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May 23, 2005

Mr. Glenn May
Division of Environmental Remediation
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203

W.O. No. 02181.086.009

Re: Progress Report – November 1, 2004 to April 30, 2005
3M Tonawanda, New York Facility
Order on Consent # B9-0369-91-04, Site Code #915148

Dear Mr. May:

In accordance with the referenced Order on Consent (Order) and at 3M's direction, I am submitting the progress report for the 3M Tonawanda, NY facility for the period extending from November 1, 2004 to April 30, 2005. As we discussed, 3M has now completed five years of site monitoring and reporting as required under the existing Order. Pursuant to the Order, 3M plans to conduct the 5-year performance evaluation of the implemented remedial action at the Tonawanda facility. The results of this evaluation will be provided to the NYSDEC in July 2005 and include recommendations concerning future site inspections, monitoring and reporting. If you have any comments or questions, please call me at 610-701-7302.

Very truly yours,

WESTON SOLUTIONS, INC.

Thomas A. Drew, P.G.
Principal Project Manager

c: Division of Environmental Remediation, Albany (w/o enclosure)
Director, Bureau of Environmental Exposure Investigation, Troy (w/o enclosure)
Division of Environmental Enforcement, Buffalo (w/o enclosure)
C. O'Connor - New York State Department of Health, Buffalo (w/ enclosure)
M. Gaetz, 3M (w/ enclosure)
K. Held, 3M (w/ enclosure)

PROGRESS REPORT

Site Name and Location:	3M Facility, Tonawanda, New York
Registry Number:	915148
Order on Consent:	B9-0369-91-04
3M Project Contacts:	Mark Gaetz (3M Corporate) Keith Held (3M Tonawanda)
NYSDEC Project Lead:	Glenn May
Reporting Period:	November 1, 2004 to April 30, 2005

Background

The New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) (Registry No. 915148) for the 3M facility in Tonawanda, New York. This ROD presents the selected remedial action for the Tonawanda facility based on the site's Administrative Record and public input. Following ROD issuance, the NYSDEC reclassified the 3M Tonawanda site from "Class 3 – Does not present a significant threat to the public health or environment – action may be deferred", to "Class 4 – Site properly closed – requires continued management."

3M is implementing the selected ROD remedy, No Further Action with Monitoring, under an Order on Consent (Index # B9-0369-91-04) (Order) according to the NYSDEC-approved Operation and Maintenance Work Plan (O&M Work Plan), which was made part of the Order. The O&M Work Plan calls for:

- Filing a Declaration of Covenants and Restrictions with the property deed at the Erie County Clerk's Office. This was completed and was reported in the initial progress report for the period ending March 31, 2001.
- Performing long-term groundwater monitoring. Involves semiannual sampling of site monitor wells MW-1, MW-2, MW-3, and MW-4 and annual sampling of the two site lysimeters, LY-1 and LY-2, with groundwater samples analyzed for CS_2.
- Inspecting the completed interim remedial measures (IRMs) (includes the CS_2 tank system, and the catch basin and associated swale) and maintaining the integrity of the IRMs.

This progress report provides a summary of the project activities that have occurred from November 1, 2004 to April 30, 2005.

1.0 Summary of Activities Performed During the Reporting Period

The following is a summary of activities performed by 3M during the reporting period:

- Daily inspections of the CS_2 tank/secondary containment system and associated truck/rail unloading stations were conducted for evidence of spills, leaks and unpermitted discharges of water containing CS_2. None of these were observed during the daily inspections.
- Periodic visual inspections were conducted prior to and during the transfer of CS_2 into the storage tank for evidence of malfunctioning equipment. No deficiencies were noted during the visual inspections.
- External inspection of the CS_2 system was conducted on January 26, 2005. The NYSDEC has approved a request from 3M to delay the internal inspection of the tank due to the scheduled removal and replacement of the CS_2 tank.
- The catch basins and surrounding area was maintained during this reporting period as required by the O&M Work Plan.
- Semiannual groundwater monitoring was conducted on October 27, 2004 and April 25, 2005 in accordance with procedures specified in the O&M Work Plan. The monitoring results are summarized in Section 3.0.

2.0 CS_2 Tank System Deficiencies Identified by 3M and Corrective Actions Taken

- No CS_2 tank system deficiencies were noted during this reporting period.

