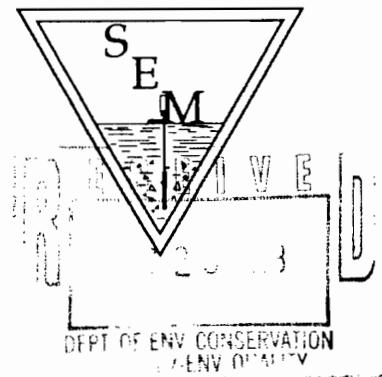


# Strategic Environmental Management, Inc.

August 22, 2003

Timothy I. DiGiulio, P.E.  
New York State Department of Environmental Conservation  
Solid & Hazardous Materials-Region 7  
615 Erie Boulevard West  
Syracuse, New York 13202



Reference: Groundwater Recovery and Treatment System Operation,  
Monitoring, and Maintenance Summary-July 2003  
Former Northeast Environmental Services, Inc. Site  
Canal Road, Town of Lenox, New York  
**NYSDEC Spill No. 01-60024/PIN No. H-0529**

SEM File: 3003.050.07.03

Dear Mr. DiGiulio:

The following provides a summary of operation, monitoring, and maintenance activities conducted by our firm in connection with the above-referenced project since our last monthly summary report dated July 11, 2003. This also serves to present the results of effluent monitoring conducted at Outfall 001A, pursuant to the requirements of the existing State Pollutant Discharge Elimination System (SPDES) Permit.

## Maintenance and Repairs

In general, the routine maintenance activities that have been conducted by SEM since the issuance of the last monthly summary report have included weekly system inspection and backflushing of the four carbon filters.

The carbon within the four carbon filters was backflushed during each weekly site visit by SEM personnel to remove accumulated mineral deposits and sediments. The backflushed water and mineral deposits were placed in four 55-gallon settling drums. The deposits were allowed to settle out of suspension and the clear liquid was transferred to the air stripper via a portable submersible pump during the following weekly site visit.

A log of magnehelic readings for the air stripper that have been recorded during the month of June is presented below. The magnehelic gauge measures the air pressure in the air stripper sump where the fresh influent air is introduced. As the trays become fouled with mineral deposits, the air pressure has been observed to rise due to the restricted air flow through the diffusion trays. As a point of reference, upon start-up of the system after the last

physical/manual cleaning event (June 4, 2003), the sump pressure was measured at 9.75 inches of water column (w.c.).

### Tabulation of Magnehelic Readings

Date	Magnehelic Reading (" w.c.)
7/2/03	11.25
7/8/03	11.60
7/15/03	12.0
7/22/03	13.0
7/29/03	13.0

During the month of July, a decrease in the flow through the air stripper from the recovery wells was observed, and appeared to have been resultant of periodic interruption of the influent pump operation due to high water level within the air stripper sump. During this same period, an increase in back pressure from the carbon filter units was noted in the system, suggesting that a restriction of water flow through the carbon filters was decreasing the rate of transfer of water from the air stripper sump, causing intermittent backups of water in the air stripper. Backflushing of the carbon filters also revealed significant amounts of iron precipitate and suspected iron-bacterial mass. Overtime, the backflushing process became less effective in reducing system pressures.

Given that the above-described observations suggested that the carbon filters had been significantly fouled by iron precipitate and iron-bacteria colonies, the carbon within the filters was removed and replaced on August 8, 2003. Following the carbon replacement, a decrease in system pressure was observed, and groundwater flow through the air stripper from the influent pumps has remained continual since that time, without periodic interruption by high water levels in the air stripper sump.

### Precipitate Control Pilot Study

In addition to the routine system maintenance activities, a pilot study was initiated on June 10, 2003 to investigate the effectiveness of "Super Iron Out" solution in removing iron precipitate that had accumulated on the interior trays of the air stripper unit. The scope of the pilot study was as described in SEM's correspondence of May 8, 2003, and generally consisted of the recirculation of "Super Iron Out" solution within and through the air stripper and the discharge pump that serves to transfer water from the air stripper sump to the carbon filters, and ultimately to the system outfall. "Super Iron Out" is a commercially available product commonly employed in the plumbing and heating industry to remove iron precipitate from heating system piping.

As a means of recirculating the Iron Out solution through the air stripper without the solution being transferred to the carbon filters or system outfall, the plumbing on the discharge side of the air stripper was modified. The modification included the installation of control valves and piping that would divert flow from the air stripper discharge pump back into the upper tray

August 22, 2003

of the air stripper, rather than through the carbon filters. After entering the upper tray of the air stripper, the solution would flow downward through the various trays of the air stripper and into the lower sump of the unit. The air stripper discharge pump would in turn transfer the solution back into the unit's upper tray. During this period of recirculation, groundwater recovery from the two (2) site recovery wells (RW-1 and WP-5) was suspended.

The air stripper was disassembled and mechanically cleaned on June 4, 2003, prior to the initial application of the Super Iron Out product, to remove loose scale. The solution was allowed to recirculate through the air stripper trays and discharge pump from June 10 through June 12. On June, 12, the solution was removed from the air stripper sump and placed in 55-gallon barrels at the site, and the interior of the air stripper was rinsed thoroughly with treated groundwater that had previously been recovered from the site recovery wells, treated through the air stripping, and utilized to backflush the carbon filters. This treated groundwater had been contained in settling barrels after the prior backflush event, allowing the iron precipitate and solids removed from the carbon filters to settle out of suspension. The clear water was decanted from the settling barrels and used to rinse the residual Iron Out from the air stripper unit.

After the recirculation process was terminated, a considerable volume of solids were present in the air stripper sump, suggesting that the Iron Out solution was at least somewhat successful in removing residual precipitate/scale from the air stripper trays.

The air pressure readings indicated by the magnehelic gauge on the stripper unit have been monitored since the initial Iron Out application. The internal air pressure gradually increased from 10.5 inches of water column following the recirculation on June 12, 2003, to 13.5 inches of water column on August 5, 2003, indicating a restriction of air flow through the trays as a result of iron/mineral deposition. Based on this, a second application of Super Iron Out was performed on August 5, in a manner generally consistent with that employed during the first application. The solution was recirculated through the air stripper system from that date until August 11. Upon terminating the recirculation procedure and removal of the Iron Out solution from the sump, approximately two (2) to three (3) inches of sediment was present in the bottom of the sump. This material was removed from the air stripper prior to restarting the unit. Following the second application of the Iron Out solution, the magnehelic gauge on the air stripper indicated an internal air pressure of 13.25 inches of water column.

Based on the presence of the solids/sediments within the air stripper sump following each application of the Iron Out solution, it appears that the solution was successful in removing some degree of scale from the air stripper trays; however, the magnehelic gauge readings recorded since the initial application indicate that the process was not successful in restoring air flow to the condition achieved by manual cleaning. These observations would suggest that the use of the Iron Out product may reduce the frequency at which manual cleaning is necessary, but may not be effective in eliminating the need for the manual cleaning.

## **Sampling and Analysis/Operational Monitoring**

Weekly monitoring samples are collected from several points of the groundwater recovery and treatment system. Discrete samples are collected from each of the two influent sources (RW-1 and WP5D), post-air stripper/pre-GAC filter, and the treatment system effluent (Outfall 001A).

The samples are submitted to Life Science Laboratories, Inc., of East Syracuse, New York, for analysis via EPA 601/602 methodology for volatile organic compounds (VOC). The data generated from these analyses are used to assess the contaminant level of the influent waters, the operational efficiency of the air stripper, and the VOC removal capacity of the GAC filter backup system.

The sampling was conducted on the following dates:

- Week of June 29 (July 2)
- Week of July 6 (July 8)
- Week of July 13 (July 15)
- Week of July 20 (July 22)
- Week of July 27 (July 29)

The results of the analyses are summarized in the table included on the following page.

**Tabulation of Detected Compounds vs. SPDES Discharge Limitations  
 System O&M Sampling**

Sampling Date	Detected Compound	RW-1 Influent	WP-5D Influent	Air Stripper Discharge	Final System Discharge (Outfall 01A)	SPDES Discharge Limit
7/2/03	Ethyl Benzene	29	ND	ND	ND	10
	Toluene	600	ND	ND	ND	10
	Xylenes (total)	120	ND	ND	ND	10
	Chloroethane	ND	15	ND	ND	30
	1,1-Dichloroethane	73	ND	ND	ND	10
	1,1-Dichloroethene	6.0	ND	ND	ND	10
	t-1,2-Dichloroethene	5.1	ND	ND	ND	30
	1,1,1-trichloroethane	42	ND	ND	ND	10
	Trichloroethene	46	ND	ND	ND	10
	Vinyl Chloride	240	64	ND	ND	50
7/8/03	Ethyl Benzene	12	ND	ND	ND	10
	Toluene	350	ND	ND	ND	10
	Xylenes (total)	73	ND	ND	ND	10
	Chloroethane	ND	12	ND	ND	30
	1,1-Dichloroethane	67	ND	ND	ND	10
	1,1-Dichloroethene	8.1	ND	ND	ND	10
	t-1,2-Dichloroethene	8.7	ND	ND	ND	30
	1,1,1-trichloroethane	66	ND	ND	ND	10
	Trichloroethene	74	ND	ND	ND	10
	Vinyl Chloride	150	55	ND	ND	50
7/15/03	Ethyl Benzene	ND	ND	ND	ND	10
	Toluene	240	ND	ND	ND	10
	Xylenes (total)	53	ND	ND	ND	10
	Chloroethane	ND	11	ND	ND	30
	1,1-Dichloroethane	44	ND	ND	ND	10
	1,1-Dichloroethene	7.2	ND	ND	ND	10
	t-1,2-Dichloroethene	7.4	ND	ND	ND	30
	1,1,1-trichloroethane	51	ND	ND	ND	10
	Trichloroethene	51	ND	ND	ND	10
	Vinyl Chloride	130	47	ND	ND	50
7/22/03	Ethyl Benzene	22	ND	ND	ND	10
	Toluene	540	ND	ND	ND	10
	Xylenes (total)	110	ND	ND	ND	10
	Chloroethane	ND	9.9	ND	ND	30
	1,1-Dichloroethane	55	ND	ND	ND	10
	1,1-Dichloroethene	8.4	ND	ND	ND	10
	t-1,2-Dichloroethene	6.9	ND	ND	ND	30
	1,1,1-trichloroethane	58	ND	ND	ND	10
	Trichloroethene	59	ND	ND	ND	10
	Vinyl Chloride	210	55	ND	ND	50
7/29/03	Ethyl Benzene	25	ND	ND	ND	10
	Toluene	550	ND	ND	ND	10
	Xylenes (total)	140	ND	ND	ND	10
	Chloroethane	ND	15	ND	ND	30
	1,1-Dichloroethane	93	ND	ND	ND	10
	1,1-Dichloroethene	7.3	ND	ND	ND	10
	t-1,2-Dichloroethene	6.0	ND	ND	ND	30
	1,1,1-trichloroethane	63	ND	ND	ND	10
	Trichloroethene	58	ND	ND	ND	10
	Vinyl Chloride	230	54	ND	ND	50

Notes: All values are in ug/L or parts-per-billion (ppb).

The above table reflects only those target compounds that were detected in the various samples; all other target compounds were below the respective method detection limits.

New York State Department of Environmental Conservation  
Re: Groundwater Recovery and Treatment System O, M&M Summary-July 2003  
Former Northeast Environmental Services, Inc. Site

August 22, 2003

A log of operational parameters and maintenance activities (ATTACHMENT A), and a tabulation of flow volumes vs. analysis results (ATTACHMENT B) are attached to allow convenient reference. Copies of the laboratory analysis results and sample custody documentation associated with the various sampling events are also attached.

The next monthly summary of operation, monitoring and maintenance activities will be submitted in early September. Please feel free to contact our office if you have any questions or concerns in the interim.

Respectfully,  
STRATEGIC ENVIRONMENTAL MANAGEMENT, Inc.

  
Mark N. Graves

Project Manager

MNG/jed

Attachments

Cc: David Roth-Op-Tech Environmental Services, Inc., with attachments

## **Attachment A**

### **Groundwater recovery and Treatment System Operations and Maintenance Logs**

ATTACHMENT A

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2002**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer	Flow Rate (GPM)	Flow Rate Totalizer	WP-5D Flow Rate (GPM)	Activities/Comments
<b>March 2002</b>						
Pre-March 13	-	*	--	*	--	Operations and maintenance activities performed by Tim Kilts.
March 13	1000	*	9	*	7	Carbon filters 1,2,3 and 4 backwashed
March 27	1500	*	9	*	7	Carbon replaced in filters 3 and 4
March 28	0900	*	None	*	None	Disassembled air stripper and began cleaning trays.
March 29	0900	*	None	*	None	Replaced carbon in filters 1 and 2
<b>April 2002</b>						
April 1	1400	*	None	*	None	Acid washed air stripper; cleaned shed and re-assembled air stripper
April 3	1200	*	8.7	*	7	Replaced carbon in filters 3 and 4; attempted to pull submersible pump in RW-1 for trouble shooting.
April 4	1000	*	8.8	*	7.3	Remediation shed flooded; removed water from floor
April 8	1430	*	8.5	*	7.5	
April 17	1230	*	8.5	*	7.5	Carbon filters 1, 2, 3 and 4 back flushed.
April 25	1220	*	8.5	*	7.5	Back flushed carbon filters 3 and 4
April 30	*		9	*	7.5	Carbon filters 3 and 4 back flushed.
<b>May 2002</b>						
May 9	1530	*	9	*	7	Carbon filters 1 and 2 back flushed.
May 14	1100	*	9	*	7	Significant water on floor of shed upon arrival-transferred to air stripper; carbon filters 1 and 2 back flushed; lower walls and floor of remediation building pressure washed; several leaks in system repaired.
May 15	1000	*	9	*	7	New flow meter/totalizer installed on WP-5D; carbon filters 1 and 2 back flushed; troubleshooting of sump pump within floor sump.
May 31	1350	*	8.5	150410	7.5	Carbon filters 1 and 2 back flushed.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

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**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer (GPM)	WP-5D Flow Rate Totalizer (GPM)	Flow Rate (GPM)	Activities/Comments
<b>June 2002</b>					
June 6	0845	5	12.5	194430	8 New flow meter/totalizer installed on RW-1;
June 11	1330	49090	11.5	227910	8 Carbon filters 3 and 4 back flushed.
June 13	1130	69830	11.2	241720	7.5 Carbon filters 1, 2, 3 and 4 back flushed; flow from recovery wells intermittent-air stripper discharge pump unable to handle flow from both wells. High water level interlock of air stripper shuts down operation of recovery wells periodically while water is transferred from lower tray of air stripper to carbon filters.
June 25	0830	198030	None	323710	None Groundwater recovery and treatment system operation discontinued to allow pipe from well WP-5D to be buried.
June 26	-	198030	None	323710	None Continuation of water line installation activities; system not operational.
June 27+	-	198030	None	323710	None Water line installation finalized by Op-Tech; determination that carbon in carbon filters requires change due to breakthrough detected at Outfall 001; Carbon ordered by Op-Tech, system no operational.
<b>July 2002</b>					
July 18	-	198030	None	323710	None Carbon in carbon filters 1,2,3 and 4 replaced by Op-Tech; system not operational.
July 19	1810	198030	11.5	323710	None Connected new water line that had been installed from WP-5D, attempts to prime water line from WP-5D and re-start system operation unsuccessful; system operation with RW-1 only resumed in pm.
July 21	1335	210220	11	323710	None System check, electrical line installed from remediation building to Outfall 001 area for flow meter that is positioned within V-notch weir.
July 22	--	--	--	--	-- Trouble shooting water pipe from well WP-5D to groundwater treatment system; WP-5D not operational; air pressure-test of line.
July 23	0910	-	11.5	323710	None Re- Excavation and replacement of buried water line from WP-5D to groundwater treatment system; priming new line; startup of system with WP-5D operational.
July 26	1130	236900	11.5	331160	7.0 System operation intermittent, as air stripper outlet pump is unable to handle volume from RW-1 and WP-5D; significant fouling of interior of stripper trays; new flow meter delivered to site for WP-5D
July 31	1515	252830	11.0	342370	None Air Stripper cleaned by Op-Tech; only RW-1 turned back on-Pump of WP-5D not operational; troubleshooting revealed blown fuses-need to purchase new fuses for pump.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

**ATTACHMENT A**

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2002**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	Flow Totalizer	RW-1 Flow Rate (GPM)	Flow Totalizer	WP-5D Flow Rate (GPM)	WP-5D	Activities/Comments
<b>August 2002</b>							
August 5	1045	292240	10	342370	None	Carbons 1 and 2 active; 3 and 4 shut down; backwashing of 1 and 2 conducted; fuses replaced; attempts to re-prime line of WP-5D unsuccessful- need additional person to facilitate priming.	
August 6	1000	301970	11.5	342370	None	All four carbon filters placed into operation prior to departing site, due to increase in pressure; attempts to prime water line from WP-5D unsuccessful- determined that flexible hose within manhole at WP-5D was restricting free flow of water-needs to be replaced.	
August 9	1330 1540	330880 331300	11.5	342380 342540	6.5	Flexible hose in manhole at well changed to vacuum hose due to prior hose collapsing, creating flow restriction; WP-5D operating before leaving site.	
August 19	1115	373970	None	366120	None	Poor discharge from air stripper due to clogged piping from stripper pump to carbon filters; system was not operating prior to leaving site, T/C with Tim Digiulio-authorized SEM to re-plumb appropriate piping.	
August 20	--	373970	None	366120	None	Cut and removed piping from air stripper discharge pump to carbon filters due to significant scale on interior of piping. Began re-plumbing system.	
August 21	--	373970	None	366120	None	Finish installing new piping from air stripper discharge pump to carbon filters. Supply line from well WP-5D needs to be primed. Unable to place system into operation due to low flow rate of air stripper discharge pump.	
August 22	--	373970	None	366120	None	Pump test on air stripper discharge pump revealed maximum flow rate of 4.5 GPM. Dismantled pump head of air stripper discharge pump-pump vanes significantly clogged with iron/mineral buildup. Pump disconnected and removed for cleaning. Submitted to HOW Pumps of Liverpool, NY for cleaning and replacement of seals and impellers.	

