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# JUL 2 2 2002 P. O. BOX 248, 1186 LOWER RIVER ROAD, NW, CHARLESTON, TN 37310-0248

(423) 336-4000 FAX: (423) 336-4166

NYSDEC - REG. 9 FOIL REL\_UNREL

July 18,2002

Mr. Michael J. Hinton, P.E. Environmental Engineer New York State Department of Environmental Conservation 270 Michigan Avenue Buffalo, NY 14203-2999

Subject: Charles Gibson Site (Pine and Tuscarora Site) Niagara Falls, New York NYSDEC Registry No. 9-32-063 Semi-Annual Ground Water Sampling Report April 2002

Dear Mr. Hinton:

In accordance with the approved sampling plan for the above referenced Site, enclosed are three copies of the first Semi-Annual Ground Water Report, April 2002. The analytical data summary for ground water is listed in Table 1. Analytical results for the annual leachate sampling at Manhole B are listed in Table 2. The laboratory data summary package (Appendix A), and the field logs (Appendix B) for this sampling event are also attached. The Quarterly Site Inspection Forms and the Quarterly Ground Water Elevation Forms are included in Appendices C and D respectively. The analytical data has been validated and found to be acceptable.

If you have any questions, please call me at 423/ 336-4381.

Sincerely, OLIN CORPORATION

maine M. Miller

Lorraine M. Miller Principal Environmental Specialist

cc: C.M. Richards (letter only, via e-mail) T. E.Tirabassi (letter only, via e-mail) M. Walker (1 copy)

dm:sites/P&T Gibson//ENV 4060/O&M/SemiAnnual Sampling April 2002 OLINCORPORATION

# TABLE 1

### CHARLES GIBSON SITE NIAGARA FALLS, NEW YORK

### ANALYTICAL RESULTS SUMMARY SEMI-ANNUAL GROUND WATER SAMPLING

### April 16, 2002

	MW-1R	MW-1R (dup)	MW-2	MW-4	MW-5	MW-A3
PARAMETER						
alpha-BHC	.054U	.052U	.053U	.054U	.054U	.054U
beta-BHC	.038J	.052U	.053U	.054U	.054U	.054U
delta-BHC	.054U	.052U	.053U	.054U	.054U	.054U
gamma-BHC	.054U	.052U	.053U	.054U	.054U	.054U
Hexachlorobenzene	NR	NR	NR	NR	NR	NR

Notes:

Concentration in ug/l

U Undetected at associated value

J Estimated value

Field blank was non-detect for all parameters of interest.

Data has been validated and judged acceptable as qualified.

NR Not required for this event.

Next sampling for hexachlorobenzene is scheduled for October 2002.

# TABLE 2

#### CHARLES GIBSON SITE NIAGARA FALLS, NEW YORK

### ANALYTICAL RESULTS SUMMARY ANNUAL LEACHATE SAMPLING

#### April 16, 2002

	MANHOLE B
PARAMETER	
alpha-BHC	.091
beta-BHC	.32
delta-BHC	.70
gamma-BHC	.29
Hexachlorobenzene	NR

#### Notes:

Concentration in ug/I

Field blank was non-detect for all parameters of interest.

Data has been validated and judged acceptable as qualified.

NR Not required for this event.

Next sampling for hexachlorobenzene is scheduled for October 2005.

### APPENDIX A

# LABORATORY DATA SUMMARY PACKAGE

# SEMI-ANNUAL GROUND WATER SAMPLING

AND

### ANNUAL LEACHATE SAMPLING OF MANHOLE B

APRIL 2002

CHARLES GIBSON SITE (PINE AND TUSCARORA SITE) NIAGARA FALLS, NEW YORK NYSDEC Registry No. 9-32-063

dm:sites/P&T Gibson//ENV 4060/O&M/SemiAnnual Sampling April 2002

# FILE COPY

CHARLES GIBSON SITE (aka Pine & Tuscarora, P&T) ENV4060 IND Site Monitoring 2002

Sen ANNUAL Splg. APRIL 2002 ANALYTICAL REPORT **JOB NUMBER: 200912** Prepared For: OLIN CORPORATION Sevenson Environmental Services, Inc. 2749 Lockport Road Niagara Falls, NY 14305 Project: OLIN-CHARLES GIBSON Attention: Mike Walker

Date: 05/23/2002

ficula Signati

Name: Maryam A. Taylor V Title: Project Manager E-Mail: mataylor@stl-inc.com

2002

STL Connecticut 128 Long Hill Cross Road Shelton, CT 06484

This Report Contains  $(\cancel{12})$  Pages

# STL Report : 200912 OLIN

# **Case Narrative**

**Sample Receipt** – All samples were received in good condition and at 11.3°C. The client was notified, and the laboratory was instructed to proceed with the analyses.

**Organic Extraction -** Samples were extracted according to method 3510C. No problems were encountered.

**Pesticides** – Pesticide samples were analyzed by GC/ECD using guidance provided in Method 8081A. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with an Electron Capture Detector (Ni63).

All samples were analyzed without any apparent problems.

Manual integrations were performed if required, and any affected peaks were designated with an "M" on the quantitation report. Manual integrations were initialed by the analyst that performed the integration.

Sample Calculation:

Sample ID --MW-1R Compound --delta-BHC (50040030area)(10000ul) = .70ug/L (765146132area/ng)(930ml)(1ul)

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

Page 1 - Narrative for Login No. 200912

#### STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

#### STL-Connecticut Certification Summary (as of February 2001)

Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	CT023
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste NELAC	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	ChemistryNon- Potable Water and Wastewater	A43
Utah	Department of Health	RCRA	2032614458
Washington	Department of Ecology	Wastewater/Hazardous Waste	C231
Wisconsin	Department of Natural Resources	Wastewater	998355710

Job Number Customer Attn	.: 200912 .: OLIN CORPORATION .: Mike Walker	Project Numb Customer Pro Project Desc	er 2 ject ID: O ription: O	0000103 LIN-CHARLES GI lin-Charles Gi	BSON bson	
Laboratory Sample 10	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
200912-1	MANHOLE B	Water	04/16/2002	09:30	04/17/2002	09:45
200912-2	MW-A3	Water	04/16/2002	10:40	04/17/2002	09:45
200912-3	MW-4	Water	04/16/2002	11:30	04/17/2002	09:45
200912-4	MW-5	Water	04/16/2002	12:20	04/17/2002	09:45
200912-5	MW-2	Water	04/16/2002	13:00	04/17/2002	09:45
200912-6	MW-1R	Water	04/16/2002	14:00	04/17/2002	09:45
200912-7	MW-7	Water	04/16/2002	15:00	04/17/2002	09:45
200912-8	FIELD BLANK	Water	04/16/2002	12:20	04/17/2002	09:45
-						

Job Number: 200912

### Date:04/30/2002

#### CUSTOMER: OLIN CORPORATION

#### PROJECT: OLIN-CHARLES GIBSON

ATTN: Mike Walker

Customer Sample ID: MANHOLE B Date Sampled.....: 04/16/2002 Time Sampled.....: 09:30 Sample Matrix....: Water Laboratory Sample ID: 200912-1 Date Received.....: 04/17/2002 Time Received.....: 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION UNITS	BATCH DT DATE/TIME TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	0.091 0.32 0.70 0.29	M M M	0.0073 0.0077 0.0049 0.0035	0.054 0.054 0.054 0.054	1.00000 ug/L 1.00000 ug/L 1.00000 ug/L 1.00000 ug/L	4972         04/25/02         1519         kam           4972         04/25/02         1519         kam           4972         04/25/02         1519         kam           4972         04/25/02         1519         kam           4969         04/24/02         1335         kam

\* In Description = Dry Wgt.

Job Number: 200912

11.

#### Date:04/30/2002

ATTN: Mike Walker

#### CUSTOMER: OLIN CORPORATION

### PROJECT: OLIN-CHARLES GIBSON

Customer Sample ID: MW-A3 Date Sampled.....: 04/16/2002 Time Sampled.....: 10:40 Sample Matrix....: Water Laboratory Sample ID: 200912-2 Date Received...... 04/17/2002 Time Received...... 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND ND ND ND	U U U U	0.0074 0.0078 0.0050 0.0036	0.054 0.054 0.054 0.054	1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L	4969 4969 4969 4969 4969		04/24/02 1409 04/24/02 1409 04/24/02 1409 04/24/02 1409	kam kam kam kam
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\* In Description = Dry Wgt.

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#### Job Number: 200912

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# Date:04/30/2002

ATTN: Mike Walker

#### CUSTOMER: OLIN CORPORATION

#### PROJECT: OLIN-CHARLES GIBSON

Customer Sample ID: MW-4 Date Sampled.....: 04/16/2002 Time Sampled.....: 11:30 Sample Matrix....: Water Laboratory Sample ID: 200912-3 Date Received...... 04/17/2002 Time Received...... 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DIIUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND ND ND ND	ม บ บ บ		0.0073 0.0077 0.0049 0.0035	0.054 0.054 0.054 0.054	1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L	4969 4969 4969 4969 4969		04/24/02 1444 04/24/02 1444 04/24/02 1444 04/24/02 1444	kam kam kam kam
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\* In Description = Dry Wgt.