3.0 Groundwater Monitoring Results

Summary of Carbon Disulfide Groundwater Analytical Results (mg/L)

Date	Sample ID					
	MW-01	MW-02	MW-03	MW-04	LY-01	LY-02
10/27/04	0.0059	0.0098	ND	0.058/0.025	ND	340
4/25/05	ND	ND	ND	ND/ND*	NS	NS

Notes: ND - Not detected. The reporting limit for CS_2 is 5 µg/L.
* - Duplicate sample result.
NS - Not Sampled

As noted above, carbon disulfide was detected at low levels in the groundwater samples collected from monitor wells MW-01, MW-02 and MW-04 in October 2004. The October 2004 sampling results are anomalous since carbon disulfide had not been detected in any site monitor well during the previous four years of semiannual sampling.

Furthermore, the semiannual sampling results from April 2005 (see results summarized above) do not confirm the presence of CS_2 in the site monitor wells. A copy of the analytical data packages for the October 2004 and April 2005 sampling events are provided in Attachment A.

The two site lysimeters (LY-01 and LY-02) were only sampled in October 2004. These lysimeters are sampled annually. Consistent with the previous sampling results, CS_2 was not detected in the soil pore water collected from lysimeter LY-01. Carbon disulfide was found at a concentration of 340 mg/L in the LY-02 sample and this result is comparable to previous sampling data.

ATTACHMENT A
LABORATORY ANALYTICAL PACKAGES
OCTOBER 2004 AND APRIL 2005 SAMPLING EVENTS

SEVERN TRENT STL

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

Tel: 716 691 2600 Fax: 716 691 7991
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ANALYTICAL REPORT

Job#: A04-A623

STL Project#: NY1A8679
Site Name: 3M Tonawanda, NY - Semi-Anual Monitoring
Task: 3M Tonawanda, NY - Semi-Annual Monitoring

Mr. Tom Drew
Roy F. Weston, Inc.
1400 Weston Way
West Chester, PA 19380

STL Buffalo

Mark A. Nemec
Project Manager

11/16/2004

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 SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A4A62308	FIELD BLANK	10/27/2004	16:40	10/27/2004	17:45
A4A62301	LY-01	10/27/2004	17:10	10/27/2004	17:45
A4A62302	LY-02	10/27/2004	17:15	10/27/2004	17:45
A4A62303	MW-01	10/27/2004	15:45	10/27/2004	17:45
A4A62304	MW-02	10/27/2004	13:30	10/27/2004	17:45
A4A62305	MW-03	10/27/2004	15:30	10/27/2004	17:45
A4A62306	MW-04	10/27/2004	16:45	10/27/2004	17:45
A4A62307	MW-04 DUP	10/27/2004	16:45	10/27/2004	17:45
A4A62309	TRIP BLANK	10/27/2004	12:00	10/27/2004	17:45

METHODS SUMMARY

Job#: A04-A623

STL Project#: NY1A8679
Site Name: 3M Tonawanda, NY - Semi-Anual Monitoring

PARAMETER	ANALYTICAL METHOD
METHOD 8260 - Carbon Disulfide	SW8463 8260/5ML

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#: A04-A623

STL Project#: NY1A8679
Site Name: 3M Tonawanda, NY - Semi-Anual Monitoring

General Comments

The enclosed data 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

A04-A623
Sample Cooler(s) were received at the following temperature(s); 6.0 °C
All samples were received in good condition.

GC/MS Volatile Data

The requested target analyte list does not include any spiking compounds routinely analyzed. Spike recovery data has not been included in the report.

****

Client Sample ID	Lab Sample ID	Parameter (Inorganic)/Method (Organic)	Dilution	Code
LY-02	A4A62302	8260/5ML	5000.00	008

Dilution Code Definition:

002 - sample matrix effects
003 - excessive foaming
004 - high levels of non-target compounds
005 - sample matrix resulted in method non-compliance for an Internal Standard
006 - sample matrix resulted in method non-compliance for Surrogate
007 - nature of the TCLP matrix
008 - high concentration of target analyte(s)
009 - sample turbidity
010 - sample color
011 - insufficient volume for lower dilution
012 - sample viscosity
013 - other