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

**ATTACHMENT A**

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2002**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	Flow Totalizer	RW-1 Flow Rate (GPM)	Flow Totalizer	WP-5D Flow Rate (GPM)	Activities/Comments
<b>August 2002 (cont.)</b>						
August 28	1520	374270	None	366200	None	System not operational upon arrival, as air stripper discharge pump had been removed and cleaned/repaired by HOW Pumps of Liverpool, NY. Pump re-installed, and system placed into operation. System in full operation at 1555; pump for WP-5D was primed. Air stripper discharge pump now maintaining adequate drawdown in lower tray of stripper so that inflow from wells RW-1 and WP-5D is not interrupted due to high water level. Carbon filters 1 and 2 backflushed-very turbid; recommend backflush again on 8/29. Carbon filters 1 and 2 placed in operation; filters 3 and 4 not in operation at this time-may need to open all four at once if sediment buildup occurs too quickly to maintain adequate flow. Samples of influent from RW-1 and WP-5D; air stripper effluent (pre-carbon); and final system discharge (Outfall 001A) collected and submitted to Life Science Laboratories for analysis by EPA Methods 601 + 602.
	1603	374630	10.7	366250	6.6	
	1702	375260	10.0	366640	6.7	
	1720	375440	11.38	366760	7.4	
	1840	376350		367350		Ave. = 10.96 GPM
August 29	1228	386320	11 GPM	373800	6.8 GPM	System operating properly upon arrival. Transferred water from 8/28 carbon backflush event to air stripper, and backflushed carbon filters 1 and 2. Influent flow discontinued from 1230 to 1304 for backflush procedure. Carbon filters 3 and 4 remain closed. System operation fine upon departure.
	1412	387110		374310		
<b>September 2002</b>						
Sept. 3	Not Recorded		Not Recorded			Carbon filters 1 and 2 backflushed; filters 3 and 4 remain closed.
Sept. 6	Not Recorded		Not Recorded			Carbon filters 1 and 2 backflushed; filters 3 and 4 remain closed.
Sept. 9	1451	501830	11.5 GPM	438660	5.5 GPM	Carbon filters 1 and 2 backflushed; filters 3 and 4 remain closed.
Sept. 12	1423	528940	12 GPM	451930	5.5 GPM	Carbon filters 1 and 2 backflushed; filters 3 and 4 remain closed.
Sept. 17	1231	576220	11 GPM	475670	6 GPM	Carbon filters 1 and 2 backflushed; filters 3 and 4 opened.
Sept. 21	1427	613330	11 GPM	494800	5.5 GPM	Upon arrival, air stripper discharge pump operating, but influent pumps from RW-1 and WP-5D not, due to high water level in air stripper. Carbon filter backpressure at 66 PSI prior to backflush event. Carbon filters 1, 2, 3, and 4 backflushed. Filters 3 and 4 most turbid; recommend backflush again on 9/23 or 9/24, as flow through filters 3 and 4 remained turbid. System operating without intermittent shutdown of influent pumps upon departure. Pressure reduced to 16 PSI following backflushing.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

**ATTACHMENT A**

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**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-600024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer (GPM)	RW-1 Flow Rate (GPM)	WP-5D Flow Totalizer (GPM)	WP-5D Flow Rate (GPM)	Activities/Comments
<b>September 2002 (cont.)</b>						
Sept. 24	1935	653200	10.5 GPM	516400	5.7 GPM	Carbon filters 1 and 2 backflushed. Sampling port for RW-1 influent broken-needs to be replaced.
<b>October 2002</b>						
October 1	1000	704020	11.5 GPM	544040	6.5 GPM	Piping and sampling port for RW-1 influent replaced to allow sampling of the influent. Carbon filters 1, 2, 3 and 4 backflushed. Carbon filters 3 and 4 exhibited most sediment.
October 4	1028	715240	11 GPM	550540	6 GPM	Influent flow from RW-1 and WP-5D intermittent upon arrival due to water level in air stripper sump accumulating faster than discharge pump was removing, creating high water level alarm-backpressure from carbon filters appears to be impeding discharge pump operation. All 4 carbon filters backflushed. System operating without interruption by high water levels upon departure.
October 8	1100	758400	10.5 GPM	575840	6.5 GPM	All 4 carbon filters backflushed. System operating fine.
October 14	1645	836590	11 GPM	622530	6.5 GPM	System operating fine. All 4 carbon filters backflushed-less sediment buildup noted than previously observed. Heater for building plugged in and started to prevent freezing.
October 23	1206	914680	11 GPM	670670	6.5 GPM	All 4 carbon filters backflushed. System operating fine.
October 28	1600	941430	11 GPM	687200	7.5 GPM	Carbon filters 1 and 2 backflushed. System operating fine.
<b>November 2002</b>						
November 4	1252	96510	11.5 GPM	703400	7 GPM	Carbon filters 1 through 4 backflushed. System operating fine.
November 6		NR	NR	NR	NR	Air stripper dismantled, pressure washed, and re-assembled, and carbon within all four carbon filters replaced by Op-Tech. Sump pump within floor sump not operating-sump pump previously used to transfer backflush water from settling basins to air stripper placed in floor sump.
November 12	1345	991750	11 GPM	746460	6.5 GPM	Carbon filters 1 through 4 backflushed. System operating fine.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

ATTACHMENT A

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**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
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Date	Time	Totalizer (GPM)	RW-1 Flow Rate (GPM)	Flow Rate Totalizer (GPM)	WP-5D Flow Rate (GPM)	Activities/Comments
<b>November 2002 (cont.)</b>						
November 18	1337	991750	NR	776690	6.7 GPM	System operation intermittent upon arrival, due to high water level in air stripper sump. Sump pump that had been placed in floor sump during November 6 work (i.e., pump previously used to transfer backflush water from settling basins to air stripper) not operational-new sump pump purchased at Kline True Value for site. Water from prior backflush event transferred to air stripper, and carbon filters 1 through 4 backflushed. Flow meter/totalizer for recovery well RW-1 not registering water flow-meter removed, dismantled, cleaned, and re-installed. Meter was clogged with significant volume of very fine sand. Meter operating appropriately after cleaning. Startup volume=991750 gallons.
November 27	1540	1051970	10 GPM	819600	6.5 GPM	System operating fine upon arrival. Carbon filters 1-4 backflushed. System operating fine upon departure.
<b>December 2002</b>						
December 3	1840	1102720	11 GPM	854110	6.5 GPM	System operating fine upon arrival. Carbon filters 1-4 backflushed. System operating fine upon departure.
December 9	1352	1150060	10 GPM	885500	7 GPM	System operating fine upon arrival. Carbon filters 1-4 backflushed. Fitting on inlet piping from well WP-5D needs to be replaced, as water is leaking from small crack. System operating fine upon departure.
December 12	1354	1178340	10 GPM	903950	6 GPM	System operating fine upon arrival. Carbon filters 1-4 backflushed. Fitting on inlet piping from well WP-5D needs to be replaced, as water is leaking from small crack. System operating fine upon departure.
December 17	1520	1221280	10 GPM	931590	6.5 GPM	System operating fine upon arrival. System shut down due to elevated VOC concentrations detected in system effluent in laboratory results from sampling event. System to be restarted once Op-Tech has pressure washed air stripper and replaced carbon. Plumbing fitting on inlet piping from well WP-5D replaced-no visible leak after replacement.
December 20	NA	1221280	No Flow	931590	No Flow	Air stripper dismantled and pressure washed by Op-Tech. Carbon in filters 1-4 changed as well. Attempts to re-start GWT system revealed that effluent piping to discharge point was frozen, preventing flow.
December 30	1435	1221480	9.5 GPM	931740	6.5 GPM	System not operating upon arrival. Effluent piping from GWT building to discharge point replaced due to ice formation in existing line. System re-started and operating fine.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

**ATTACHMENT A**

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2003**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	Flow Totalizer	RW-1 Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	WP-5D	Activities/Comments
<b>January 2003</b>							
January 3	PM	NA	NA	NA	NA	NA	Visited site to check on GWT system operation and to collect samples for laboratory analysis. Could not access site or safely pull off road anywhere remotely near the site to walk to treatment building due to high volume of snow received during storm on this date. System inspection and sampling to occur after site access has been plowed.
January 7	0905	1297680	10 GPM	983460	6.1 GPM	GWT system operating upon arrival. Water from prior carbon backflushing event transferred to air stripper and carbon filters 1 through 4 backflushed. Rate of flow from air stripper discharge pump suggests that flow may be reduced somewhat, possibly due to iron/mineral buildup. Pump to be dismantled and inspected, and cleaned if necessary at time of next site visit. Operational monitoring and SPDES discharge samples collected.	
January 14	1647	1363910	10.6 GPM	1026750	7 GPM	GWT system operating upon arrival-system operation slightly intermittent, due to high water level in air stripper sump, resulting in influent flow being occasionally interrupted for a short time. This may be indicative of decreased efficiency of air stripper discharge pump as a result of iron buildup, as encountered previously with this system. Water from prior backflush event transferred to air stripper; all four carbon filters backflushed. Filters 3 and 4 were most turbid.	
January 22	1410	1427180	10 GPM	1068380	6.8 GPM	System operating intermittently upon arrival, due to buildup of water within air stripper sump-believed to be result of fouling of air stripper discharge pump and resultant reduced efficiency of pump operation. Air stripper discharge pump should be dismantled and cleaned to improve efficiency-to be scheduled. Water from prior carbon backflush event transferred to air stripper; all four carbon filters backflushed. pH of system discharge measured at 8.8 s.u.	
January 27	1462600	10.1 GPM	1091610	7 GPM	System operating intermittently upon arrival, due to water buildup in air stripper sump. Air stripper discharge pump disassembled-impellers and pump head components placed in "CLR" iron/mineral removal product (commercially available); pump re-assembled and re-installed following cleaning. Used "CLR" solution remains in 5-gallon pail pending arrangements for disposal. Water from prior carbon backflushing transferred to air stripper; all four carbon filters backflushed. System operating okay upon departure.		

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

ATTACHMENT A

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2003**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer (GPM)	Flow Rate Totalizer (GPM)	WP-5D Flow (GPM)	Flow Rate (GPM)	Activities/Comments
<b>February 2003</b>						
02/03/03	NA	NA	NA	NA	NA	Air stripper disassembled and cleaned by high-pressure water, and carbon within carbon filters replaced by Op-Tech.
02/04/03	1707	1511070	10 GPM	1123840	7 GPM	System operating fine upon arrival. pH of final discharge = 8.6 s.u.
02/11/03	1525	1543920	10.2 GPM	1147150	6.8 GPM	System operating intermittently upon arrival due to buildup of water within the air stripper sump. Combined influent flow continues to exceed rate of transfer from air stripper to carbon filters by the discharge pump. Pump rate of air stripper transfer pump is very slow: approx. 5.5 to 6 GPM. Piping between pump and carbon filters contains some iron buildup, but remains relatively open. Water from prior carbon backflush event transferred to air stripper; all four carbon filters backflushed.
02/20/03	1550	1607960	10 GPM	1190810	6.5 GPM	System operating intermittently upon arrival due to buildup of water within the air stripper sump. Combined influent flow continues to exceed rate of transfer from air stripper to carbon filters by the discharge pump. Pump rate of air stripper transfer pump is very slow. Water from prior carbon backflush event transferred to air stripper; all four carbon filters backflushed. pH of final discharge = 8.0 s.u.
02/27/03	0842	1653430	10 GPM	1222500	6.5 GPM	System operating intermittently upon arrival due to buildup of water within the air stripper sump. Combined influent flow continues to exceed rate of transfer from air stripper to carbon filters by the discharge pump. Pump rate of air stripper transfer pump is very slow. Water from prior carbon backflush event transferred to air stripper; all four carbon filters backflushed.
<b>March 2003</b>						
3/7/03	0807	1697690	10 GPM	1256640	6.5	System operating intermittently upon arrival due to buildup of water in air stripper sump. Water from prior backflush event transferred from settling drums to air stripper. All four carbon filters backflushed. Collected monitoring samples.
3/13/03	1150	1697710 0(new flowmeter)	11 GPM	1279290	6.5	Replaced RW-1 flow totalizer; Air stripper discharge pump disassembled and cleaned; carbon filters backflushed; collected monitoring samples. Ordered replacement pump impellers.
3/19/03	0937	72244	11 GPM	1321946	6.6	System operating upon arrival. Backflushed all four carbon filters, collected monitoring samples.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

**ATTACHMENT A**

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2003**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	WP-5D Flow Rate (GPM)	Activities/Comments
3/31/03	NR	NR	NR	NR	NR	SEM personnel on site to inspect air stripper, observed obstruction of air exchange perforations, scheduled Op-Tech for more aggressive cleaning, system not restarted due to high operating pressures.
						<b>April 2003</b>
4/4/03	1512	148120	11 GPM	1369510	6.75 GPM	Disassembled air stripper and manually scrapped trays, reamed out air perforation holes, and removed residue from stripper sump. Cleaned residue from floor sump, backflushed all four carbon filters, collected weekly monitoring samples. Magnehelic gauge=11.5 in. WC. upon restart of system.
4/10/03	1104	236050	11 GPM	1417226	6.5 GPM	System operating upon arrival, pumped settling drums to air stripper, backflushed all 4 carbon filters.
4/15/03	1105	313060	11 GPM	1417227	NA	System operating upon arrival; floor wet; carbon drums dripping. Shut off ball valve from backflush hose of drum #2 overflowing settling drum. Collected monitoring samples including pH (from 001A). Magnehelic gauge=12 in. WC. Flow meter for WP-5D was not functioning.
4/23/03	1000	430810	10.5 GPM	1417227	NA	Two to three inches of water on floor of shed upon arrival, two valves leaking in first set of carbon drums and drums leaking at flanges. Flow meter for WP-5D was not functioning, tapped on meter to clear sediment. Magnehelic gauge=13.5 in. WC.
4/30/03	1030	531876	10 GPM	1417589	6.3 GPM	System operating upon arrival, significant water accumulation (2 in.) on floor-cleaned up with sump pump-due to leak from ball valve on drum #1 back flow valve (1 1/2") Pumped out settling drums; collected monitoring data, samples and backflushed carbon filters. Magnehelic gauge=14 in. WC. Flow meter WP-5D functioning.
						<b>May 2003</b>
5/7/03	1055	631080	9.7 GPM	1480660	6.2 GPM	Two (2) inches of water accumulated on floor of treatment shed due to overflow of settling drums-leakage through backflush BV of drum #1 3/8 inch hose. Collected all data/samples; pumped out settling drums; backflushed carbon filters. Magnehelic gauge=14.5 in. WC.
5/13/03	937	711960	10.0 GPM	1533430	5.5 GPM	Pumped out settling drums and floor sump; backflushed all four carbon filters; recorded system data (O&M); Recorded carbon filter layout for schematic; system monitoring samples collected by C. Bradford while doing quarterly sampling of monitoring wells. Magnehelic gauge=14.75 in. WC.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

