Olin

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February 10, 2005

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

Subject: **Charles Gibson Site**
NYSDEC Registry No. 9-32-063
Thirteenth Annual Report - 2005

Dear Mr. Hinton:

As requested by NYSDEC in September 2005, enclosed is one hard copy and one electronic version (in Adobe PDF format) of the subject report. This report summarizes the activities performed during 2005 for the operation and maintenance of the containment remedy for the site and the ground water monitoring program outside of the containment area. Comments received from NYSDEC in March 2005 have been incorporated in this report where appropriate.

The following is a summary of major activities that occurred during 2005.

- Semi-annual groundwater sampling events were performed during April and September 2005.
- Annual sediment sampling was performed in September.
- Annual sampling and analysis of leachate was completed in April.
- There were 51,115 gallons of leachate discharged to the City of Niagara Falls Wastewater Treatment Facility during 2005.
- NYSDEC completed a site inspection on April 19, 2005.

In past years the Semi-Annual Ground Water and Annual Sediment Sampling Report had been included in the Annual Report as an appendix. To eliminate redundancy of information and streamline reports, the data for the Semi-Annual Ground Water and Annual Sediment Sampling, collected during September 2005 has been incorporated as part of the Annual Report. As requested, the Data Usability Summary Report is also included in this report.

At this time, Olin requests NYSDEC reconsider Olin's 2004 request to discontinue hexachorobenzene (HCB) monitoring in ground water wells. This request is based on the Site never having any detections of this compound in the groundwater. NYSDEC had commented it was awaiting the results of the April 2005 leachate sampling before making a decision. The April 2005 leachate results had no detectable concentrations of HCB.

Please call me at 423/336-4381 to discuss any information concerning this report.

Sincerely,
OLIN CORPORATION

Lorraine M. Miller

Lorraine M. Miller
Principal Environmental Specialist

dm:sites/P&T(Gibson)/ENV4060/O&M/Thirteenth Annual Report 2005

cc: C. M. Richards via e-mail
Tom Tirabassi via e-mail
Mike Walker via e-mail
Matthew Forcucci – NYSDOH/ Buffalo

THIRTEENTH ANNUAL REPORT

2005

CHARLES GIBSON SITE

(PINE AND TUSCARORA SITE)

NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063

PREPARED BY OLIN CORPORATION

FEBRUARY 2006

Introduction

This is the Thirteenth Annual Report from Olin Corporation (Olin) for the Charles Gibson Site (aka Pine and Tuscarora Site), located in Niagara Falls, New York. This report summarizes activities performed during 2005 for the operations and maintenance of the containment remedy for the Site and the ground water monitoring program outside of the containment area. In past years the semi annual report had been included in the appendix as a separate report. To eliminate redundancy of information and to streamline reports, the data for the Semi-Annual Ground Water and Annual Sediment Sampling, collected during September 2005 has been incorporated as part of the Annual Report. As requested, the Data Usability Summary Report is included as Appendix 1. The analytical data has been validated and found to be acceptable. Field logs for the September 2005 sampling event are attached as Appendix 2.

Background

The Charles Gibson Site (Site) is located approximately four miles east of downtown Niagara Falls, New York. The Site comprises an area of approximately two acres of land in Niagara County bordered on the south by private property, on the west by Tuscarora Road and on the north and east by Cayuga Creek. The Site is a fully remediated waste site currently surrounded by a fence. A Site map with sampling locations has been added to this report as Figure 1.

Construction of the remedy on the Site concluded in 1990. The remedy consisted of rerouting Cayuga Creek around and away from the waste, installation of a fully circumscribed soil-bentonite slurry wall barrier and installation of a double flexible membrane liner cap with a perimeter collection drain system. The first year of operations and maintenance (O&M) of the containment remedy for the Site and the ground water monitoring program began in 1993.

Waters collected in the Site perimeter collection drain system are managed by direct discharge to the City of Niagara Falls Wastewater Treatment Facility. The Site is classified as a commercial/small industrial/residential user (CSIRU) and does not require a permit.

Reports are submitted as appropriate to the New York State Department of Environmental Conservation (NYSDEC). Records of all environmental monitoring are maintained by Olin Corporation. These records are available for review and inspection by the State upon reasonable notice.

Discussion

The Stipulation and Consent Judgment, CIV 83-1400, and its modification, CIV 83-1400C, (the Agreement) listed the following elements to be included in the required remediation plan for the Site (Plan C):

1. Quarterly ground water monitoring for 30 years (revised in 1997 to semiannual);
2. Sample collection and analysis of creek water and of creek sediments annually for 30 years. During 1993 the creek water sampling was discontinued and sediment sampling was modified to collection during the low flow/dry season;
3. Establishment of an upward hydraulic gradient within the containment area, unless Olin can demonstrate by clear and convincing evidence the establishment of the same is unnecessary or inappropriate to the accomplishment of the goals set forth in paragraph 4(a) of the stipulation;
4. Acquisition by Olin of easements which would permit the required monitoring;
5. Provisions for protection of the Site from disturbance which might increase the threat of contamination migration, including regular inspection of the site;

6. Provisions for the design and implementation of a contingency plan in the event that migration of the contaminants occurs despite the implementation of the containment remediation plan;
7. Containment or removal of the contaminants deposited or caused to be deposited by Olin which have migrated off-Site consistent with the goals of paragraph 4(a);
8. Fiscal arrangements, guarantees, or the provision of financial assurances sufficient to ensure that Olin possess the financial ability to perform the containment remedial plan and monitoring. Olin's performance has been demonstrated and the financial assurance notification is no longer required.

The Agreement includes a provision in the event that after seven years following the delivery of a Release of Liability (issued December 15, 1992), Olin demonstrates that conditions at the Site are such that the stated frequency or duration of the requirements of elements 1, 2, or 5 are no longer necessary to determine whether the remediation is effective, Olin may reduce the frequency and duration of such monitoring or inspections. Modifications are noted in the discussion above.

The approved Operation and Maintenance Manual (O&M Manual (June 2000)) provides details on the O&M of the containment remedy on the northern portion of the site and includes provisions for site control and environmental monitoring. The O&M Manual (June 2000) reflects current activities being performed for the operation and maintenance of the containment remedy for the Site and the ground water monitoring program outside the containment area. The yearly inspection and sampling schedule for the Site is attached for reference (Attachment 1).

The O&M Manual (2000) addresses the required elements as set forth in the Agreement. Element 4, acquisition of easements, is a completed task. Element 6, a contingency plan, is addressed in the O&M Manual. Element 7, containment of the contaminants, has been achieved and is being monitored for effectiveness. Element 8, provision of financial assurance, is being met. This report discusses elements 1, 2, 3, and 5 of the Agreement.

Element 1) **Semi-annual ground water monitoring.** Monitor wells MW-A3, MW-1R, MW-2, MW-4, and MW-5 were sampled on April 5 and on September 7 for the site compounds alpha-BHC, beta-BHC, gamma-BHC, delta-BHC. Analyses were performed using SW-846 Method 8080. During 2005, with one exception, sampling results for all monitored compounds in all wells were undetected (U). The exception was a September estimated value, below detection levels, for beta-BHC (.036J) in MW-4. Since 2000, monitor wells are monitored for hexachlorobenzene (HCB) biennially. The next HCB sampling is scheduled for September 2006. NYSDEC has been asked to reconsider an Olin request to discontinue the HCB monitoring. HCB has not been detected in any ground water samples.

Semi-annual ground water monitoring data summary from 1997 through 2005 is provided in Table 1. The 1997 time period represents the start of the semi-annual events. Since 2003, concentrations of site compounds being monitored are undetected or estimated at concentrations below the detection levels in all monitor wells.

Element 2) **Annual creek sediment monitoring.** Annual sediment sampling was performed on September 7, 2005. Upstream data were similar to 2002 and 2003 levels. A field duplicate for the upstream location was not analyzed due to lab error. Downstream sediment data for 2005 is not available as there was no sediment in the trap at the time of collection. Annual sediment sampling results for the project-to-date are summarized in Table 2. Sediment monitoring was modified in 2001 from collecting a grab sample to placement of sediment traps at the upstream and downstream locations. Sediment traps were installed for the first time during the April 2001 sampling event. Evaluating results from sediment trap monitoring will require collecting additional data over several monitoring events.

Element 3) **Establishment of an upward (inward) hydraulic gradient.** Quarterly ground water elevations were monitored at piezometer pairs P1/P2, P3/P4, and P5/P6 to maintain an inward hydraulic gradient in the containment area of the site. The data collected during each

event is recorded on the Sampling Field Form. An evaluation of data from the piezometer pairs at the Site indicates that an inward hydraulic gradient is being maintained in the containment area of the site. Water level elevation in Manhole A and Manhole B are monitored quarterly (Table 3).

There were 51,115 gallons of leachate discharged to the POTW during 2005. A summary of yearly discharge volumes for the Site is provided in Table 4. Since 1991 a total of 928,790 gallons of leachate were removed from the Site. Annual leachate sampling and analysis for BHC's began in 2000 to replace the POTW sampling that was previously performed. HCB is monitored every five years (started in 2000). The sampling location is Manhole B. Analytical results for 2005 are provided in Table 4. The next scheduled sampling is 2010. Quarterly Ground Water Elevation Forms are included in Appendix 3.

Element 5) **Site protection.** Quarterly site inspections were conducted to identify any potential problems with the physical structures and to ensure that the remedial measure components are operating effectively. Routine site maintenance included fertilizing, mowing, weeding and mulching the site area.