DATA COMMENT PAGE

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected at or above the reporting limit.
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 a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. 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 at or above the reporting limit.
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.
K	Indicates the post digestion spike recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
M	Indicates duplicate injection results exceeded quality control limits.
W	Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
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 analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

Sample Data Package

Client ID		FIELD BLANK		LY-01		LY-02		MW-01	
Job No / Lab ID		A04-A623	A4A62308	A04-A623	A4A62301	A04-A623	A4A62302	A04-A623	A4A62303
Sample Date		10/27/2004		10/27/2004		10/27/2004		10/27/2004	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	340000	8200	5.9	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	83	50-200	82	50-200	84	50-200	96	50-200
1,4-Difluorobenzene	%	81	50-200	82	50-200	86	50-200	96	50-200
1,4-Dichlorobenzene-D4	%	84	50-200	85	50-200	70	50-200	91	50-200
Toluene-D8	%	102	77-122	105	77-122	104	77-122	81	77-122
p-Bromofluorobenzene	%	93	74-120	94	74-120	101	74-120	86	74-120
1,2-Dichloroethane-D4	%	114	73-136	122	73-136	102	73-136	78	73-136

Client ID		MW-02		MW-03		MW-04		MW-04 DUP	
Job No / Lab ID		A04-A623	A4A62304	A04-A623	A4A62305	A04-A623	A4A62306	A04-A623	A4A62307
Sample Date		10/27/2004		10/27/2004		10/27/2004		10/27/2004	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	9.8	5.0	ND	5.0	58	5.0	25	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	80	50-200	97	50-200	94	50-200	96	50-200
1,4-Difluorobenzene	%	77	50-200	96	50-200	94	50-200	96	50-200
1,4-Dichlorobenzene-D4	%	80	50-200	92	50-200	86	50-200	88	50-200
Toluene-D8	%	106	77-122	80	77-122	83	77-122	81	77-122
p-Bromofluorobenzene	%	93	74-120	86	74-120	85	74-120	85	74-120
1,2-Dichloroethane-D4	%	121	73-136	79	73-136	81	73-136	80	73-136

9/23

Batch Quality Control Data

Date: 11/16/2004 15:28:35
Batch No: A4B19071

MS/MSD Batch QC Results

Rept: AN1392

Lab Sample ID: A4A87003 A4A87003MS A4A87003SD

Analyte	Units of Measure	Concentration			Spike Amount		% Recovery			%	QC LIMITS	
		Sample	Matrix Spike	Spike Duplicate	MS	MSD	MS	MSD	Avg	RPD	RPD	REC.
ALLIED - SW8463 8260 - TCLP VOLATILES -												
Benzene	MG/L	0	0.508	0.391	0.500	0.500	102	78	90	27 *	17.0	77-123
2-Butanone	MG/L	0	2.40	2.03	2.50	0.500	96	406 *	251	124 *	20.0	64-139
Carbon Tetrachloride	MG/L	0	0.485	0.372	0.500	0.500	97	74 *	86	27 *	20.0	75-128
Chlorobenzene	MG/L	0.0140	0.459	0.353	0.500	0.500	89	68 *	79	27 *	19.0	77-121
Chloroform	MG/L	0	0.506	0.386	0.500	0.500	101	77	89	27 *	20.0	75-126
1,2-Dichloroethane	MG/L	0	0.503	0.382	0.500	0.500	101	76	89	28 *	20.0	74-126
1,1-Dichloroethene	MG/L	0	0.501	0.380	0.500	0.500	100	76	88	27 *	20.0	66-142
Tetrachloroethene	MG/L	0	0.480	0.369	0.500	0.500	96	74 *	85	26 *	20.0	77-120
Trichloroethene	MG/L	0	0.509	0.379	0.500	0.500	102	76 *	89	29 *	22.0	77-123
Vinyl chloride	MG/L	0	0.516	0.374	0.500	0.500	103	75	89	31 *	20.0	55-145

11/23

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Lab Sample ID: A4A53704DL A4A53704MS A4A53704SD