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Job Number: 200912

#### Date:04/30/2002

#### CUSTOMER: OLIN CORPORATION

#### PROJECT: OLIN-CHARLES GIBSON

ATTN: Mike Walker

Customer Sample ID: MW-5 Date Sampled.....: 04/16/2002 Time Sampled.....: 12:20 Sample Matrix....: Water Laboratory Sample ID: 200912-4 Date Received......: 04/17/2002 Time Received......: 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DATE/TIME TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND ND ND ND	U U U U	0.0073 0.0077 0.0049 0.0035	0.054 0.054 0.054 0.054	1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L	4969 4969 4969 4969 4969	04/24/02 1519 kam 04/24/02 1519 kam 04/24/02 1519 kam 04/24/02 1519 kam 04/24/02 1519 kam
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\* In Description = Dry Wgt.

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Job Number: 200912

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#### Date:04/30/2002

# CUSTOMER: OLIN CORPORATION

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#### PROJECT: OLIN+CHARLES GIBSON

ATTN: Mike Walker

Customer Sample ID: MW-2 Date Sampled.....: 04/16/2002 Time Sampled.....: 13:00 Sample Matrix....: Water Laboratory Sample ID: 200912-5 Date Received.....: 04/17/2002 Time Received.....: 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH D	τ	DATE/TIME TE
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND ND ND ND	U U U U U	0.0072 0.0076 0.0048 0.0035	0.053 0.053 0.053 0.053	1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L	4969 4969 4969 4969 4969		04/24/02 1554 kar 04/24/02 1554 kar 04/24/02 1554 kar 04/24/02 1554 kar
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\* In Description = Dry Wgt.

Job Number: 200912

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#### Date:04/30/2002

ATTN: Mike Walker

#### CUSTOMER: OLIN CORPORATION

#### PROJECT: OLIN-CHARLES GIBSON

Customer`Sample ID: MW-1R Date Sampled.....: 04/16/2002 Time Sampled.....: 14:00 Sample Matrix....: Water Laboratory Sample ID: 200912-6 Date Received...... 04/17/2002 Time Received...... 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	FLAGS	MDL	RL	DILUTION	UNITS	BATCH DT	DATE/TIME TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND L 0.038 L ND L ND L		0.0073 0.0077 0.0049 0.0035	0.054 0.054 0.054 0.054	1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L	4969 4972 4969 4969	04/24/02 1629 kam 04/25/02 1818 kam 04/24/02 1629 kam 04/24/02 1629 kam
		· ·					<b>,</b>		

\* In Description = Dry Wgt.,

Job Number: 200912

#### Date:04/30/2002

CUSTOMER: OLIN CORPORATION

# PROJECT: OLIN+CHARLES GIBSON

ATTN: Mike Walker

MWIRGUP) Customer Sample ID: MW-7 Date Sampled.....: 04/16/2002 Time Sampled.....: 15:00 Sample Matrix....: Water

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Laboratory Sample ID: 200912-7 Date Received.....: 04/17/2002 Time Received.....: 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND ND ND ND	U U U U	0.0071 0.0075 0.0048 0.0034	0.052 0.052 0.052 0.052	1.00000 1.00000 1.00000 1.00000	ug/L ug/L ug/L ug/L	4969 4969 4969 4969 4969		04/24/02 170 04/24/02 170 04/24/02 170 04/24/02 170	3 kam 3 kam 3 kam 3 kam 3 kam
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\* In Description = Dry Wgt.

Page 8

Job Number: 200912

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#### Date:04/30/2002

#### CUSTOMER: OLIN CORPORATION

### PROJECT: OLIN-CHARLES GIBSON

ATTN: Mike Walker

Customer Sample ID: FIELD BLANK Date Sampled.....: 04/16/2002 Time Sampled.....: 12:20 Sample Matrix....: Water Laboratory Sample ID: 200912-8 Date Received...... 04/17/2002 Time Received...... 09:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION UNITS	BATCH DT DATE/TIME TECH
8081A	Organochlorine Pesticide Analysis alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane)	ND ND ND ND		0.0068 0.0072 0.0046 0.0033	0.050 0.050 0.050 0.050	1.00000 ug/L 1.00000 ug/L 1.00000 ug/L 1.00000 ug/L	4969 04/24/02 1738 kam 4969 04/24/02 1738 kam 4969 04/24/02 1738 kam 4969 04/24/02 1738 kam 4969 04/24/02 1738 kam

\* In Description = Dry Wgt.

Job	Number: 200912	-			Date:	04/30/2002		
CUSTOMER: OLIN CO	RPORATION	ECT: OLIN-(	CHARLES C	IBSON		ATTN: Mike Wal	ker	
Lab ID: 200912-1	Client ID: MANHOLE B	Date Re		17/2002	Sample	Date: 04/16/2	002	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME A	NALYZED	DILUTION
3510C	Extraction Sep. Funnel (Chlor.Pest)	1	4872			04/22/2002	0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1335	1.00000
8081A	Organochlorine Pesticide Analysis	1	4972	4872		04/25/2002	1519	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4969	4872		04/24/2002	1335	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4972	4872		04/25/2002	1519	1.00000
Lab ID: 200912-2	Client ID: MW-A3	, Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/2	002	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME A	NALYZED	DILUTION
3510C	Extraction Sep. Funnel (Chlor.Pest)	1	4872			04/22/2002	.0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1409	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4972	4872		04/25/2002	1555	1.00000
Lab ID: 200912-3	Client ID: MW-4	Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/20	002	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME A	VALYZED	DILUTION
100 STOC	Extraction Sep. Funnel (Chlor.Pest)	1	4872			04/22/2002	0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1444	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4972	4872		04/25/2002	1631	1.00000
Lab ID: 200912-4	Client ID: MW-5	Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/20	002	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME AN	ALYZED	DILUTION
3510C	Extraction Sep. Funnel (Chlor.Pest)	1 ·	4872			04/22/2002	0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1519	1.00000
8081A	Organochlorine Pesticide Confirmation	. 1	4972	4872	· ·	04/25/2002	1707	1.00000
Lab ID: 200912-5	Client ID: MW-2	Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/20	002	
METHOD	DESCRIPTION	RUN#	BATCH# .	PREP BT	#(S)	DATE/TIME AN	IALYZED	DILUTION
3510C	Extraction Sep. Funnel (Chlor.Pest)	1	4872			04/22/2002	0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1554	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4972	4872		04/25/2002	1743	1.00000
Lab ID: 200912-6	Client ID: MW-1R	Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/20	02	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME AN	IALYZED	DILUTION
3510C	Extraction Sep. Funnel (Chlor.Pest)	1	4872			04/22/2002	0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1629	1.00000
8081A	Organochlorine Pesticide Analysis	1	4972	4872		04/25/2002	1818	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4969	4872		04/24/2002	1629	1.00000
8081A	Organochlorine Pesticide Confirmation	1.	4972	4872		.04/25/2002	1818	1.00000
Lab ID: 200912-7	Client ID: MW-7	Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/20	102	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME AN	ALYZED	DILUTION
3510C -	Extraction Sep. Funnel (Chlor.Pest)	1	48/2			04/22/2002	0000	
8081A -	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1703	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4972	4872		04/25/2002	1854	1.00000
Lab ID: 200912-8	Client ID: FIELD BLANK	Date Re	cvd: 04/	17/2002	Sample	Date: 04/16/20	102	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME AN	ALYZED	DILUTION
3510C	Extraction Sep. Funnel (Chlor.Pest)	1	4872			04/22/2002	0000	
8081A	Organochlorine Pesticide Analysis	1	4969	4872		04/24/2002	1738	1.00000
8081A	Organochlorine Pesticide Confirmation	1	4972	4872		04/25/2002	1930	1.00000

LABORATORY

CHRONICLE

REPORT COMMENTS
be reproduced only in its entirety.
2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
<ul> <li>4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 10604</li> <li>5) According to 40CFR Part 136.3, pH, Chloride Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.</li> </ul>
Glossary of flags, qualifiers and abbreviation
Inorganic Qualifiers (Q-Column) U Analyte was not detected at or above the reporting limit.
< Not detected at or above the reporting limit.
J Result is less than the RL, but greater than or equal to the method detection limit.
8 Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL. 9 Result use determined by the Method of Standard Additions
S Result was determined by the method of Standard Additions.
ICV.CCV.ICB.CCB.ISA.ISB.CRI.CRA.MRL: Instrument related QC exceed the upper or lower control limits.
* LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
+ MSA correlation coefficient is less than 0.995.
4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike
F SD: Serial dilution exceeds the control limits.
H MB, EB: Batch QC is greater than reporting limit or had a negative instrument reading lower than the
absolute value of the reporting limit.
N MS, MSD: Spike recovery exceeds the upper or lower control limits.
W PS: Post-digestion spike was outside 85-115% control limits.
Urganic qualifiers (q - column)
ND Compound not detected.
J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
Q Result was qualitatively confirmed, but not quantified.
C Pesticide identification was confirmed by GC/MS.
7 The chromatographic response resembles a cypical fock pactern.
E _Result exceeded calibration range, secondary dilution required.
Organic Flags (Flags Column)
MB,EB, MLE: Batch QC is greater than reporting limit.
<ul> <li>LLS, LLD, LLV, MS, MSD, Surrogate, KStation we exceeds the upper of tower control timits.</li> <li>Concentration exceeds the instrument calibration range or below the reporting limit.</li> </ul>
B Compound was found in the blank and sample.
D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for
analysis; also compounds analyzed at a dilution will be flagged with a D.
H Alternate peak selection upon analytical review
I Indicates the presence of an interfence, recovery is not calculated.
m manually integrated compound. P The lower of the two values is reported when the % difference between the results of two GC columns is
greater than 25%.

