L	1.	10.	9.
Reactive Silica (as SiO2)	mg/L	0.5	3.4	4.3
Ortho Phosphate (as P)	mg/L	0.01	nd(0.02)	nd

Phosphorus	mg/L	0.1	0.1	0.1
Nitrate + Nitrite (as N)	mg/L	0.05	1.7	1.7
Nitrate (as N)	mg/L	0.05	1.68	1.70
Nitrite	mg/L	0.01	0.02	nd
Ammonia (as N)	mg/L	0.05	0.31	0.97

Color	TCU	5.	67.	77.
Total Org. Carbon (by UV)	mg/L	0.5	13.9	15.3
Turbidity	NTU	0.1	3.0	2.1
Conductance (RCap)	uS/cm	1.	76.	77.

Legend
 EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND = Not Detected, instrument did not detect anything above standard EQL.
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 - = Dash is reported when parameter not requested in sample.

Note
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 : Biota results are expressed on a wet weight basis unless otherwise stated.

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Inorganic Parameters page : 2
 Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0422801H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/20

Matrix	Water	Water
Philip ID	04-H089823	04-H089824
Client ID	SW5	SW8
Date Sampled (y/m/d)	04/12/03	04/12/03
Date Received (y/m/d)	04/12/03	04/12/03

Analyte Units EQL (Continued from previous page)

pH	Units	-	5.6	5.2
Hardness (as CaCO3)	mg/L	0.1	15.5	12.7
Bicarbonate (as CaCO3)	mg/L	1.	nd(5.)	6.
Carbonate (as CaCO3)	mg/L	1.	nd(5.)	nd
TDS (Calculated)	mg/L	1.	44.	45.
Cation Sum	meq/L	0.10	0.67	0.64
Anion Sum	meq/L	0.10	0.63	0.64
Ion Balance	%	-	3.18	0.09
Langlier Index @ 4C		-	-4.83	-5.29
Langlier Index @ 20C		-	-4.43	-4.89
Saturation pH @ 4C	Units	-	10.4	10.5
Saturation pH @ 20C	Units	-	10.0	10.1
Total Suspended Solids	mg/L	0.5	nd(2.)	nd(2.)
Total Dissolved Solids	mg/L	10	50	50
Aluminum	ug/L	10	470	420
Antimony	ug/L	2.	nd	nd
Arsenic	ug/L	2.	nd	nd
Barium	ug/L	5.	9.	8.
Beryllium	ug/L	2.	nd	nd
Bismuth	ug/L	2.	nd	nd
Boron	ug/L	5.	9.	6.

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

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

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Inorganic Parameters page : 3
 Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0422801H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/20

Matrix	Water	Water
Philip ID	04-H089823	04-H089824
Client ID	SW5	SW8
Date Sampled (y/m/d)	04/12/03	04/12/03
Date Received (y/m/d)	04/12/03	04/12/03

Analyte Units EQL (Continued from previous page)

Cadmium	ug/L	0.3	nd	nd
Chromium	ug/L	2.	nd	nd
Cobalt	ug/L	1.	nd	nd
Copper	ug/L	2.	nd	nd
Iron	ug/L	50	270	300

Lead	ug/L	0.5	0.6	1.1
Manganese	ug/L	2.	22.	14.
Mercury	ug/L	0.05	nd	nd
Molybdenum	ug/L	2.	nd	nd
Nickel	ug/L	2.	nd	nd

Selenium	ug/L	2.	nd	nd
Silver	ug/L	0.5	nd	nd
Strontium	ug/L	5.	19.	18.
Thallium	ug/L	0.1	nd	nd
Tin	ug/L	2.	nd	nd

Titanium	ug/L	2.	7.	5.
Uranium	ug/L	0.1	0.1	0.2
Vanadium	ug/L	2.	2.	2.
Zinc	ug/L	5.	8.	7.
Mercury Digestion		-	20041213-A	20041213-A

Kjeldahl Nitrogen	Sub	mg/L	0.1	1.6	1.8
Phenolics		mg/L	0.001	nd	nd

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

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 : Biota results are expressed on a wet weight basis unless otherwise stated.

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Inorganic Parameters page : 4
Client : New Era Technologies Ltd.
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NS B3T 1P2
PSC Project Number : 0422801H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2005/01/18 E488
Reported : 2004/12/20

04-H089823 SW5

Elevated reporting limit for Potassium (0.3 mg/L)

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

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

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

page verified XXXXXXXXXX

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Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0422801H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/20

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
 - Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
 - Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
 - Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
 - Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
 - Total Recoverable Metals Digest: Homogenization/Digestion. Ref: USEPA Method #200.2
 - Mercury: Digestion/Cold Vapour Atomic Absorption. Ref: USEPA Method #245.1 SOP 3420 V1R3/ 3425 V1R2
 - NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colormetric Analyser. Ref. USEPA Method #353.1
 - pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
 - Phosphorus: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
 - Total Kjeldal Nitrogen: Subcontract - Block Digestion/Technicon Autoanalyser - Colormetric. Ref: USEPA Method #351.2
 - Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
 - Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
 - Total Dissolved Solids: Gravimetric. Ref: USEPA Method #160.1
 - Total Suspended Solids: Gravimetric. Ref: USEPA Method #160.2
 - Turbidity: Nephelometric. Ref: USEPA Method #180.1
 - Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
 - Phenolics in Water: On-line Distillation and 4-AAP Colorimetric Analysis using Technicon AAI. Ref: USEPA Method #420.2
 - Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
 - Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
 - Nitrite. Roche Cobas/BMC Hitachi 911 Automated Colormetric Analyser. Ref: USEPA Method #354.1
 - Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
 - Total Metals in Water: Digestion/ICP-MS. Ref: USEPA 200.8
-

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PSC Project Number : 0422801H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/18 E488
Reported : 2004/12/20

Certificate of Analysis

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

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

Analyses reviewed by:

Inorganics Manager :


Jerry Arenovich
Jan

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0422801H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2005/01/18 (Event 490)
Reported : 2004/12/20

04-H089823 SW5

Date Sampled : 2004/12/03
Time Sampled : 13:45
Date Received : 2004/12/03
COD (as O₂) 25. mg/L EQL = 5.
BOD5 Carbonaceous < 5 mg/L EQL = 5.