Other non-routine repairs completed in 2005 include: replacing the man gate that was broken by vandals during October. General site conditions and security status were noted on the Site Inspection Forms and addressed as appropriate (Appendix 4).

Conclusions/Recommendations:

The work performed for the Site during 2005 was reviewed and found to be in accordance with the approved O&M Manual (2000). Ground water monitoring indicates there are no increased concentrations of the Site compounds being monitored. Evaluation of the ground water data generated during the 2005 monitoring year indicates that the containment remedy is effective. An evaluation of data from the piezometer pairs at the Site indicates that an inward hydraulic gradient is being maintained in the containment area of the site. Data from 2005 sediment trap monitoring were similar to the 2002 and 2003 monitoring.

Olin requests NYSDEC reconsider Olin's 2004 request to discontinue hexachorobenzene (HCB) monitoring in ground water wells. This request is based on the Site never having any detections of this compound in the groundwater. NYSDEC had commented it was awaiting the results of the April 2005 leachate sampling before making a decision. The April 2005 leachate results had no detectable concentrations of HCB.

FIGURE 1

SITE MAP

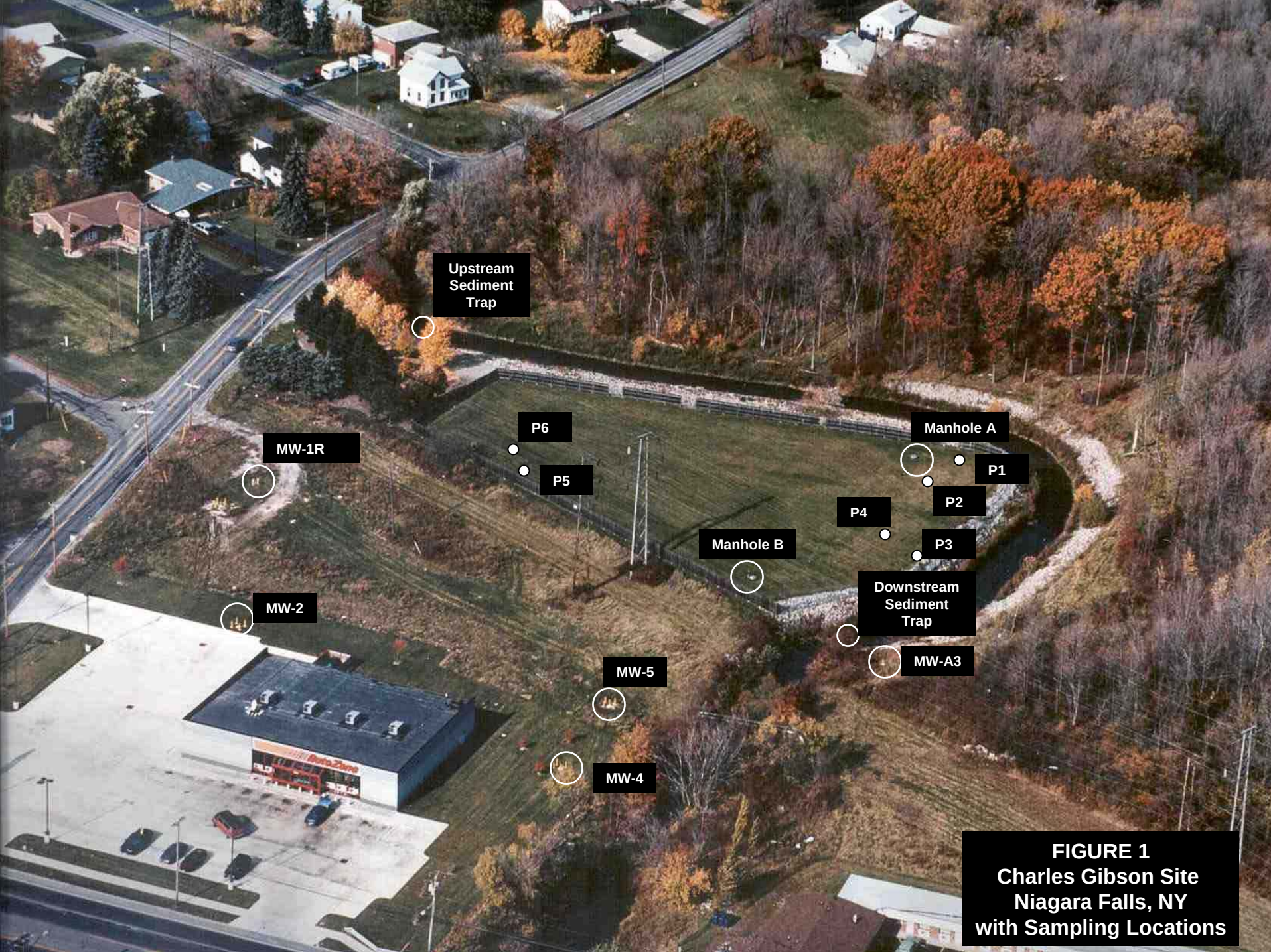

FIGURE 1
Charles Gibson Site
Niagara Falls, NY
with Sampling Locations

TABLE 1
CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK

ANALYTICAL SUMMARY
SEMI-ANNUAL GROUND WATER SAMPLING

MONITOR WELL : MW-A3

	1997	1998		1999		2000		2001		2002		2003		2004		2005	
Parameter	**September***	**April**	**October**	**April**	**October**	**May**	**October**	**April**	**October**	**April**	**September**	**April**	**September**	**April**	**September**	**April**	**September**
Alpha-BHC	0.059	.016J	0.12	.0043J	-	.050U	.054U	.050U	.050U	.050U	.029J	.048U	.035J	.048U	.047U	.047U	.048U
Beta- BHC	.028J	.012J	.0092J	.053U	-	.012J	.054U	.050U	.050U	.050U	.016J	.048U	.059U	.048U	.047U	.047U	.048U
Gamma-BHC	.050U	.050U	.024J	.053U	-	.050U	.054U	.050U	.050U	.050U	.050U	.048U	.059U	.048U	.047U	.047U	.048U
Delta-BHC	.050U	.050U	.053U	.053U	-	.050U	.054U	.050U	.050U	.050U	.050U	.048U	.059U	.048U	.047U	.047U	.048U
Hexachlorobenzene	10U	10U	-	11U	-	11U	NR	10U	NR	NR	NR	NR	NR	10U	NR	NR	NR

MONITOR WELL : MW-1R

	1997	1998		1999		2000		2001		2002		2003		2004		2005	
Parameter	**September***	**April**	**October**	**April**	**October**	**May**	**October**	**April**	**October**	**April**	**September**	**April**	**September**	**April**	**September**	**April**	**September**
Alpha-BHC	0.058	0.085	0.18	0.072	0.057	.028J	.054U/.052U	.050U/.050U	.099/.060	.070/.061	.055/.030J	.014J/.015U	.052U	.049U/.049	.026J/.048U	.040J/.049U	.047U/.048U
Beta- BHC	0.053	0.14	0.2	0.13	0.08	0.12	.038J/.052U	.012J/.050U	.19/.15	.10/.050U	.13/.095	.053/.052	.052U	.049U/.065	.090/.024J	.050U/.049U	.047U/.048U
Gamma-BHC	.050U	.050U	.028J	.053U	.050UJ	.051U	.054U/.052U	.050U/.050U	.063J/.058U	.050U/.050U	.055U	.049U	.052U	.049U/.049U	.048U/048U	.036J/.049U	.047U/.048U
Delta-BHC	.050U	.0042J	.053U	.0054J	.050U	.051U	.054U/.052U	.050U/.050U	.061U/.058U	.050U/.053	.055U	.049U	.052U	.049U/.049U	.048U/.048U	.050U/.049U	.047U/.048U
Hexachlorobenzene	10U	10U	11U	11U	10U	10U	NR	10U/10U	NR	NR	NR	NR	NR	10U	NR	NR	NR

MONITOR WELL : MW-2

	1997	1998		1999		2000		2001		2002		2003		2004		2005	
Parameter	**September***	**April**	**October**	**April**	**October**	**May**	**October**	**April**	**October**	**April**	**September**	**April**	**September**	**April**	**September**	**April**	**September**
Alpha-BHC	.050U	.050U	.053U	.053U	.050U	.029J	.053U	.050U	.054U	.050U	.050U	.050U	.050U	.050U	.050U	.050U	.050U
Beta- BHC	.050U	.050U	.053U	.053U	.050U	0.098	.053U	.050U	.054U	.050U	.050U	.050U	.050U	.050U	.050U	.050U	.050U
Gamma-BHC	.050U	.050U	.053U	.053U	.050UJ	.052U	.053U	.050U	.054U	.050U	.050U	.050U	.030J	.050U	.030J	.050U	.050U
Delta-BHC	.050U	.050U	.053U	.053U	.050U	.052U	.053U	.050U	.054U	.050U	.050U	.050U	.050U	.050U	.050U	.050U	.050U
Hexachlorobenzene	10UJ	10U	11U	10U	10U	10U	NR	10U	NR	NR	NR	NR	NR	10U	NR	NR	NR