**ATTACHMENT A**

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2003**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer	Flow Rate (GPM)	WP-5D Flow Totalizer	Flow Rate (GPM)	Activities/Comments
5/20/03	1505	809620	10.5 GPM	1596070	6.5 GPM	System operating upon arrival; floor only wet in rear room from drum overflow due to leak in backflush valve drum #1; collected system monitoring samples; pumped out floor sump and settling drums; backflushed carbon drums. Magnehelic gauge=14.75 in. W.C.
5/28/03	944	917270	10.5 GPM	1663150	6.4 GPM	System operating upon arrival; pumped out floor sump; collected system data and samples, pumped out settling drums; backflushed GAC filters. Magnehelic=15.0 in. W.C.
						<b>June 2003</b>
6/05/03	1345	1023950	10.2 GPM	1731060	6.2 GPM	Stripper cleaned June 4, 2003 by Op-Tech. System operating upon arrival, some water over top of floor sump-pumped out. Collected weekly monitoring data and samples; pumped out settling drums, backflushed carbon filters. Modified plumbing of air stripper discharge line. Magnehelic=9.75 in. W.C.
6/10/03	1430	1026220	10.2 GPM	1732520	6.2 GPM	System operating upon arrival; backflushed carbons; collected system data and monitoring samples. Completed plumbing alterations, removed water from stripper sump. Mixed up Super-Iron Out in 55 gal. Drums-Added to air stripper via plumbing circuit to injection nozzle for WP-5D in top tray. Magnehelic=10.5 in. W.C.
6/12/03	1930	1027440	10.2 GPM	1733310	6.2 GPM	Completed plumbing modifications. System operational-recirculating 'Super-Iron Out Cleaning Agent'. Pump out iron out from stripper sump and rinse into 55 gal. Drum (3 drums full) pumped out settling drums and backflushed filters. Replace two air bleeder valves-one clogged with iron (#4) and one not closing off (#1). Repair leak in supply pipe at fittings (new). Collected O&M data and samples. Magnehelic=10.5 in. W.C
6/19/03	1105	1081590	10.2 GPM	1768459	6.2 GPM	System operating upon arrival. Floor wet in vicinity of drum 1&2 due to leak around flange and condensation. Pumped out floor sump. Collected weekly system data and monitoring samples. Backflush carbon filters. Magnehelic=10.75 in. W.C.
6/26/03	1830	1177430	10.2 GPM	1831787.5	6.2 GPM	System operating upon arrival, some water on floor-sump full probably due to condensation and leaks of GAC filter flanges. Collected system samples and operating data. Pumped out settling drums and backflushed carbons-Heavy iron in backflush supply water-Bleed off pressure by cracking open recirculation valve to reduce pressure to 50 psi. Magnehelic=11.25 in. W.C.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

ATTACHMENT A

**Groundwater Recovery and Treatment System Operations and Maintenance Log-2003  
Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York  
NYSDEC Petroleum Spill No. 01-60024/PIN No. H-0529**

Date	Time	RW-1 Flow Totalizer (GPM)	Flow Rate Totalizer (GPM)	WP-5D Flow Rate (GPM)	Activities/Comments
7/02/03	1530	1205100	10.2 GPM	1848480	6.2 GPM System operating upon arrival. High water level light on, discharge pump running at 75 psi-suspect air in line. Collected monitoring samples and data-no flow at out fall port. Pumped out settling drums. Backflushed carbon filters 1 through 4, got high back pressure drum #1 and large clump of carbon media was dislodged, then pressure dropped. Collected sample from spent Iron Out solution drum for pH analysis. Repositioned hoses between drums to loop down to prevent air trap, got better flow at out fall sample port.
7/08/03	1355	1235617	10.0 GPM	1866401	6.0 GPM System operating upon arrival. System in high water level condition, discharged pump running at 70 psi-checked discharge line at ditch, flow was less than 5 GPM. Pumped out settling drums. Backflushed carbons 1, 2 & 4-Filtration media seen in backflush water from drum #1. Drum #2 difficult to backflush-screen apparently clogged with bacterial mass. Transferred Iron Out to plastic drum.
7/15/03	1330	1294701	10.2 GPM	1900791	6.2 GPM System operating upon arrival. Collected O&M data and samples. Pumped out settling drum and backflushed carbons 1 & 4. Pressure high-screens clogged?
7/22/03	1030	1333100	10.1 GPM	1922070	6.1 GPM Collected weekly O&M data, pumped out settling drums. Backflushed carbons 1 and 4 with extra volume (2X), pressure still high-suspect clogged screen in filters. Microbial slime noted in hose between filter 3&4. Also high iron discharge from port after AS when sampling.
7/29/03	1340	1366071	10.2 GPM	1940468	6.1 GPM System operating upon arrival, water accumulated on floor due to drips from flanges on carbon filters. Collected O&M data and samples. Pumped out settling drums. Backflushed carbon filters 1, 3 & 4.

Notes: \* Influent piping equipped with digital flow meters not capable of totalizing flow until May 15 (WP-5D) and June 6 (RW-1).

## **Attachment B**

### **Tabulation of Flow Volumes vs. Analysis Results**

**ATTACHMENT B****Tabulation of Flow Volumes vs. Analysis Results**

**Groundwater Recovery and Treatment System Operations and Maintenance Monitoring  
Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York  
NYSDDEC Spill No. 01-600024/PIN No. H-0529**

Date	Time	Flow Totalizer Readings				Analysis Results-Total VOC (ppb)														
		RW-1	$\Delta$	WP-5D	$\Delta$	RW-1 Inf.	WP-5D Inf.	AS Discharge (Pre-Carbon)	Final Discharge (OUTFALL 001A)	Cumulative Gallons (RW-1 and WP-5D)										
<b>7/18/02</b>										<b>Carbon in filters 1,2,3 and 4 replaced by Op-Tech</b>										
<b>7/31/02</b>										<b>Air Stripper Dismantled and Cleaned(by Op-Tech)</b>										
7/31/02	1515	252830	NA	342370	NA	NS	NS	NS	NS	7/31-	8/9/02	<b>System operation limited to RW-1 only, due to problems with operation of pump for WP-5D</b>								
<b>8/19-</b>										<b>System down to replace air stripper discharge pump due to significant fouling of discharge pump and piping.</b>										
8/28/02	1540	331300	78,470	342540	170	541.9	69	ND	ND	8/19-	8/19-	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
8/19/02	1540	331300	78,470	342540	170	541.9	69	ND	ND	8/19-	8/19-	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
8/28/02	1720	375440	122,610	366760	24,390	1,432.4	67	ND	ND	8/19-	8/19-	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
9/6/02	1445	NR	NA	NR	NA	748	65	ND	ND	9/6/02	9/6/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
9/17/02	1231	576220	323,390	475670	133,300	136	61	ND	ND	9/17/02	9/17/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
9/24/02	1935	653200	400,370	516400	174,030	NA	72	ND	ND	9/24/02	9/24/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
10/1/02	1000	704020	451,190	544040	201,670	654	80	20	ND	10/1/02	10/1/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
10/8/02	1100	758400	505,570	575840	233,470	1,093	70.8	ND	ND	10/8/02	10/8/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
10/23/02	1206	914680	661,850	670670	328,300	1,127	59	61.6	47	10/23/02	10/23/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
11/4/02	1252	967510	714,680	703400	361,030	1,208.1	73	268.9	73	11/4/02	11/4/02	<b>System down to replace air stripper discharge pump and repair air stripper discharge pump.</b>								
11/6/02										11/6/02	11/6/02	<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
11/12/02	1345	991750	24,240*	746460	43,060	219.6	69	ND	ND	11/12/02	11/12/02	<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
11/18/02	1337	991750*	UNK*	776690	73,290	1,547.9	62.2	7.8	ND	11/18/02	11/18/02	<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
11/27/02	1540	1051970	84,460*	819600	116,200	1,516.7	60.5	33	4.1	11/27/02	11/27/02	<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
12/3/02	1840	1102720	135,210*	854110	150,710	779	74	133.1	63.1	12/3/02	12/3/02	<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
12/12/02	1354	1178370	210,860*	903950	200,550	884.5	55	173	20.4	12/12/02	12/12/02	<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
12/17/02										12/17/02	12/17/02	<b>System shut down based on results of analyses performed on samples collected on December 3.</b>								
12/20/02										12/20/02	12/20/02	<b>Air stripper dismantled and cleaned, and carbon within filters 1-4 changed by Op-Tech; unable to re-start system due to frozen effluent piping.</b>								
12/30/02	0905	1297680	119,310	983460	79,510	1,091.3	74	60.9	ND	12/30/02	12/30/02	<b>GWT system effluent piping replaced and system re-started.</b>								
1/7/03										1/7/03	1/7/03	<b>GWT system effluent piping replaced and system re-started.</b>								

**ATTACHMENT B**

**Tabulation of Flow Volumes vs. Analysis Results**  
**Groundwater Recovery and Treatment System Operations and Maintenance Monitoring**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDEC Spill No. 01-60024/PIN No. H-0529**

Date	Time	Flow Totalizer Readings				Analysis Results-Total VOC (ppb)				
		RW-1	Δ	WP-5D	Δ	RW-1 Inf.	WP-5D Inf.	AS Discharge (Pre-Carbon)	Final Discharge (OUTFALL 001A)	Cumulative Gallons (RW-1 and WP-5D)
1/14/03	1647	1363910	185,540	1026750	122,800	399	65	144.1	15.5	308,340
1/22/03	1410	1427180	248,810	1068380	164,430	1,120.6	77	363.8	38.3	413,240
1/27/03	1615	1462600	284,230	1091610	187,660	799	65	282.1	39.8	471,890
<b>02/03/03</b>		<b>Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).</b>								
2/04/03	1707	1511070	NA	1123840	NA	718.1	72	73.1	ND	NA
2/11/03	1525	1543920	32,850	1147150	23,310	1,329.5	70	45	8.5	56,160
2/20/03	1550	1607960	96,890	1190810	66,970	858	72	5.6	ND	163,860
2/27/03	0842	1653430	142,360	1222500	98,660	1,187.7	82	2.2	ND	241,020
3/7/03	0807	1697690	186,620	1256640	132,800	1,092.8	68	16.5	1.2	319,420
3/13/03	1155	1697710**	UNK**	1279290	155,450	769.4	66	116.1	15.7	UNK**
3/19/03	0938	72245	UNK**	1321947	198,107	960.2	72	85.9	38	UNK**
<b>3/31/03</b>		<b>Air stripper shut down for cleaning.</b>								
4/04/03	1512	148120	NA	1369510	NA	515.4	53	ND	ND	NA
4/10/03	1104	236050	87,930	1417227	47,717	785.4	51	ND	ND	135,647
4/15/03	1105	313060	164,940	1417227	NA	628.4	59	ND	ND	164,940
4/23/03	1000	430810	282,690	1417227	NA	304.3	66	ND	ND	282,690
4/30/03	1030	531876	383,756	1417589	48,079	668.7	69	ND	ND	431,835
5/07/03	1055	631080	482,960	1480660	111,150	896.8	83	ND	ND	594,110
5/13/03	937	711960	563,840	1533430	163,920	736.7	101	ND	ND	727,760
5/20/03	1505	809620	661,500	1596070	226,560	504.8	77	1.4	1.6	888,060
5/28/03	0944	917270	769,150	1663150	293,640	605	74	8.9	8.3	1,062,790
<b>6/4/03</b>		<b>Air stripper shut down for cleaning</b>								
6/05/03	1345	1023950	NA	1731060	NA	748.6	112	ND	ND	NA
6/10/03	1430	1026220	2,270	1732520	1,460	No sampling				3,730

**ATTACHMENT B**

**Tabulation of Flow Volumes vs. Analysis Results**  
**Groundwater Recovery and Treatment System Operations and Maintenance Monitoring**  
**Former Northeast Environmental Services, Inc. Site, Canal Road, Town of Lenox, New York**  
**NYSDDEC Spill No. 01-60024/PIN No. H-0529**

Date	Time	Flow Totalizer Readings					Analysis Results-Total VOC (ppb)			
		RW-1	Δ	WP-5D	Δ	RW-1 Inf.	WP-5D Inf.	AS Discharge (Pre-Carbon)	Final Discharge (OUTFALL 001A)	Cumulative Gallons (RW-1 and WP-5D)
6/12/03	1930	1027440	3,490	1733310	2,250	869.6	98	ND	ND	5,740
6/19/03	1105	1081590	57,640	1768459	37,399	960	85	ND	ND	95,039
6/26/03	1830	1177430	153,480	1831788	100,728	685.5	63	ND	ND	254,208
7/2/03	1530	1205100	181,150	1848480	117,420	1,161.1	79	ND	ND	298,570
7/8/03	1355	1235617	211,667	1866401	135,341	808.8	67	ND	ND	347,008
7/15/03	1330	1294704	270,754	1900791	169,731	583.6	58	ND	ND	440,485
7/22/03	1030	1333100	309,150	1922070	191,010	1,069.3	64.9	ND	ND	500,160
7/29/03	1340	1366071	342,121	1940468	209,408	1,172.3	69	ND	ND	551,529

## NOTES:

-Δ indicates number of gallons recovered from respective well since the air stripper was last cleaned.

NA=Not Applicable

-NR=Not Recorded

-ND=None Detected

-Cumulative gallons column reflects sum total of water volumes recovered from both wells since the prior air stripper cleaning.

\* Flow meter/totalizer for RW-1 was clogged and not recording flow-discovered and remedied on 11/18/02;actual flow for this period unknown. Subsequent total flows between this period and the December 20 air stripper cleaning may not be representative.

-Sample of influent from RW-1 not available on September 24, 2002 due to broken sampling port-port subsequently replaced.

\*\* Flow meter/totalizer for RW-1 was not operating during the March 13, 2003 visit; the flow meter/totalizer was replaced; actual flow for this period is unknown. Subsequent total flows between this period and the March 31, 2003 air stripper cleaning may not be representative.

**Attachment C**

**Laboratory Analysis Results and Chain of Custody  
Documentation**

**LSL**

**Timothy DiGiulio  
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Syracuse, NY 13204-2400**

**Phone: (315) 426-7519  
FAX: (315) 426-2653**

# **Laboratory Analysis Report for the New York State Department of Environmental Conservation**

**Contract Number: C200209**

**NYS DEC Spill #: 01-60024**

**NYS DEC Pin #: H-0529**

**LSL Project ID: 0309821**

**Receive Date/Time: 07/02/03 16:14 by: GS**

**"I certify that this laboratory has current ELAP certification to provide the analytical results in this report and that the data package is in compliance with the terms and conditions of the contract."**

yis m cx ,acc

07-16-03

**Reviewed By**

**Date**

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**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Influent-WP-5d	LSL Sample ID:	0309821-001			
Location:	NES					
Sampled:	07/02/03 14:50	Sampled By:	WG			
Sample Matrix:	NPW					
Analytical Method	Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA						
Benzene	<1	ug/l		7/13/03		BD
Chlorobenzene	<1	ug/l		7/13/03		BD
1,2-Dichlorobenzene	<1	ug/l		7/13/03		BD
1,3-Dichlorobenzene	<1	ug/l		7/13/03		BD
1,4-Dichlorobenzene	<1	ug/l		7/13/03		BD
Ethyl benzene	<1	ug/l		7/13/03		BD
MTBE	<1	ug/l		7/13/03		BD
Toluene	<1	ug/l		7/13/03		BD
Xylenes (Total)	<1	ug/l		7/13/03		BD
t-Butyl alcohol	<200	ug/l		7/13/03		BD
Surrogate (1,2-DCA-d4)	91	%R		7/13/03		BD
Surrogate (Tol-d8)	110	%R		7/13/03		BD
Surrogate (4-BFB)	121	%R		7/13/03		BD
(1) ITEM #GW-02- , EPA 601 Vol.						
Bromodichloromethane	<1	ug/l		7/13/03		BD
Bromoform	<1	ug/l		7/13/03		BD
Bromomethane	<1	ug/l		7/13/03		BD
Carbon tetrachloride	<1	ug/l		7/13/03		BD
Chlorobenzene	<1	ug/l		7/13/03		BD
Chloroethane	15	ug/l		7/13/03		BD
2-Chloroethylvinyl ether	<10	ug/l		7/13/03		BD
Chloroform	<1	ug/l		7/13/03		BD
Chloromethane	<1	ug/l		7/13/03		BD
Dibromochloromethane	<1	ug/l		7/13/03		BD
1,2-Dichlorobenzene	<1	ug/l		7/13/03		BD
1,3-Dichlorobenzene	<1	ug/l		7/13/03		BD
1,4-Dichlorobenzene	<1	ug/l		7/13/03		BD
Dichlorodifluoromethane	<1	ug/l		7/13/03		BD
1,1-Dichloroethane	<1	ug/l		7/13/03		BD
1,2-Dichloroethane	<1	ug/l		7/13/03		BD
1,1-Dichloroethene	<1	ug/l		7/13/03		BD
trans-1,2-Dichloroethene	<1	ug/l		7/13/03		BD
1,2-Dichloropropane	<1	ug/l		7/13/03		BD
cis-1,3-Dichloropropene	<1	ug/l		7/13/03		BD
trans-1,3-Dichloropropene	<1	ug/l		7/13/03		BD
Methylene chloride	<1	ug/l		7/13/03		BD
1,1,2,2-Tetrachloroethane	<1	ug/l		7/13/03		BD
Tetrachloroethene	<1	ug/l		7/13/03		BD
1,1,1-Trichloroethane	<1	ug/l		7/13/03		BD
1,1,2-Trichloroethane	<1	ug/l		7/13/03		BD
Trichloroethene	<1	ug/l		7/13/03		BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		7/13/03		BD
Vinyl chloride	64	ug/l		7/13/03		BD
Surrogate (1,2-DCA-d4)	91	%R		7/13/03		BD
Surrogate (Tol-d8)	110	%R		7/13/03		BD
Surrogate (4-BFB)	121	%R		7/13/03		BD