04-H089824 SW8

Date Sampled : 2004/12/03
Time Sampled : 13:45
Date Received : 2004/12/03
COD (as O₂) 35. mg/L EQL = 5.
BOD5 Carbonaceous < 5 mg/L EQL = 5.

EQL = Estimated Quantitation Limit for routine analysis

PSC Analytical Services
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Fax (902) 420-8612
P.O.

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0422801H
Client Project Number :

MUSOLINO, SUZANNE

Printed : 2005/01/18
Reported : 2004/12/20

Certificate of Analysis

Method Summaries:

- COD: Closed reflux digestion method with Colorimetric Analysis. Ref: USEPA 410.4
- Carbonaceous BOD: 5 day oxygen depletion. Ref: APHA Standard Methods, 20th Edition, 1998, Method 5210 B

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

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Analyses reviewed by:

Microbiology Supervisor : _____

Patti Denmore

for

J

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0423038H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/18 (Event 488)
Reported : 2004/12/14

Matrix	Water	Water	Water	Water
Philip ID	04-H090874	04-H090875	04-H090876	04-H090877
Client ID	MW#1R	MW#3	MW#6	MW#7S
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07

Analyte	Units	EQL				
Total Water Digest		-	20041209-B	20041209-B	20041209-B	20041209-B
Sodium	mg/L	0.1	10.9	11.4	9.1	11.3
Potassium	mg/L	0.1	1.9	1.7	1.0	1.5
Calcium	mg/L	0.1	41.5	40.0	22.7	28.2
Magnesium	mg/L	0.1	6.7	6.9	5.0	4.8
Alkalinity (as CaCO3)	mg/L	5.	150	160	83.	84.
Sulfate	mg/L	2.	3.	2.	4.	6.
Chloride	mg/L	1.	5.	6.	15.	18.
Reactive Silica (as SiO2)	mg/L	0.5	9.9	12.	22.	17.
Ortho Phosphate (as P)	mg/L	0.01	0.07	nd	nd	nd
Phosphorus	mg/L	0.1	0.1	nd	nd	nd
Nitrate + Nitrite (as N)	mg/L	0.05	0.12	nd	nd	0.46
Nitrate (as N)	mg/L	0.05	0.12	nd	nd	0.46
Nitrite	mg/L	0.01	nd(0.03)	nd(0.03)	nd(0.03)	nd(0.03)
Ammonia (as N)	mg/L	0.05	0.27	0.05	nd	nd
Color	TCU	5.	nd	nd	nd	nd
Total Org. Carbon (by UV)	mg/L	0.5	nd	5.2	0.9	1.7
Turbidity	NTU	0.1	0.6	nd	0.4	nd
Conductance (RCap)	uS/cm	1.	289.	282.	198.	222.

Legend

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

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

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Inorganic Parameters page : 2
 Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/14

Matrix	Water	Water	Water	Water
Philip ID	04-H090874	04-H090875	04-H090876	04-H090877
Client ID	MW#1R	MW#3	MW#6	MW#7S
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07

Analyte	Units	EQL	(Continued from previous page)			
pH	Units	-	7.9	8.0	7.2	7.2
Hardness (as CaCO3)	mg/L	0.1	131.	128.	77.3	90.2
Bicarbonate (as CaCO3)	mg/L	1.	149.	158.	83.	84.
Carbonate (as CaCO3)	mg/L	1.	1.	1.	nd	nd
TDS (Calculated)	mg/L	1.	170.	176.	129.	139.
Cation Sum	meq/L	0.10	3.16	3.11	1.97	2.34
Anion Sum	meq/L	0.10	3.21	3.41	2.17	2.35
Ion Balance	%	-	0.75	4.72	4.84	0.20
Langlier Index @ 4C	-	-	-0.16	-0.05	-1.37	-1.27
Langlier Index @ 20C	-	-	0.24	0.35	-0.97	-0.87
Saturation pH @ 4C	Units	-	8.06	8.05	8.57	8.47
Saturation pH @ 20C	Units	-	7.66	7.65	8.17	8.07
Total Suspended Solids	mg/L	0.5	257.	1380	234.	220.
Aluminum	ug/L	10	80	nd	10	nd
Antimony	ug/L	2.	nd	nd	nd	nd
Arsenic	ug/L	2.	2.	14.	nd	nd
Barium	ug/L	5.	31.	30.	23.	43.
Beryllium	ug/L	2.	nd	nd	nd	nd
Bismuth	ug/L	2.	nd	nd	nd	nd
Boron	ug/L	5.	14.	20.	6.	10.
Cadmium	ug/L	0.3	nd	nd	nd	nd