Analyte	Units of Measure	Concentration			Spike Amount		% Recovery			%	QC LIMITS	
		Sample	Matrix Spike	Spike Duplicate	MS	MSD	MS	MSD	Avg	RPD	RPD	REC.
AQUEOUS-METHOD 8260 -NYSDEC TCL+ VOLATIL												
1,1-Dichloroethene	UG/L	0	26767	26105	25000	25000	107	104	106	3	16.0	66-142
Trichloroethene	UG/L	991	28315	26698	25000	25000	109	103	106	6	16.0	72-120
Benzene	UG/L	0	26655	26555	25000	25000	107	106	107	0.	13.0	71-120
Toluene	UG/L	0	24661	24489	25000	25000	99	98	99	1	18.0	69-120
Chlorobenzene	UG/L	0	24123	23862	25000	25000	96	95	96	1	19.0	73-120

12/23

* Indicates Result is outside QC Limits
NC = Not Calculated ND = Not Detected

Chronology and QC Summary Package

Client ID		VBLK 76		VBLK 77		VBLK49		VBLK50	
Job No	Lab ID	A04-A623	A4B1902002	A04-A623	A4B1907102	A04-A623	A4B1912202	A04-A623	A4B1912302
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
==========IS/SURROGATE(S)==========									
Chlorobenzene-D5	%	84	50-200	85	50-200	99	50-200	85	50-200
1,4-Difluorobenzene	%	82	50-200	86	50-200	97	50-200	84	50-200
1,4-Dichlorobenzene-D4	%	85	50-200	89	50-200	91	50-200	72	50-200
Toluene-D8	%	106	77-122	104	77-122	80	77-122	108	77-122
p-Bromofluorobenzene	%	97	74-120	98	74-120	84	74-120	110	74-120
1,2-Dichloroethane-D4	%	116	73-136	121	73-136	78	73-136	104	73-136

A = Not Applicable ND = Not Detected

Client ID Job No Lab ID Sample Date		MSB 76 A04-A623 A4B1902001		MSB 77 A04-A623 A4B1907101		MSB49 A04-A623 A4B1912201		MSB50 A04-A623 A4B1912301	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	53	5.0	57	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	99	50-200	98	50-200	96	50-200	90	50-200
1,4-Difluorobenzene	%	99	50-200	100	50-200	96	50-200	89	50-200
1,4-Dichlorobenzene-D4	%	97	50-200	100	50-200	90	50-200	78	50-200
Toluene-D8	%	107	77-122	107	77-122	81	77-122	79	77-122
p-Bromofluorobenzene	%	100	74-120	106	74-120	85	74-120	83	74-120
1,2-Dichloroethane-D4	%	112	73-136	116	73-136	76	73-136	78	73-136

NA = Not Applicable ND = Not Detected

Client ID		TRIP BLANK							
Job No	Lab ID	A04-A623	A4A62309						
Sample Date		10/27/2004							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	NA		NA		NA	
======IS/SURROGATE(S)======									
Chlorobenzene-D5	%	80	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	79	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	80	50-200	NA		NA		NA	
Toluene-D8	%	112	77-122	NA		NA		NA	
p-Bromofluorobenzene	%	100	74-120	NA		NA		NA	
1,2-Dichloroethane-D4	%	121	73-136	NA		NA		NA	

16/23

A = Not Applicable ND = Not Detected

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	FIELD BLANK A04-A623 A4A62308	LY-01 A04-A623 A4A62301	LY-02 A04-A623 A4A62302	MW-01 A04-A623 A4A62303	MW-02 A04-A623 A4A62304
Sample Date	10/27/2004 16:40	10/27/2004 17:10	10/27/2004 17:15	10/27/2004 15:45	10/27/2004 13:30
Received Date	10/27/2004 17:45	10/27/2004 17:45	10/27/2004 17:45	10/27/2004 17:45	10/27/2004 17:45
Extraction Date					
Analysis Date	11/06/2004 17:42	11/08/2004 14:12	11/10/2004 13:21	11/09/2004 23:02	11/06/2004 19:41
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	WATER	WATER	GW	GW
Dilution Factor	1.0	1.0	5000.0	1.0	1.0
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS
% Dry					

17/23

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	MW-03 A04-A623 A4A62305	MW-04 A04-A623 A4A62306	MW-04 DUP A04-A623 A4A62307		
Sample Date	10/27/2004 15:30	10/27/2004 16:45	10/27/2004 16:45		
Received Date	10/27/2004 17:45	10/27/2004 17:45	10/27/2004 17:45		
Extraction Date					
Analysis Date	11/09/2004 23:29	11/09/2004 23:56	11/10/2004 00:23		
Extraction HT Met?	-	-	-		
Analytical HT Met?	YES	YES	YES		
Sample Matrix	GW	GW	GW		
Dilution Factor	1.0	1.0	1.0		
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS		
% Dry					