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Date Printed: 7/16/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Influent RW-1		LSL Sample ID:	0309821-002
Location:	NES			
Sampled:	07/02/03 14:35	Sampled By:	WG	
Sample Matrix:	NPW			
Analytical Method			Prep Date	Analysis Date & Time
Analyte	Result	Units		Analyst Initials
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA				
Benzene	<5	ug/l	7/13/03	BD
Chlorobenzene	<5	ug/l	7/13/03	BD
1,2-Dichlorobenzene	<5	ug/l	7/13/03	BD
1,3-Dichlorobenzene	<5	ug/l	7/13/03	BD
1,4-Dichlorobenzene	<5	ug/l	7/13/03	BD
Ethyl benzene	29	ug/l	7/13/03	BD
MTBE	<5	ug/l	7/13/03	BD
Toluene	600	ug/l	7/13/03	BD
Xylenes (Total)	120	ug/l	7/13/03	BD
t-Butyl alcohol	<1000	ug/l	7/13/03	BD
Surrogate (1,2-DCA-d4)	95	%R	7/13/03	BD
Surrogate (Tol-d8)	103	%R	7/13/03	BD
Surrogate (4-BFB)	115	%R	7/13/03	BD
(II) ITEM #GW-02- , EPA 601 Vol.				
Bromodichloromethane	<5	ug/l	7/13/03	BD
Bromoform	<5	ug/l	7/13/03	BD
Bromomethane	<5	ug/l	7/13/03	BD
Carbon tetrachloride	<5	ug/l	7/13/03	BD
Chlorobenzene	<5	ug/l	7/13/03	BD
Chloroethane	<5	ug/l	7/13/03	BD
2-Chloroethylvinyl ether	<50	ug/l	7/13/03	BD
Chloroform	<5	ug/l	7/13/03	BD
Chloromethane	<5	ug/l	7/13/03	BD
Dibromochloromethane	<5	ug/l	7/13/03	BD
1,2-Dichlorobenzene	<5	ug/l	7/13/03	BD
1,3-Dichlorobenzene	<5	ug/l	7/13/03	BD
1,4-Dichlorobenzene	<5	ug/l	7/13/03	BD
Dichlorodifluoromethane	<5	ug/l	7/13/03	BD
1,1-Dichloroethane	73	ug/l	7/13/03	BD
1,2-Dichloroethane	<5	ug/l	7/13/03	BD
1,1-Dichloroethene	6.0	ug/l	7/13/03	BD
trans-1,2-Dichloroethene	5.1	ug/l	7/13/03	BD
1,2-Dichloropropane	<5	ug/l	7/13/03	BD
cis-1,3-Dichloropropene	<5	ug/l	7/13/03	BD
trans-1,3-Dichloropropene	<5	ug/l	7/13/03	BD
Methylene chloride	<5	ug/l	7/13/03	BD
1,1,2,2-Tetrachloroethane	<5	ug/l	7/13/03	BD
Tetrachloroethene	<5	ug/l	7/13/03	BD
1,1,1-Trichloroethane	42	ug/l	7/13/03	BD
1,1,2-Trichloroethane	<5	ug/l	7/13/03	BD
Trichloroethene	46	ug/l	7/13/03	BD
Trichlorofluoromethane (Freon 11)	<5	ug/l	7/13/03	BD
Vinyl chloride	240	ug/l	7/13/03	BD
Surrogate (1,2-DCA-d4)	95	%R	7/13/03	BD
Surrogate (Tol-d8)	103	%R	7/13/03	BD
Surrogate (4-BFB)	115	%R	7/13/03	BD

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Post-Air Stripper (Pre-Carbon)	LSL Sample ID:	0309821-003	
Location:	NES			
Sampled:	07/02/03 14:40	Sampled By:	WG	
Sample Matrix:	NPW			
Analytical Method			Prep Date	Analysis Date & Time
Analyte	Result	Units		Analyst Initials
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA				
Benzene	<1	ug/l	7/13/03	BD
Chlorobenzene	<1	ug/l	7/13/03	BD
1,2-Dichlorobenzene	<1	ug/l	7/13/03	BD
1,3-Dichlorobenzene	<1	ug/l	7/13/03	BD
1,4-Dichlorobenzene	<1	ug/l	7/13/03	BD
Ethyl benzene	<1	ug/l	7/13/03	BD
MTBE	<1	ug/l	7/13/03	BD
Toluene	<1	ug/l	7/13/03	BD
Xylenes (Total)	<1	ug/l	7/13/03	BD
t-Butyl alcohol	<200	ug/l	7/13/03	BD
Surrogate (1,2-DCA-d4)	89	%R	7/13/03	BD
Surrogate (Tol-d8)	109	%R	7/13/03	BD
Surrogate (4-BFB)	119	%R	7/13/03	BD
(I) ITEM #GW-02- , EPA 601 Vol.				
Bromodichloromethane	<1	ug/l	7/13/03	BD
Bromoform	<1	ug/l	7/13/03	BD
Bromomethane	<1	ug/l	7/13/03	BD
Carbon tetrachloride	<1	ug/l	7/13/03	BD
Chlorobenzene	<1	ug/l	7/13/03	BD
Chloroethane	<1	ug/l	7/13/03	BD
2-Chloroethylvinyl ether	<10	ug/l	7/13/03	BD
Chloroform	<1	ug/l	7/13/03	BD
Chloromethane	<1	ug/l	7/13/03	BD
Dibromochloromethane	<1	ug/l	7/13/03	BD
1,2-Dichlorobenzene	<1	ug/l	7/13/03	BD
1,3-Dichlorobenzene	<1	ug/l	7/13/03	BD
1,4-Dichlorobenzene	<1	ug/l	7/13/03	BD
Dichlorodifluoromethane	<1	ug/l	7/13/03	BD
1,1-Dichloroethane	<1	ug/l	7/13/03	BD
1,2-Dichloroethane	<1	ug/l	7/13/03	BD
1,1-Dichloroethene	<1	ug/l	7/13/03	BD
trans-1,2-Dichloroethene	<1	ug/l	7/13/03	BD
1,2-Dichloropropane	<1	ug/l	7/13/03	BD
cis-1,3-Dichloropropene	<1	ug/l	7/13/03	BD
trans-1,3-Dichloropropene	<1	ug/l	7/13/03	BD
Methylene chloride	<1	ug/l	7/13/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l	7/13/03	BD
Tetrachloroethene	<1	ug/l	7/13/03	BD
1,1,1-Trichloroethane	<1	ug/l	7/13/03	BD
1,1,2-Trichloroethane	<1	ug/l	7/13/03	BD
Trichloroethene	<1	ug/l	7/13/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l	7/13/03	BD
Vinyl chloride	<1	ug/l	7/13/03	BD
Surrogate (1,2-DCA-d4)	89	%R	7/13/03	BD
Surrogate (Tol-d8)	109	%R	7/13/03	BD
Surrogate (4-BFB)	119	%R	7/13/03	BD

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Date Printed: 7/16/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

*New York State DEC - Region 7, ER      Syracuse, NY*

Sample ID:	Final GWT System Discharge (Outfall 01A)	LSL Sample ID:	0309821-004	
Location:	NES	Sampled By:	WG	
Sample Matrix:	NPW			
Analytical Method			Prep Date	Analysis Date & Time
Analyte		Result	Units	Analyst Initials
<b>(1) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>				
Benzene		<1	ug/l	7/13/03      BD
Chlorobenzene		<1	ug/l	7/13/03      BD
1,2-Dichlorobenzene		<1	ug/l	7/13/03      BD
1,3-Dichlorobenzene		<1	ug/l	7/13/03      BD
1,4-Dichlorobenzene		<1	ug/l	7/13/03      BD
Ethyl benzene		<1	ug/l	7/13/03      BD
MTBE		<1	ug/l	7/13/03      BD
Toluene		<1	ug/l	7/13/03      BD
Xylenes (Total)		<1	ug/l	7/13/03      BD
t-Butyl alcohol		<200	ug/l	7/13/03      BD
Surrogate (1,2-DCA-d4)		88	%R	7/13/03      BD
Surrogate (Tol-d8)		110	%R	7/13/03      BD
Surrogate (4-BFB)		118	%R	7/13/03      BD
<b>(2) ITEM #GW-02- , EPA 601 Vol.</b>				
Bromodichloromethane		<1	ug/l	7/13/03      BD
Bromoform		<1	ug/l	7/13/03      BD
Bromomethane		<1	ug/l	7/13/03      BD
Carbon tetrachloride		<1	ug/l	7/13/03      BD
Chlorobenzene		<1	ug/l	7/13/03      BD
Chloroethane		<1	ug/l	7/13/03      BD
2-Chloroethylvinyl ether		<10	ug/l	7/13/03      BD
Chloroform		<1	ug/l	7/13/03      BD
Chloromethane		<1	ug/l	7/13/03      BD
Dibromochloromethane		<1	ug/l	7/13/03      BD
1,2-Dichlorobenzene		<1	ug/l	7/13/03      BD
1,3-Dichlorobenzene		<1	ug/l	7/13/03      BD
1,4-Dichlorobenzene		<1	ug/l	7/13/03      BD
Dichlorodifluoromethane		<1	ug/l	7/13/03      BD
1,1-Dichloroethane		<1	ug/l	7/13/03      BD
1,2-Dichloroethane		<1	ug/l	7/13/03      BD
1,1-Dichloroethene		<1	ug/l	7/13/03      BD
trans-1,2-Dichloroethene		<1	ug/l	7/13/03      BD
1,2-Dichloropropane		<1	ug/l	7/13/03      BD
cis-1,3-Dichloropropene		<1	ug/l	7/13/03      BD
trans-1,3-Dichloropropene		<1	ug/l	7/13/03      BD
Methylene chloride		<1	ug/l	7/13/03      BD
1,1,2,2-Tetrachloroethane		<1	ug/l	7/13/03      BD
Tetrachloroethene		<1	ug/l	7/13/03      BD
1,1,1-Trichloroethane		<1	ug/l	7/13/03      BD
1,1,2-Trichloroethane		<1	ug/l	7/13/03      BD
Trichloroethene		<1	ug/l	7/13/03      BD
Trichlorofluoromethane (Freon 11)		<1	ug/l	7/13/03      BD
Vinyl chloride		<1	ug/l	7/13/03      BD
Surrogate (1,2-DCA-d4)		88	%R	7/13/03      BD
Surrogate (Tol-d8)		110	%R	7/13/03      BD
Surrogate (4-BFB)		118	%R	7/13/03      BD

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Date Printed: 7/16/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

*New York State DEC - Region 7, ER      Syracuse, NY*

Sample ID: Final GWT System Discharge (Outfall 01A)      LSL Sample ID: 0309821-004

Location: NES

Sampled: 07/02/03 14:45      Sampled By: WG

Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) ITEM #WT-25- ,EPA 150.1 pH	8.1	Std. Units	7/2/03	17:40	CDG
pH	25	Degrees C	7/2/03	17:40	CDG

*NYS DOH ELAP specifications require pH to be measured within one hour of sample collection.*

**-- LABORATORY ANALYSIS REPORT --**

*New York State DEC - Region 7, ER      Syracuse, NY*

<b>Sample ID:</b>	Trip Blank			<b>LSL Sample ID:</b>	0309821-005	
<b>Location:</b>	NES					
<b>Sampled:</b>	07/02/03 0:00	<b>Sampled By:</b>				
<b>Sample Matrix:</b>	TB					
<b>Analytical Method</b>				<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>	<b>Analyst Initials</b>
<b>Analyte</b>		<b>Result</b>	<b>Units</b>			
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>						
Benzene		<1	ug/l		7/13/03	BD
Chlorobenzene		<1	ug/l		7/13/03	BD
1,2-Dichlorobenzene		<1	ug/l		7/13/03	BD
1,3-Dichlorobenzene		<1	ug/l		7/13/03	BD
1,4-Dichlorobenzene		<1	ug/l		7/13/03	BD
Ethyl benzene		<1	ug/l		7/13/03	BD
MTBE		<1	ug/l		7/13/03	BD
Toluene		<1	ug/l		7/13/03	BD
Xylenes (Total)		<1	ug/l		7/13/03	BD
t-Butyl alcohol		<200	ug/l		7/13/03	BD
Surrogate (1,2-DCA-d4)		90	%R		7/13/03	BD
Surrogate (Tol-d8)		114	%R		7/13/03	BD
Surrogate (4-BFB)		118	%R		7/13/03	BD
<b>(II) ITEM #GW-02- , EPA 601 Vol.</b>						
Bromodichloromethane		<1	ug/l		7/13/03	BD
Bromoform		<1	ug/l		7/13/03	BD
Bromomethane		<1	ug/l		7/13/03	BD
Carbon tetrachloride		<1	ug/l		7/13/03	BD
Chlorobenzene		<1	ug/l		7/13/03	BD
Chloroethane		<1	ug/l		7/13/03	BD
2-Chloroethylvinyl ether		<10	ug/l		7/13/03	BD
Chloroform		<1	ug/l		7/13/03	BD
Chloromethane		<1	ug/l		7/13/03	BD
Dibromochloromethane		<1	ug/l		7/13/03	BD
1,2-Dichlorobenzene		<1	ug/l		7/13/03	BD
1,3-Dichlorobenzene		<1	ug/l		7/13/03	BD
1,4-Dichlorobenzene		<1	ug/l		7/13/03	BD
Dichlorodifluoromethane		<1	ug/l		7/13/03	BD
1,1-Dichloroethane		<1	ug/l		7/13/03	BD
1,2-Dichloroethane		<1	ug/l		7/13/03	BD
1,1-Dichloroethene		<1	ug/l		7/13/03	BD
trans-1,2-Dichloroethene		<1	ug/l		7/13/03	BD
1,2-Dichloropropane		<1	ug/l		7/13/03	BD
cis-1,3-Dichloropropene		<1	ug/l		7/13/03	BD
trans-1,3-Dichloropropene		<1	ug/l		7/13/03	BD
Methylene chloride		<1	ug/l		7/13/03	BD
1,1,2,2-Tetrachloroethane		<1	ug/l		7/13/03	BD
Tetrachloroethene		<1	ug/l		7/13/03	BD
1,1,1-Trichloroethane		<1	ug/l		7/13/03	BD
1,1,2-Trichloroethane		<1	ug/l		7/13/03	BD
Trichloroethene		<1	ug/l		7/13/03	BD
Trichlorofluoromethane (Freon 11)		<1	ug/l		7/13/03	BD
Vinyl chloride		<1	ug/l		7/13/03	BD
Surrogate (1,2-DCA-d4)		90	%R		7/13/03	BD
Surrogate (Tol-d8)		114	%R		7/13/03	BD
Surrogate (4-BFB)		118	%R		7/13/03	BD

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Date Printed: 7/16/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

*New York State DEC - Region 7, ER      Syracuse, NY*

Sample ID: **Used Iron-Out Soln.**                            LSL Sample ID: **0309821-006**

Location: **NES**

Sampled: **07/02/03 14:55**                                  Sampled By: **WG**

Sample Matrix: **NPW**

<b>Analytical Method</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>	<b>Analyst Initials</b>
(1) ITEM #WT-25- ,EPA 150.1 pH	pH	7.3	Std. Units	7/2/03	17:42	CDG
	pH Measurement Temperature	25	Degrees C	7/2/03	17:42	CDG

*NYS DOH ELAP specifications require pH to be measured within one hour of sample collection.*

**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

8/14/02

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	80-120	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8280	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Dodecane	40-110	40-110
DOH 310-14	Dodecane	40-110	40-110
DOH 310-15	Dodecane	40-110	40-110
DOH 310-34*	4-BFB	50-150	50-150
8015M_GRO*	4-BFB	50-150	50-150
8015M_DRO*	Terphenyl-d14	50-150	50-150

\*Run by GC/MS.