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND = Not Detected, instrument did not detect anything above standard EQL.
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Client : New Era Technologies Ltd.
 61 Evergreen Place
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 NS B3T 1P2
 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/14

Matrix	Water	Water	Water	Water
Philip ID	04-H090874	04-H090875	04-H090876	04-H090877
Client ID	MW#1R	MW#3	MW#6	MW#7S
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07

Analyte	Units	EQL	(Continued from previous page)			
Chromium	ug/L	2.	4.	nd	nd	nd
Cobalt	ug/L	1.	nd	nd	1.	nd
Copper	ug/L	2.	nd	nd	nd	2.
Iron	ug/L	50	80	nd	nd	nd
Lead	ug/L	0.5	nd	nd	nd	0.8
Manganese	ug/L	2.	39.	88.	870	42.
Mercury	ug/L	0.05	nd	nd	nd	nd
Molybdenum	ug/L	2.	5.	5.	nd	nd
Nickel	ug/L	2.	nd	nd	nd	2.
Selenium	ug/L	2.	nd	nd	nd	nd
Silver	ug/L	0.5	nd	nd	nd	nd
Strontium	ug/L	5.	140	110	70.	70.
Thallium	ug/L	0.1	nd	nd	nd	nd
Tin	ug/L	2.	nd	nd	nd	nd
Titanium	ug/L	2.	3.	nd	nd	nd
Uranium	ug/L	0.1	15.	17.	0.4	0.2
Vanadium	ug/L	2.	nd	nd	nd	nd
Zinc	ug/L	5.	nd	6.	6.	13.
Dissolved Organic Carbon	mg/L	0.5	nd	1.1	0.8	2.0
Filtration for DOC	-	-	In Lab	In Lab	In Lab	In Lab
Mercury Digestion	-	-	20041210-C	20041210-C	20041210-C	20041210-C
Phenolics	mg/L	0.001	nd	nd	nd	nd

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PSC Project Number : 0423038H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2005/01/18 E488
Reported : 2004/12/14

04-H090874	MW#1R	Phenolics: Sample decanted prior to analysis due to turbidity.
04-H090875	MW#3	Phenolics: Sample decanted prior to analysis due to turbidity.
04-H090876	MW#6	Phenolics: Sample decanted prior to analysis due to turbidity.
04-H090877	MW#7S	Phenolics: Sample decanted prior to analysis due to turbidity.

Legend

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

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MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/14

Matrix	Water	Water	Water
Philip ID	04-H090878	04-H090879	04-H090880
Client ID	MW#7D	MW#2	MW#2 DUP
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07

Analyte	Units	EQL			DUP
Total Water Digest		-	20041209-B	20041209-B	20041209-B
Sodium	mg/L	0.1	10.0	56.5	58.1
Potassium	mg/L	0.1	1.0	3.5	3.6
Calcium	mg/L	0.1	31.3	148.	153.
Magnesium	mg/L	0.1	6.9	0.5	0.5

Alkalinity (as CaCO3)	mg/L	5.	110	37.	35.
Sulfate	mg/L	2.	3.	64.	64.
Chloride	mg/L	1.	14.	260	290
Reactive Silica (as SiO2)	mg/L	0.5	18.	9.7	9.6
Ortho Phosphate (as P)	mg/L	0.01	0.04	nd	nd

Phosphorus	mg/L	0.1	nd	nd	nd
Nitrate + Nitrite (as N)	mg/L	0.05	nd	nd	nd
Nitrate (as N)	mg/L	0.05	nd	nd	nd
Nitrite	mg/L	0.01	nd(0.03)	nd(0.03)	nd(0.03)
Ammonia (as N)	mg/L	0.05	0.08	0.22	0.24

Color	TCU	5.	nd	13.	13.
Total Org. Carbon (by UV)	mg/L	0.5	0.8	13.6	13.9
Turbidity	NTU	0.1	0.5	2.4	2.7
Conductance (RCap)	uS/cm	1.	256.	1240	1230
pH	Units	-	7.0	9.6	9.6

Hardness (as CaCO3)	mg/L	0.1	107.	372.	384.

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Client : New Era Technologies Ltd.
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 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/14

Matrix	Water	Water	Water
Philip ID	04-H090878	04-H090879	04-H090880
Client ID	MW#7D	MW#2	MW#2 DUP
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07

Analyte Units EQL (Continued from previous page)

Bicarbonate (as CaCO3)	mg/L	1.	110.	25.	24.
Carbonate (as CaCO3)	mg/L	1.	nd	10.	9.
TDS (Calculated)	mg/L	1.	151.	565.	600.
Cation Sum	meq/L	0.10	2.60	9.99	10.3

Anion Sum	meq/L	0.10	2.66	9.41	10.2
Ion Balance	%	-	1.23	3.00	0.49
Langlier Index @ 4C		-	-1.31	1.44	1.43
Langlier Index @ 20C		-	-0.91	1.84	1.83
Saturation pH @ 4C	Units	-	8.31	8.16	8.17

Saturation pH @ 20C	Units	-	7.91	7.76	7.77
Total Suspended Solids	mg/L	0.5	4.2	6160	-
Aluminum	ug/L	10	nd	220	220
Antimony	ug/L	2.	nd	nd(20)	nd(20)
Arsenic	ug/L	2.	nd	nd(20)	nd(20)

Barium	ug/L	5.	14.	57.	57.
Beryllium	ug/L	2.	nd	nd(20)	nd(20)
Bismuth	ug/L	2.	nd	nd(20)	nd(20)
Boron	ug/L	5.	8.	nd(50)	nd(50)
Cadmium	ug/L	0.3	nd	nd(3.)	nd(3.)