18/23

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	TRIP BLANK A04-A623 A4A62309				
Sample Date	10/27/2004 12:00				
Received Date	10/27/2004 17:45				
Extraction Date					
Analysis Date	11/06/2004 17:11				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.005 LITERS				
% Dry					

19/23

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	MSB 76 A04-A623 A4B1902001	MSB 77 A04-A623 A4B1907101	MSB49 A04-A623 A4B1912201	MSB50 A04-A623 A4B1912301	
Sample Date					
Received Date					
Extraction Date					
Analysis Date	11/06/2004 09:09	11/08/2004 11:41	11/09/2004 21:41	11/10/2004 12:00	
Extraction HT Met?	-	-	-	-	
Analytical HT Met?	-	-	-	-	
Sample Matrix	WATER	WATER	WATER	WATER	
Dilution Factor	1.0	1.0	1.0	1.0	
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	
% Dry					

20/23

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	VBLK 76 A04-A623 A4B1902002	VBLK 77 A04-A623 A4B1907102	VBLK49 A04-A623 A4B1912202	VBLK50 A04-A623 A4B1912302	
Sample Date					
Received Date					
Extraction Date					
Analysis Date	11/06/2004 10:09	11/08/2004 12:11	11/09/2004 22:08	11/10/2004 12:54	
Extraction HT Met?	-	-	-	-	
Analytical HT Met?	-	-	-	-	
Sample Matrix	WATER	WATER	WATER	WATER	
Dilution Factor	1.0	1.0	1.0	1.0	
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	
% Dry					

NA = Not Applicable

Chain of Custody

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: Weston/3M Tonawanda	Project Manager: Tom Drew	Date: 10/27/04	Chain of Custody Number: 193908
Address	Telephone Number (Area Code)/Fax Number: 610.701.7302	Lab Number	Page 1 of 1
City: West Chester; State: PA; Zip Code: 19380	Site Contact	Lab Contact: Mark Nemec	
Project Name and Location (State): 3M Tonawanda 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.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: CS2	Special Instructions/ Conditions of Receipt
MW-02	10/27/04	1330		✓						✓			✓	* 5 PPB Detection Limit
MW-03		1530								✓			✓	
MW-01		1545								✓			✓	
MW-04		1645								✓			✓	
MW-04 Dup		1645								✓			✓	
LY-01		1710								✓			✓	
LY-02		1715								✓			✓	
Field Blank		1640								✓			✓	
Trip Blank		1200								✓			✓	

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 _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	10/27/04	1745	1. Received By	10/27/04	17:45
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 6.0°C

23/23

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

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#: A05-4077

STL Project#: NY1A8679
Site Name: 3M Tonawanda, NY - Semi-Anual Monitoring
Task: 3M Tonawanda, NY - Semi-Annual Monitoring

Mr. Tom Drew
Roy F. Weston, Inc.
1400 Weston Way
West Chester, PA 19380

STL Buffalo

Mark A. Nemec
Project Manager

05/17/2005

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 SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A5407705	FIELD BLANK	WATER	04/25/2005	16:40	04/25/2005	18:25
A5407701	MW-01	GW	04/25/2005	17:10	04/25/2005	18:25
A5407702	MW-02	GW	04/25/2005	15:00	04/25/2005	18:25
A5407703	MW-03	GW	04/25/2005	17:00	04/25/2005	18:25
A5407704	MW-04	GW	04/25/2005	13:30	04/25/2005	18:25
A5407704FD	MW-04	GW	04/25/2005	13:30	04/25/2005	18:25
A5407706	TRIP BLANK	WATER	04/25/2005		04/25/2005	18:25

METHODS SUMMARY

Job#: A05-4077

STL Project#: NY1A8679
Site Name: 3M Tonawanda, NY - Semi-Anual Monitoring

PARAMETER	ANALYTICAL METHOD
METHOD 8260 - Carbon Disulfide	SW8463 8260/5ML

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#: A05-4077

STL Project#: NY1A8679
Site Name: 3M Tonawanda, NY - Semi-Anual Monitoring

General Comments

The enclosed data 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

A05-4077
Sample Cooler(s) were received at the following temperature(s); 4.6 °C
All samples were received in good condition.