Notes: Concentration in ug/l

* Start of semi annual monitoring

\- insufficient sample

U Undetected

J Estimated value

NR Not required

TABLE 1
CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK

ANALYTICAL SUMMARY
SEMI-ANNUAL GROUND WATER SAMPLING

MONITOR WELL : MW-4

	1997	1998		1999		2000		2001		2002		2003		2004		2005	
Parameter	**September***	**April**	**October**	**April**	**October**	**May**	**October**	**April**	**October**	**April**	**September**	**April**	**September**	**April**	**September**	**April**	**September**
Alpha-BHC	.050/.060	.0030J	.053U	.0031J	.050U	.051U/.052U	.054U	.050U	.0069J	.050U	.050U	.049U	0.056	.048U	.048U	.047U	.047U
Beta- BHC	.055/.069	.016J	.045J	.017J	.066/.068	.045J/.062	.054U	.050U	.047J	.041J	.033J	.049U	.026J	.048U	.037J	.047U	0.036J
Gamma-BHC	.050U	.050U	.053U	.053U	.050U	.051U/.052U	.054U	.050U	.050U	.071J	.050U	.049U	.033J	.048U	.048U	.047U	.047U
Delta-BHC	.050U	.050U	.053U	.053U	.050U	.051U/.052U	.054U	.050U	.050U	.050U	.050U	.049U	.050U	.048U	.048U	.047U	.047U
Hexachlorobenzene	10U	10U	10U	10U	10U	10U	NR	10U	NR	NR	NR	NR	NR	9U	NR	NR	NR

MONITOR WELL : MW-5

	1997	1998		1999		2000		2001		2002		2003		2004		2005	
Parameter	**September***	**April**	**October**	**April**	**October**	**May**	**October**	**April**	**October**	**April**	**September**	**April**	**September**	**April**	**September**	**April**	**September**
Alpha-BHC	0.059	.050U/.0066J	.053U	.0071J	.045J	.010J	.054U	.050U	.013J	.050U	.050U	.048U	.049U	.048U	.048U	.047U	.047UJ
Beta- BHC	.050U	.0080J/.0084J	.053U	.053U	0.05	.031J	.054U	.050U	.022J	.050U	.050U	.048U	.049U	.048U	.048U	.047U	.047UJ
Gamma-BHC	.050U	.050U	.053U	.053U	.0065J	.052U	.054U	.050U	.055U	.050U	.050U	.048U	.049U	.048U	.048U	.047U	.047UJ
Delta-BHC	.050U	.050U	.053U	.053U	.050U	.052U	.054U	.050U	.055U	.050U	.050U	.048U	.049U	.048U	.048U	.047U	.047UJ
Hexachlorobenzene	10U	10U	11U	11U/11U	10U	10U	NR	10U	NR	NR	NR	NR	NR	10U	NR	NR	NR

Notes: Concentration in ug/l

* Start of semi annual monitoring

\- insufficient sample

U Undetected

J Estimated value

NR Not required

TABLE 2
CHARLES GIBSONB SITE
NIAGARA FALLS, NEW YORK

ANALYTICAL SUMMARY

ANNUAL CAYUGA CREEK SEDIMENT SAMPLING

UPSTREAM

	1993	1994		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Parameter	**September**	**June**	**September**	**August**	**September**	**September**	**October**	**October**	**October**	**October***	**September**	**September**	**September**	**September**
Alpha-BHC	0.059	.016J	0.12	.0043J	.050U	.050U	2.1J	8.9/7.4	3.5	55	19/90	28/22J	80U/86J	23J
Beta- BHC	.028J	.012J	.0092J	.053U	.012J	.050U	5.2	28/19	4.5J	49	37/76	48/30	20J/190	36
Gamma-BHC	.050U	.050U	.024J	.053U	.050U	.050U	5.5	37/31	2.3U	24	31/26	12J/28	23J/56J	15J
Delta-BHC	.050U	.050U	.053U	.053U	.050U	.050U	.31UJ	2.9J/.42J	2.3U	3.3J	5.8U/1.6U	1.9J/26U	80U/38J	26U
Hexachlorobenzene	10U	10U	-	11U	11U	10U	470U	480U	NR	NR	NR	NR	NR	NR

DOWNSTREAM

	1993	1994		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Parameter	**September**	**June**	**September**	**August**	**September**	**September**	**October**	**October**	**October**	**October***	**September**	**September**	**September**	**September**
Alpha-BHC	0.059	.016J	0.12	.0043J	.050U	.050U	2.1J	8.9/7.4	3.5	55	19/90	28/22J	80U/86J	NS
Beta- BHC	.028J	.012J	.0092J	.053U	.012J	.050U	5.2	28/19	4.5J	49	37/76	48/30	20J/190	NS
Gamma-BHC	.050U	.050U	.024J	.053U	.050U	.050U	5.5	37/31	2.3U	24	31/26	12J/28	23J/56J	NS
Delta-BHC	.050U	.050U	.053U	.053U	.050U	.050U	.31UJ	2.9J/.42J	2.3U	3.3J	5.8U/1.6U	1.9J/26U	80U/38J	NS
Hexachlorobenzene	10U	10U	-	11U	11U	10U	470U	480U	NR	NR	NR	NR	NR	NS

Notes:

U Not Detected

J Estimated value

NR Not required

NS No sample in trap

* Sediment traps installed April 2001

Table 3

2005 Quarterly Groundwater Elevations Summary

Piezometer Pair	1QTR 2005	4/5/2005	9/7/2005	10/11/2005
	*			
P1		565.71	566.44	566.46
P2		565.53	565.28	565.30
	*			
P3		567.61	564.94	564.94
P4		565.34	565.20	565.17
	*			
P5		569.85	569.85	569.87
P6		568.03	567.25	567.25
Manhole A	*	563.66	564.19	564.19
Manhole B		563.73	564.26	564.24

Notes: Measurement units are in feet.
Piezometers P1, P3, P5 are outside the slurry wall.
Piezometers P2, P4, P6 are located within the containment area.
Discharge system pumped 65, 082 gallons during a 2004.
* No measurement taken inclement weather

Manhole monitoring:

- Maintain water level below 565 feet to prevent hydrostatic pressure buildup under concrete slab.
- Pump Manhole B as required to maintain an inward gradient. (This pumping requirement is addressed by the operation of the direct discharge system which became operational in March 1997.)

Table 4

Summary of Yearly Discharge Volumes
(gallons)

Date	Volume (gallons)
1991	104,120
1992	76,562
1993	77,797
1994	69,724
1995	56,940
1996	77,512
1997(*)	64,687
1998	51,070
1999	140,860
2000	67,236
2001	20,855
2002	0
2003 (1)	5230
2004	65,082
2005	**51,115**
TOTALS	**928,790**

Notes:
(*) Represents start of operation of direct discharge system
(1) Pumped during test of system on 4/13/2003
Discharge system pumped January -May, October, and December of 2005.

Table 5

Annual Manhole B Sampling

April 5, 2005

Parameter	Concentration (ug/l)
alpha – BHC	.046J
beta - BHC	..076
delta - BHC	.28
gamma - BHC	.047U
Hexachlorobenzene	9U

Notes:
U Undetected at associated value
Field blank was non-detect for all parameters of interest
Data has been validated and judged acceptable as qualified.
Next sampling for hexachlorobenzene is scheduled for 2010.

ATTACHMENT 1

INSPECTION AND SAMPLING SCHEDULE

CHARLES GIBSON SITE

(PINE AND TUSCARORA SITE)

NIAGARA FALLS, NEW YORK

NYSDEC Registry No. 9-32-063

GIBSON SITE
NIAGARA FALLS, NEW YORK
2005 INSPECTION AND SAMPLING SCHEDULE

Quarterly	Site Inspection (including Site Cover/Cap, Site Fence, Creek Riprap, Site Structures, CPVC Drain/Sump System).
Quarterly	Piezometer and sump groundwater level elevation measurements.
Semi-Annually	Groundwater monitoring well sampling (April and September) for BHC isomers.
Annually	Cayuga Creek sediment sampling (September) for BHC isomers.
Annually	Leachate sample collection and analysis (Manhole B) for BHC isomers (starting in 2000).
Annually	Annual report to NYSDEC (1st Quarter).
Biennially	Groundwater monitoring well sampling (starting in April 2000) for HCB. The biennial sampling events following 2000 will alternate seasonally between April and September sampling. Next HCB sampling is September 2006.
Every Five Years	Leachate sample collection and analysis (Manhole B) (for HCB) (starting in 2000). Next leachate sampling for HCB is 2010.

APPENDIX 1

DATA USABILITY SUMMARY REPORT
SEMI-ANNUAL GROUND WATER SAMPLING
AND
ANNUAL CREEK SEDIMENT SAMPLING

SEPTEMBER 2005

CHARLES GIBSON SITE

(PINE AND TUSCARORA SITE)

NIAGARA FALLS, NEW YORK

NYSDEC Registry No. 9-32-063

DATA USABILITY SUMMARY REPORT
SEMI-ANNUAL GROUNDWATER SAMPLING AND ANNUAL CREEK SEDIMENT SAMPLING
SEPTEMBER 2005

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK

PREPARED BY:
SEVENSON ENVIRONMENTAL SERVICES, INC.
2749 LOCKPORT ROAD
NIAGARA FALLS, NEW YORK 14305

Report Submitted: December 8, 2005

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

The following details an assessment and validation of analytical results reported by Severn Trent Laboratories, Inc. (STL) of Buffalo, New York, for groundwater samples collected in September 2005 for the Semi-Annual Well Sampling at the Charles Gibson Site in Niagara Falls, New York. The semi-annual sampling includes the collection of groundwater samples from five monitoring wells (MW-1R, MW-2, MW-4, MW-5, and MW-A3) and a field duplicate of MW-1R (designated as MW-7). Samples were collected and analyzed by the laboratory from all required groundwater sample locations during the sampling event. The annual sampling includes the collection of two sediment samples (US1 and DS1) and a field duplicate of US1 (designated as MS1). Only sediment sample US1 was analyzed by the laboratory in relation to the September sampling event. A sediment sample was not collected from DS1 since there was not enough material in the trap. Due to a laboratory error, the sediment duplicate sample MS1 was not analyzed. All samples were collected in accordance with the "Operation and Maintenance Manual" for the site, dated June 2000.