Chromium	ug/L	2.	nd	nd(20)	nd(20)
Cobalt	ug/L	1.	nd	nd(10)	nd(10)
Copper	ug/L	2.	nd	nd(20)	nd(20)

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Client : New Era Technologies Ltd.
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 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/14

Matrix	Water	Water	Water
Philip ID	04-H090878	04-H090879	04-H090880
Client ID	MW#7D	MW#2	MW#2 DUP
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07

Analyte Units EQL (Continued from previous page)

Iron	ug/L	50	80	nd(500)	nd(500)
Lead	ug/L	0.5	nd	nd(5.)	nd(5.)
Manganese	ug/L	2.	63.	nd(20)	nd(20)
Mercury	ug/L	0.05	nd	-	-
Molybdenum	ug/L	2.	nd	nd(20)	nd(20)
Nickel	ug/L	2.	nd	nd(20)	nd(20)
Selenium	ug/L	2.	nd	nd(20)	nd(20)
Silver	ug/L	0.5	nd	nd(5.)	nd(5.)
Strontium	ug/L	5.	94.	510	520
Thallium	ug/L	0.1	nd	nd(1.)	nd(1.)
Tin	ug/L	2.	nd	nd(20)	nd(20)
Titanium	ug/L	2.	nd	nd(20)	nd(20)
Uranium	ug/L	0.1	3.8	nd(1.)	nd(1.)
Vanadium	ug/L	2.	nd	22.	22.
Zinc	ug/L	5.	nd	nd(50)	nd(50)
Dissolved Organic Carbon	mg/L	0.5	1.0	13.0	13.3
Filtration for DOC	-	-	In Lab	In Lab	In Lab

Mercury Digestion
 Phenolics mg/L 0.001 nd 20041210-C - -
 04-H090879 MW#2
 Elevated reporting limits for trace metals due to a high calcium content for samples 04-H090879 to 04-H090880.

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND = Not Detected, instrument did not detect anything above standard EQL.
 ND () = Not Detected at the elevated EQL specified, due to matrix interferences or sample pre-dilution.
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Client : New Era Technologies Ltd.
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 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/14

Certificate of Analysis

Method Summaries:

- Alkalinity: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #310.2
- Chloride: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #325.1
- Colour: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: Standard Methods, 16th Edition, 1985
- Conductance (RCap): Electrometric @ 25 C, values >300 uS/cm diluted for validation purposes. Ref: Standard Methods 4500-H+, 19th Edition, 1995.
- Total Organic Carbon: UV Digestion/Technicon AA1 Analyser. Ref: Standard Methods, 19th Edition, 1995
- Total Recoverable Metals Digest: Homogenization/Digestion. Ref: USEPA Method #200.2
- Mercury: Digestion/Cold Vapour Atomic Absorption. Ref: USEPA Method #245.1 SOP 3420 V1R3/ 3425 V1R2
- NO2/NO3: Roche Cobas Fara/BMC Hitachi 911 Automated Colormetric Analyser. Ref. USEPA Method #353.1
- pH: Electrometric @ 25 C. Ref: USEPA Method #150.1 SOP 1007 V1R1 / 1011 V1R2
- Phosphorus: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
- Reactive Silica: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #370.1
- Sulphate: Automated Turbidimetric. Ref: USEPA Method #375.4 or Ion Chromatography. Ref: USEPA Method #300.1
- Total Suspended Solids: Gravimetric. Ref: USEPA Method #160.2
- Turbidity: Nephelometric. Ref: USEPA Method #180.1
- Ortho Phosphorus: Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA Method #365.1 SOP 2160 V1R2 / 2165 V1R1
- Phenolics in Water: On-line Distillation and 4-AAP Colorimetric Analysis using Technicon AAI. Ref: USEPA Method #420.2
- Trace Metals in Aqueous Samples: Elan 5000 ICP-MS. Ref: USEPA Method #200.8
- Ammonia (NH3 plus NH4+): Roche Cobas Fara/BMC Hitachi 911 Automated Colorimetric Analyser. Ref: USEPA 350.1 Determination of Ammonia (Colorimetric, Automated Phenate) Revision 2.0, 1993. SOP 2100 V1R2 / 2105 V1R2
- Nitrite. Roche Cobas/BMC Hitachi 911 Automated Colormetric Analyser. Ref: USEPA Method #354.1
- Major Metals in Aqueous Samples: PE Optima 3000 ICP-OES. Ref: USEPA Method #200.7
- Total Metals in Water: Digestion/ICP-MS. Ref: USEPA 200.8

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PSC Project Number : 0423038H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/18 E488
Reported : 2004/12/14

Certificate of Analysis

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

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Analyses reviewed by:

Inorganics Manager : _____


for Jerry Arenovich

Client : New Era Technologies Ltd.
61 Evergreen Place
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NS B3T 1P2
PSC Project Number : 0423038H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2005/01/18 (Event 490)
Reported : 2004/12/14

04-H090874	MW#1R	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		< 5 mg/L EQL = 5.
04-H090875	MW#3	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		< 5 mg/L EQL = 5.
04-H090876	MW#6	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		< 5 mg/L EQL = 5.
04-H090877	MW#7S	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		< 5 mg/L EQL = 5.
04-H090878	MW#7D	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		< 5 mg/L EQL = 5.
04-H090879	MW#2	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		48. mg/L EQL = 5.
04-H090880	MW#2 DUP	Date Sampled : 2004/12/07
		Time Sampled : 11:00
		Date Received : 2004/12/07
COD (as O2)		44. mg/L EQL = 5.