GC/MS Volatile Data

No deviations from protocol were encountered during the analytical procedures.

****

DATA COMMENT PAGE

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected at or above the reporting limit.
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 a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. 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 at or above the reporting limit.
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.
K	Indicates the post digestion spike recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
M	Indicates duplicate injection results exceeded quality control limits.
W	Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
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 analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

Date: 05/17/2005
Time: 17:19:40

3M Tonawanda, NY - Semi-Anual Monitoring
3M Tonawanda, NY - Semi-Annual Monitoring
METHOD 8260 - CARBON DISULFIDE

Rept: AN0326

Client ID		FIELD BLANK		MW-01		MW-02		MW-03	
Job No / Lab ID		A05-4077	A5407705	A05-4077	A5407701	A05-4077	A5407702	A05-4077	A5407703
Sample Date		04/25/2005		04/25/2005		04/25/2005		04/25/2005	
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	ND	5.0	ND	5.0
IS/SURROGATE(S)									
Chlorobenzene-D5	%	99	50-200	99	50-200	98	50-200	97	50-200
1,4-Difluorobenzene	%	100	50-200	97	50-200	98	50-200	97	50-200
1,4-Dichlorobenzene-D4	%	99	50-200	92	50-200	98	50-200	91	50-200
Toluene-D8	%	96	77-122	100	77-122	100	77-122	106	77-122
p-Bromofluorobenzene	%	104	74-120	104	74-120	109	74-120	111	74-120
1,2-Dichloroethane-D4	%	99	73-136	102	73-136	103	73-136	108	73-136

Client ID		MW-04		MW-04					
Job No / Lab ID		A05-4077	A5407704	A05-4077	A5407704FD				
Sample Date		04/25/2005		04/25/2005					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	101	50-200	104	50-200	NA		NA	
1,4-Difluorobenzene	%	101	50-200	102	50-200	NA		NA	
1,4-Dichlorobenzene-D4	%	100	50-200	97	50-200	NA		NA	
Toluene-D8	%	98	77-122	101	77-122	NA		NA	
p-Bromofluorobenzene	%	108	74-120	106	74-120	NA		NA	
1,2-Dichloroethane-D4	%	103	73-136	104	73-136	NA		NA	

7/17

NA = Not Applicable ND = Not Detected

STL Buffalo

Chronology and QC Summary Package

Date: 05/17/2005
Time: 17:19:52

3M Tonawanda, NY - Semi-Anual Monitoring
3M Tonawanda, NY - Semi-Annual Monitoring
METHOD 8260 - CARBON DISULFIDE

Rept: AN0326

Client ID Job No Lab ID Sample Date		VBLK90 A05-4077 A5B0617403		VBLK91 A05-4077 A5B0617404					
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	ND	5.0	NA		NA	
==========IS/SURROGATE(S)==========									
Chlorobenzene-D5	%	103	50-200	96	50-200	NA		NA	
1,4-Difluorobenzene	%	103	50-200	95	50-200	NA		NA	
1,4-Dichlorobenzene-D4	%	102	50-200	89	50-200	NA		NA	
Toluene-D8	%	97	77-122	100	77-122	NA		NA	
p-Bromofluorobenzene	%	106	74-120	103	74-120	NA		NA	
1,2-Dichloroethane-D4	%	103	73-136	106	73-136	NA		NA	

9/17

NA = Not Applicable ND = Not Detected

STL Buffalo

Client ID		MSB90		MSB91					
Job No	Lab ID	A05-4077	A5B0617401	A05-4077	A5B0617402				
Sample Date									
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	35	5.0	ND	5.0	NA		NA	
IS/SURROGATE(S)									
Chlorobenzene-D5	%	101	50-200	96	50-200	NA		NA	
1,4-Difluorobenzene	%	100	50-200	96	50-200	NA		NA	
1,4-Dichlorobenzene-D4	%	100	50-200	89	50-200	NA		NA	
Toluene-D8	%	99	77-122	105	77-122	NA		NA	
p-Bromofluorobenzene	%	110	74-120	111	74-120	NA		NA	
1,2-Dichloroethane-D4	%	103	73-136	110	73-136	NA		NA	