All aqueous and solid samples were submitted for the analysis of the pesticides alpha-BHC, beta-BHC, delta-BHC, and gamma-BHC, using US Environmental Protection Agency (USEPA) SW-846 Methods 3510 and 8081A. Analyses are referenced from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," SW-846 Third Edition, 1986 and subsequent revisions. The analytical data are presented in Tables 1 and 2 for the groundwater samples and sediment sample, respectively. A copy of the chain of custody form is included in Appendix A and the summary report from the laboratory is included in Appendix B. Data evaluation was based on information obtained from the finished data sheets, chain-of-custody forms, blank data, field duplicate data, and recovery data for matrix, blank, and surrogate spikes.

The Quality Assurance/Quality Control (QA/QC) criteria by which these data have been assessed are outlined in the analytical methods and in "National Functional Guidelines for Organic Data Review," USEPA, October 1999.

2.0 SAMPLE HOLDING TIMES

Based on the criteria outlined in the methods of analysis, the following holding time requirements were used:

Parameter	Matrix	Collection to Extraction (days)	Extraction to Analysis (days)
BHCs	Water	7	40
BHCs	Sediment	14	40

Based on sample chain-of-custody forms and laboratory analysis reports, samples were collected on September 7, 2005 extracted on September 8, 2005 and analyzed on September 9, 2005 for pesticides. The sample extraction and analysis was performed within the holding times specified in the "National Functional Guidelines for Organic Data Review" (USEPA, 1999).

As indicated on the Non-Conformance Summary included with the laboratory analytical data report, the laboratory received the sample cooler at a temperature of 6°C, in good condition. Samples were hand delivered to the laboratory on the same day that the samples were collected.

3.0 SURROGATE SPIKE RECOVERIES

All field samples, blanks, and laboratory QC samples (e.g., matrix spike, matrix spike duplicate) analyzed for BHCs are spiked with surrogate compounds prior to extraction. The primary function of the surrogate spiking activity is to determine the efficiency of recovery of analytes in the samples preparation and analysis and thus the degree to which the sample matrix plays a role in the analysis. This matrix interference is measured as a percent recovery, which is then used to gauge the total accuracy of the analytical method for that sample.

All samples submitted for BHC analyses were spiked with the surrogate compounds decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX). All surrogate recoveries were within the laboratory control limits, demonstrating acceptable analytical efficiency, with the following exception:

- The recovery of the surrogate compound DCB in groundwater sample MW-5-090705 was 24%, slightly less than the laboratory lower acceptance criteria of 30%. Matrix interference is suspected to have caused the low bias. Based on the data evaluation guidance "National Functional Guidelines for Organic Data Review," (USEPA, October 1999), the sample results were assigned "J" qualifiers during data validation.

4.0 LABORATORY BLANK ANALYSES

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of sample contamination resulting from laboratory sample preparation and analysis activities. A method blank is a sample of non-contaminated deionized water that is subjected to all of the sample preparation (i.e., extraction) and analytical methodology applied to the samples.

Laboratory blanks were extracted and analyzed at a frequency of one per analytical batch. All BHC results in the method blank were non-detect, indicating that contamination from laboratory activities was not a factor for this sampling round.

5.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSES (MS/MSD)

To assess the effects of sample matrices on analytical efficiency, samples are spiked in duplicate with known concentrations of the target compounds into a prepared portion of a sample just prior to analysis. The matrix spike recovery provides information on matrix effects encountered during analysis and indicates whether the selected analytical method is appropriate for the recovery of the contaminants of concern for the matrix. The MS/MSD recoveries are used to evaluate analytical accuracy, while the relative percent difference (RPD) values between the MS and MSD are used to evaluate analytical precision.

The MS and MSD analyses for pesticides were performed using groundwater samples collected from monitoring well MW-2 for this sampling event. A limited list of pesticides was added to the MS and MSD samples, including gamma-BHC. Gamma-BHC recoveries and the associated RPD are within the laboratory control limits, demonstrating acceptable laboratory accuracy and precision.

6.0 BLANK SPIKE ANALYSES

Blank spikes are analyzed as samples to assess the analytical accuracy of the methods employed in the absence of matrix interference. The blank spike contains known concentrations of the analytes of concern and is carried through the entire preparation and analysis process. The actual analyte concentration and percent recovery is reported with the laboratory QC data. Blank spikes are analyzed at a minimum frequency of one per analytical batch.

All BHC recoveries reported by the laboratory for the blank spike analyses were within the laboratory control limits, demonstrating acceptable analytical accuracy.

7.0 FIELD QA/QC

7.1 Field Blanks

The purpose of field blank analysis is to determine the existence and magnitude of contamination resulting from sample bottles, field sampling activities, sample transport, and/or storage. Due to a field oversight, a field blank was not collected during the sampling event.

7.2 Field Duplicates

Field duplicate samples are collected in a manner that is identical to the original sample - the original field samples and its duplicate are collected at the same time, by the sample personnel, using the same procedures and sampling equipment, and is placed in the same type of containers. Field duplicates are used as a relative measure of the combined precision of the sample collection and analytical process. One field duplicate sample was collected during this sampling event and submitted as a "blind" sample to the laboratory. The field duplicate collected for this sampling event consisted of the following:

Sample ID	Field Duplicate ID
MW-1R-090705	MW-7-090705

Results from the analysis of the primary sample were compared to the results from the duplicate sample analysis and agreement expressed in terms of relative percent difference (RPD). The sample results for the MW-1R/MW-7 duplicate pair (Table 1) indicate that all parameters were not detected in the duplicate samples. The duplicate sample results demonstrate acceptable reproducibility, indicating good sampling and analytical precision.

7.3 Rinse Blanks

No rinse blanks were collected for this sampling event, as dedicated equipment was used for monitoring well sample collection.

8.0 CONCLUSIONS

The analytical data package from Severn Trent was complete with all required QC information. The method blanks were free from contamination. All analyses were performed using specified methods within proper holding times. The relative percent differences, and surrogate, blank spike, and matrix spike/matrix spike duplicate recoveries were within laboratory control limits for all parameters and analyses with the exception of the low surrogate compound recovery in sample MW-5-090705 discussed above in Section 3.0. Based on this assessment and validation of the laboratory report, the data produced by STL are acceptable with qualification.

TABLES

TABLE 1
ANALYTICAL RESULTS SUMMARY - SEMI-ANNUAL WELL SAMPLING
CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
SEPTEMBER 2005

Sample ID	MW-A3-090705		MW-1R-090705		MW-7-090705*		MW-2-090705		MW-4-090705		MW-5-090705	
Sample Date	09/07/05		09/07/05		09/07/05		09/07/05		09/07/05		09/07/05	
BHC Isomers in Water via Method 8081A (ug/L)												
alpha-BHC	<0.048	U	<0.047	U	<0.048	U	<0.050	U	<0.047	U	<0.047	U *(J)*
beta-BHC	<0.048	U	<0.047	U	<0.048	U	<0.050	U	0.036	J	<0.047	U *(J)*
delta-BHC	<0.048	U	<0.047	U	<0.048	U	<0.050	U	<0.047	U	<0.047	U *(J)*
gamma-BHC (lindane)	<0.048	U	<0.047	U	<0.048	U	<0.050	U	<0.047	U	<0.047	U *(J)*

Notes:

* MW-7 is a field duplicate of MW-1R

U Compound was analyzed for but not detected

J Estimated value - result is less than the sample quantitation limit but greater than zero

(J) The reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

TABLE 2
ANALYTICAL RESULTS SUMMARY - ANNUAL CREEK SEDIMENT SAMPLING
CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
SEPTEMBER 2005

Sample ID	US-1-090705	
Sample Date	09/07/05	
BHC Isomers in Soil via Method 8081A (ug/Kg)		
alpha-BHC	23	J
beta-BHC	36	
delta-BHC	15	J
gamma-BHC (lindane)	26	U

Notes:

J Compound was analyzed for and determined to be present in the sample. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.