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# QUALITY ASSURANCE METHODS

### Report Date: 04/30/2002

REFERENCES AND NOTES

#### Abbreviations

Batch Designation given to identify a specific extraction, digestion, preparation set, or analysis set CAP Capillary Column CC8 Continuing Calibration Blank CCV Continuing Calibration Verification CF **Confirmation Analysis** CRA Low Level Standard Check - GFAA; Mercury Low Level Standard Check - ICP CRI Dil Fac **Dilution Factor** Secondary dilution and analysis DL DLFac **Detection Limit Factor** DSH Distilled Standard - High Level Distilled Standard - Low Level DSL Distilled Standard - Medium Level DSM E8 Extraction Blank Initial Calibration Blank 108 Initial Calibration Verification ICV IDL Instrument Detection Limit ISA Interference Check Sample A ISB Interference Check Sample B The first six digits of the sample ID which refers to a specific client, project and sample group Job No. An 8 number unique laboratory identification Lab ID LCD Laboratory Control Standard Duplicate LCS Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest MB Method Blank or (PB) Preparation Blank MD Method Duplicate MDL Method Detection Limit MLE Medium Level Extraction Blank MRL Method Reporting Limit Standard Method of Standard Additions MSA MS Matrix Spike MSD Matrix Spike Duplicate ND Not Detected PACK Packed Column Preparation factor used by the Laboratory's Information Management System (LIMS) PREPE PS Post Spike PSD Post Spike Duplicate RA Re-analysis Re-extraction and analysis RE RI Reporting Limit Relative Percent Difference of duplicate (unrounded) analyses RPD RRF Relative Response Factor **Reference Standard** RS **Retention Time** RT RTW Retention Time Window SampleID A 9 digit number unique for each sample, the first six digits are referred as the job number Seeded Control Blank SCB Serial Dilution SD **Unseeded Control Blank** UCB One or a combination of these data qualifiers and abbreviations may appear in the analytical report.

# APPENDIX B

### FIELD LOGS

# SEMI-ANNUAL GROUND WATER SAMPLING AND ANNUAL LEACHATE SAMPLING AT MANHOLE B

# April 2002

CHARLES GIBSON SITE (PINE AND TUSCARORA SITE) NIAGARA FALLS, NEW YORK

NYSDEC Registry No. 9-32-063

dm:sites/P&T Gibson//ENV 4060/O&M/SemiAnnual Sampling April 2002

	0		ILLEFTORM		
RECORDED BY:	Craig Bove	_	SAMPLE ID:	MW-A3	
SAMPLED BY:	Bove	_	SAMPLING EVE	NT/DATE:	4/16/2002
COMPANY:	Sevenson Environme	ntal	MONITORING V	ELL: MW-A3	
·		-	CONDITION:	OK	
GROUNDWATER PL	IRGE DATA	PURGE D	ATE: 4/16	/2002	
•				NOTE: A	LL GIBSON SITE
DEPTH TO BOTTOM	FROM TOP OF RISEF	र:	11.95 (FT.)	MONITC	RING WELLS ARE
DEPTH TO WATER F	FROM TOP OF RISER:		4.9_(FT.)	2-INCH I	DIAMETER STAIN-
	WATER COLUMN:		7.05 (FT.)	LESS ST	EEL. WELL DEPTHS:
	2" DIA. WELL CONST	TANT:	0.16	MW-1R	12.10'
	ONE WELL VOLUME	= '	1.128 (GAL	S) MW-2	12.13'
				MW-A3	11.95'
PURGE METHOD: BOTTOM OF WELL!		no		MW-5	15.28'
PURGE START TIME	E: 1015	STOP TIM	IE:	1040	
PURGE OBSERVAT	ONS: clear/no o	dor	· · ·		
FIFI D PARAMETER	MEASUREMENTS:			•	
	····	SPECIFIC			•
WELL		CONDUC	TIVITY TEM	P.	
VOLUME	рН	umhos/cm	<u>) (CO</u>	<u>R<sup>·</sup>F)</u>	NOTES:
1 1.2gal	6.97	475	<b>j</b>	9.1	clear
2 2.4gal	6.97	421	•	9.6	clear
3 3.6gal	7.09	468	<b>}</b>	8.7	clear
4					
5		<u></u>			
			•		
TOTAL VOLUME PU	RGED: 3.6 gallon:	S			
		•		÷	
GROUNDWATER O	R SEDIMENT SAMPLI	NG DATA:	SAM	PLE DATE:	4/16/2002
-					
MEDIA: GROUND	WATER <u>yes</u>		SAM	PLE I <u>IME:</u>	1040
		_			
LOCATION:	MW-A3				
	Low flow using a par	astaltic num	In and dedicated t	nosina	
SAMPLE METHOD.	Low now, using a part	astallic pull	p and dedicated i	losing	
SAMPLING OBSERV	/ATIONS: Clear / no	odor			
OC SAMELES TAKE				-	
UU SAWFLES TAKE	.in. inu				
OTHER OBSERVAT	IONS/COMMENTS:	none			· ·
	······		SC n	neasured	
Note: specific conduc	ctivity formula to 25 deg	rees Celcius	s: SC(25)= {{T-2	5)(0.02)}+1	
CRA 8143 (1) AppD-GwsdForm					

RECORDED BY:	Craig Bove		SAMPLE	ID:	MW-1R	· · ·	
SAMPLED BY:	Bove	_	SAMPLIN	G EVENT/C	ATE:	4/16/2002	
COMPANY:	Sevenson Environme	ntal	MONITOR		: <u>MW-1R</u>		
· .			CONDITIC	DN:	OK		
GROUNDWATER PL	JRGE DATA	PURGE D	ATE:	4/16/2002	2 .		
DEPTH TO BOTTOM	I FROM TOP OF RISE	R:	12.1	(FT.)	NOTE: AI MONITOI	LL GIBSON S RING WELLS	ITE ARE
DEPTH TO WATER	FROM TOP OF RISER	:	3.65	5 (FT.)	2-INCH D	AMETER ST	AIN-
	WATER COLUMN:		8.45	- 6 (FT.)	LESS ST	EEL. WELL D	EPTHS:
	2" DIA. WELL CONS	TANT:	0.16	5	MW-1R	12.10'	
	ONE WELL VOLUME	=	1.352	- (GALS)	MW-2 MW-A3	12.13' 11.95'	
PURGE METHOD: BOTTOM OF WELL/	<b>parastaltic pump</b> SILT BUILDUP:	no			MW-4 MW-5	13.75' 15.28'	
PURGE START TIM	E: 1315 IONS: Clear/pold	STOP TIM	IE:	1340	)		
FUNGE OBSERVAT							
FIELD PARAMETER	MEASUREMENTS:			•			
(	-*	SPECIFIC		TEMP			
WELL VOLUME	nH	CONDUC umhos/cm	1 IVI I Y .)	IEMP. (C OR'F)		NOTES:	•
1 1.4gal.	<u> </u>	742	2	<u>12.1C</u>	•		
2 2.8gal.	7.9	812	· · · · · · · · · · · · · · · · · · ·	12.5C			<b>.</b> .
3 4.2gal	7.7	823	}	12.8C			•
4							
5							
· · ·	· · ·						
TOTAL VOLUME PU	IRGED: 4.2 gallon	s					
							. •
GROUNDWATER O	R SEDIMENT SAMPLI	NG DATA:		SAMPLE	DATE:	4/16/2002	
MEDIA: GROUNE	WATER yes			SAMPLE '	TIME:	1400	
CREEK S		- -					
	MW-1R						
SAMPLE METHOD:	Low flow, using a par	astaltic pum	p and dedic	ated hosing	]		
SAMPLING OBSERV	ATIONS: Clear, no	odor	<u>.</u>				
QC SAMPLES TAKE	N: no						
OTHER OBSERVAT	IONS/COMMENTS:	The well w	vent dry duri	ng the sam	ple draw, w	vaited for recha	arge
recharge to resume s	sampling.						
Note: specific conduc	ctivity formula to 25 deg	rees Celcius	s: SC(25)=	SC measu	1red )2)}+1	_	
CRA 8143 (1) AppD-GwsdForm	outry formale to 20 dog			((1 20)(0.0			

.