10/17

A = Not Applicable ND = Not Detected

Client ID		TRIP BLANK							
Job No	Lab ID	A05-4077	A5407706						
Sample Date		04/25/2005							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Carbon Disulfide	UG/L	ND	5.0	NA		NA		NA	
==========IS/SURROGATE(S)==========									
Chlorobenzene-D5	%	102	50-200	NA		NA		NA	
1,4-Difluorobenzene	%	101	50-200	NA		NA		NA	
1,4-Dichlorobenzene-D4	%	95	50-200	NA		NA		NA	
Toluene-D8	%	95	77-122	NA		NA		NA	
p-Bromofluorobenzene	%	100	74-120	NA		NA		NA	
1,2-Dichloroethane-D4	%	96	73-136	NA		NA		NA	

11/17

NA = Not Applicable ND = Not Detected

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	FIELD BLANK A05-4077 A5407705	MW-01 A05-4077 A5407701	MW-02 A05-4077 A5407702	MW-03 A05-4077 A5407703	MW-04 A05-4077 A5407704
Sample Date	04/25/2005 16:40	04/25/2005 17:10	04/25/2005 15:00	04/25/2005 17:00	04/25/2005 13:30
Received Date	04/25/2005 18:25	04/25/2005 18:25	04/25/2005 18:25	04/25/2005 18:25	04/25/2005 18:25
Extraction Date					
Analysis Date	04/27/2005 16:04	04/27/2005 14:36	04/27/2005 14:53	04/27/2005 15:11	04/27/2005 15:29
Extraction HT Met?	-	-	-	-	-
Analytical HT Met?	YES	YES	YES	YES	YES
Sample Matrix	WATER	GW	GW	GW	GW
Dilution Factor	1.0	1.0	1.0	1.0	1.0
Sample wt/vol	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS	0.005 LITERS
% Dry					

12/17

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	MW-04 A05-4077 A5407704FD				
Sample Date	04/25/2005 13:30				
Received Date	04/25/2005 18:25				
Extraction Date					
Analysis Date	04/27/2005 15:46				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	GW				
Dilution Factor	1.0				
Sample wt/vol	0.005 LITERS				
% Dry					

13/17

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	TRIP BLANK A05-4077 A5407706				
Sample Date	04/25/2005				
Received Date	04/25/2005 18:25				
Extraction Date					
Analysis Date	04/27/2005 16:21				
Extraction HT Met?	-				
Analytical HT Met?	YES				
Sample Matrix	WATER				
Dilution Factor	1.0				
Sample wt/vol	0.005 LITERS				
% Dry					

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	MSB90 A05-4077 A5B0617401	MSB91 A05-4077 A5B0617402			
Sample Date					
Received Date					
Extraction Date					
Analysis Date	04/27/2005 09:28	04/27/2005 09:46			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	0.005 LITERS	0.005 LITERS			
% Dry					

15/17

NA = Not Applicable

METHOD 8260 - CARBON DISULFIDE

Client Sample ID Job No & Lab Sample ID	VBLK90 A05-4077 A5B0617403	VBLK91 A05-4077 A5B0617404			
Sample Date					
Received Date					
Extraction Date					
Analysis Date	04/27/2005 10:11	04/27/2005 10:29			
Extraction HT Met?	-	-			
Analytical HT Met?	-	-			
Sample Matrix	WATER	WATER			
Dilution Factor	1.0	1.0			
Sample wt/vol	0.005 LITERS	0.005 LITERS			
% Dry					

16/17

NA = Not Applicable

Chain of Custody Record

SEVERN TRENT STL

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
WESTON/3M TONAWANDA	TOM DREW	4/25/05	193002
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page ____ of ____**
1400 Weston Way	610.701.7302		
City W Chester	**State** PA	**Zip Code** 19380	**Site Contact**	**Lab Contact**
Project Name and Location (State) 3M TONAWANDA 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: VOC	Special Instructions/ Conditions of Receipt
MW-1	4/25/05	1710								4			1	
MW-2		1500								4			1	
MW-3		1700								4			1	
MW-4		1330								4			1	
MW-4 Dup		1330								4			1	
FIELD BLANK		1640								4			1	
Trip Blank		900								1			1	

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 ____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4/25/05	1825	1. Received By	4/25/05	1825
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

4 °C

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

17/17