U Compound was analyzed for but not detected

APPENDIX A

CHAIN OF CUSTODY FORM

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
OLIN CORP	Lorraine Miller - OLIN	9-7-05	241670
Address: Lower River Rd	Telephone Number (Area Code)/Fax Number: 423/336-4000 F-423-336-4166	Lab Number	Page 1 of 1
City: Charleston / State: TN / Zip Code	Site Contact: Mike Walton	Lab Contact: Brian Fisher	
Project Name and Location (State): Charles Gibson Site, Niagara Falls, NY.	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): BTEX	Special Instructions/ Conditions of Receipt
MW-1R-090705	9/7/05	1030		X			X						2	
MW-2-090705 +MS +MSD	9/7/05	1130		X			X						4	MS/MSD
MW-4-090705	9/7/05	1220		X			X						2	
MW-5-090705	9-7-05	1258		X			X						2	
MW-A3-090705	9-7-05	1400		X			X						2	
US-1-090705	9-7-05	1420			X		X						1	40z. Glass
MS-1-090705	9-7-05	X			X		X						1	
DS-1-090705	9-7-05				X		X						1	
MW-7-090705	9-7-05	1625		X			X						2	

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	9/7/05	4:20pm	1. Received By: [signature]	09-07-05	1620
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

60°C

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

38256

APPENDIX B

SUMMARY ANALYTICAL REPORT

SEVERN TRENT STL

STL Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228

Tel: 716 691 2600 Fax: 716 691 7991
www.stl-inc.com

ANALYTICAL REPORT

Job#: A05-9702

STL Project#: NY3A9025
Site Name: OLIN CORPORATION
Task: Charles Gibson Site

Ms. Lorraine Miller
Olin Corporation
1186 Lower River Road
Charleston, TN 37310

CC: Mr. Michael Walker

STL Buffalo

Brian J. Fischer
Project Manager

for Donna Besco
Analyst

10/06/05

STL Buffalo
Current Certifications

STATE	Program	Cert # / Lab ID
Arkansas	SDWA, CWA, RCRA, SOIL	03-054-D/88-0686
California	NELAP SDWA, CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida	NELAP RCRA	E87672
Georgia	SDWA	956
Illinois	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	CWA, RCRA	036-999-337
New Hampshire	NELAP SDWA, CWA	233701
New Jersey	SDWA, CWA, RCRA, CLP	NY455
New York	NELAP, AIR, SDWA, CWA, RCRA	10026
North Carolina	CWA	411
North Dakota	SDWA, CWA, RCRA	R-176
Oklahoma	CWA, RCRA	9421
Pennsylvania	Env. Lab Reg.	68-281
South Carolina	RCRA	91013
USDA	FOREIGN SOIL PERMIT	S-41579
Virginia	SDWA	278
Washington	CWA	C254
West Virginia	CWA	252
Wisconsin	CWA	998310390

Sample Data Summary Package

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A5970201	MW-1R-090705	WATER	09/07/2005	10:30	09/07/2005	16:20
A5970202	MW-2-090705	WATER	09/07/2005	11:30	09/07/2005	16:20
A5970202MS	MW-2-090705	WATER	09/07/2005	11:30	09/07/2005	16:20
A5970202SD	MW-2-090705	WATER	09/07/2005	11:30	09/07/2005	16:20
A5970203	MW-4-090705	WATER	09/07/2005	12:20	09/07/2005	16:20
A5970204	MW-5-090705	WATER	09/07/2005	12:58	09/07/2005	16:20
A5970207	MW-7-090705	WATER	09/07/2005	16:25	09/07/2005	16:20
A5970205	MW-A3-090705	WATER	09/07/2005	14:00	09/07/2005	16:20
A5970206	US-1-090705	SOIL	09/07/2005	14:20	09/07/2005	16:20
A5970206MS	US-1-090705	SOIL	09/07/2005	14:20	09/07/2005	16:20
A5970206SD	US-1-090705	SOIL	09/07/2005	14:20	09/07/2005	16:20

METHODS SUMMARY

Job#: A05-9702

STL Project#: NY3A9025
Site Name: Olin Corporation - Charles Gibson site

PARAMETER	ANALYTICAL METHOD
ASP 2000 - METHOD 8081 BHC'S	ASP00 8081
ASP 2000- METHOD 8081 BHC'S	ASP00 8081
Leachable pH	SW8463 9045

ASP00 "Analytical Services Protocol", New York State Department of Conservation, June 2000.

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

NON-CONFORMANCE SUMMARY

Job#: A05-9702

STL Project#: NY3A9025
Site Name: Olin Corporation - Charles Gibson site

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature 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 after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A05-9702
Sample Cooler(s) were received at the following temperature(s); 6.0 °C
All samples were received in good condition.

GC Extractable Data

For method 8081, the recovery of surrogate Decachlorobiphenyl in sample MW-5-090705 is outside of established quality control limits due to the sample matrix. The recovery of surrogate Tetrachloro-m-xylene is within quality control limits; no corrective action is required.

For method 8081, the recoveries and the relative percent difference for sample US-1-090705 Matrix Spike and the Matrix Spike duplicate are outside quality control limits for several compounds, though the Matrix Spike Blank recoveries are compliant, no action necessary. (see page 2b) (QL)

The extracts for samples US-1-090705, Spike and Spike Duplicate required treatment with Copper prior to analysis due to the presence of elemental Sulfur. These extracts were also acid treated to minimize matrix interferences. None of the target pesticide compounds reported for this job are effected by this cleanup.

Wet Chemistry Data

No deviations from protocol were encountered during the analytical procedures.

****

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

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

Brian J. Fischer
Project Manager

10-6-05
Date

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION
AND
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS						
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	TCLP HERB	WATER QUALITY
MW-1R-090705	A5970201	-	-	-	ASP00	-	-	-
MW-2-090705	A5970202	-	-	-	ASP00	-	-	-
MW-4-090705	A5970203	-	-	-	ASP00	-	-	-
MW-5-090705	A5970204	-	-	-	ASP00	-	-	-
MW-7-090705	A5970207	-	-	-	ASP00	-	-	-
MW-A3-090705	A5970205	-	-	-	ASP00	-	-	-
US-1-090705	A5970206	-	-	-	ASP00	-	-	SW8463

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDE/PCB ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
MW-1R-090705	WATER	09/07/2005	09/07/2005	09/08/2005	09/09/2005
MW-2-090705	WATER	09/07/2005	09/07/2005	09/08/2005	09/09/2005
MW-4-090705	WATER	09/07/2005	09/07/2005	09/08/2005	09/09/2005
MW-5-090705	WATER	09/07/2005	09/07/2005	09/08/2005	09/09/2005
MW-7-090705	WATER	09/07/2005	09/07/2005	09/08/2005	09/09/2005
MW-A3-090705	WATER	09/07/2005	09/07/2005	09/08/2005	09/09/2005
US-1-090705	SOIL	09/07/2005	09/07/2005	09/08/2005	09/09/2005

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
ORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILIARY CLEAN UP	DIL/CONC FACTOR
MW-1R-090705	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED
MW-2-090705	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED
MW-4-090705	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED
MW-5-090705	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED
MW-7-090705	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED
MW-A3-090705	WATER	ASP00	SEPF	AS REQUIRED	AS REQUIRED
US-1-090705	SOIL	ASP00	SONC	AS REQUIRED	AS REQUIRED

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
US-1-090705	SOIL	SW8463	SW8463	AS REQUIRED	AS REQUIRED

STL

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
1	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No.

MW-1R-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5970201

Sample wt/vol: 1060.00 (g/mL) ML Lab File ID: 18B10095.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/2005

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.047	U
319-85-7	beta-BHC	0.047	U
319-86-8	delta-BHC	0.047	U
58-89-9	gamma-BHC (Lindane)	0.047	U

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No: MW-2-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5970202

Sample wt/vol: 1000.00 (g/mL) ML Lab File ID: 18B10096.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/200

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No.

MW-4-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5970203

Sample wt/vol: 1060.00 (g/mL) ML Lab File ID: 18B10099.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/2005

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.047	U
319-85-7	beta-BHC	0.036	J
319-86-8	delta-BHC	0.047	U
58-89-9	gamma-BHC (Lindane)	0.047	U

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No: MW-5-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5970204

Sample wt/vol: 1060.00 (g/mL) ML Lab File ID: 18B10100.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/200

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.047	U J
319-85-7	beta-BHC	0.047	U J
319-86-8	delta-BHC	0.047	U J
58-89-9	gamma-BHC (Lindane)	0.047	U J

JCL 12/1/05

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No.: MW-7-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5970207

Sample wt/vol: 1050.00 (g/mL) ML Lab File ID: 18B10102.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/2005

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.048	U
319-85-7	beta-BHC	0.048	U
319-86-8	delta-BHC	0.048	U
58-89-9	gamma-BHC (Lindane)	0.048	U

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No

MW-A3-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5970205

Sample wt/vol: 1050.00 (g/mL) ML Lab File ID: 18B10101.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/200

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.048	U
319-85-7	beta-BHC	0.048	U
319-86-8	delta-BHC	0.048	U
58-89-9	gamma-BHC (Lindane)	0.048	U

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000 - METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No.: US-1-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A5970206

Sample wt/vol: 30.54 (g/mL) G Lab File ID: 18B10107.TX0

% Moisture: 69 decanted: (Y/N) N Date Samp/Recv: 09/07/2005 09/07/2005

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	23	J
319-85-7	beta-BHC	36	
319-86-8	delta-BHC	15	J
58-89-9	gamma-BHC (Lindane)	26	U

Olin Corporation
Olin Corporation - Charles Gibson site
Wet Chemistry Analysis

Client Sample No.: US-1-090705

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix (soil/water): SOIL Lab Sample ID: A5970206

% Solids: 0.0 Date Samp/Recv: 09/07/2005 09/07/2005

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Leachable pH	S.U.	7.09				9045	09/08/2005

Comments:

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
WATER SURROGATE RECOVERY

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column(1): RTXCLPII ID: 0.53 (mm)

	Client Sample ID	Lab Sample ID	DCBP %REC	#	TCMX %REC	#							TOT OUT
1	Matrix Spike Blank	A5B1366101	36		68								0
2	Method Blank	A5B1366102	37		69								0
3	MW-1R-090705	A5970201	52		72								0
4	MW-2-090705	A5970202	66		72								0
5	MW-2-090705	A5970202MS	64		68								0
6	MW-2-090705	A5970202SD	65		72								0
7	MW-4-090705	A5970203	50		64								0
8	MW-5-090705	A5970204	24	*	60								1
9	MW-7-090705	A5970207	47		62								0
10	MW-A3-090705	A5970205	49		62								0