EQL = Estimated Quantitation Limit for routine analysis

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

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0423038H
Client Project Number :

MUSOLINO, SUZANNE

Printed : 2005/01/18
Reported : 2004/12/14

Certificate of Analysis

Method Summaries:

- COD: Closed reflux digestion method with Colorimetric Analysis. Ref: USEPA 410.4

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

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

Analyses reviewed by:

Microbiology Supervisor : _____

Patti Densmore

Inorganic Parameters

page : 1

Client : New Era Technologies Ltd.

MUSOLINO, SUZANNE

61 Evergreen Place
Goodwood

NS B3T 1P2

FAX # : 876-5163

PSC Project Number : 0423039H

Printed : 2005/01/18 (Event 488)

Client Project Number :

Reported : 2004/12/22

Matrix	Water	Water	Water	Water
Philip ID	04-H090887	04-H090888	04-H090889	04-H090890
Client ID	MW#1R	MW#3	MW#6	MW#7S
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07

Analyte	Units	EQL				
Kjeldahl Nitrogen	Sub mg/L	0.1	0.2	0.2	0.2	0.3

Legend

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

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

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

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

Note

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

page verified XXXXXXXXXX

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

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0423039H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/18 E488
 Reported : 2004/12/22

Matrix	Water
Philip ID	04-H090891
Client ID	MW#7D
Date Sampled (y/m/d)	04/12/07
Date Received (y/m/d)	04/12/07

Analyte	Units	EQL
Kjeldahl Nitrogen Sub	mg/L	0.1 0.3

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

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

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

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0423039H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/18 E488
Reported : 2004/12/22

Certificate of Analysis

Method Summaries:

- Total Kjeldal Nitrogen: Subcontract - Block Digestion/Technicon Autoanalyser - Colormetric. Ref: USEPA Method #351.2

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

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

Analyses reviewed by:

Inorganics Manager : _____

Jerry Arenovich

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE
 FAX # : 876-5163
 Printed : 2005/01/19 (Event 565)
 Reported : 2004/12/14

Matrix	Water	Water	Water	Water
Philip ID	04-H090874	04-H090875	04-H090876	04-H090877
Description				
Client ID	MW#1R	MW#3	MW#6	MW#7S
Date Sampled (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07
Date Received (y/m/d)	04/12/07	04/12/07	04/12/07	04/12/07

Analyte	Units	EQL				
Total Phosphorous	mg/L	0.02	0.36	1.4	0.36	0.13

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND () = Not Detected, our instruments did not detect anything above EQL. Raised EQL listed in Parenthesis.
 - = Dash is reported when parameter not requested in sample.
 Event # = PSC Quality Control Reference number for QC samples run with your sample.
 %REC = Surrogate Recovery Values are results of PSC quality control tests.

Note : Soil results are expressed on a dry weight basis.
 : Food results are expressed on a wet weight basis.

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

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0423038H
 Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
 Printed : 2005/01/19 E565
 Reported : 2004/12/14

Matrix	Water
Philip ID	04-H090878
Description	
Client ID	MW#7D
Date Sampled (y/m/d)	04/12/07
Date Received (y/m/d)	04/12/07

Analyte	Units	EQL	
Total Phosphorous	mg/L	0.02	0.08

Legend EQL = Estimated Quantitation Limit is the minimum concentration that can be reliably reported. It is not a regulatory limit.
 ND () = Not Detected, our instruments did not detect anything above EQL. Raised EQL listed in Parenthesis.
 - = Dash is reported when parameter not requested in sample.
 Event # = PSC Quality Control Reference number for QC samples run with your sample.
 %REC = Surrogate Recovery Values are results of PSC quality control tests.

Note : Soil results are expressed on a dry weight basis.
 : Food results are expressed on a wet weight basis.

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

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0423038H
Client Project Number :

MUSOLINO, SUZANNE
FAX # : 876-5163
Printed : 2005/01/19 E565
Reported : 2004/12/14

Certificate of Analysis

Method Summaries:

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

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

Analyses reviewed by:

Industrial Chemistry Manager : 

Robert K. Boss
for

Attachment 6
Storm Water Pond Effluent Results

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

February 7th Rain Event. No samples required
Pond frozen, just surface rain run off.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Mar 2nd - 3rd Rainfall

Pond still frozen under snowbed, No discharge
& ∴ no sampling required.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Mar 6 /04 Rain Event (week-end)

No discharge/pond frozen/ Lab closed

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Mar 11-12 Freezing Rain. No discharge from pond (still frozen) No samples taken.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Mar 15/04

No sample required. 2mm rain fell. cold conditions pond still frozen & snow covered.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

March 20th/04
Rain

Pond still frozen, Snow covered
No discharge to sample.