Units Key:  
ug/l = microgram per liter  
ug/kg = microgram per kilogram  
mg/l = milligram per liter  
mg/kg = milligram per kilogram  
%R = Percent Recovery

**STRATEGIC ENVIRONMENTAL MANAGEMENT, INC.**  
**SAMPLE CUSTODY RECORD**

0309821  
 NYSDEC/SyCR

<b>BALDWINSVILLE OFFICE</b> 25 ½ Water Street Baldwinsville, New York 13027 Telephone: (315) 635-8936 Facsimile: (315) 635-2380		<b>CANTON OFFICE</b> 3 Remington Avenue, Suite D Canton, New York 13617 Telephone: (315) 386-2736 Facsimile: (315) 386-4736					
SEM Project Number: 3003.0050 SEM Contact Person: Nevin Bradford Project Location: Canastota, New York		Report and Invoice Address: Timothy DiGiulio, P.E. NYSDEC Region 7 615 Erie Boulevard W. Syracuse, NY 13202 Phone: 315-426-7471					
Laboratory: Life Science Laboratories Project Identification: NES NYSDEC Spill No. 01-60024/Pin # H-0529 Page 1 of 1		Parameters EPA 601 + 602 NYSDEC					
		Notes/Comments Copy of Report to: Nevin Bradford Strategic Environmental Mngt. 25 ½ Water Street Baldwinsville, New York 13027					
Client's Sample Identification	Date	Collection Time	Sample Location	Number of Containers	Comp or Grab	Preservatives	Sample Matrix
001	7/1/03	1450	Influent-WP-SD	2	G	HCl	WW
002	1/435		Influent RW-I	2			X
003	1440		Post-Air Stripper (Pre-Carbon)	2			X
004	1465		Final GWT System Discharge (Outfall 01A)	2			X
005	1435		Trip Blank	2			X
1006	7/1/03	1453	Iron-Sept Sola	1	G	—	WW
Sample Custody <b>SAMPLE COLLECTION</b> Name: <u>Mark Gaffey</u> Signature: <u>Mark Gaffey</u> Sample TAT: Normal 14 Day							
Sample Custody <b>RELINQUISH SAMPLE CUSTODY</b> Name: <u>Mark Gaffey</u> Signature: <u>Mark Gaffey</u> Name: <u>Normal 14 Day</u> Signature: <u>Normal 14 Day</u>							
Sample Custody <b>ACCEPT AND RECEIVE SAMPLE CUSTODY</b> Name: <u>RCV</u> Signature: <u>RCV</u> Date: <u>7/1/03</u> Time: <u>16:15</u> Name: <u>RCV</u> Signature: <u>RCV</u> Date: <u>7/1/03</u> Time: <u>16:15</u> Name: <u>RCV</u> Signature: <u>RCV</u> Date: <u>7/1/03</u> Time: <u>16:15</u> Name: <u>RCV</u> Signature: <u>RCV</u> Date: <u>7/1/03</u> Time: <u>16:15</u>							
Sample Custody <u>6 loc on Ta</u>							



**LSL**

**Tim DiGiulio**  
New York State DEC - Region 7, ER  
615 Erie Blvd. W.  
Syracuse, NY 13204-2400

**Phone: (315) 426-7519**  
**FAX: (315) 426-2653**

# **Laboratory Analysis Report for the New York State Department of Environmental Conservation**

## **Contract Number: C200209**

**NYS DEC Spill #: 01-60024**

**NYS DEC Pin #: H-0529**

**LSL Project ID: 0310124**

**Receive Date/Time: 07/08/03 15:00 by: GS**

**"I certify that this laboratory has current ELAP certification to provide the analytical results in this report and that the data package is in compliance with the terms and conditions of the contract."**

Reviewed By

Date

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NYS DOH ELAP #11369

**-- LABORATORY ANALYSIS REPORT --**

**New York State DEC - Region 7, ER      Syracuse, NY**

<b>Sample ID:</b>	<b>Influent-RW-1</b>			<b>LSL Sample ID:</b>	<b>0310124-001</b>
<b>Location:</b>	NES				
<b>Sampled:</b>	07/08/03 13:50	<b>Sampled By:</b> MG			
<b>Sample Matrix:</b>	NPW				
<b>Analytical Method</b>		<b>Result</b>	<b>Units</b>	<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>
<b>Analyte</b>					<b>Analyst Initials</b>
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>					
Benzene		<5	ug/l	7/18/03	BD
Chlorobenzene		<5	ug/l	7/18/03	BD
1,2-Dichlorobenzene		<5	ug/l	7/18/03	BD
1,3-Dichlorobenzene		<5	ug/l	7/18/03	BD
1,4-Dichlorobenzene		<5	ug/l	7/18/03	BD
Ethyl benzene		12	ug/l	7/18/03	BD
MTBE		<5	ug/l	7/18/03	BD
Toluene		350	ug/l	7/18/03	BD
Xylenes (Total)		73	ug/l	7/18/03	BD
t-Butyl alcohol		<1000	ug/l	7/18/03	BD
Surrogate (1,2-DCA-d4)		86	%R	7/18/03	BD
Surrogate (Tol-d8)		110	%R	7/18/03	BD
Surrogate (4-BFB)		110	%R	7/18/03	BD
<b>(I) ITEM #GW-02- , EPA 601 Vol.</b>					
Bromodichloromethane		<5	ug/l	7/18/03	BD
Bromoform		<5	ug/l	7/18/03	BD
Bromomethane		<5	ug/l	7/18/03	BD
Carbon tetrachloride		<5	ug/l	7/18/03	BD
Chlorobenzene		<5	ug/l	7/18/03	BD
Chloroethane		<5	ug/l	7/18/03	BD
2-Chloroethylvinyl ether		<50	ug/l	7/18/03	BD
Chloroform		<5	ug/l	7/18/03	BD
Chloromethane		<5	ug/l	7/18/03	BD
Dibromochloromethane		<5	ug/l	7/18/03	BD
1,2-Dichlorobenzene		<5	ug/l	7/18/03	BD
1,3-Dichlorobenzene		<5	ug/l	7/18/03	BD
1,4-Dichlorobenzene		<5	ug/l	7/18/03	BD
Dichlorodifluoromethane		<5	ug/l	7/18/03	BD
1,1-Dichloroethane		67	ug/l	7/18/03	BD
1,2-Dichloroethane		<5	ug/l	7/18/03	BD
1,1-Dichloroethene		8.1	ug/l	7/18/03	BD
trans-1,2-Dichloroethene		8.7	ug/l	7/18/03	BD
1,2-Dichloropropane		<5	ug/l	7/18/03	BD
cis-1,3-Dichloropropene		<5	ug/l	7/18/03	BD
trans-1,3-Dichloropropene		<5	ug/l	7/18/03	BD
Methylene chloride		<5	ug/l	7/18/03	BD
1,1,2,2-Tetrachloroethane		<5	ug/l	7/18/03	BD
Tetrachloroethene		<5	ug/l	7/18/03	BD
1,1,1-Trichloroethane		66	ug/l	7/18/03	BD
1,1,2-Trichloroethane		<5	ug/l	7/18/03	BD
Trichloroethene		74	ug/l	7/18/03	BD
Trichlorofluoromethane (Freon 11)		<5	ug/l	7/18/03	BD
Vinyl chloride		150	ug/l	7/18/03	BD
Surrogate (1,2-DCA-d4)		86	%R	7/18/03	BD
Surrogate (Tol-d8)		110	%R	7/18/03	BD
Surrogate (4-BFB)		110	%R	7/18/03	BD

**-- LABORATORY ANALYSIS REPORT --**

**New York State DEC - Region 7, ER      Syracuse, NY**

<b>Sample ID:</b>	Influent WP-5D	<b>LSL Sample ID:</b>	0310124-002
<b>Location:</b>	NES		
<b>Sampled:</b>	07/08/03 13:45	<b>Sampled By:</b>	MG
<b>Sample Matrix:</b>	NPW		
<b>Analytical Method</b>			
<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Prep Date</b>
			<b>Analysis Date &amp; Time</b>
			<b>Analyst Initials</b>
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>			
Benzene	<1	ug/l	7/18/03
Chlorobenzene	<1	ug/l	7/18/03
1,2-Dichlorobenzene	<1	ug/l	7/18/03
1,3-Dichlorobenzene	<1	ug/l	7/18/03
1,4-Dichlorobenzene	<1	ug/l	7/18/03
Ethyl benzene	<1	ug/l	7/18/03
MTBE	<1	ug/l	7/18/03
Toluene	<1	ug/l	7/18/03
Xylenes (Total)	<1	ug/l	7/18/03
t-Butyl alcohol	<200	ug/l	7/18/03
Surrogate (1,2-DCA-d4)	87	%R	7/18/03
Surrogate (Tol-d8)	112	%R	7/18/03
Surrogate (4-BFB)	112	%R	7/18/03
<b>(I) ITEM #GW-02- , EPA 601 Vol.</b>			
Bromodichloromethane	<1	ug/l	7/18/03
Bromoform	<1	ug/l	7/18/03
Bromomethane	<1	ug/l	7/18/03
Carbon tetrachloride	<1	ug/l	7/18/03
Chlorobenzene	<1	ug/l	7/18/03
Chloroethane	12	ug/l	7/18/03
2-Chloroethylvinyl ether	<10	ug/l	7/18/03
Chloroform	<1	ug/l	7/18/03
Chloromethane	<1	ug/l	7/18/03
Dibromochloromethane	<1	ug/l	7/18/03
1,2-Dichlorobenzene	<1	ug/l	7/18/03
1,3-Dichlorobenzene	<1	ug/l	7/18/03
1,4-Dichlorobenzene	<1	ug/l	7/18/03
Dichlorodifluoromethane	<1	ug/l	7/18/03
1,1-Dichloroethane	<1	ug/l	7/18/03
1,2-Dichloroethane	<1	ug/l	7/18/03
1,1-Dichloroethene	<1	ug/l	7/18/03
trans-1,2-Dichloroethene	<1	ug/l	7/18/03
1,2-Dichloropropane	<1	ug/l	7/18/03
cis-1,3-Dichloropropene	<1	ug/l	7/18/03
trans-1,3-Dichloropropene	<1	ug/l	7/18/03
Methylene chloride	<1	ug/l	7/18/03
1,1,2,2-Tetrachloroethane	<1	ug/l	7/18/03
Tetrachloroethene	<1	ug/l	7/18/03
1,1,1-Trichloroethane	<1	ug/l	7/18/03
1,1,2-Trichloroethane	<1	ug/l	7/18/03
Trichloroethene	<1	ug/l	7/18/03
Trichlorofluoromethane (Freon 11)	<1	ug/l	7/18/03
Vinyl chloride	55	ug/l	7/18/03
Surrogate (1,2-DCA-d4)	87	%R	7/18/03
Surrogate (Tol-d8)	112	%R	7/18/03
Surrogate (4-BFB)	112	%R	7/18/03

-- LABORATORY ANALYSIS REPORT --

*New York State DEC - Region 7, ER      Syracuse, NY*

Sample ID:	Post-Air Stripper (Pre-Carbon)	LSL Sample ID:	0310124-003
Location:	NES		
Sampled:	07/08/03 13:40	Sampled By:	MG
Sample Matrix:	NPW		
Analytical Method			
Analyte	Result	Units	Prep Date
			Analysis Date & Time
			Analyst Initials
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA			
Benzene	<1	ug/l	7/18/03
Chlorobenzene	<1	ug/l	7/18/03
1,2-Dichlorobenzene	<1	ug/l	7/18/03
1,3-Dichlorobenzene	<1	ug/l	7/18/03
1,4-Dichlorobenzene	<1	ug/l	7/18/03
Ethyl benzene	<1	ug/l	7/18/03
MTBE	<1	ug/l	7/18/03
Toluene	<1	ug/l	7/18/03
Xylenes (Total)	<1	ug/l	7/18/03
t-Butyl alcohol	<200	ug/l	7/18/03
Surrogate (1,2-DCA-d4)	89	%R	7/18/03
Surrogate (Tol-d8)	113	%R	7/18/03
Surrogate (4-BFB)	113	%R	7/18/03
(I) ITEM #GW-02- , EPA 601 Vol.			
Bromodichloromethane	<1	ug/l	7/18/03
Bromoform	<1	ug/l	7/18/03
Bromomethane	<1	ug/l	7/18/03
Carbon tetrachloride	<1	ug/l	7/18/03
Chlorobenzene	<1	ug/l	7/18/03
Chloroethane	<1	ug/l	7/18/03
2-Chloroethylvinyl ether	<10	ug/l	7/18/03
Chloroform	<1	ug/l	7/18/03
Chloromethane	<1	ug/l	7/18/03
Dibromochloromethane	<1	ug/l	7/18/03
1,2-Dichlorobenzene	<1	ug/l	7/18/03
1,3-Dichlorobenzene	<1	ug/l	7/18/03
1,4-Dichlorobenzene	<1	ug/l	7/18/03
Dichlorodifluoromethane	<1	ug/l	7/18/03
1,1-Dichloroethane	<1	ug/l	7/18/03
1,2-Dichloroethane	<1	ug/l	7/18/03
1,1-Dichloroethene	<1	ug/l	7/18/03
trans-1,2-Dichloroethene	<1	ug/l	7/18/03
1,2-Dichloropropane	<1	ug/l	7/18/03
cis-1,3-Dichloropropene	<1	ug/l	7/18/03
trans-1,3-Dichloropropene	<1	ug/l	7/18/03
Methylene chloride	<1	ug/l	7/18/03
1,1,2,2-Tetrachloroethane	<1	ug/l	7/18/03
Tetrachloroethene	<1	ug/l	7/18/03
1,1,1-Trichloroethane	<1	ug/l	7/18/03
1,1,2-Trichloroethane	<1	ug/l	7/18/03
Trichloroethene	<1	ug/l	7/18/03
Trichlorofluoromethane (Freon 11)	<1	ug/l	7/18/03
Vinyl chloride	<1	ug/l	7/18/03
Surrogate (1,2-DCA-d4)	89	%R	7/18/03
Surrogate (Tol-d8)	113	%R	7/18/03
Surrogate (4-BFB)	113	%R	7/18/03

-- LABORATORY ANALYSIS REPORT --

**New York State DEC - Region 7, ER      Syracuse, NY**

<b>Sample ID:</b>	<b>Final GWT System Discharge (Outfall 01A)</b>		<b>LSL Sample ID:</b>	<b>0310124-004</b>	
<b>Location:</b>	<b>NES</b>				
<b>Sampled:</b>	<b>07/08/03 13:35</b>		<b>Sampled By:</b>	<b>MG</b>	
<b>Sample Matrix:</b>	<b>NPW</b>				
<b>Analytical Method</b>				<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>
<b>Analyte</b>		<b>Result</b>	<b>Units</b>		<b>Analyst Initials</b>
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>					
Benzene		<1	ug/l	7/18/03	BD
Chlorobenzene		<1	ug/l	7/18/03	BD
1,2-Dichlorobenzene		<1	ug/l	7/18/03	BD
1,3-Dichlorobenzene		<1	ug/l	7/18/03	BD
1,4-Dichlorobenzene		<1	ug/l	7/18/03	BD
Ethyl benzene		<1	ug/l	7/18/03	BD
MTBE		<1	ug/l	7/18/03	BD
Toluene		<1	ug/l	7/18/03	BD
Xylenes (Total)		<1	ug/l	7/18/03	BD
t-Butyl alcohol		<200	ug/l	7/18/03	BD
Surrogate (1,2-DCA-d4)		90	%R	7/18/03	BD
Surrogate (Tol-d8)		112	%R	7/18/03	BD
Surrogate (4-BFB)		112	%R	7/18/03	BD
<b>(I) ITEM #GW-02- , EPA 601 Vol.</b>					
Bromodichloromethane		<1	ug/l	7/18/03	BD
Bromoform		<1	ug/l	7/18/03	BD
Bromomethane		<1	ug/l	7/18/03	BD
Carbon tetrachloride		<1	ug/l	7/18/03	BD
Chlorobenzene		<1	ug/l	7/18/03	BD
Chloroethane		<1	ug/l	7/18/03	BD
2-Chloroethylvinyl ether		<10	ug/l	7/18/03	BD
Chloroform		<1	ug/l	7/18/03	BD
Chloromethane		<1	ug/l	7/18/03	BD
Dibromochloromethane		<1	ug/l	7/18/03	BD
1,2-Dichlorobenzene		<1	ug/l	7/18/03	BD
1,3-Dichlorobenzene		<1	ug/l	7/18/03	BD
1,4-Dichlorobenzene		<1	ug/l	7/18/03	BD
Dichlorodifluoromethane		<1	ug/l	7/18/03	BD
1,1-Dichloroethane		<1	ug/l	7/18/03	BD
1,2-Dichloroethane		<1	ug/l	7/18/03	BD
1,1-Dichloroethene		<1	ug/l	7/18/03	BD
trans-1,2-Dichloroethene		<1	ug/l	7/18/03	BD
1,2-Dichloropropane		<1	ug/l	7/18/03	BD
cis-1,3-Dichloropropene		<1	ug/l	7/18/03	BD
trans-1,3-Dichloropropene		<1	ug/l	7/18/03	BD
Methylene chloride		<1	ug/l	7/18/03	BD
1,1,2,2-Tetrachloroethane		<1	ug/l	7/18/03	BD
Tetrachloroethene		<1	ug/l	7/18/03	BD
1,1,1-Trichloroethane		<1	ug/l	7/18/03	BD
1,1,2-Trichloroethane		<1	ug/l	7/18/03	BD
Trichloroethene		<1	ug/l	7/18/03	BD
Trichlorofluoromethane (Freon 11)		<1	ug/l	7/18/03	BD
Vinyl chloride		<1	ug/l	7/18/03	BD
Surrogate (1,2-DCA-d4)		90	%R	7/18/03	BD
Surrogate (Tol-d8)		112	%R	7/18/03	BD
Surrogate (4-BFB)		112	%R	7/18/03	BD