RECORDED BY:       Craig Bove       SAMPLE ID:       MW-2         SAMPLED BY:       Bove       SAMPLEND:       MW-2         SAMPLED BY:       Bove       SAMPLEND:       MV-2         COMPANY:       Sevenson Environmental       MONITORING EVENT/DATE:       4/16/2002         COMPANY:       Sevenson Environmental       MONITORING WELL:       MW-2         COMPANY:       Sevenson Environmental       MONITORING WELL:       MW-2         COMPANY:       Sevenson Environmental       MONITORING WELL:       MW-2         GROUNDWATER PURGE DATA       PURGE DATE:       4/16/2002       MOTE: ALL GIBSON SITE         DEPTH TO WATER FROM TOP OF RISER:       12.13 (FT.)       MONITORING WELLS ARE         DEPTH TO WATER FROM TOP OF RISER:       4.65 (FT.)       2:INCH DIAMETER STAIN-         WATER COLUMN:       7.48 (FT.)       LESS STEEL. WELL DEPTHS:         2* DIA. WELL CONSTANT:       0.16       MW-4       13.75'         BOTTOM FWELLSILT BUILDUP:       no       MW-4       13.75'         DURGE BTART TIME:       1240       STOP TIME:       1300         PURGE START TIME:       1240       STOP TIME:       1300         PURGE GOBSERVATIONS:       Clearino odor       12.6       12.6         1 1.2gal<		3	AMPLING					
SAMPLED BY:       Bove       SAMPLING EVENT/DATE:       4/16/2002         COMPANY:       Sevenson Environmental       MONITORING WELL:       MW-2         CONDITION:       OK         GROUNDWATER PURGE DATA       PURGE DATE:       1/16/2002         DEPTH TO BOTTOM FROM TOP OF RISER:       12.13 (FT.)       MONITORING WELLS ARE         DEPTH TO WATER FROM TOP OF RISER:       4.65 (FT.)       LESS STEEL. WELL DEPTHS:         2* DIA. WELL CONSTANT:       0.16       MW-1R       12.10'         ONE WELL VOLUME=       1.1988 (GALS)       MW-2       12.3'         DEPTH TO WATER FROM TOP OF RISER:       0.16       MW-4       13.75'         DEPTH TO WATER FROM TOP OF RISER:       0.16       MW-4       13.75'         DEPTH TO WATER COLUMN:       7.48 (FT.)       LESS STEEL. WELL DEPTHS:         2* DIA. WELL CONSTANT:       0.16       MW-4       13.75'         DURGE DARAMETER MEASUREMENTS:       1300       PURGE DISSERVATIONS:       Clearino odor         FIELD PARAMETER MEASUREMENTS:       SPECIFIC       NOTES:       11.2gal       7.75       984       12.6       12.6         1       1.2gal       7.75       984       12.6       13.3       13.3 (5 gallons)         GRQUNDWATER OR SEDIMENT SAMPLING DATA:	RECORDED BY:	Craig Bove		SAMPLEI	D:	MW-2		
COMPANY:         Sevenson Environmental         MONITORING WELL:         MW-2 CONDITION:         OK           GROUNDWATER PURGE DATA         PURGE DATE:         4/16/2002 NOTE: ALL GIBSON SITE         NOTE: ALL GIBSON SITE           DEPTH TO BOTTOM FROM TOP OF RISER:         12.13 (FT.)         MONITORING WELLS ARE           DEPTH TO WATER FROM TOP OF RISER:         4.65 (FT.)         2-INCH DIAMETER STAIN- WATER COLUMN:         7.48 (FT.)         LESS STEEL. WELL DEPTHS:           2* DIA. WELL COUNTATT:         0.16         MW-48 12.10*         ONE WELL VOLUME=         1.1968 (GALS)         MW-2         12.13'           PURGE METHOD:         parastaltic pump         MW-43 13.75'         BOTTOM OF WELL/SILT BUILDUP:         no         MW-43 11.95'           PURGE START TIME         1240         STOP TIME:         1300         15.28'           PURGE START TIME         SPECIFIC         WELL         CONDUCTIVITY         TEMP.           VOLUME         PH         umbos/cm)         (C OR F)         NOTES:           1         1.2gal         7.75         984         12.6           2         2.4gal         7.43         965         10.3           3         3.6gal         7.2         972         11.7           4         5         SAMPLE DATE:	SAMPLED BY:	Bove	_	SAMPLING	G EVENT/D	ATE:	4/16/2002	· .
CONDITION:         OK           GROUNDWATER PURGE DATA         PURGE DATE:         4/16/2002           DEPTH TO BOTTOM FROM TOP OF RISER:         12.13 (FT.)         MONITORING WELLS ARE           DEPTH TO WATER FROM TOP OF RISER:         4.65 (FT.)         2-INCH DIAMETER STAIN-           WATER COLUMN:         7.48 (FT.)         LESS STEEL. WELL DEPTHS:           2*DIA. WELL CONSTANT:         0.16         MW-1R 12.10*           ONE WELL VOLUME=         1.1968 (GALS)         MW-4         13.75*           DURGE METHOD:         parastaltic pump         MW-4         13.75*           DURGE OBSERVATIONS:         Clearing odd         1300         PURGE OBSERVATIONS:         Clearing odd           PURGE DARAMETER MEASUREMENTS:         SPECIFIC         CONDUCTIVITY         TEMP.         NOTES:           1 1.2gal         7.75         984         12.6         2.2.4gal         7.43         965         10.3         3.3.6gal         7.2         972         11.7         4         5         3.3.6gal         7.2         972         11.7         4         5         1300         SAMPLE TIME:         1300         1300         CREEK SEDIMENT         SAMPLE TIME:         1300         1300         1300         1300         1300         1300         130	COMPANY:	Sevenson Environme	ntal	MONITOR	ING WELL	: <u>MW-2</u>		
GROUNDWATER PURGE DATA     PURGE DATE:     4/16/2002       MOTE: ALL GIBSON SITE     MOTE: ALL GIBSON SITE       DEPTH TO BOTTOM FROM TOP OF RISER:     12.13 (FT.)     NOTE: ALL GIBSON SITE       DEPTH TO WATER FROM TOP OF RISER:     4.65 (FT.)     2-INCH DIAMETER STAIN-       WATER COLUMN:     7.48 (FT.)     LESS STEEL. WELL DEPTHS:       2" DIA. WELL CONSTANT:     0.16     MW-1R     12.10°       ONE WELL VOLUME=     1.1968 (GALS)     MW-2     12.13'       PURGE METHOD:     parastatic pump     MW-4     13.75'       BOTTOM OF WELL/SIL BUILDUP:     no     MW-4     13.75'       BOTTOM OF WELL/SIL BUILDUP:     no     MW-4     13.75'       BOTTOM OF WELL/SIL BUILDUP:     no     MW-4     13.75'       PURGE DARAMETER MEASUREMENTS:     SPECIFIC     MW-4     13.75'       WELL     CONDUCTIVITY     TEMP.     NOTES:       11.2gal     7.75     984     12.6       2.2.4gal     7.43     965     10.3       3.3.6gal     7.2     972     11.7       4     5		, 		CONDITIC	DN:	ок		i
DEPTH TO BOTTOM FROM TOP OF RISER: 12.13 (FT.) MONITORING WELLS ARE DEPTH TO WATER FROM TOP OF RISER: 4.65 (FT.) 2-INCH DIAMETER STAIN- WATER COLUMN: 7.48 (FT.) LESS STEEL. WELL DEPTHS: 2° DIA. WELL CONSTANT: 0.16 MW-1R 12.10' ONE WELL VOLUME= 1.1968 (GALS) MW-2 12.13' MW-3 11.95' BOTTOM OF WELL/SILT BUILDUP: no MW-4 13.75' BOTTOM OF WELL/SILT BUILDUP: no MW-5 15.28' PURGE START TIME: 1240 STOP TIME: 1300 PURGE OBSERVATIONS: Clear/no dod FIELD PARAMETER MEASUREMENTS: SPECIFIC WELL CONDUCTIVITY TEMP. VOLUME pH umhos/cmi (C OF F) NOTES: 1 1.2gal 7.75 984 12.6 2 2.4gal 7.43 965 10.3 3 3.6gal 7.2 972 11.7 4 5 TOTAL VOLUME PURGED: 3.6 gallons GRQUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 4/16/2002 MEDIA: GROUNDWATER Yes SAMPLE TIME: 1300 CREEK SEDIMENT	GROUNDWATER PL	JRGE DATA	PURGE D	ATE:	4/16/2002	NOTE: AI	LL GIBSON SI	TE
DEPTH TO WATER FROM TOP OF RISER:       4.65 (FT.)       2-INCH DIAMETER STAIN-         WATER COLUMN:       7.48 (FT.)       LESS STEEL. WELL DEPTHS:         2" DIA. WELL CONSTANT:       0.16       MW-1R       12.10'         ONE WELL VOLUME=       1.1968 (GALS)       MW-2       12.13'         PURGE METHOD:       parastatic pump       MW-43       11.95'         BOTTOM OF WELLSIT BUILDUP:       no       MW-43       13.75'         BOTTOM OF WELLSIT BUILDUP:       no       MW-44       13.76'         PURGE DESERVATIONS:       Clear/no odor       10.00       FIELD PARAMETER MEASUREMENTS:         WELL       CONDUCTIVITY       TEMP.       NOTES:         1 1.2gal       7.75       984       12.6         2 2.4gal       7.43       965       10.3         3 3.6gal       7.2       972       11.7         4	DEPTH TO BOTTOM	I FROM TOP OF RISE	र:	12.13	(FT.)	MONITO	RING WELLS	ARE