QC LIMITS

(DCBP) = Decachlorobiphenyl (30-150)
(TCMX) = Tetrachloro-m-xylene (30-150)

\# Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000 - METHOD 8081 BHC'S
SOIL SURROGATE RECOVERY

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column(1): RTXCLPII ID: 0.53 (mm)

Level (low/med): LOW

	Client Sample ID	Lab Sample ID	DCBP %REC	#	TCMX %REC	#							TOT OUT
1	Matrix Spike Blank	A5B1366301	92		59								0
2	Method Blank	A5B1366302	91		67								0
3	US-1-090705	A5970206	63		42								0
4	US-1-090705	A5970206MS	88		62								0
5	US-1-090705	A5970206SD	86		39								0

QC LIMITS

(DCBP) = Decachlorobiphenyl (30-150)
(TCMX) = Tetrachloro-m-xylene (30-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
WATER MATRIX SPIKE BLANK RECOVERY

Lab Name: SIL Buffalo Contract: _____ Lab Samp ID: A5B1366102

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - Client Sample No.: Method Blank

COMPOUND	SPIKE ADDED UG/L	MSB CONCENTRATION UG/L	MSB % REC #	QC LIMITS REC.	+ =
gamma-BHC (Lindane)_____	0.500	0.354	71	56 - 123	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike recovery: ____0 out of ____1 outside limits

Comments: _____

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000 - METHOD 8081 BHC'S
SOIL MATRIX SPIKE BLANK RECOVERY

Lab Name: STL Buffalo Contract: _____ Lab Samp ID: A5B1366302

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - Client Sample No.: Method Blank Level: (low/med) LOW

COMPOUND	SPIKE ADDED UG/KG	MSB CONCENTRATION UG/KG	MSB % REC #	QC LIMITS REC.	+ =
gamma-BHC (Lindane)_____	16.5	10.1	61	46 - 127	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike recovery: ____0 out of ____1 outside limits

Comments: _____

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL Buffalo Contract: _____ Lab Samp ID: A5970202

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - Client Sample No.: MW-2-090705

COMPOUND	SPIKE ADDED UG/L	SAMPLE CONCENTRATION UG/L	MS CONCENTRATION UG/L	MS % REC #	QC LIMITS REC.	+ =
gamma-BHC (Lindane)	0.462	0	0.333	72	56 - 123	

COMPOUND	SPIKE ADDED UG/L	MSD CONCENTRATION UG/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.	+ =
gamma-BHC (Lindane)	0.462	0.364	79	9	15	56 - 123	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike recovery: 0 out of 2 outside limits

Comments: _____

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000 - METHOD 8081 BHC'S
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: STL Buffalo Contract: _____ Lab Samp ID: A5970206

Lab Code: RESNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - Client Sample No.: US-1-090705 Level: (low/med) LOW

COMPOUND	SPIKE ADDED UG/KG	SAMPLE CONCENTRATION UG/KG	MS CONCENTRATION UG/KG	MS % REC #	QC LIMITS REC.	+ =
gamma-BHC (Lindane)_____	54.0	0	24.5	45 *	46 - 127	

COMPOUND	SPIKE ADDED UG/KG	MSD CONCENTRATION UG/KG	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.	+ =
gamma-BHC (Lindane)_____	53.4	99.2	186 *	122 *	50	46 - 127	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 1 outside limits
Spike recovery: 2 out of 2 outside limits

Comments: _____

Due to a laboratory error, MS and MSD analyses were performed using field samples MS-1-090705 and DS-1-090705. They believed that these were field-designated MS and MSD volume. The MS and MSD analyses presented above are not valid.

JAS
12/1/05

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000 - METHOD 8081 BHC'S
METHOD BLANK SUMMARY

Client No.

Method Blank

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Lab Sample ID: A5B1366302 Lab File ID: 18B10111.TX0

Matrix: (soil/water) SOIL Extraction: SONC

Sulfur Cleanup: (Y/N): N Date Extracted: 09/08/2005

Date Analyzed (1): 09/09/2005 Date Analyzed (2): _____

Time Analyzed (1): 17:01 Time Analyzed (2): _____

Instrument ID (1): HP5890-18 Instrument ID (2): _____

GC Column (1): RTXCLPII Dia: 0.53(mm) GC Column (2): _____ Dia: ____(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	Matrix Spike Blank	A5B1366301	09/09/2005	
2	US-1-090705	A5970206	09/09/2005	
3	US-1-090705	A5970206MS	09/09/2005	
4	US-1-090705	A5970206SD	09/09/2005	

Comments: _____

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000 - METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No: Method Blank

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: A5B1366302

Sample wt/vol: 30.82 (g/mL) G Lab File ID: 18B10111.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: _____ _____

Extraction: (SepF/Cont/Sonc/Soxh): SONC Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: _ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	7.8	U
319-85-7	beta-BHC	7.8	U
319-86-8	delta-BHC	7.8	U
58-89-9	gamma-BHC (Lindane)	7.8	U

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
METHOD BLANK SUMMARY

Client No.

Method Blank

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Lab Sample ID: A5B1366102 Lab File ID: 18B10104.TX0

Matrix: (soil/water) WATER Extraction: SEPF

Sulfur Cleanup: (Y/N): N Date Extracted: 09/08/2005

Date Analyzed (1): 09/09/2005 Date Analyzed (2): _____

Time Analyzed (1): 12:26 Time Analyzed (2): _____

Instrument ID (1): HP5890-18 Instrument ID (2): _____

GC Column (1): RTXCLPII Dia: 0.53(mm) GC Column (2): _____ Dia: ____(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	Matrix Spike Blank	A5B1366101	09/09/2005	
2	MW-1R-090705	A5970201	09/09/2005	
3	MW-2-090705	A5970202	09/09/2005	
4	MW-2-090705	A5970202MS	09/09/2005	
5	MW-2-090705	A5970202SD	09/09/2005	
6	MW-4-090705	A5970203	09/09/2005	
7	MW-5-090705	A5970204	09/09/2005	
8	MW-7-090705	A5970207	09/09/2005	
9	MW-A3-090705	A5970205	09/09/2005	

Comments: _____

OLIN CORPORATION
OLIN CORPORATION - CHARLES GIBSON SITE
ASP 2000- METHOD 8081 BHC'S
ANALYSIS DATA SHEET

Client No.: Method Blank

Lab Name: STL Buffalo Contract: _____

Lab Code: RECNY Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: A5B1366102

Sample wt/vol: 1000.00 (g/mL) ML Lab File ID: 18B10104.TX0

% Moisture: _____ decanted: (Y/N) N Date Samp/Recv: _____ _____

Extraction: (SepF/Cont/Sonc/Soxh): SEPF Date Extracted: 09/08/2005

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/09/2005

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 5.00 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U

APPENDIX 2

FIELD LOGS

SEMI-ANNUAL GROUND WATER SAMPLING
AND
ANNUAL SEDIMENT SAMPLING

September 2005

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 SAMPLING FIELD PARAMETERS
FIELD INSTRUMENTATION CALIBRATION FORM

DATE: 9/7/2005 SEMI-ANNUAL SAMPLING EVENT: Fall Semi-Annual Sampling 2005

PERSON CALIBRATING METERS: M. Walker

pH METER USED: MANUFACTURER: Corning
MODEL: pH -20
IDENTIFICATION/CONTROL NUMBER: E-864

CALIBRATION STANDARDS USED:

STANDARD 7.00 METER READ: 7.02
STANDARD 4.00 METER READ:
STANDARD 10.00 METER READ:

METER CALIBRATION COMMENTS: Single point calibration

SPECIFIC CONDUCTIVITY METER USED:
MANUFACTURER: Oakton
MODEL: Hand Held
IDENTIFICATION/CONTROL NUMBER: E-864

CALIBRATION STANDARDS USED:

STANDARD 0 READ:
(STANDARD 0 USED: ____ AIR, ____ WATER)
STANDARD ____447____ READ: 445
STANDARD ____ READ:

METER CALIBRATION COMMENTS:

THERMOMETER USED: TYPE: Digital
MANUFACTURER: Fischer-Scientific
IDENTIFICATION/CONTROL NUMBER: E-864
COMMENTS: (DOES THERMOMETER TEMPERATURE AGREE WITH SPECIFIC CONDUCTIVITY METER TEMPERATURE ?) no
OTHER:

OTHER INSTRUMENTS USED: TYPE:
MANUFACTURER:
IDENTIFICATION/CONTROL NUMBER:

CALIBRATIONS PERFORMED:

OTHER CALIBRATION COMMENTS:

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker
SAMPLED BY: M. Walker
COMPANY: Sevenson

SAMPLE ID: MW-1R-090705
SAMPLING EVENT/DATE: 9/7/2005
MONITORING WELL: MW-1R
CONDITION: good

GROUNDWATER PURGE DATA PURGE DATE: 9/7/05

DEPTH TO BOTTOM FROM TOP OF RISER: 12.1 (FT.)
DEPTH TO WATER FROM TOP OF RISER: 6 (FT.)
WATER COLUMN: 6.1 (FT.)
2" DIA. WELL CONSTANT: 0.16
ONE WELL VOLUME= 0.98 (GALS)

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

PURGE METHOD: Low flow using Parastaltic pump and dedicated tubing. A
BOTTOM OF WELL/SILT BUILDUP: No
PURGE START TIME: 1015 STOP TIM 1030
PURGE OBSERVATIONS:

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1	6.9	756	64.3 F	Sulfury smell
2	6.93	716	67.2	Clear/ No Odor
3	6.83	750	66.87	Clear
4				
5				

TOTAL VOLUME PURGED: 3 gallons

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2005

MEDIA: GROUNDWATER X
CREEK SEDIMENT
SAMPLE TIME: 1030

LOCATION: MW-1R

SAMPLE METHOD: Low flow using Parastaltic pump and dedicated tubing. After purging 3 volumes.