**-- LABORATORY ANALYSIS REPORT --**

**New York State DEC - Region 7, ER      Syracuse, NY**

<b>Sample ID:</b>	Trip Blank			<b>LSL Sample ID:</b>	0310124-005			
<b>Location:</b>	NES							
<b>Sampled:</b>	07/08/03 0:00	<b>Sampled By:</b>						
<b>Sample Matrix:</b>	TB							
Analytical Method		Result	Units	Prep Date	Analysis Date & Time	Analyst Initials		
Analyte								
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA								
Benzene		<1	ug/l	7/18/03		BD		
Chlorobenzene		<1	ug/l	7/18/03		BD		
1,2-Dichlorobenzene		<1	ug/l	7/18/03		BD		
1,3-Dichlorobenzene		<1	ug/l	7/18/03		BD		
1,4-Dichlorobenzene		<1	ug/l	7/18/03		BD		
Ethyl benzene		<1	ug/l	7/18/03		BD		
MTBE		<1	ug/l	7/18/03		BD		
Toluene		<1	ug/l	7/18/03		BD		
Xylenes (Total)		<1	ug/l	7/18/03		BD		
t-Butyl alcohol		<200	ug/l	7/18/03		BD		
Surrogate (1,2-DCA-d4)		90	%R	7/18/03		BD		
Surrogate (Tol-d8)		114	%R	7/18/03		BD		
Surrogate (4-BFB)		115	%R	7/18/03		BD		
(I) ITEM #GW-02- , EPA 601 Vol.								
Bromodichloromethane		<1	ug/l	7/18/03		BD		
Bromoform		<1	ug/l	7/18/03		BD		
Bromomethane		<1	ug/l	7/18/03		BD		
Carbon tetrachloride		<1	ug/l	7/18/03		BD		
Chlorobenzene		<1	ug/l	7/18/03		BD		
Chloroethane		<1	ug/l	7/18/03		BD		
2-Chloroethylvinyl ether		<10	ug/l	7/18/03		BD		
Chloroform		<1	ug/l	7/18/03		BD		
Chloromethane		<1	ug/l	7/18/03		BD		
Dibromochloromethane		<1	ug/l	7/18/03		BD		
1,2-Dichlorobenzene		<1	ug/l	7/18/03		BD		
1,3-Dichlorobenzene		<1	ug/l	7/18/03		BD		
1,4-Dichlorobenzene		<1	ug/l	7/18/03		BD		
Dichlorodifluoromethane		<1	ug/l	7/18/03		BD		
1,1-Dichloroethane		<1	ug/l	7/18/03		BD		
1,2-Dichloroethane		<1	ug/l	7/18/03		BD		
1,1-Dichloroethene		<1	ug/l	7/18/03		BD		
trans-1,2-Dichloroethene		<1	ug/l	7/18/03		BD		
1,2-Dichloropropane		<1	ug/l	7/18/03		BD		
cis-1,3-Dichloropropene		<1	ug/l	7/18/03		BD		
trans-1,3-Dichloropropene		<1	ug/l	7/18/03		BD		
Methylene chloride		<1	ug/l	7/18/03		BD		
1,1,2,2-Tetrachloroethane		<1	ug/l	7/18/03		BD		
Tetrachloroethene		<1	ug/l	7/18/03		BD		
1,1,1-Trichloroethane		<1	ug/l	7/18/03		BD		
1,1,2-Trichloroethane		<1	ug/l	7/18/03		BD		
Trichloroethene		<1	ug/l	7/18/03		BD		
Trichlorofluoromethane (Freon 11)		<1	ug/l	7/18/03		BD		
Vinyl chloride		<1	ug/l	7/18/03		BD		
Surrogate (1,2-DCA-d4)		90	%R	7/18/03		BD		
Surrogate (Tol-d8)		114	%R	7/18/03		BD		
Surrogate (4-BFB)		115	%R	7/18/03		BD		



## SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS

8/14/02

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	80-120	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Dodecane	40-110	40-110
DOH 310-14	Dodecane	40-110	40-110
DOH 310-15	Dodecane	40-110	40-110
DOH 310-34*	4-BFB	50-150	50-150
8015M_GRO*	4-BFB	50-150	50-150
8015M_DRO*	Terphenyl-d14	50-150	50-150

\*Run by GC/MS.

<b>Units Key:</b>	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery

**STRATEGIC ENVIRONMENTAL MANAGEMENT, INC.**  
**SAMPLE CUSTODY RECORD**

0310124  
NYSDEC7SYTCR

**BALDWINSVILLE OFFICE**  
**25 ½ Water Street**  
**Baldwinsville, New York 13020**  
**Telephone: (315) 635-8936**  
**Fax/cimile: (315) 635-2380**

SEM Project Number: 3003.0050  
SEM Contact Person: Nevin Bradford  
Project Location: Canastota, New

Laboratory: Life Science Laboratories  
Project Identification: NES NYSDEE  
Page 1\_\_\_\_ of 1\_\_\_\_  
01-60024/Pin

Client's Sample Identification	Date	Collection Time	Sample Location	Number of Containers	Comp or Grab	Preservatives	Sample Matrix
001(A) RW1	7/18/03	1350	Influent-RW-1	2	6	H2O	NPW
WP5D		1345	Influent WP-5D	2			1
PA/PC		1346	Post-Air Stripper (Pre-Carbon)	2			
01A		1335	Final GWT Discharge (Outfall 01A)	2			
005			Trip Blank 1330	2			4

Sample Custody  
SAMPLE COLLECTION  
Name: MARK GRAVES  
Signature: Mark Graves  
Normal 14 Day  
sample TAT:

Sample Custody  
RELINQUISH SAMPLE CUSTOMER  
Mark Hayes

**ACCEPT AND RECEIVE SAMPLE CUSTODY**

Name: <u>218/03</u>	Signature: _____	Date: _____
Name: <u>218/03</u>	Laboratory: <u>BSI</u>	Time: <u>15:00</u>
Name: <u>218/03</u>	Signature: <u>BSI</u>	Date: <u>07-08</u>



**Tim DiGiulio**  
**New York State DEC - Region 7, ER**  
**615 Erie Blvd. W.**  
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# **Laboratory Analysis Report for the New York State Department of Environmental Conservation**

## **Contract Number: C200209**

**NYS DEC Spill #: 01-60024**

**NYS DEC Pin #: H-0529**

**LSL Project ID: 0310632**

**Receive Date/Time: 07/15/03 14:49 by: GS**

**"I certify that this laboratory has current ELAP certification to provide the analytical results in this report and that the data package is in compliance with the terms and conditions of the contract."**

William Cox, QCC  
**Reviewed By**

07-29-03  
**Date**

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The Chain of Custody document submitted with these samples is considered by LSL to be an appendix of this report and may contain specific information that pertains to the samples included in this report. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

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New York State DEC - Region 7, ER      Syracuse, NY

Sample ID: Influent-RW-1      LSL Sample ID: 0310632-001

Location: NES

Sampled: 07/15/03 13:15      Sampled By: MG

Sample Matrix: NPW

Analytical Method	Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA						
	Benzene	<5	ug/l	7/23/03		BD
	Chlorobenzene	<5	ug/l	7/23/03		BD
	1,2-Dichlorobenzene	<5	ug/l	7/23/03		BD
	1,3-Dichlorobenzene	<5	ug/l	7/23/03		BD
	1,4-Dichlorobenzene	<5	ug/l	7/23/03		BD
	Ethyl benzene	<5	ug/l	7/23/03		BD
	MTBE	<5	ug/l	7/23/03		BD
	Toluene	240	ug/l	7/23/03		BD
	Xylenes (Total)	53	ug/l	7/23/03		BD
	t-Butyl alcohol	<1000	ug/l	7/23/03		BD
	Surrogate (1,2-DCA-d4)	73	%R	7/23/03		BD
	Surrogate (Tol-d8)	105	%R	7/23/03		BD
	Surrogate (4-BFB)	103	%R	7/23/03		BD
(I) ITEM #GW-02- , EPA 601 Vol.						
	Bromodichloromethane	<5	ug/l	7/23/03		BD
	Bromoform	<5	ug/l	7/23/03		BD
	Bromomethane	<5	ug/l	7/23/03		BD
	Carbon tetrachloride	<5	ug/l	7/23/03		BD
	Chlorobenzene	<5	ug/l	7/23/03		BD
	Chloroethane	<5	ug/l	7/23/03		BD
	2-Chloroethylvinyl ether	<50	ug/l	7/23/03		BD
	Chloroform	<5	ug/l	7/23/03		BD
	Chloromethane	<5	ug/l	7/23/03		BD
	Dibromochloromethane	<5	ug/l	7/23/03		BD
	1,2-Dichlorobenzene	<5	ug/l	7/23/03		BD
	1,3-Dichlorobenzene	<5	ug/l	7/23/03		BD
	1,4-Dichlorobenzene	<5	ug/l	7/23/03		BD
	Dichlorodifluoromethane	<5	ug/l	7/23/03		BD
	1,1-Dichloroethane	44	ug/l	7/23/03		BD
	1,2-Dichloroethane	<5	ug/l	7/23/03		BD
	1,1-Dichloroethene	7.2	ug/l	7/23/03		BD
	trans-1,2-Dichloroethene	7.4	ug/l	7/23/03		BD
	1,2-Dichloropropane	<5	ug/l	7/23/03		BD
	cis-1,3-Dichloropropene	<5	ug/l	7/23/03		BD
	trans-1,3-Dichloropropene	<5	ug/l	7/23/03		BD
	Methylene chloride	<5	ug/l	7/23/03		BD
	1,1,2,2-Tetrachloroethane	<5	ug/l	7/23/03		BD
	Tetrachloroethene	<5	ug/l	7/23/03		BD
	1,1,1-Trichloroethane	51	ug/l	7/23/03		BD
	1,1,2-Trichloroethane	<5	ug/l	7/23/03		BD
	Trichloroethene	51	ug/l	7/23/03		BD
	Trichlorofluoromethane (Freon 11)	<5	ug/l	7/23/03		BD
	Vinyl chloride	130	ug/l	7/23/03		BD
	Surrogate (1,2-DCA-d4)	73	%R	7/23/03		BD
	Surrogate (Tol-d8)	105	%R	7/23/03		BD
	Surrogate (4-BFB)	103	%R	7/23/03		BD

New York State DEC - Region 7, ER      Syracuse, NY

<b>Sample ID:</b>	<b>Influent WP-5D</b>			<b>LSL Sample ID:</b>	<b>0310632-002</b>	
<b>Location:</b>	NYS					
<b>Sampled:</b>	07/15/03 13:20	<b>Sampled By:</b> MG				
<b>Sample Matrix:</b>	NPW					
<b>Analytical Method</b>				<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>	<b>Analyst Initials</b>
<b>Analyte</b>		<b>Result</b>	<b>Units</b>			
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>						
Benzene		<1	ug/l	7/23/03		BD
Chlorobenzene		<1	ug/l	7/23/03		BD
1,2-Dichlorobenzene		<1	ug/l	7/23/03		BD
1,3-Dichlorobenzene		<1	ug/l	7/23/03		BD
1,4-Dichlorobenzene		<1	ug/l	7/23/03		BD
Ethyl benzene		<1	ug/l	7/23/03		BD
MTBE		<1	ug/l	7/23/03		BD
Toluene		<1	ug/l	7/23/03		BD
Xylenes (Total)		<1	ug/l	7/23/03		BD
t-Butyl alcohol		<200	ug/l	7/23/03		BD
Surrogate (1,2-DCA-d4)		76	%R	7/23/03		BD
Surrogate (Tol-d8)		108	%R	7/23/03		BD
Surrogate (4-BFB)		104	%R	7/23/03		BD
<b>(I) ITEM #GW-02- , EPA 601 Vol.</b>						
Bromodichloromethane		<1	ug/l	7/23/03		BD
Bromoform		<1	ug/l	7/23/03		BD
Bromomethane		<1	ug/l	7/23/03		BD
Carbon tetrachloride		<1	ug/l	7/23/03		BD
Chlorobenzene		<1	ug/l	7/23/03		BD
Chloroethane		11	ug/l	7/23/03		BD
2-Chloroethylvinyl ether		<10	ug/l	7/23/03		BD
Chloroform		<1	ug/l	7/23/03		BD
Chloromethane		<1	ug/l	7/23/03		BD
Dibromochloromethane		<1	ug/l	7/23/03		BD
1,2-Dichlorobenzene		<1	ug/l	7/23/03		BD
1,3-Dichlorobenzene		<1	ug/l	7/23/03		BD
1,4-Dichlorobenzene		<1	ug/l	7/23/03		BD
Dichlorodifluoromethane		<1	ug/l	7/23/03		BD
1,1-Dichloroethane		<1	ug/l	7/23/03		BD
1,2-Dichloroethane		<1	ug/l	7/23/03		BD
1,1-Dichloroethene		<1	ug/l	7/23/03		BD
trans-1,2-Dichloroethene		<1	ug/l	7/23/03		BD
1,2-Dichloropropane		<1	ug/l	7/23/03		BD
cis-1,3-Dichloropropene		<1	ug/l	7/23/03		BD
trans-1,3-Dichloropropene		<1	ug/l	7/23/03		BD
Methylene chloride		<1	ug/l	7/23/03		BD
1,1,2,2-Tetrachloroethane		<1	ug/l	7/23/03		BD
Tetrachloroethene		<1	ug/l	7/23/03		BD
1,1,1-Trichloroethane		<1	ug/l	7/23/03		BD
1,1,2-Trichloroethane		<1	ug/l	7/23/03		BD
Trichloroethene		<1	ug/l	7/23/03		BD
Trichlorofluoromethane (Freon 11)		<1	ug/l	7/23/03		BD
Vinyl chloride		47	ug/l	7/23/03		BD
Surrogate (1,2-DCA-d4)		76	%R	7/23/03		BD
Surrogate (Tol-d8)		108	%R	7/23/03		BD
Surrogate (4-BFB)		104	%R	7/23/03		BD

**New York State DEC - Region 7, ER      Syracuse, NY**

<b>Sample ID:</b>	<b>Post-Air Stripper (Pre-Carbon)</b>		<b>LSL Sample ID:</b>	<b>0310632-003</b>
<b>Location:</b>	<b>NES</b>			
<b>Sampled:</b>	<b>07/15/03 13:25</b>	<b>Sampled By:</b>	<b>MG</b>	
<b>Sample Matrix:</b>	<b>NPW</b>			
<b>Analytical Method</b>			<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>
<b>Analyte</b>		<b>Result</b>	<b>Units</b>	<b>Analyst Initials</b>
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>				
Benzene		<1	ug/l	7/23/03 BD
Chlorobenzene		<1	ug/l	7/23/03 BD
1,2-Dichlorobenzene		<1	ug/l	7/23/03 BD
1,3-Dichlorobenzene		<1	ug/l	7/23/03 BD
1,4-Dichlorobenzene		<1	ug/l	7/23/03 BD
Ethyl benzene		<1	ug/l	7/23/03 BD
MTBE		<1	ug/l	7/23/03 BD
Toluene		<1	ug/l	7/23/03 BD
Xylenes (Total)		<1	ug/l	7/23/03 BD
t-Butyl alcohol		<200	ug/l	7/23/03 BD
Surrogate (1,2-DCA-d4)		77	%R	7/23/03 BD
Surrogate (Tol-d8)		107	%R	7/23/03 BD
Surrogate (4-BFB)		110	%R	7/23/03 BD
<b>(I) ITEM #GW-02- , EPA 601 Vol.</b>				
Bromodichloromethane		<1	ug/l	7/23/03 BD
Bromoform		<1	ug/l	7/23/03 BD
Bromomethane		<1	ug/l	7/23/03 BD
Carbon tetrachloride		<1	ug/l	7/23/03 BD
Chlorobenzene		<1	ug/l	7/23/03 BD
Chloroethane		<1	ug/l	7/23/03 BD
2-Chloroethylvinyl ether		<10	ug/l	7/23/03 BD
Chloroform		<1	ug/l	7/23/03 BD
Chloromethane		<1	ug/l	7/23/03 BD
Dibromochloromethane		<1	ug/l	7/23/03 BD
1,2-Dichlorobenzene		<1	ug/l	7/23/03 BD
1,3-Dichlorobenzene		<1	ug/l	7/23/03 BD
1,4-Dichlorobenzene		<1	ug/l	7/23/03 BD
Dichlorodifluoromethane		<1	ug/l	7/23/03 BD
1,1-Dichloroethane		<1	ug/l	7/23/03 BD
1,2-Dichloroethane		<1	ug/l	7/23/03 BD
1,1-Dichloroethene		<1	ug/l	7/23/03 BD
trans-1,2-Dichloroethene		<1	ug/l	7/23/03 BD
1,2-Dichloropropane		<1	ug/l	7/23/03 BD
cis-1,3-Dichloropropene		<1	ug/l	7/23/03 BD
trans-1,3-Dichloropropene		<1	ug/l	7/23/03 BD
Methylene chloride		<1	ug/l	7/23/03 BD
1,1,2,2-Tetrachloroethane		<1	ug/l	7/23/03 BD
Tetrachloroethene		<1	ug/l	7/23/03 BD
1,1,1-Trichloroethane		<1	ug/l	7/23/03 BD
1,1,2-Trichloroethane		<1	ug/l	7/23/03 BD
Trichloroethene		<1	ug/l	7/23/03 BD
Trichlorofluoromethane (Freon 11)		<1	ug/l	7/23/03 BD
Vinyl chloride		<1	ug/l	7/23/03 BD
Surrogate (1,2-DCA-d4)		77	%R	7/23/03 BD
Surrogate (Tol-d8)		107	%R	7/23/03 BD
Surrogate (4-BFB)		110	%R	7/23/03 BD