Storm Water & Pond Discharge Report

Drizzle
Rain
over night 12th
5-10 mm on 13th

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}
Date Sampled: Apr 13/04
Time Sampled: 10:30AM

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____
Collection Invoice # _____
Volume Removed _____
Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: Fecal 0 CFU/ml
TSS 5.4 mg/l
BOD nd

Discharge Date: Apr 26th 04

Operators Signature: 

Date Generated
20-Apr-2004
Spreadsheet File Name
0405496H.XLS

Client ID: SW3
Project ID:
PSC Analytical ID: 04-H021313
Matrix: Water
Duplicate of:
Date Sampled: 13-Apr-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	5.4
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	0

Inorganic Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0405497H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2004/04/22 (Event 633)
Reported : 2004/04/22

Matrix	Water
Philip ID	04-H021314
Client ID	SW3
Date Sampled (y/m/d)	04/04/13
Date Received (y/m/d)	04/04/13

Analyte	Units	EQL
BOD5 Cf ceous Sub	mg/L	2. nd(5.)

Legend

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

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

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

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

Note

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

page verified XXXXXXXXXX

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled:

May 4/04

Time Sampled:

9:30-10.4m

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped:

Collection Invoice #

Volume Removed

Disposal Slip #

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results:

Fecal 2 cFu/ml

TSS 3.9 mg/l

BOD < 5 mg/l

Discharge Date:

May 12/04

Operators Signature:

[Redacted Signature]

Rain Event May 3-4 (Sample taken)

Date Generated
12-May-2004
Spreadsheet File Name
0407025H-027H.XLS

Client ID:	Drain Tile	3 Pond Discharg	3 Pond Discharg
Project ID:			
PSC Analytical ID:	04-H026940	04-H026941	04-H026942
Matrix:	Microbiology	Microbiology	Microbiology
Duplicate of:			
Date Sampled:	4-May-04	4-May-04	4-May-04
Client Description:			

Parameters	Method	EQL	Units			
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L			3.9
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL			2
C-H-2 BOD5 Carbonaceous	APHA 5210B	2	mg/L	4		< 5

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

May 19th /04 Rain Event. Pond was empty from last discharge. Small accumulation of water. New Era used for watering purposes.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

May 24/04 Rain Event over week-end, No much water accumulation in pond. No sampling required. Water to be used at facility for watering purposes.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled:

May 25/04

Time Sampled:

9 AM

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped:

Collection Invoice #

Volume Removed

Disposal Slip #

(2) Discharged based on criteria set by DOE

(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results:

Fecal Coli 43 cfu/ml

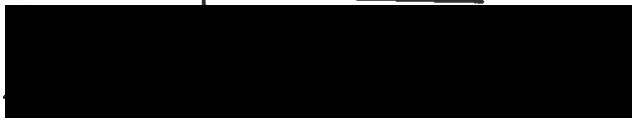
TSS 9.2 mg/l

BOD 5 mg/l

Discharge Date:

June 2/04

Operators Signature:



Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0408622H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2004/06/01 (Event 402)
Reported : 2004/06/01

04-H032883

SW3

Date Sampled : 2004/05/25
Time Sampled : 10:00
Date Received : 2004/05/25
43. cfu/mL

Fecal Coliform (Isogrid)

Inorganic Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0408622H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2004/06/01 (Event 400)
Reported : 2004/06/01

Matrix	Water
Philip ID	04-H032883
Client ID	SW3
Date Sampled (y/m/d)	04/05/25
Date Received (y/m/d)	04/05/25

Analyte	Units	EQL	
Total Suspended Solids	mg/L	0.5	9.2

Legend

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

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

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

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

Note

: Soil results are expressed as air dry weight basis.

: Biota results are expressed on a wet weight basis unless otherwise stated.

page verified ██████████

Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0408623H
Client Project Number :

TIBBO, GERALD

FAX # : 876-5163
Printed : 2004/05/31 (Event 599)
Reported : 2004/05/31

04-H032884

SW3

BOD5 Carbonaceous

Date Sampled : 2004/05/25
Time Sampled : 10:00
Date Received : 2004/05/25
5. mg/L EQL = 2.

EQL = Estimated Quantitation Limit for routine analysis

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

June 15/04

Rained overnight (14th) + drizzle through the day (15th). Not much water accumulated in pond. What did was used for watering purposes at the plant.

Pumped out via Honda pump.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

June 23/04 Rain/Drizzle Event.

Pumped water from pond for watering purposes.
No discharge.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

July 5/04

using Honda pumped, pumped water from pond to fiberglass tank for watering purposes.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Pumped Pond water to Fiberglass
Tank for watering of Bio filters.
(STORED).

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: 

RAINED July 15/04 AM for 2 hours.
used water on July 16/04 for watering purposes
Pumped via Honda Pump from Pond to Fiberglass
Tank July 15/04 + July 16/04
2:30 pm 10:30 AM

Storm Water & Pond Discharge Report

July 19/04
Rain Fall Amount
43.6 mm

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled:

July 20/04

Time Sampled:

10:30 am

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped:

Collection Invoice #

Volume Removed

Disposal Slip #

(2) Discharged based on criteria set by DOE

(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results:

TSS 4.3 mg/l

BOD < 5 mg/l

Fecal 2 cfu/ml

Discharge Date:

July 29/04

Operators Signature:

[Redacted Signature]

Pumped some water from pond to fiberglass holding tank via Honda pump for future watering purposes.

Date Generated
28-Jul-2004
Spreadsheet File Name
041270271.XLS

Client ID: SW3
Project ID:
PSC Analytical ID: 04-H047356
Matrix: Water
Duplicate of:
Date Sampled: 20-Jul-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	4.3
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	2
C-H-2 BOD5 Carbonaceous	APHA 5210B	2	mg/L	< 5

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Aug 6/04 Pumped pond via Honda Pump to
feberglass + leachate tanks.
No discharge.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Rain

Aug 7/04. Had employee come in for screening. He set up Honda pump @ pond & pumped water into fiberglass for holding/watering purposes.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: Aug 16/04

Time Sampled: 9 AM

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: Fecal 20 FCU/mL

BOD < 5 mg/L

TSS 4.0 mg/L

Discharge Date: Aug 24/04

Operators Signature: 

Aug 16/04 (Rain fall event over weekend)

pumped some water into fiberglass ^{tank} from pond for watering purposes. Samples taken.