SAMPLING OBSERVATIONS: Clear water

QC SAMPLES TAKEN: yes, blind duplicate "MW-7"

OTHER OBSERVATIONS/COMMENTS: MW-7 was used as a "blind duplicate" taken at this time and labeled 1625 for time of sample. 4 1 liter amber jars filled.

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= SC measured {{T-25)(0.02)}+1

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker **SAMPLE ID:** MW-7-090705
SAMPLED BY: M. Walker SAMPLING EVENT/DATE: 9/7/2005
COMPANY: Sevenson MONITORING WELL: MW-1 Duplicate (blind)
CONDITION:

GROUNDWATER PURGE DATA PURGE DATE: 9/7/05

DEPTH TO BOTTOM FROM TOP OF RISER: XXXX (FT.)
DEPTH TO WATER FROM TOP OF RISER: XXXX (FT.)
WATER COLUMN: XXXX (FT.)
2" DIA. WELL CONSTANT: XXXX
ONE WELL VOLUME= XXXX (GALS)

PURGE METHOD: XXXX
BOTTOM OF WELL/SILT BUILDUP: XXXX
PURGE START TIME: XXX STOP TIME: XXXX
PURGE OBSERVATIONS:

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1				
2				
3				
4				
5				

TOTAL VOLUME PURGED:

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2005

MEDIA: GROUNDWATER X SAMPLE TIME: 1625
CREEK SEDIMENT

LOCATION: MW-1R blind duplicate

SAMPLE METHOD: Low flow using Parastaltic pump and dedicated tubing. After purging 3 volumes.

SAMPLING OBSERVATIONS: Clear , No odor.

QC SAMPLES TAKEN: No

OTHER OBSERVATIONS/COMMENTS: 2 - 1 liter glass jars filled.

Then labeled MW-7 and timed at 1625. To serve as Blind Dup for QC purposes.

Note: specific conductivity formula to 25 degrees Celcius: $SC(25) = \frac{SC\ measured}{\{(T-25)(0.02)\}+1}$

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker **SAMPLE ID:** MW-2-090705

SAMPLED BY: M. Walker SAMPLING EVENT/DATE: 9/7/2005

COMPANY: Sevenson MONITORING WELL: MW-2

CONDITION: good

GROUNDWATER PURGE DATA PURGE DATE: 9/7/05

DEPTH TO BOTTOM FROM TOP OF RISER: 12.13 (FT.)

DEPTH TO WATER FROM TOP OF RISER: 5.75 (FT.)

WATER COLUMN: 6.38 (FT.)

2" DIA. WELL CONSTANT: 0.16

ONE WELL VOLUME= 1.02 (GALS)

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

PURGE METHOD: Low flow using Parastaltic pump and dedicated tubing. A

BOTTOM OF WELL/SILT BUILDUP: No

PURGE START TIME: 1100 STOP TIM 1120

PURGE OBSERVATIONS: Clear water

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1	6.78	608	63.7	Clear
2	6.34	627	66.4	Clear
3	6.24	631	66.6	Clear
4				
5				

TOTAL VOLUME PURGED: 3 Gallons

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2005

MEDIA: GROUNDWATER X SAMPLE TIME: 1130

CREEK SEDIMENT

LOCATION: MW-2

SAMPLE METHOD: Low flow using Parastaltic pump and dedicated tubing. After purging 3 volumes.

SAMPLING OBSERVATIONS: Clear , No odor.

QC SAMPLES TAKEN: MS & MSD samples taken along with normal samples taken

OTHER OBSERVATIONS/COMMENTS: Total bottles taken: 4- 1 liter amber.

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= SC measured / {(T-25)(0.02)}+1

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker
SAMPLE ID: MW-4-090705
SAMPLED BY: M. Walker
SAMPLING EVENT/DATE: 9/7/2005
COMPANY: Sevenson
MONITORING WELL: MW-4
CONDITION: good

GROUNDWATER PURGE DATA PURGE DATE: 9/7/05

DEPTH TO BOTTOM FROM TOP OF RISER: 13.75 (FT.)
DEPTH TO WATER FROM TOP OF RISER: 6.95 (FT.)
WATER COLUMN: 6.8 (FT.)
2" DIA. WELL CONSTANT: 0.16
ONE WELL VOLUME= 1.09 (GALS)

PURGE METHOD: Low flow using Parastaltic pump and dedicated tubing. A
BOTTOM OF WELL/SILT BUILDUP: No
PURGE START TIME: 1150 STOP TIM 1220
PURGE OBSERVATIONS:

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1	6.8	1619	66	Black water
2	7.7	1570	63.4	Lt. Grey
3	6.7	1564	63.6	clear
4				
5				

TOTAL VOLUME PURGED: 3.5 gallons

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2005

MEDIA: GROUNDWATER X
CREEK SEDIMENT
SAMPLE TIME: 1220

LOCATION: MW-4 near behind Autozone, near creek & electrical panel on bldg.

SAMPLE METHOD: Low flow using Parastaltic pump and dedicated tubing. After purging 3 volumes.

SAMPLING OBSERVATIONS: Clear during Sampling

QC SAMPLES TAKEN: No

OTHER OBSERVATIONS/COMMENTS: 2 , 1 liter amber jars filled.

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= SC measured {{T-25)(0.02)}+1

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker
SAMPLE ID: MW-5-090705
SAMPLED BY: M. Walker
SAMPLING EVENT/DATE: 9/7/2005
COMPANY: Sevenson
MONITORING WELL: MW-5
CONDITION: good

GROUNDWATER PURGE DATA PURGE DATE: 9/7/05

DEPTH TO BOTTOM FROM TOP OF RISER: 15.28 (FT.)
DEPTH TO WATER FROM TOP OF RISER: 9.36 (FT.)
WATER COLUMN: 5.92 (FT.)
2" DIA. WELL CONSTANT: 0.16
ONE WELL VOLUME= 0.95 (GALS)

PURGE METHOD: Low flow using Parastaltic pump and dedicated tubing. A
BOTTOM OF WELL/SILT BUILDUP: No
PURGE START TIME: 1230 STOP TIM 1258
PURGE OBSERVATIONS:

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1	6.03	1633	65.1	orange water
2	5.92	1809	60.6	Clear
3	6	1660	63.1	Clear
4				
5				

TOTAL VOLUME PURGED: 3 gallons

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2005

MEDIA: GROUNDWATER X
CREEK SEDIMENT
SAMPLE TIME: 1258

LOCATION: MW-5 Behind Autozone, in tall grass near creek.

SAMPLE METHOD: Low flow using Parastaltic pump and dedicated tubing. After purging 3 volumes.

SAMPLING OBSERVATIONS:

QC SAMPLES TAKEN: No

OTHER OBSERVATIONS/COMMENTS: 2 , 1 liter amber jars filled.

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= SC measured / {{T-25)(0.02)}+1

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker
SAMPLE ID: MW-A3-090705
SAMPLED BY: M. Walker
SAMPLING EVENT/DATE: 9/7/2005
COMPANY: Sevenson
MONITORING WELL: MW-A3
CONDITION: good

GROUNDWATER PURGE DATA PURGE DATE: 9/7/05

DEPTH TO BOTTOM FROM TOP OF RISER: 11.95 (FT.)
DEPTH TO WATER FROM TOP OF RISER: 11.14 (FT.)
WATER COLUMN: 0.81 (FT.)
2" DIA. WELL CONSTANT: 0.16
ONE WELL VOLUME= 0.13 (GALS)

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

PURGE METHOD: Low flow using Parastaltic pump and dedicated tubing. Al
BOTTOM OF WELL/SILT BUILDUP: No
PURGE START TIME: STOP TIM
PURGE OBSERVATIONS: The well did not yield 3 volumes of purge water

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1	6.57	758	63.7	clear
2	6.52	770	63.4	clear
3				
4				
5				

TOTAL VOLUME PURGED: .5 liter

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2005

MEDIA: GROUNDWATER X
CREEK SEDIMENT
SAMPLE TIME: 1400

LOCATION: MW-A3, Behind the Niagara Motel.

SAMPLE METHOD: Grab sample, using parastaltic pump and dedicated tubing, after well recharged

SAMPLING OBSERVATIONS: The well did not yield enough water to purge 3 volumes. So I let it recharge after it went dry , and took a grab sample.

QC SAMPLES TAKEN: No

OTHER OBSERVATIONS/COMMENTS: 2 , 1 liter amber jars filled.