New York State DEC - Region 7, ER      Syracuse, NY

<b>Sample ID:</b>	Final GWT System Discharge (Outfall 01A)	<b>LSL Sample ID:</b>	0310632-004		
<b>Location:</b>	NES				
<b>Sampled:</b>	07/15/03 13:29	<b>Sampled By:</b>	MG		
<b>Sample Matrix:</b>	NPW				
<b>Analytical Method</b>			<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>	<b>Analyst Initials</b>
<b>Analyte</b>		<b>Result</b>	<b>Units</b>		
<i>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</i>					
Benzene		<1	ug/l	7/23/03	BD
Chlorobenzene		<1	ug/l	7/23/03	BD
1,2-Dichlorobenzene		<1	ug/l	7/23/03	BD
1,3-Dichlorobenzene		<1	ug/l	7/23/03	BD
1,4-Dichlorobenzene		<1	ug/l	7/23/03	BD
Ethyl benzene		<1	ug/l	7/23/03	BD
MTBE		<1	ug/l	7/23/03	BD
Toluene		<1	ug/l	7/23/03	BD
Xylenes (Total)		<1	ug/l	7/23/03	BD
t-Butyl alcohol		<200	ug/l	7/23/03	BD
Surrogate (1,2-DCA-d4)		79	%R	7/23/03	BD
Surrogate (Tol-d8)		109	%R	7/23/03	BD
Surrogate (4-BFB)		106	%R	7/23/03	BD
<i>(I) ITEM #GW-02- , EPA 601 Vol.</i>					
Bromodichloromethane		<1	ug/l	7/23/03	BD
Bromoform		<1	ug/l	7/23/03	BD
Bromomethane		<1	ug/l	7/23/03	BD
Carbon tetrachloride		<1	ug/l	7/23/03	BD
Chlorobenzene		<1	ug/l	7/23/03	BD
Chloroethane		<1	ug/l	7/23/03	BD
2-Chloroethylvinyl ether		<10	ug/l	7/23/03	BD
Chloroform		<1	ug/l	7/23/03	BD
Chloromethane		<1	ug/l	7/23/03	BD
Dibromochloromethane		<1	ug/l	7/23/03	BD
1,2-Dichlorobenzene		<1	ug/l	7/23/03	BD
1,3-Dichlorobenzene		<1	ug/l	7/23/03	BD
1,4-Dichlorobenzene		<1	ug/l	7/23/03	BD
Dichlorodifluoromethane		<1	ug/l	7/23/03	BD
1,1-Dichloroethane		<1	ug/l	7/23/03	BD
1,2-Dichloroethane		<1	ug/l	7/23/03	BD
1,1-Dichloroethene		<1	ug/l	7/23/03	BD
trans-1,2-Dichloroethene		<1	ug/l	7/23/03	BD
1,2-Dichloropropane		<1	ug/l	7/23/03	BD
cis-1,3-Dichloropropene		<1	ug/l	7/23/03	BD
trans-1,3-Dichloropropene		<1	ug/l	7/23/03	BD
Methylene chloride		<1	ug/l	7/23/03	BD
1,1,2,2-Tetrachloroethane		<1	ug/l	7/23/03	BD
Tetrachloroethene		<1	ug/l	7/23/03	BD
1,1,1-Trichloroethane		<1	ug/l	7/23/03	BD
1,1,2-Trichloroethane		<1	ug/l	7/23/03	BD
Trichloroethene		<1	ug/l	7/23/03	BD
Trichlorofluoromethane (Freon 11)		<1	ug/l	7/23/03	BD
Vinyl chloride		<1	ug/l	7/23/03	BD
Surrogate (1,2-DCA-d4)		78	%R	7/23/03	BD
Surrogate (Tol-d8)		109	%R	7/23/03	BD
Surrogate (4-BFB)		106	%R	7/23/03	BD

**New York State DEC - Region 7, ER      Syracuse, NY**

**Sample ID:** Trip Blank                            **LSL Sample ID:** 0310632-005

**Location:** NES

**Sampled:** 07/15/03 0:00

**Sampled By:**

**Sample Matrix:** TB

<b>Analytical Method</b>		<b>Result</b>	<b>Units</b>	<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>	<b>Analyst Initials</b>
	<b>Analyte</b>					
(I) ITEM #GW-01- ,EPA 602 Vol.	Xyl.+MTBE+TBA					
Benzene	<1	ug/l		7/23/03		BD
Chlorobenzene	<1	ug/l		7/23/03		BD
1,2-Dichlorobenzene	<1	ug/l		7/23/03		BD
1,3-Dichlorobenzene	<1	ug/l		7/23/03		BD
1,4-Dichlorobenzene	<1	ug/l		7/23/03		BD
Ethyl benzene	<1	ug/l		7/23/03		BD
MTBE	<1	ug/l		7/23/03		BD
Toluene	<1	ug/l		7/23/03		BD
Xylenes (Total)	<1	ug/l		7/23/03		BD
t-Butyl alcohol	<200	ug/l		7/23/03		BD
Surrogate (1,2-DCA-d4)	78	%R		7/23/03		BD
Surrogate (Tol-d8)	108	%R		7/23/03		BD
Surrogate (4-BFB)	106	%R		7/23/03		BD
(I) ITEM #GW-02- , EPA 601 Vol.						
Bromodichloromethane	<1	ug/l		7/23/03		BD
Bromoform	<1	ug/l		7/23/03		BD
Bromomethane	<1	ug/l		7/23/03		BD
Carbon tetrachloride	<1	ug/l		7/23/03		BD
Chlorobenzene	<1	ug/l		7/23/03		BD
Chloroethane	<1	ug/l		7/23/03		BD
2-Chloroethylvinyl ether	<10	ug/l		7/23/03		BD
Chloroform	<1	ug/l		7/23/03		BD
Chloromethane	<1	ug/l		7/23/03		BD
Dibromochloromethane	<1	ug/l		7/23/03		BD
1,2-Dichlorobenzene	<1	ug/l		7/23/03		BD
1,3-Dichlorobenzene	<1	ug/l		7/23/03		BD
1,4-Dichlorobenzene	<1	ug/l		7/23/03		BD
Dichlorodifluoromethane	<1	ug/l		7/23/03		BD
1,1-Dichloroethane	<1	ug/l		7/23/03		BD
1,2-Dichloroethane	<1	ug/l		7/23/03		BD
1,1-Dichloroethene	<1	ug/l		7/23/03		BD
trans-1,2-Dichloroethene	<1	ug/l		7/23/03		BD
1,2-Dichloropropane	<1	ug/l		7/23/03		BD
cis-1,3-Dichloropropene	<1	ug/l		7/23/03		BD
trans-1,3-Dichloropropene	<1	ug/l		7/23/03		BD
Methylene chloride	<1	ug/l		7/23/03		BD
1,1,2,2-Tetrachloroethane	<1	ug/l		7/23/03		BD
Tetrachloroethene	<1	ug/l		7/23/03		BD
1,1,1-Trichloroethane	<1	ug/l		7/23/03		BD
1,1,2-Trichloroethane	<1	ug/l		7/23/03		BD
Trichloroethene	<1	ug/l		7/23/03		BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		7/23/03		BD
Vinyl chloride	<1	ug/l		7/23/03		BD
Surrogate (1,2-DCA-d4)	78	%R		7/23/03		BD
Surrogate (Tol-d8)	108	%R		7/23/03		BD
Surrogate (4-BFB)	106	%R		7/23/03		BD



## SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS

8/14/02

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	80-120	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Dodecane	40-110	40-110
DOH 310-14	Dodecane	40-110	40-110
DOH 310-15	Dodecane	40-110	40-110
DOH 310-34*	4-BFB	50-150	50-150
8015M_GRO*	4-BFB	50-150	50-150
8015M_DRO*	Terphenyl-d14	50-150	50-150

\*Run by GC/MS.

Units Key:  
ug/l = microgram per liter  
ug/kg = microgram per kilogram  
mg/l = milligram per liter  
mg/kg = milligram per kilogram  
%R = Percent Recovery

0310432  
NYSDEC/SyCr

**STRATEGIC ENVIRONMENTAL MANAGEMENT, INC.**  
**SAMPLE CUSTODY RECORD**

<b>BALDWINSVILLE OFFICE</b> 25 ½ Water Street Baldwinsville, New York 13027 Telephone: (315) 635-8936 Facsimile: (315) 635-2380		<b>SEM Project Number:</b> 3003.0050 <b>SEM Contact Person:</b> Nevin Bradford <b>Project Location:</b> Canastota, New York	<b>CANTON OFFICE</b> 3 Remington Avenue, Suite D Canton, New York 13617 Telephone: (315) 386-2736 Facsimile: (315) 386-4736				
<p>Laboratory: Life Science Laboratories</p> <p>Project Identification: NES NYSDEC Spill No. 01-60024/Pin # H-0529</p> <p>Page 1 of 1</p>		<p>Report and Invoice Address: Timothy DiGiulio, P.E. NYSDEC Region 7 615 Erie Boulevard W. Syracuse, NY 13202 Phone: 315-426-7471</p>	<p><b>Parameters</b></p> <p>EPA Method 601 + 602</p>	<p><b>Notes/Comments</b></p> <p>Copy of Report to: Nevin Bradford Strategic Environmental Mngt. 25 ½ Water Street Baldwinsville, New York 13027</p> <p><i>Hand delivered</i> ice.</p>			
Client's Sample Identification	Date	Collection Time	Sample Location	Number of Containers	Comp or Grab	Preservatives	Sample Matrix
001 AB Rw	7/15/93	1315	Influent WP-5D	2	G	Hg	NPN ✓
002		1320					
003 PA/PC		1325	Post-Air Stripper (Pre-Carbon)				
004 01A		1329	Final GWT System Discharge (Outfall 01A)				
005			Trip Blank				
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**LSL**

**Tim DiGiulio**  
**New York State DEC - Region 7, ER**  
**615 Erie Blvd. W.**  
**Syracuse, NY 13204-2400**

**Phone: (315) 426-7519**

**FAX: (315) 426-2653**

# **Laboratory Analysis Report for the New York State Department of Environmental Conservation**

## **Contract Number: C200209**

**NYS DEC Spill #: 01-60024**

**NYS DEC Pin #: H-0529**

**LSL Project ID: 0311083**

**Receive Date/Time: 07/22/03 16:33 by: GS**

**"I certify that this laboratory has current ELAP certification to provide the analytical results in this report and that the data package is in compliance with the terms and conditions of the contract."**

*yim gk OCC*      *08-07-03*

**Reviewed By**

**Date**

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The Chain of Custody document submitted with these samples is considered by LSL to be an appendix of this report and may contain specific information that pertains to the samples included in this report. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

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**LSL Middlesex Lab**  
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**Middlesex, NY 14507**  
**Tel. (585) 554-5347**  
**Fax. (585) 554-6743**  
**NYS DOH ELAP #11369**

*A copy of this report was sent to:*    **Nevin Bradford**  
**SEM**

Page 1 of 7

Date Printed: 8/7/03

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Influent-WP-5D	LSL Sample ID:	0311083-001
Location:	NES		
Sampled:	07/22/03 10:50	Sampled By:	MG
Sample Matrix:	NPW		

Analytical Method Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>					
Benzene	<1	ug/l	8/4/03		BD
Chlorobenzene	<1	ug/l	8/4/03		BD
1,2-Dichlorobenzene	<1	ug/l	8/4/03		BD
1,3-Dichlorobenzene	<1	ug/l	8/4/03		BD
1,4-Dichlorobenzene	<1	ug/l	8/4/03		BD
Ethyl benzene	<1	ug/l	8/4/03		BD
MTBE	<1	ug/l	8/4/03		BD
Toluene	<1	ug/l	8/4/03		BD
Xylenes (Total)	<1	ug/l	8/4/03		BD
t-Butyl alcohol	<200	ug/l	8/4/03		BD
Surrogate (1,2-DCA-d4)	92	%R	8/4/03		BD
Surrogate (Tol-d8)	118	%R	8/4/03		BD
Surrogate (4-BFD)	116	%R	8/4/03		BD
<b>(II) ITEM #GW-02- , EPA 601 Vol.</b>					
Bromodichloromethane	<1	ug/l	8/4/03		BD
Bromoform	<1	ug/l	8/4/03		BD
Bromomethane	<1	ug/l	8/4/03		BD
Carbon tetrachloride	<1	ug/l	8/4/03		BD
Chlorobenzene	<1	ug/l	8/4/03		BD
Chloroethane	9.9	ug/l	8/4/03		BD
2-Chloroethyl/vinyl ether	<10	ug/l	8/4/03		BD
Chloroform	<1	ug/l	8/4/03		BD
Chloromethane	<1	ug/l	8/4/03		BD
Dibromochloromethane	<1	ug/l	8/4/03		BD
1,2-Dichlorobenzene	<1	ug/l	8/4/03		BD
1,3-Dichlorobenzene	<1	ug/l	8/4/03		BD
1,4-Dichlorobenzene	<1	ug/l	8/4/03		BD
Dichlorodifluoromethane	<1	ug/l	8/4/03		BD
1,1-Dichloroethane	<1	ug/l	8/4/03		BD
1,2-Dichloroethane	<1	ug/l	8/4/03		BD
1,1-Dichloroethene	<1	ug/l	8/4/03		BD
trans-1,2-Dichloroethene	<1	ug/l	8/4/03		BD
1,2-Dichloropropane	<1	ug/l	8/4/03		BD
cis-1,3-Dichloropropene	<1	ug/l	8/4/03		BD
trans-1,3-Dichloropropene	<1	ug/l	8/4/03		BD
Methylene chloride	<1	ug/l	8/4/03		BD
1,1,2,2-Tetrachloroethane	<1	ug/l	8/4/03		BD
Tetrachloroethene	<1	ug/l	8/4/03		BD
1,1,1-Trichloroethane	<1	ug/l	8/4/03		BD
1,1,2-Trichloroethane	<1	ug/l	8/4/03		BD
Trichloroethene	<1	ug/l	8/4/03		BD
Trichlorofluoromethane (Freon 11)	<1	ug/l	8/4/03		BD
Vinyl chloride	55	ug/l	8/4/03		BD
Surrogate (1,2-DCA-d4)	92	%R	8/4/03		BD
Surrogate (Tol-d8)	118	%R	8/4/03		BD
Surrogate (4-BFD)	116	%R	8/4/03		BD

## -- LABORATORY ANALYSIS REPORT --

New York State DEC - Region 7, ER Syracuse, NY

Sample ID: Influent RW-1 LSL Sample ID: 0311083-002  
 Location: NES  
 Sampled: 07/22/03 10:55 Sampled By: MG  
 Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA					
Benzene	<5	ug/l	8/4/03		BD
Chlorobenzene	<5	ug/l	8/4/03		BD
1,2-Dichlorobenzene	<5	ug/l	8/4/03		BD
1,3-Dichlorobenzene	<5	ug/l	8/4/03		BD
1,4-Dichlorobenzene	<5	ug/l	8/4/03		BD
Ethyl benzene	22	ug/l	8/4/03		BD
MTBE	<5	ug/l	8/4/03		BD
Toluene	540	ug/l	8/4/03		BD
Xylenes (Total)	110	ug/l	8/4/03		BD
t-Butyl alcohol	<1000	ug/l	8/4/03		BD
Surrogate (1,2-DCA-d4)	91	%R	8/4/03		BD
Surrogate (Tol-d8)	108	%R	8/4/03		BD
Surrogate (4-BFB)	114	%R	8/4/03		BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<5	ug/l	8/4/03		BD
Bromoform	<5	ug/l	8/4/03		BD
Bromomethane	<5	ug/l	8/4/03		BD
Carbon tetrachloride	<5	ug/l	8/4/03		BD
Chlorobenzene	<5	ug/l	8/4/03		BD
Chloroethane	<5	ug/l	8/4/03		BD
2-Chloroethylvinyl ether	<50	ug/l	8/4/03		BD
Chloroform	<5	ug/l	8/4/03		BD
Chloromethane	<5	ug/l	8/4/03		BD
Dibromochloromethane	<5	ug/l	8/4/03		BD
1,2-Dichlorobenzene	<5	ug/l	8/4/03		BD
1,3-Dichlorobenzene	<5	ug/l	8/4/03		BD
1,4-Dichlorobenzene	<5	ug/l	8/4/03		BD
Dichlorodifluoromethane	<5	ug/l	8/4/03		BD
1,1-Dichloroethane	55	ug/l	8/4/03		BD
1,2-Dichloroethane	<5	ug/l	8/4/03		BD
1,1-Dichloroethene	8.4	ug/l	8/4/03		BD
trans-1,2-Dichloroethene	6.9	ug/l	8/4/03		BD
1,2-Dichloropropane	<5	ug/l	8/4/03		BD
cis-1,3-Dichloropropene	<5	ug/l	8/4/03		BD
trans-1,3-Dichloropropene	<5	ug/l	8/4/03		BD
Methylene chloride	<5	ug/l	8/4/03		BD
1,1,2,2-Tetrachloroethane	<5	ug/l	8/4/03		BD
Tetrachloroethene	<5	ug/l	8/4/03		BD
1,1,1-Trichloroethane	58	ug/l	8/4/03		BD
1,1,2-Trichloroethane	<5	ug/l	8/4/03		BD
Trichloroethane	59	ug/l	8/4/03		BD
Trichlorofluoromethane (From 11)	<5	ug/l	8/4/03		BD
Vinyl chloride	210	ug/l	8/4/03		BD
Surrogate (1,2-DCA-d4)	91	%R	8/4/03		BD
Surrogate (Tol-d8)	108	%R	8/4/03		BD
Surrogate (4-BFB)	114	%R	8/4/03		BD