Prepared For:
Gerald Tibbo

Date Generated
24-Aug-2004
Spreadsheet File Name
0414617H.XLS

Client ID: SW3
Project ID:
PSC Analytical ID: 04-H054917
Matrix: Water
Duplicate of:
Date Sampled: 16-Aug-04
Client Description:

Parameters	Method	EQL	Units	
C-H:0 Total Suspended Solids	Grav.	0.5	mg/L	4
C-H:2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	2
C-H:2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	< 5

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Rain Event overnight Aug 20/04. ^{awaiting} Sample results from Aug 16/04. Pumped some water from pond to fiberglass for future watering.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Aug 31/04

Rain overnight and off + on through the day. Pumped pond water to fiberglass for watering purposes.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: Sept 1/04

Time Sampled: 9Am

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: BOD < 5 mg/L

TSS 4.4 mg/L

Fecal 3 CFU/ml

Discharge Date: Sept 10/04

Operators Signature: 

Sept 1/04 More rain overnight + throughout the day. Samples taken of accumulating pond water.

Date Generated
10-Sep-2004
Spreadsheet File Name
04156604.XLS

Client ID: SW3
Project ID:
PSC Analytical ID: 04-H059323
Matrix: Water
Duplicate of:
Date Sampled: 1-Sep-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	4.4
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	3
C-H-2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	< 5

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: Sept 20/04

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____


(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: TSS → nd

Fecal → 3 cFu/ml

BOD → < 5 mg/l

Discharge Date: Sept 30/04

Operators Signature: 

Sept 19¹⁸⁺ (Rain Event) Samples Taken



ANALYTICAL SERVICES

Prepared For:
SUZANNE MUSOLINO

Date Generated
30-Sep-2004
Spreadsheet File Name
0417043H.XLS

Client ID: SW3 Pond
Project ID:
PSC Analytical ID: 04-H064978
Matrix: Water
Duplicate of:
Date Sampled: 20-Sep-04
Client Description:

Parameters	Method	EQL	Units	
C-H-:0 Total Suspended Solids	Grav.	0.5	mg/L	< 2
C-H-:2 Fecal Coliform (Isogrld)	MFLP 55	0	cfu/mL	3
C-H-:2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	< 5

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Oct 12 Heavy Rain. Pumped some water from pond to fiberglass (holding purposes + watering) also pumped some water over to the leachate tank (level low)

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED (PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: Oct 14/04

Time Sampled: 10Am

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: Fecal → 0 FC/ml

TSS → 1.8 mg/l

BOD → < 5 mg/l

Pass

Discharge Date: Oct 26/04

Operators Signature: 

Rain (Heavy) Oct 12-13

Inorganic Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0418941H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2004/10/25 (Event 607)
Reported : 2004/10/25

Matrix	Water
Philip ID	04-H072590
Client ID	SW3
Date Sampled (y/m/d)	04/10/14
Date Received (y/m/d)	04/10/14

Analyte	Units	EQL	
Total Suspended Solids	mg/L	0.5	1.8

Legend

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

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

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

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

Note

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

page verified XXXXXXXXXX

Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0418941H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2004/10/25 (Event 611)
Reported : 2004/10/25

04-H072590

SW3

Date Sampled : 2004/10/14

Time Sampled : 10:00

Date Received : 2004/10/14

Fecal Coliform (Isogrid)

0. cfu/mL

BOD5 Carbonaceous

< 5 mg/L

EQL = 5.

EQL = Estimated Quantitation Limit for routine analysis

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

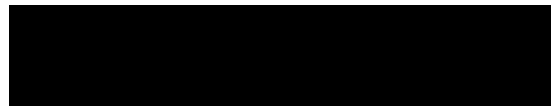
✱

Nov 05/04

Raining

Waiting for Sample Results from Nov 04/04

Pumping water to Fibreglass via Honda Pump
for storage / watering purposes.



Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled:

Nov 4/04

Time Sampled:

8:30am

ACTIONS TAKEN:

(1) Pumped by Hilchies/Disposed at Mill Cove

Date Pumped:

Collection Invoice #

Volume Removed

Disposal Slip #

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results:

TSS 2.6 mg/L

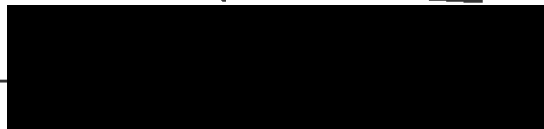
Fecal 50 CFU/ml

BOD < 5 mg/L

Discharge Date:

Nov 16/04

Operators Signature:



Rain Event (Heavy) Nov 3. Samples taken Nov 4 am

Date Generated
15-Nov-2004
Spreadsheet File Name
0420603H.XLS

Client ID: SW3
Project ID:
PSC Analytical ID: 04-H080192
Matrix: Water
Duplicate of:
Date Sampled: 4-Nov-04
Client Description:

Parameters	Method	EQL	Units	
C-H-0 Total Suspended Solids	Grav.	0.5	mg/L	2.6
C-H-2 Fecal Coliform (Isogrid)	MFLP 55	0	cfu/mL	50
C-H-2 BOD5 Carbonaceous	APHA 5210B	5	mg/L	< 5

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

No samples required for Nov 25-26. Pumped water via Honda pump from pond to holding tanks for watering purposes. (new dry media) in Biofilters

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled:

Dec 9/04

Time Sampled:

9AM

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped:

Collection Invoice #

Volume Removed

Disposal Slip #

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results:

BOD < 5mg/l

TSS NOT DETECTED

Fecal 2 CFU/ml

Discharge Date:

Dec 21/04

Operators Signature:

[REDACTED SIGNATURE]

Rainfall Dec 8 into Dec 9 samples taken. Pumped some pond water to holding tanks for watering purposes.