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= $\frac{SC\ measured}{\{(T-25)(0.02)\}+1}$

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker
SAMPLE ID: US-1-090705
SAMPLED BY: M. Walker
SAMPLING EVENT/DATE: 9/7/2005
COMPANY: Sevenson
MONITORING WELL: **Creek Sediment**
CONDITION:

GROUNDWATER PURGE DATA PURGE DATE:

DEPTH TO BOTTOM FROM TOP OF RISER: (FT.)
DEPTH TO WATER FROM TOP OF RISER: (FT.)
WATER COLUMN: (FT.)
2" DIA. WELL CONSTANT:
ONE WELL VOLUME= (GALS)
PURGE METHOD:
BOTTOM OF WELL/SILT BUILDUP:
PURGE START TIME: STOP TIM
PURGE OBSERVATIONS:

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1				
2				
3				
4				
5				

TOTAL VOLUME PURGED:

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2006

MEDIA: GROUNDWATER
CREEK SEDIMENT XX
SAMPLE TIME: 1420

LOCATION: Middle of creek, Sediment trap lined up with 2 main entrance gate posts.

SAMPLE METHOD: extracted sediment from 8" sediment trap on creekbed.

SAMPLING OBSERVATIONS: Black / Grey muck, silty

QC SAMPLES TAKEN: Duplicate sample taken, and labelled: MS-1-090705

OTHER OBSERVATIONS/COMMENTS: Water level , low and slow. 2- 4oz. Glass jars

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= $\frac{\text{SC measured}}{\{(T-25)(0.02)\}+1}$

CHARLES GIBSON SITE
NIAGARA FALLS, NEW YORK
NYSDEC REGISTRY NO. 9-32-063
GROUNDWATER AND SEDIMENT
SAMPLING FIELD FORM

RECORDED BY: M. Walker
SAMPLED BY: M. Walker
COMPANY: Sevenson

SAMPLE ID: DS-1-090705
SAMPLING EVENT/DATE: 9/7/2005
MONITORING WELL: **Creek Sediment**
CONDITION:

GROUNDWATER PURGE DATA PURGE DATE:

DEPTH TO BOTTOM FROM TOP OF RISER: (FT.)
DEPTH TO WATER FROM TOP OF RISER: (FT.)
WATER COLUMN: (FT.)
2" DIA. WELL CONSTANT:
ONE WELL VOLUME= (GALS)
PURGE METHOD:
BOTTOM OF WELL/SILT BUILDUP:
PURGE START TIME: STOP TIM
PURGE OBSERVATIONS:

NOTE: ALL GIBSON SITE MONITORING WELLS ARE 2-INCH DIAMETER STAIN-LESS STEEL. WELL DEPTHS:

MW-1R	12.10'
MW-2	12.13'
MW-A3	11.95'
MW-4	13.75'
MW-5	15.28'

FIELD PARAMETER MEASUREMENTS:

WELL VOLUME	pH	SPECIFIC CONDUCTIVITY umhos/cm)	TEMP. (C OR F)	NOTES:
1				
2				
3				
4				
5				

TOTAL VOLUME PURGED:

GROUNDWATER OR SEDIMENT SAMPLING DATA: SAMPLE DATE: 9/7/2006

MEDIA: GROUNDWATER
CREEK SEDIMENT XX

SAMPLE TIME: 1500

LOCATION: Down stream of property cap, even with the 4th fence post from the corner.

SAMPLE METHOD: **Sediment trap was empty, so no sample was taken during this event.**

SAMPLING OBSERVATIONS:

QC SAMPLES TAKEN: No

OTHER OBSERVATIONS/COMMENTS: **Water level , low and slow.**

Note: specific conductivity formula to 25 degrees Celcius: SC(25)= SC measured / {{T-25)(0.02)}+1

APPENDIX 3

QUARTERLY GROUNDWATER ELEVATION /PUMPING FORMS

July - December 2005

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

THIS FORM TO BE USED FOR ALL QUARTERLY PIEZOMETER AND MANHOLE GROUND-WATER ELEVATION MEASURING EVENTS

DATE: 9/7/2005 TIME: 910

INSPECTOR: M. Walker COMPANY: Sevenson

WEATHER: Sunny 70 F

PIEZOMETER	RISER ELEVATION (INSIDE CASING)	DEPTH TO WATER (FT.)	WATER ELEVATION	COMMENTS
P-1	572.72	6.28	566.44	
P-2	574.89	9.61	565.28	
P-3	574.16	9.22	564.94	
P-4	576.14	10.94	565.2	
P-5	575.05	5.2	569.85	
P-6	578.28	11.03	567.25	
MANHOLE A	575.22	11.03	564.19	
MANHOLE B	577.34	13.08	564.26	

(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)

ADDITIONAL COMMENTS/OBSERVATIONS:

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

THIS FORM TO BE USED FOR ALL QUARTERLY PIEZOMETER AND MANHOLE GROUND-WATER ELEVATION MEASURING EVENTS

DATE: 10/11/2005 TIME: 1000

INSPECTOR: M. Walker COMPANY: Sevenson

WEATHER:

PIEZOMETER	RISER ELEVATION (INSIDE CASING)	DEPTH TO WATER (FT.)	WATER ELEVATION	COMMENTS
P-1	572.72	6.26	566.46	
P-2	574.89	9.59	565.3	
P-3	574.16	9.22	564.94	
P-4	576.14	10.97	565.17	
P-5	575.05	5.18	569.87	
P-6	578.28	11.03	567.25	
MANHOLE A	575.22	11.03	564.19	
MANHOLE B	577.34	13.1	564.24	

(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)

ADDITIONAL COMMENTS/OBSERVATIONS:

APPENDIX 4

QUARTERLY SITE INSPECTION FORMS

July - December 2005

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
SITE INSPECTION FORM

THIS FORM TO BE USED FOR QUARTERLY AND ALL OTHER SITE INSPECTIONS

DATE: 9/7/2005 TIME: 900

INSPECTOR: Walker COMPANY: Sevenson

WEATHER:

REASON FOR INSPECTION (QUARTERLY OR OTHER): Fall 2005 Sampling Event

GENERAL SITE CONDITIONS: U=UNACCEPTABLE A=ACCEPTABLE

(Note: For general site conditions note existence of bare areas (number,size), cracks, subsidence (sinking), ponded water, stressed vegetation, soil discoloration or seeps, and rodent burrows. For site security, note absence of locks, gates open or damaged, missing signs or evidence of vandalism. Note any other unusual occurences.)

		COMMENTS
ACCESS ROAD	A	
COVER VEGETATION	A	
TREES	A	
LITTER	A	
EROSION (CAP)	A	
EROSION (BANK)	A	

SECURITY:

FENCE/LOCKS	A	
PIEZOMETERS/LOCKS	A	
MONITORING WELLS/LOCKS	A	
MANHOLES/LIDS/LOCKS	A	
ELECTRICAL PANEL	A	

ADDITIONAL COMMENTS: Everything looks good

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

THIS FORM TO BE USED FOR QUARTERLY AND ALL OTHER SITE INSPECTIONS

DATE: 10/6/2005 TIME: 1000

INSPECTOR: Mike Walker COMPANY: Sevenson

WEATHER:

REASON FOR INSPECTION (QUARTERLY OR OTHER): Phone call from OLIN Security

GENERAL SITE CONDITIONS: U=UNACCEPTABLE A=ACCEPTABLE

(Note: For general site conditions note existence of bare areas (number,size), cracks, subsidence (sinking), ponded water, stressed vegetation, soil discoloration or seeps, and rodent burrows. For site security, note absence of locks, gates open or damaged, missing signs or evidence of vandalism. Note any other unusual occurences.)

		COMMENTS
ACCESS ROAD	A	
COVER VEGETATION	A	
TREES	A	
LITTER	A	
EROSION (CAP)	A	
EROSION (BANK)	A	
SECURITY:		
FENCE/LOCKS	U	Man Gate on side of side has been damaged
PIEZOMETERS/LOCKS	A	
MONITORING WELLS/LOCKS	A	
MANHOLES/LIDS/LOCKS	A	
ELECTRICAL PANEL	A	

ADDITIONAL COMMENTS: I had received a call from Craig, the security guard at Olin Gate 4, He told me that Steve Stepien had called him and asked him to relay a message to me that one of the small gates at the CGS had been broken down. I went to the site and found the damaged gate in pieces. I took one of the spare fence panels that we had on site and nailed it up where the gate was to secure the site. I called Fox Fence Co. and asked them to come out and replace the gate. I will follow this report with an update as the situation progresses. For now the site is secure.

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

THIS FORM TO BE USED FOR QUARTERLY AND ALL OTHER SITE INSPECTIONS

DATE: 10/11/2005 TIME: 900

INSPECTOR: Mike Walker COMPANY: Sevenson

WEATHER:

REASON FOR INSPECTION (QUARTERLY OR OTHER): Follow up on Gate Repair/Qtrly. Insp

GENERAL SITE CONDITIONS: U=UNACCEPTABLE A=ACCEPTABLE

(Note: For general site conditions note existence of bare areas (number,size), cracks, subsidence (sinking), ponded water, stressed vegetation, soil discoloration or seeps, and rodent burrows. For site security, note absence of locks, gates open or damaged, missing signs or evidence of vandalism. Note any other unusual occurences.)

		COMMENTS
ACCESS ROAD	A	
COVER VEGETATION	A	
TREES	A	
LITTER	A	
EROSION (CAP)	A	
EROSION (BANK)	A	

SECURITY:

FENCE/LOCKS	A	Man Gate on side of property has been repaired.
PIEZOMETERS/LOCKS	A	
MONITORING WELLS/LOCKS	A	
MANHOLES/LIDS/LOCKS	A	
ELECTRICAL PANEL	A	

ADDITIONAL COMMENTS: Site looks good. Damaged gate has been repaired properly.