WATER COLUMN:         7.48 (FT.)         LESS STEEL. WELL DEPTHS:           2" DIA. WELL CONSTANT:         0.16         MW-1R         12.10'           ONE WELL VOLUME=         1.1968 (GALS)         MW-2         12.13'           PURGE METHOD:         parastatic pump         MW-4         13.75'           BOTTOM OF WELL/SILT BUILDUP:         no         MW-5         15.28'           PURGE START TIME         1240         STOP TIME:         1300           PURGE START MEASUREMENTS:         SPECIFIC         WELL         CONDUCTIVITY           VOLUME         PH         ummos/cm)         (C ORF)         NOTES:           1         1.2gal         7.75         984         12.6         12.6           2         2.4gal         7.43         965         10.3         3.6gal         13.0           TOTAL VOLUME PURGED:	DEPTH TO WATER	FROM TOP OF RISER:		4.65	(FT.)	2-INCH D	DIAMETER ST.	AIN-
2" DIA. WELL CONSTANT:         0.16         MW-1R         12.10'           ONE WELL VOLUME=         1.1968 (GALS)         MW-2         12.13'           PURGE METHOD:         parastaltic pump         MW-4         13.75'           BOTTOM OF WELL/SILT BUILDUP:         no         MW-5         15.28'           PURGE START TIME:         1240         STOP TIME:         1300           PURGE START TIME:         1240         STOP TIME:         1300           PURGE START TIME:         1240         STOP TIME:         1300           PURGE START TIME:         126         2000         CONDUCTIVITY         TEMP.           VOLUME         pH         umhos/cm)         (C ORF)         NOTES:           1         1.12gal         7.75         984         12.6           2         2.4gal         7.43         965         10.3           3         3.6gal         7.2         972         11.7           4		WATER COLUMN:		7.48	(FT.)	LESS ST	EEL. WELL DI	EPTHS:
ONE WELL VOLUME=         1.1968 (GALS)         MW-2         12.13' MW-3           PURGE METHOD:         parastatitic pump         MW-4         13.75'           BOTTOM OF WELL/SILT BUILDUP:         no         MW-5         15.28'           PURGE START TIME:         1240         STOP TIME:         1300           PURGE OBSERVATIONS:         Clear/no odor         FIELD PARAMETER MEASUREMENTS:           SPECIFIC         CONDUCTIVITY         TEMP.         NOTES:           11.2gal         7.75         984         12.6           2.2.4gal         7.43         965         10.3           3.6gal         7.2         972         11.7           4		2" DIA. WELL CONS	Γ <u>ΑΝΤ:</u>	0.16	_	MW-1R	12.10'	
PURGE OBSERVATIONS: Clear/no odor  FIELD PARAMETER MEASUREMENTS:  WELL CONDUCTIVITY TEMP. VOLUME pH umhos/cm) (C OR F) NOTES: 1 1.2gal 7.75 984 12.6 2 2.4gal 7.43 965 10.3 3 3.6gal 7.2 972 11.7 4 5  TOTAL VOLUME PURGED: 3.6 gallons  GRQUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 4/16/2002 MEDIA: GROUNDWATER yes SAMPLE DATE: 1300 GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE TIME: 1300 LOCATION: MW-2 SAMPLE METHOD: Low flow, using a parastaltic pump and dedicated hosing SAMPLING OBSERVATIONS: Clear, no odor QC SAMPLES TAKEN: Duplicate samples taken, labeled MW-7 (4x 1liter amber) OTHER OBSERVATIONS/COMMENTS: none Note: specific conductivity formula to 25 degrees Celcius: SC(25)= SC(25)= SC(25)= 1000000000000000000000000000000000000	PURGE METHOD: BOTTOM OF WELL/ PURGE START TIM	ONE WELL VOLUME parastaltic pump SILT BUILDUP: E 1240	no STOP TIM	1.1968 IE:	(GALS) 1300	MW-2 MW-A3 MW-4 MW-5	12.13' 11.95' 13.75' 15.28'	
SPECIFIC CONDUCTIVITY TEMP. (C OR F) NOTES: 1 1.2gal         1 1.2gal       7.75       984       12.6         2 2.4gal       7.43       965       10.3         3 3.6gal       7.2       972       11.7         4	PURGE OBSERVAT	IONS: Clear/no c	odor					
SPECIFIC       CONDUCTIVITY       TEMP.         VOLUME       pH       umhos/cm)       (C OR F)       NOTES:         1 1.2gal       7.75       984       12.6         2 2.4gal       7.43       965       10.3         3 3.6gal       7.2       972       11.7         4	FIELD PARAMETER	MEASUREMENTS:		- 			•	
VOLUME         pH         umhos/cm)         (C OR F)         NOTES:           11.2gal         7.75         984         12.6           22.4gal         7.43         965         10.3           33.6gal         7.2         972         11.7           4	WELL			, TIVITY	TEMP.			
1         1.2gal         7.75         984         12.6           2         2.4gal         7.43         965         10.3           3         3.6gal         7.2         972         11.7           4	VOLUME	рН	umhos/cm	<u>ı)</u>	(C OR <sup>·</sup> F)		NOTES:	
2 2.4gal       7.43       965       10.3         3 3.6gal       7.2       972       11.7         4	1 1.2gal	7.75	984	L	12.6	5	<u></u>	
3 3.6gal       7.2       972       11.7         4	2 2.4gal	7.43	965	5	· 10.3	3		
4         5         TOTAL VOLUME PURGED:       3.6 gallons         GROUNDWATER OR SEDIMENT SAMPLING DATA:       SAMPLE DATE:       4/16/2002         MEDIA:       GROUNDWATER CREEK SEDIMENT       yes       SAMPLE TIME:       1300         LOCATION:       MW-2         SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing         SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note: specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured ({T-25)(0.02)}+1	3 3.6gal	7.2	972	2	11.7	7 .		
5         TOTAL VOLUME PURGED: 3.6 gallons         GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 4/16/2002         MEDIA:       GROUNDWATER yes       SAMPLE TIME: 1300         CREEK SEDIMENT	4	· · · · · · · · · · · · · · · · · · ·						
TOTAL VOLUME PURGED:       3.6 gallons         GRQUNDWATER OR SEDIMENT SAMPLING DATA:       SAMPLE DATE:       4/16/2002         MEDIA:       GROUNDWATER Uses       SAMPLE TIME:       1300         LOCATION:       MW-2       SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing         SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing       SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)       OTHER OBSERVATIONS/COMMENTS:       none         Note:       specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured       {T-25)(0.02)}+1	5_							
GROUNDWATER OR SEDIMENT SAMPLING DATA:       SAMPLE DATE:       4/16/2002         MEDIA:       GROUNDWATER CREEK SEDIMENT       yes       SAMPLE TIME:       1300         LOCATION:       MW-2         SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing         SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note: specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured {(T-25)(0.02)}+1	TOTAL VOLUME PL	JRGED: 3.6 gallon	S					
MEDIA:       GROUNDWATER CREEK SEDIMENT       yes       SAMPLE TIME:       1300         LOCATION:       MW-2         SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing         SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note:       specific conductivity formula to 25 degrees Celcius: SC(25)=	GROUNDWATER O	R SEDIMENT SAMPLI	NG DATA:		SAMPLE	DATE:	4/16/2002	<u> </u>
LOCATION:       MW-2         SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing         SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note: specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured ({T-25)(0.02)}+1	 MEDIA: GROUNI CREEK S	DWATER <u>yes</u>			SAMPLE	TIME:	1300	
SAMPLE METHOD:       Low flow, using a parastaltic pump and dedicated hosing         SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note: specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured		MW-2		<u>.</u>				
SAMPLING OBSERVATIONS:       Clear, no odor         QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note: specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured {(T-25)(0.02)}+1	SAMPLE METHOD:	Low flow, using a par	astaltic pum	p and dedic	ated hosing	g		
QC SAMPLES TAKEN:       Duplicate samples taken, labeled MW-7 (4x 1liter amber)         OTHER OBSERVATIONS/COMMENTS:       none         Note: specific conductivity formula to 25 degrees Celcius: SC(25)=       SC measured {{T-25}(0.02)}+1	SAMPLING OBSER	VATIONS: Clear, no	odor					
OTHER OBSERVATIONS/COMMENTS: none           Note: specific conductivity formula to 25 degrees Celcius: SC(25)=         SC measured {{T-25}(0.02)}+1	QC SAMPLES TAKE	EN: Duplicate	samples tal	ken, labeled	MW-7 (4x	1liter ambe	er)	
Note: specific conductivity formula to 25 degrees Celcius: SC(25)=	OTHER OBSERVAT	FIONS/COMMENTS:	none		<u></u>		······	
	Note: specific condu	ictivity formula to 25 deg	rees Celciu	s: SC(25)=	SC measu {{T-25)(0.0	ured 02)}+1		