Microbiology Parameters

page : 1

Client : New Era Technologies Ltd.
61 Evergreen Place
Goodwood
NS B3T 1P2
PSC Project Number : 0423236H
Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
Printed : 2004/12/20 (Event 392)
Reported : 2004/12/20

04-H091593

SW3

Date Sampled : 2004/12/09
Time Sampled : 11:00
Date Received : 2004/12/09
2. cfu/mL
< 5 mg/L

Fecal Coliform (Isogrid)
BOD5 Carbonaceous

EQL = 5.

EQL = Estimated Quantitation Limit for routine analysis

Inorganic Parameters

page : 1

Client : New Era Technologies Ltd.
 61 Evergreen Place
 Goodwood
 NS B3T 1P2
 PSC Project Number : 0423236H
 Client Project Number :

MUSOLINO, SUZANNE

FAX # : 876-5163
 Printed : 2004/12/20 (Event 390)
 Reported : 2004/12/20

Matrix	Water
Philip ID	04-H091593
Client ID	SW3
Date Sampled (y/m/d)	04/12/09
Date Received (y/m/d)	04/12/09

Analyte	Units	EQL	
Total Suspended Solids	mg/L	0.5	nd(2.)

Legend

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

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

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

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

Note

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

page verified XXXXXXXXXX

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ANALYSIS TAKEN:

(1) Pumped by Hitches/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2) Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Dec 14/2004

Rain overnight + During Day Approx (15 ml)

Pumped water to Fibreglass via Honda Pump
from Pond for watering purposes

Waiting for sample results from previous Rain Event.

Storm Water & Pond Discharge Report

SAMPLES TAKEN/ANALYSED(PSC Analytical)

Pond Water {TSS, BOD, FECAL COLIFORM}

Date Sampled: _____

Time Sampled: _____

ACTIONS TAKEN:

(1)Pumped by Hilchies/Disposed at Mill Cove

Date Pumped: _____

Collection Invoice # _____

Volume Removed _____

Disposal Slip # _____

(2)Discharged based on criteria set by DOE
(TSS-50mg/l, BOD-5mg/l, Fecal Coliform 200/100mls)

Sample Results: _____

Discharge Date: _____

Operators Signature: _____

Dec 20/2004

RAINED Sunday Morning (Dec 19/04) & Monday Late Morning
Pumped pond water into fiberglass Holding Tank for
watering Purposes.

(Pumped via Honda Pump).

Appendix I

Summary of Annual Tonnage

**Feedstock Received – Compost Produced and
Contaminating Tonnage Rejected during 2004**

New Era Technologies 2004 Report

Month	Residential	Commercial	HRM Totals	HRM NET	Compost	Compost %	Overs	% Overs	Front End Residue	% Front End Residue	Back End Residue	% Back End Residue
January	758.66	341.92	1,100.58	932.98	310.12	28.18%	0.00	0.00%	147.95	13.44%	19.65	1.79%
February	521.70	287.96	809.66	663.81	359.12	44.35%	0.00	0.00%	128.53	15.87%	17.32	2.14%
March	792.66	366.06	1,158.71	937.73	471.15	40.66%	0.00	0.00%	197.79	17.07%	23.19	2.00%
April	1,186.68	369.92	1,556.60	1,415.89	187.22	12.03%	0.00	0.00%	113.00	7.26%	27.71	1.78%
May	1,250.83	350.04	1,600.87	1,480.39	248.68	15.53%	0.00	0.00%	93.12	5.82%	27.36	1.71%
June	1,616.32	465.37	2,081.69	1,967.60	729.17	35.03%	0.00	0.00%	89.47	4.30%	24.62	1.18%
July	1,529.30	463.88	1,993.18	1,878.91	591.24	29.66%	0.00	0.00%	93.84	4.71%	20.43	1.02%
August	1,345.44	487.73	1,833.17	1,735.20	542.56	29.60%	0.00	0.00%	72.82	3.97%	25.15	1.37%
September	1,127.05	419.37	1,546.42	1,444.58	954.85	61.75%	0.00	0.00%	76.95	4.98%	24.89	1.61%
October	1,190.33	468.74	1,659.07	1,579.32	384.24	23.16%	0.00	0.00%	54.35	3.28%	25.40	1.53%
November	1,311.21	440.90	1,752.11	1,661.16	642.24	36.66%	0.00	0.00%	65.54	3.74%	25.41	1.45%
December	987.06	436.58	1,423.64	1,295.37	580.91	40.80%	0.00	0.00%	97.52	6.85%	30.75	2.16%
Total	13,617.23	4,898.47	18,515.70	16,992.94	6001.50	32.41%	0.00	0.00%	1230.88	6.65%	291.88	1.58%

9.03