CRA 8143 (1) AppD-GwsdForm

RECORDED BY:	Craig Bove		SAMPLE	D:	MW-4	
SAMPLED BY:	Bove	•	SAMPLIN	G EVENT/D	ATE:	4/16/2002
COMPANY:	Sevenson Environmer	- ntal	MONITOR		: MW-4	·
		-	CONDITIC	DN:	ок	<u></u>
GROUNDWATER PU	RGE DATA	PURGE D	ATE:	4/16/2002		· · · · · · · · · · · · · · · · · · ·
					NOTE: AL	L GIBSON SITE
DEPTH TO BOTTOM	FROM TOP OF RISEF	R:	13.75	5 (FT.)	MONITOR	RING WELLS ARE
DEPTH TO WATER F	ROM TOP OF RISER:		5.95	<u>(</u> FT.)	2-INCH D	IAMETER STAIN-
	WATER COLUMN:		7.8	(FT.)	LESS ST	EEL. WELL DEPTHS:
	2" DIA. WELL CONST	ANT:	0.16	<u>i</u> .	MW-1R	12.10'
	ONE WELL VOLUME	=	1.248	(GALS)	MW-2	12.13'
					MW-A3	11.95'
PURGE METHOD: BOTTOM OF WELL/S	parastaltic pump	no			MW-5	15.28'
PURGE START TIME	1050	STOP TIM	E:	1130	)	
PURGE OBSERVATI	ONS: Black, sulf	ur smell, the	n clearing	up.		
FIELD PARAMETER	MEASUREMENTS:					
		SPECIFIC				
WELL		CONDUCT	IVITY	TEMP.		
VOLUME	pH	umhos/cm	2	(C OR F)	<del>.</del> .	NOTES:
1 1.2gal	7.47	1382		12.1	·	Black,sulfur
2 2.4gal	7.47	1304		10.3	}	Lt.Blk./Sulfur
3 3.6gal	7.48	1313		12.1		Lt.Blk.,Sulfur
4				<u> </u>	<u> </u>	
5						
						· · ·
TOTAL VOLUME PUI	RGED: 3.6 gallons	5				
GROUNDWATER OF	R SEDIMENT SAMPLIN	IG DATA:		SAMPLE	DATE:	4/16/2002
						1120
MEDIA: GROUND CREEK S	EDIMENT	-		SAMPLE		1150
		-				
LOCATION:	MW-4					<u> </u>
SAMPLE METHOD:	Low flow, using a para	astaltic pum	p and dedic	ated hosing	, J	
		ky water eu	Ifuric email	then it clea	ared upp so	me
SAIVIFLING UDSERV	ALIUNS. DIACK IIIUI	Ny Waler, Su			aca upp 50	
QC SAMPLES TAKE	N: No	•				
OTHER OBSERVATI	ONS/COMMENTS:	none				
	<u></u>			SC measu	ired	
Note: specific conduc	tivity formula to 25 degr	ees Celcius	: SC(25)=	{{T-25)(0.0	02)}+1	
CRA 8143 (1) AppD-GwsdForm						

RECORDED BY:	Craig Bove		SAMPLE	ID:	MW-5	
SAMPLED BY:	Bove		SAMPLIN	G EVENT/	DATE:	4/16/2002
COMPANY:	Sevenson Environi	mental	MONITOF		L: MW-5	
<u></u>			CONDITIC	ON:	OK	
GROUNDWATER PU	RGE DATA	PURGE D	DATE:	4/16/200	2	
					NOTE: A	LL GIBSON SITE
DEPTH TO BOTTOM	FROM TOP OF RIS	SER:	15.28	3 (FT.)	MONITO	RING WELLS ARE
DEPTH TO WATER F	ROM TOP OF RISI	ER:	6.12	<u>?</u> (FT.)	2-INCH E	DIAMETER STAIN-
	WATER COLUMN	:	9.16	6 (FT.)	LESS ST	EEL. WELL DEPTHS:
	2" DIA. WELL CON	NST <u>ANT:</u>	0.16	<u>}</u>	MW-1R	12.10'
PURGE METHOD:	ONE WELL VOLU	ME=	1.4656	6 (GALS)	MW-2 MW-A3 MW-4	12.13' 11.95' 13.75'
BOTTOM OF WELL/S PURGE START TIME PURGE OBSERVATIO	ILT BUILDUP: 1140 DNS: Light ru	no STOP TIN Ist colored	ME:	122	MW-5 0	15.28'
FIFI D PARAMETER						
		SPECIFIC	5			
WELL		CONDUC	TIVITY	TEMP.		
VOLUME	pH	umhos/cn	<u>n)</u>	(C OR F)	<u>,</u>	NOTES:
1 1.5	6.7	188	5	13.	.3	Rust colored
2 3	6.8	192	5	· 10.	./	Lt.rust colored
3 4.5	6.7	190	1		.0	
5				· · · · · · · · · · · · · · · · · · ·		
TOTAL VOLUME PUF	RGED:	4.5				
GROUNDWATER OR		PLING DATA:		SAMPLE	DATE:	4/16/2002
MEDIA: GROUND	WATER <u>yes</u>			SAMPLE	T <u>IME:</u>	1220
CREEK SI						
LOCATION:	MW-5					
SAMPLE METHOD:	Low flow, using a	parastaltic pur	np and dedic	cated hosin	ıg	
SAMPLING OBSERV	ATIONS: Clear /	no odor				
QC SAMPLES TAKE	N: Yes, M	IS/MSD (6 x 1	liter amber	)		
OTHER OBSERVATION	ONS/COMMENTS:	none	· · · · · ·			
· · · · · · · · · · · · · · · · · · ·						<u></u>
Note: crocific conduct	livity formula to 25 c	laarees Celciu	IS SC(25)-	SC meas	ured 02)\+1	
invole. Specific conduct	uvity formula to 25 t			11-20/0		

	·						
RECORDED BY:	Craig Bove	_	SAMPLE	ID:	Manhole '	'B"	
SAMPLED BY:	Bove		SAMPLIN	G EVENT/C	DATE:	4/16/2002	
COMPANY:	Sevenson Environme	ntal	MONITOF		: Manhole I	3	
			CONDITIC	ON:	ОК		<u> </u>
GROUNDWATER PU	IRGE DATA	PURGE D	ATE:	4/16/2002	2		_
		_	•	( )	NOTE: AL	L GIBSON SITI	E
DEPTH TO BOTTOM	FROM TOP OF RISE	R:		(FT.)	MONITOR	RING WELLS A	RE
DEPTH TO WATER F	FROM TOP OF RISER	:	14	<u>+</u> (FT.)	2-INCH D	IAMETER STAI	N-
	WATER COLUMN:			(FT.)	LESS ST	EEL. WELL DEF	PTHS:
	2" DIA. WELL CONS	TANT:	0.16	<u>5</u>	MW-1R	12.10'	
	ONE WELL VOLUME	=		(GALS)	MW-2	12.13'	
	No purge grab sam	ple needed			MW-A3 MW-4	11.95	
BOTTOM OF WELL	SILT BUILDUP:	no		· ·	MW-5	15.28'	
		STOP TIM	IE:	dna			
PURGE OBSERVATI	ONS: dna						
FIELD PARAMETER	MEASUREMENTS:						
		SPECIFIC					
WELL	-11	CONDUC		TEMP.		NOTER	
VOLUME	<u>pH</u>	umnos/cm	<u> </u>	<u>(UUKF)</u>	<del>.</del>	NUTES:	
1	8.3	600	J	12.30			
2				<u> </u>		<u> </u>	
3							
5			. <u>.</u>				
		<b>`</b>					
TOTAL VOLUME PU	RGED:	J					
	·····						
GROUNDWATER O	R SEDIMENT SAMPLI	NG DATA:		SAMPLE	DATE:	4/16/2002	
- MEDIA: GROUND		•		SAMPLE	TIME:	930	
CREEK S					· <u></u>		
	Mashala D						
			· .	<u></u>		<del>,</del>	
SAMPLE METHOD:	Grab sample, using a	disposable	teflon baile	r			
	ATIONS: Clear as	odor					
SAMPLING OBSERV	Clear, no						
QC SAMPLES TAKE	N:	· · · · · · · · · · · · · · · · · · ·					
		no					
UTHER UDSERVAT		10					
			- · · ·		1		
Note: specific conduc	stivity formula to 25 dec	rees Celcius	s: SC(25)=	SC measu	ured	_	
CRA 8143 (1) AppD-CwedForm	Survicy Ionniala to 20 deg			((. 20)(0.			
and the second second second							

# CHARLES GIBSON SITE NIAGARA FALLS, NEW YORK NYSDEC REGISTRY NO. 9-32-063 GROUNDWATER SAMPLING FIELD PARAMETERS FIELD INSTRUMENTATION CALIBRATION FORM

DATE: 4/16/2002	SEMI-ANNUAL SAMPLING EVENT:	· · · · · · · · · · · · · · · · · · ·
PERSON CALIBRATING METER	RS: Craig Bove	
pH METER USED: MANUFA	CTURER: Corning	
IDENTIFI	CATION/CONTROL NUMBER:	• •
CALIBRA	TION STANDARDS USED:	
	STANDARD 7.00 METER READ: 7.01	
	STANDARD 4.00 METER READ: 4.00	
METER CALIBRATIC	STANDARD 10.00 METER READ 10.00	
SPECIFIC CONDUCTIVITY MET	rer used:	
MANUFA	CTURER: Oakton	• .
MODEL:		•
CALIBRA	TION STANDARDS USED:	
	STANDARD 0 READ:	
	(STANDARD U USED:AIR,WATER)	•
	STANDARD 1413 READ: 1413	
METER CALIBRATIO	ON COMMENTS:	
· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·		• •
THERMOMETER USED:	TYPE: Digital	· ·
	MANUFACTURER: Fisher Scientific	•
COMMEN	IDENTIFICATION/CONTROL NOMBER. 14-048-12	
	SPECIFIC CONDUCTIVITY METER TEMPERATURE ?) yes	
OTHER:		
OTHER INSTRUMENTS USED:	TYPE: Geo Pump 2	
	MANUFACTURER: Geo Tech Environmental Eq.	
		•
CALIBRA		
OTHER CALIBRATION COMME	NTS: Parastaltic Pump	
	•	
· · · · · · · · · · · · · · · · · · ·		

E V R	VERN 128 Long Hill Cross Ro Shelton CT 06484	DAmpled By Bad CRAIG Boy Statewoon	E E E E V	6 D	e uto	CHAIN L Servi	 OF CU: دیخ	STODY R	ECORD		PAGE	OF	NO.	
SEI TL J .IEM	Tel: (203) 929-8140 Fax: (203) 929-8142 IOB #: OLIN Corp, NT: 03-70-70-Charl	2749 Lock NING ART Full 716 294	10431 0431	4 14	305	PST MISC		200 DLIN CORPOR NIKE WALKE DLIN-CHARLE	912 RATION R GIBSON	2	05/08/2	002	Ø	Sevel Results to: M.K. WALKER SEVENSON ENV. 2749 Lockpart R
SO1	IECT ID:							BOT	IDE IMPEAN	DEPRESERVA	TION			14305
ĽF	PROJECT MGR:	<u> </u>	•			GL-100	i							Thurk You
Rl	JSH 🗌 YES 📈 NO	DUE DATE		22.50										
TE T	CLIENT SAMPLEID	A DATE/ TIME SAMPLED		PID.		¥/@	Y / N	Y/N	Y / N	Y / N	Y / N	Y/N	Y/N	EBANPLE REMARKS
	MUNITALE B	4-16-02 0930	AQ	01	N	2			· .	· ·				
	MW-A3	4-16-92	ta	02	N	2								
.,	MW-4	4-16-02 1130	AQ	03	$\mathcal{N}$	2								
$\sum_{i=1}^{n}$	1KW-5	4-16-02	ta	OH	Y	6								MS/ WS.D
	Huu-2-	4-16-02	AQ	65.	μ	2							, , , , , , , , , , , , , , , , , , ,	
	mw-lR	4-16-02 1400	AQ	06	N.	2			1					Cover 1. 11, 3°C
<u>,                                     </u>	MW-7	4-16-02 1500	AQ	07	N	2					+			Couler 2- 13,200
	Fald bluet	4-16-02.	ta	68		2	2 o 3 p noons	hives m	<u>4</u> 3'	"PAS	CEN	DAD	OAB	
							1.		17-02			שאח	DCH	EN"
			·						•					· ·
	MATRIX CODES				DATE	/ TIME	BOTTLES REC'D	BY		DA	TE / TIME		NA ON BAMPE (RECEIPT	
	AIR S - SOIL	SIGNATURE			. <u></u> .	•	·	SIGNATURE		· · · · · ·				S INTACT 🗌 CUSTODY SEALS

	COMPLE DRUM W OIL	IX ASTE	W - 0 - FB -	WIPE OTHER FIELD BLANK	SAMPLES COLLE	BOVE	•••
ł		·.	<b>TB –</b>	TRIP BLANK		aigk. Bo	v
_							

122 /07001

••

BOTTLES INTACT	CUSTODY SEALS
	SEALS INTACT

DATE / TIME RECEIVED IN LAB DATE / TIME DATE / TIME PRESERVE 4.16.02/1530 Alex Yawaranski 0+/17/02 09:45 CHILLED SIGNATURE C. Younsaski 🔲 SEE REMARKS

# APPENDIX C

# QUARTERLY SITE INSPECTION FORMS

January - June 2002

CHARLES GIBSON SITE (PINE AND TUSCARORA SITE) NIAGARA FALLS, NEW YORK

NYSDEC Registry No. 9-32-063

THIS FORM TO BE USED FOR	QUARTER		K SHE INSPECTIONS		
DATE: 6/28/2002	TIME:	4:00 PM			
INSPECTOR: Michael W	/alker		Sevenson		
WEATHER: Sunny and	d Hot 85 F				•
REASON FOR INSPECTION (Q	UARTERL	Y OR OTHER <u>):</u>	Quarterly Inspection		
			• •		
GENERAL SITE CONDITIONS: (Note: For general sit subsidence (sinking), and rodent burrows. missing signs or evide	e condition ponded w For site se ence of var	U=UNACCEPTAE s note existence of t ater, stressed vegeta curity, note absence ndalism. Note any ot	BLE A=ACCEPTABLE bare areas (number,size), cracks, ation, soil discoloration or seeps, of locks, gates open or damaged, her unusual occurences.)		
		COM	IENTS		
ACCESS ROAD	А	· · ·			
COVER VEGETATION	A	·			
TREES	A				
LITTER	A		· ·		
EROSION (CAP)					
EROSION (BANK)	A			•	
SECURITY:	A				
FENCE/I OCKS	Α	e e e e e e e e e e e e e e e e e e e			
PIEZOMETERS/LOCKS	· A		· · · · · · · · · · · · · · · · · · ·		
MONITORING WELLS/LOCKS	Δ	 	· · · · · · · · · · · · · · · · · · ·		
MANHOLES/LIDS/LOCKS	A				
ELECTRICAL PANEL	A				
ADDITIONAL COMMENTS:	The pine not touch company	trees under the pow hing yet, but will even whow about this situ	er linesare growing close to the wires, itually. We may need to let the power nation.		
-	The sign illegibility	s that are posted on	the fence are weathered to the piont of		
		,,,,			
· ·					

THIS FOF	RM TO BE USED FOR	QUARTER	LY AND ALL OTHER	SITE INSPECTIONS	· · · · · · · · · · · · · · · · · · ·
DATE:	4/30/2002	TIME:	10:00am		
INSPECT	OR: M. Walker	•	_COMPANY:	Sevenson Environmental Services	
	D.			·	
WEATTE	Π.				
DEACON	FOR INSPECTION (O			NVSDEC appual inspection	
REASON	FOR INSPECTION (Q	UARIERL	r OR OTHER <u>)</u> .	NTSDEC annual inspection	
•	· · ·				
GENERA	L SITE CONDITIONS: (Note: For general sit subsidence (sinking), and rodent burrows. missing signs or evid	e condition ponded w For site se ence of var	U=UNACCEPTABL s note existence of ba ater, stressed vegetation curity, note absence of ndalism. Note any othe	E A=ACCEPTABLE re areas (number,size), cracks, on, soil discoloration or seeps, f locks, gates open or damaged, r unusual occurences.)	· · · ·
		· ·	COMME	NTS	
ACCESS	ROAD	<u>A</u>			
COVER	/EGETATION	Α			· · ·
TREES		Α			
LITTER		<u>A</u>	·		
EROSIO	N (CAP)	Α		· · · · · · · · · · · · · · · · · · ·	·
EROSIO	N (BANK)	. <u>A</u>	·	·	
SECURIT	TY:		•		
FENCE/L	OCKS				
PIEZOME	ETERS/LOCKS	A		· ·	
MONITO	- RING WELLS/LOCKS	A	· ·		
MANHOL	ES/LIDS/LOCKS	A			
ELECTRI	ICAL PANEL	<u>A</u>		· · ·	
ADDITIO	HAL COMMENTS:	Met with	Mike Hinton of the NY	SDEC. Performed an overall site	
walk and	inspection including or	ening and	observing the water le	vel in Manhole B, and opening and	
abacking	the flow totalizer in the		anal. He pointed out t	hat it looks as if some settling	
CHECKING	the now totalizer in the	electrical p	anei. The pointed out i		
may have	e occurred between P-5	and P-6.			
		•			
· · ·					
	·				· .

THIS FORM TO BE USED FOR	QUARTER	LY AND ALL	OTHER S	ITE INSPECTI	ONS	
DATE: <u>4/5/2002</u>	TIME:	1200		-		
INSPECTOR: C. bove	2003. •			Sevenson		
		- · ·	• •			
	- , 4			•		
			<b>.</b>			
REASON FOR INSPECTION (Q	UARTERLY	OROTHER	):	Inspect tence	repair	
· · · · · · · · · · · · · · · · · · ·						· · · · ·
GENERAL SITE CONDITIONS: (Note: For general si subsidence (sinking) and rodent burrows. missing signs or evid	te conditions , ponded wa For site sec ence of van	U=UNACCI s note existen iter, stressed curity, note ab dalism. Note	EPTABLE ce of bare vegetation sence of lo any other o	A=ACCEPTA areas (numbe , soil discolora ocks, gates op unusual occure	BLE er,size), cracks, tion or seeps, en or damaged, ences.)	
		•		TS		
ACCESS ROAD	А	• *			· .	• • • •
COVER VEGETATION	A		•		· · · · · · · · · · · · · · · · · · ·	<b>—</b>
TREES	A				· ·	<del>-</del> .
LITTER	A					
EROSION (CAP)	À			•		<b>—</b>
EROSION (BANK)	A			•	·	
SECURITY:	· · ·					
FENCE/LOCKS	Α	•			•	
PIEZOMETERS/LOCKS	A				- <u>-</u>	<b>—</b> .
MONITORING WELLS/LOCKS	A			· · · · · · · · · · · · · · · · · · ·		<b></b>
MANHOLES/LIDS/LOCKS	Α		· · · ·			
ELECTRICAL PANEL	Α	- · -				
ADDITIONAL COMMENTS	The dame	a to the ner	imotor fon	ca has haan ri	anaired and is ance	again secure
	<u>- me dame</u>	ige to alle per			sparred and is once	
	•			· · · · · · · · · · · · · · · · · · ·	<u>.</u>	
		:		······································		
·		<u> </u>		····		
			·	,		
	· ·					
			<u> </u>			
CRA 9142 (1) Amp D I D						
Lange Lange Chapping Supprom						

THIS FORM TO BE USED FOR	QUARTERL	Y AND ALL C	OTHER SI	TE INSPECTION	NS		
DATE: <u>3/28/2002</u>	TIME:	8:00 AM			•		
INSPECTOR: Walker		COMPANY:		Sevenson			
						•	
WEATHER:							
REASON FOR INSPECTION (Q	UARTERLY	OR OTHER):	· · ·	Call from Ben B	rayley	•	
		•				•	
GENERAL SITE CONDITIONS		U=UNACCE	PTABLE	A=ACCEPTABL	E		
(Note: For general sit subsidence (sinking), and rodent burrows.	te conditions ponded wat For site sec	note existenc ter, stressed v urity, note abs	ce of bare a regetation, sence of lo	areas (number,s soil discoloratio cks, gates open	size), cracks, n or seeps, or damaged,		
missing signs or evid	ence of vand	dalism. Note a	iny other u	nusual occurent	ces.)		•
•		C	OMMENT	S	· ·	•	
ACCESS ROAD	A				· · · · ·		
COVER VEGETATION	Α					•	
TREES	<u>A</u>				·		•
LITTER	<u>A</u>			. <u> </u>	··· · · · · · · · · · · · · · · · · ·		
EROSION (CAP)	Α				•		
EROSION (BANK)	<u>A</u>						
SECURITY:	· .			•			
FENCE/LOCKS	U .	<u> </u>	Vind dama	ge to 4 sections	of fence + posts		•
PIEZOMETERS/LOCKS	A	- -	·				•
MONITORING WELLS/LOCKS	<u>A</u>			· .			
MANHOLES/LIDS/LOCKS	Α						
ELECTRICAL PANEL	<u>A</u>	- · <u>·</u>		····			
ADDITIONAL COMMENTS:	Fence dar	nage on south	n eastern s	ide of site facing	NF Blvd.		
I met with Mark Fox of Fox Fenc	e to get repa	irs done. A cre	ew will be	there on Friday I	morning, 3-29	• •	
to set new posts and rehang the	fence.						
					······································		
		· · · · · ·		•			
CRA 8143(1) AppD-InspForm							

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	Walker		Sevenson	. <u> </u>	-
VEATHER:		•		· .	
		•			
REASON FOR INSPECTION (C	UARTERL	Y OR OTHER	: Quarterly Inspection		
	· .			· · · · ·	
SENERAL SITE CONDITIONS: (Note: For general si subsidence (sinking) and rodent burrows. missing signs or evic	ite conditior ), ponded w For site se dence of var	U=UNACCI is note existen ater, stressed curity, note ab ndalism, Note	PTABLE A=ACCEPTABLE ce of bare areas (number,size), cra regetation, soil discoloration or see sence of locks, gates open or dama any other unusual occurences.)	acks, aps, aged,	
ACCESS ROAD	А				
COVER VEGETATION	A		· · · · · · · · · · · · · · · · · · ·		
<b>TREES</b>	A				
ITTER	A		• •	······································	
EROSION (CAP)	A				
EROSION (BANK)	А			· · · ·	
SECURITY:	А				
	•	• •	· · · . ·		
	<u>A</u>				
MONITORING WELLS/LOCKS	<u>A</u>		<del></del>		
MANHOLES/LIDS/LOCKS	<u>A</u>				
ELECTRICAL PANEL	A		· · · · · · · · · · · · · · · · · · ·		
ADDITIONAL COMMENTS.	۰ <u></u>			· · · · · ·	
· · · ·					• •
·		•			
			· .		
		<u> </u>			
			· · · · · · · · · · · · · · · · · · ·	;	
		•			
		<u> </u>	<u></u>		
		<u>.</u>	······································		•

# APPENDIX D

# QUARTERLY GROUNDWATER ELEVATION / PUMPING FORMS

January - June 2002

CHARLES GIBSON SITE (PINE AND TUSCARORA SITE) NIAGARA FALLS, NEW YORK

NYSDEC Registry No. 9-32-063

# CHARLES GIBSON SITE NIAGARA FALLS, NEW YORK NYSDEC REGISTRY NO. 9-32-063 GROUNDWATER ELEVATION FORM

DATE: <u>6/28/2</u>	002	_TIME:3:00 P	M		:
INSPECTOR:	MikeWalker	_COMPANY:	Sevenson	 	
WEATHER:	Sunny,Hot 85F				
PIEZOMETER	RISER ELEVATION (INSIDE CASING)	DEPTH TO WATER (FT.)	WATER ELEVATION	COMMENTS	
P-1	572.72	6.15	566.57	· 	
P-2	574.89	9.34	565.55	<u> </u>	
P-3	574.16	6.8	567.36		• •
P-4	576.14	10.75	565.39		•.
P-5	575.05	6	569.05		
P-6	578.28	10.25	568.03	·	
MANHOLE A	575.22	11.1	564.12	•••	
MANHOLE B	577.34	13.15	564.19	<u> </u>	
Niagara Tuscarora in Manhole B (and water distance fro (Note: riser elevat	A Road sanitary sewer line by extension Manhole A) m the manhole rim should ions (re)surveyed Septem	by a float controlled s below an elevation of not be less than 12.4 ber, 1999 by Wendel S NS: All piezo	sump pump which m 565 ft. above mean 1 ft. at Manhole B a Surveyors)	aintains groundwat sea level. Therefo nd 10.22 ft. at Mant es are in good conc	er elevation re, Depth to nole A.
, <u>, , , , , , , , , , , , , , , , </u>					
·					

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CRA 8143 (1) AppD-GwleForm

# CHARLES GIBSON SITE NIAGARA FALLS, NEW YORK NYSDEC REGISTRY NO. 9-32-063 GROUNDWATER ELEVATION FORM

DATE: 2/20/2002		TIME: 1130	)	
NSPECTOR:	MikeWalker	_COMPANY:	Sevenson	· . · · ·
WEATHER:	Cloudy 50 F	·		· · · · · · · · · · · · · · · · · · ·
•	· · · ·			
PIEZOMETER	RISER ELEVATION (INSIDE CASING)	DEPTH TO WATER (FT.)	WATER ELEVATION	COMMENTS
P-1	572.72	7	565.72	
P-2	574.89	9.3	565.59	
P-3	574.16	6.55	567.61	
P-4	576.14	10.4	565.74	
P-5	575.05	5.2	569.85	
P-6	578.28	10_	568.28	
	575.22	12.2	563.02	
MANHOLE B	577.34	14.3	563.04	•

(Note: Manhole A empties into Manhole B by gravity feed and Manhole B is pumped automatically to the Town of Niagara Tuscarora Road sanitary sewer line by a float controlled sump pump which maintains groundwater elevations in Manhole B (and by extension Manhole A) below an elevation of 565 ft. above mean sea level. Therefore, Depth to water distance from the manhole rim should not be less than 12.41 ft. at Manhole B and 10.22 ft. at Manhole A. (Note: riser elevations (re)surveyed September, 1999 by Wendel Surveyors)

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ADDITIONAL COMMENTS/OBSERVATIONS:

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alpha - BHC



beta - BHC



gamma - BHC



delta -BHC