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Date Printed: 8/7/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER Syracuse, NY

**Sample ID:** Post-Air Stripper (Pre-Carbon)      **LSL Sample ID:** 0311083-003  
**Location:** NES  
**Sampled:** 07/22/03 10:40      **Sampled By:** MG  
**Sample Matrix:** NPW

Analytical Method	Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
<b>(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA</b>						
	Benzene	<1	ug/l	8/5/03		BD
	Chlorobenzene	<1	ug/l	8/5/03		BD
	1,2-Dichlorobenzene	<1	ug/l	8/5/03		BD
	1,3-Dichlorobenzene	<1	ug/l	8/5/03		BD
	1,4-Dichlorobenzene	<1	ug/l	8/5/03		BD
	Ethyl benzene	<1	ug/l	8/5/03		BD
	MTBE	<1	ug/l	8/5/03		BD
	Toluene	<1	ug/l	8/5/03		BD
	Xylenes (Total)	<1	ug/l	8/5/03		BD
	t-Butyl alcohol	<200	ug/l	8/5/03		BD
	Surrogate (1,2-DCA-d4)	106	%R	8/5/03		BD
	Surrogate (Tol-d8)	120	%R	8/5/03		BD
	Surrogate (4-BFB)	108	%R	8/5/03		BD
<b>(I) ITEM #GW-02- , EPA 601 Vol.</b>						
	Bromodichloromethane	<1	ug/l	8/5/03		BD
	Bromoform	<1	ug/l	8/5/03		BD
	Bromomethane	<1	ug/l	8/5/03		BD
	Carbon tetrachloride	<1	ug/l	8/5/03		BD
	Chlorobenzene	<1	ug/l	8/5/03		BD
	Chloroethane	<1	ug/l	8/5/03		BD
	2-Chloroethylvinyl ether	<10	ug/l	8/5/03		BD
	Chloroform	<1	ug/l	8/5/03		BD
	Chloromethane	<1	ug/l	8/5/03		BD
	Dibromochloromethane	<1	ug/l	8/5/03		BD
	1,2-Dichlorobenzene	<1	ug/l	8/5/03		BD
	1,3-Dichlorobenzene	<1	ug/l	8/5/03		BD
	1,4-Dichlorobenzene	<1	ug/l	8/5/03		BD
	Dichlorodifluoromethane	<1	ug/l	8/5/03		BD
	1,1-Dichloroethane	<1	ug/l	8/5/03		BD
	1,2-Dichloroethane	<1	ug/l	8/5/03		BD
	1,1-Dichloroethene	<1	ug/l	8/5/03		BD
	trans-1,2-Dichloroethene	<1	ug/l	8/5/03		BD
	1,2-Dichloropropane	<1	ug/l	8/5/03		BD
	cis-1,3-Dichloropropene	<1	ug/l	8/5/03		BD
	trans-1,3-Dichloropropene	<1	ug/l	8/5/03		BD
	Methylene chloride	<1	ug/l	8/5/03		BD
	1,1,2,2-Tetrachloroethane	<1	ug/l	8/5/03		BD
	Tetrachloroethene	<1	ug/l	8/5/03		BD
	1,1,1-Trichloroethane	<1	ug/l	8/5/03		BD
	1,1,2-Trichloroethane	<1	ug/l	8/5/03		BD
	Trichloroethane	<1	ug/l	8/5/03		BD
	Trichlorofluoromethane (Freon 11)	<1	ug/l	8/5/03		BD
	Vinyl chloride	<1	ug/l	8/5/03		BD
	Surrogate (1,2-DCA-d4)	106	%R	8/5/03		BD
	Surrogate (Tol-d8)	120	%R	8/5/03		BD
	Surrogate (4-BFB)	108	%R	8/5/03		BD

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Date Printed: 8/7/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER Syracuse, NY

<b>Sample ID:</b>	Final GWT System Discharge (Outfall 01A)	<b>LSL Sample ID:</b>	0311083-004		
<b>Location:</b>	NES				
<b>Sampled:</b>	07/22/03 10:30	<b>Sampled By:</b>	MG		
<b>Sample Matrix:</b>	NPW				
<b>Analytical Method</b>					
Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA					
Benzene	<1	ug/l	8/5/03		BD
Chlorobenzene	<1	ug/l	8/5/03		BD
1,2-Dichlorobenzene	<1	ug/l	8/5/03		BD
1,3-Dichlorobenzene	<1	ug/l	8/5/03		BD
1,4-Dichlorobenzene	<1	ug/l	8/5/03		BD
Ethyl benzene	<1	ug/l	8/5/03		BD
MTBE	<1	ug/l	8/5/03		BD
Toluene	<1	ug/l	8/5/03		BD
Xylenes (Total)	<1	ug/l	8/5/03		BD
t-Butyl alcohol	<200	ug/l	8/5/03		BD
Surrogate (1,2-DCA-d4)	107	%R	8/5/03		BD
Surrogate (Tol-d8)	116	%R	8/5/03		BD
Surrogate (4-BFB)	107	%R	8/5/03		BD
(I) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l	8/5/03		BD
Bromoform	<1	ug/l	8/5/03		BD
Bromomethane	<1	ug/l	8/5/03		BD
Carbon tetrachloride	<1	ug/l	8/5/03		BD
Chlorobenzene	<1	ug/l	8/5/03		BD
Chlornathane	<1	ug/l	8/5/03		BD
2-Chloroethylvinyl ether	<10	ug/l	8/5/03		BD
Chloroform	<1	ug/l	8/5/03		BD
Chloromethane	<1	ug/l	8/5/03		BD
Dibromochloromethane	<1	ug/l	8/5/03		BD
1,2-Dichlorobenzene	<1	ug/l	8/5/03		BD
1,3-Dichlorobenzene	<1	ug/l	8/5/03		BD
1,4-Dichlorobenzene	<1	ug/l	8/5/03		BD
Diechlorodifluoromethane	<1	ug/l	8/5/03		BD
1,1-Dichloroethane	<1	ug/l	8/5/03		BD
1,2-Dichloroethane	<1	ug/l	8/5/03		BD
1,1-Dichloroethene	<1	ug/l	8/5/03		BD
trans-1,2-Dichloroethene	<1	ug/l	8/5/03		BD
1,2-Dichloropropane	<1	ug/l	8/5/03		BD
cis-1,3-Dichloropropene	<1	ug/l	8/5/03		BD
trans-1,3-Dichloropropene	<1	ug/l	8/5/03		BD
Methylchloro chloride	<1	ug/l	8/5/03		BD
1,1,2,2-Tetrachloroethane	<1	ug/l	8/5/03		BD
Tetrachloroethene	<1	ug/l	8/5/03		BD
1,1,1-Trichloroethane	<1	ug/l	8/5/03		BD
1,1,2-Trichloroethane	<1	ug/l	8/5/03		BD
Trichloroethene	<1	ug/l	8/5/03		BD
Trichlorofluoromethane (Freon 11)	<1	ug/l	8/5/03		BD
Vinyl chloride	<1	ug/l	8/5/03		BD
Surrogate (1,2-DCA-d4)	107	%R	8/5/03		BD
Surrogate (Tol-d8)	116	%R	8/5/03		BD
Surrogate (4-BFB)	107	%R	8/5/03		BD

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Date Printed: 8/7/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --***New York State DEC - Region 7, ER      Syracuse, NY*

Sample ID:	Final GWT System Discharge (Outfall 01A)	LSL Sample ID:	0311083-004
Location:	NES		
Sampled:	07/22/03 10:30	Sampled By:	MG
Sample Matrix:	NPW		

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) ITEM #WT-25- ,EPA 150.1 pH	7.9	Std. Units	7/23/03	12:53	CDG
pH Measurement Temperature	25	Degrees C	7/23/03	12:53	CDG

*NYS DOH ELAP specifications require pH to be measured within one hour of sample collection.*

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Trip Blank	LSL Sample ID:	0311083-005		
Location:	NES				
Sampled:	07/22/03 0:00	Sampled By:			
Sample Matrix:	TB				
Analytical Method					
Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA					
Benzene	<1	ug/l		8/5/03	BD
Chlorobenzene	<1	ug/l		8/5/03	BD
1,2-Dichlorobenzene	<1	ug/l		8/5/03	BD
1,3-Dichlorobenzene	<1	ug/l		8/5/03	BD
1,4-Dichlorobenzene	<1	ug/l		8/5/03	BD
Ethyl benzene	<1	ug/l		8/5/03	BD
MTBE	<1	ug/l		8/5/03	BD
Toluene	<1	ug/l		8/5/03	BD
Xylenes (Total)	<1	ug/l		8/5/03	BD
t-Butyl alcohol	<200	ug/l		8/5/03	BD
Surrogate (1,2-DCA-d4)	105	%R		8/5/03	BD
Surrogate (Tol-d8)	117	%R		8/5/03	BD
Surrogate (4-BFB)	107	%R		8/5/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		8/5/03	BD
Bromoform	<1	ug/l		8/5/03	BD
Bromomethane	<1	ug/l		8/5/03	BD
Carbon tetrachloride	<1	ug/l		8/5/03	BD
Chlorobenzene	<1	ug/l		8/5/03	BD
Chloroethane	<1	ug/l		8/5/03	BD
2-Chloroethylvinyl ether	<10	ug/l		8/5/03	BD
Chloroform	<1	ug/l		8/5/03	BD
Chloromethane	<1	ug/l		8/5/03	BD
Dibromochloromethane	<1	ug/l		8/5/03	BD
1,2-Dichlorobenzene	<1	ug/l		8/5/03	BD
1,3-Dichlorobenzene	<1	ug/l		8/5/03	BD
1,4-Dichlorobenzene	<1	ug/l		8/5/03	BD
Dichlorodifluoromethane	<1	ug/l		8/5/03	BD
1,1-Dichloroethane	<1	ug/l		8/5/03	BD
1,2-Dichloroethane	<1	ug/l		8/5/03	BD
1,1-Dichloroethene	<1	ug/l		8/5/03	BD
trans-1,2-Dichloroethene	<1	ug/l		8/5/03	BD
1,2-Dichloropropane	<1	ug/l		8/5/03	BD
cis-1,3-Dichloropropene	<1	ug/l		8/5/03	BD
trans-1,3-Dichloropropene	<1	ug/l		8/5/03	BD
Methylene chloride	<1	ug/l		8/5/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		8/5/03	BD
Tetrachloroethene	<1	ug/l		8/5/03	BD
1,1,1-Trichloroethane	<1	ug/l		8/5/03	BD
1,1,2-Trichloroethane	<1	ug/l		8/5/03	BD
Trichloroethene	<1	ug/l		8/5/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		8/5/03	BD
Vinyl chloride	<1	ug/l		8/5/03	BD
Surrogate (1,2-DCA-d4)	105	%R		8/5/03	BD
Surrogate (Tol-d8)	117	%R		8/5/03	BD
Surrogate (4-BFB)	107	%R		8/5/03	BD

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Date Printed: 8/7/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

8/14/02

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 506	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	80-120	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Dodecane	40-110	40-110
DOH 310-14	Dodecane	40-110	40-110
DOH 310-15	Dodecane	40-110	40-110
DOH 310-34*	4-BFB	50-150	50-150
B015M_GRO*	4-BFB	50-150	50-150
B015M_DRO*	Terphenyl-d14	50-150	50-150

\*Run by GC/MS.

<b>Units Key:</b>	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery

# STRATEGIC ENVIRONMENTAL MANAGEMENT

## **SAMPLE CUSTODY RECORD**

0311053  
NTFSDBCTSyncB

<b>BALDWINSVILLE OFFICE</b> 25½ Water Street Baldwinsville, New York 13027 Telephone: (315) 635-8936 Facsimile: (315) 635-2380	SEM Project Number: <u>3003.0050</u> SEM Contact Person: <u>Nevin Bradford</u> Project Location: <u>Canastota, New York</u>	<b>Keweenaw Avenue, Suite D</b> Canton, New York 13617 Telephone: (315) 386-2736 Facsimile: (315) 386-4736
--	---	---

Laboratory:	Life Science Laboratories	Report and Invoice Address:	Timothy DiGiulio, P.E. NYSDEC Region 7 615 Erie Boulevard W. Syracuse, NY 13202 Phone: 315-426-7471	Parameters	Notes/Comments
Project Identification:	NES NYSDEC Spill No. 01-60024/Pin # H-0529				Copy of Report to: Nevin Bradford Strategic Environmental Mngt. 25 ½ Water Street Baldwinsville, New York 13027
Page <u>1</u> of <u>1</u>					

Sample Custody SAMPLE COLLECTION	Sample Custody RELINQUISH SAMPLE CUSTODY	Sample Custody ACCEPT AND RECEIVE SAMPLE CUSTODY
Name: <u>MARK N. GRAVES</u> Signature: <u>Mark Graves</u> Sample TAT: Normal 14 Day	Name: <u>MARK N. GRAVES</u> Time: <u>1632</u> Signature: <u>Mark N. Graves</u> Name: _____ Signature: _____	Name: _____ Time: _____ Signature: _____ Date: _____ Time: _____ Date: _____ Laboratory: <u>07-22</u> Time: <u>16:33</u> Signature: <u>ELB</u> Date: _____

1.5° on T<sub>g</sub>



**LSL**

**Tim DiGiulio**  
**New York State DEC - Region 7, ER**  
**615 Erie Blvd. W.**  
**Syracuse, NY 13204-2400**

**Phone: (315) 426-7519**  
**FAX: (315) 426-2653**

# **Laboratory Analysis Report for the New York State Department of Environmental Conservation**

## **Contract Number: C200209**

**NYS DEC Spill #: 01-60024**

**NYS DEC Pin #: H-0529**

**LSL Project ID: 0311524**

**Receive Date/Time: 07/30/03 10:33 by: GS**

**"I certify that this laboratory has current ELAP certification to provide the analytical results in this report and that the data package is in compliance with the terms and conditions of the contract."**

xilm gx ,acc      08-11-03  
**Reviewed By**

**Date**

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**Fax. (585) 554-6743**  
**NYS DOH ELAP #11369**

*A copy of this report was sent to:*      **Nevin Bradford**  
**SEM**

Page 1 of 6

Date Printed: 8/8/03

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Influent-WP-5D	LSL Sample ID:	0311524-001
Location:	NES		
Sampled:	07/29/03 13:25	Sampled By:	MG
Sample Matrix:	NPW		

Analytical Method	Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA						
	Benzene	<1	ug/l		8/6/03	BD
	Chlorobenzene	<1	ug/l		8/6/03	BD
	1,2-Dichlorobenzene	<1	ug/l		8/6/03	BD
	1,3-Dichlorobenzene	<1	ug/l		8/6/03	BD
	1,4-Dichlorobenzene	<1	ug/l		8/6/03	BD
	Ethyl benzene	<1	ug/l		8/6/03	BD
	MTBE	<1	ug/l		8/6/03	BD
	Toluene	<1	ug/l		8/6/03	BD
	Xylenes (Total)	<1	ug/l		8/6/03	BD
	t-Butyl alcohol	<200	ug/l		8/6/03	BD
	Surrogate (1,2-DCA-d4)	108	%R		8/6/03	BD
	Surrogate (Tol-d8)	109	%R		8/6/03	BD
	Surrogate (4-BFB)	102	%R		8/6/03	BD
(I) ITEM #GW-02- , EPA 601 Vol.						
	Bromodichloromethane	<1	ug/l		8/6/03	BD
	Bromoform	<1	ug/l		8/6/03	BD
	Bromomethane	<1	ug/l		8/6/03	BD
	Carbon tetrachloride	<1	ug/l		8/6/03	BD
	Chlorobenzene	<1	ug/l		8/6/03	BD
	Chloroethane	15	ug/l		8/6/03	BD
	2-Chloroethylvinyl ether	<10	ug/l		8/6/03	BD
	Chloroform	<1	ug/l		8/6/03	BD
	Chloromethane	<1	ug/l		8/6/03	BD
	Dibromochloromethane	<1	ug/l		8/6/03	BD
	1,2-Dichlorobenzene	<1	ug/l		8/6/03	BD
	1,3-Dichlorobenzene	<1	ug/l		8/6/03	BD
	1,4-Dichlorobenzene	<1	ug/l		8/6/03	BD
	Dichlorodifluoromethane	<1	ug/l		8/6/03	BD
	1,1-Dichloroethane	<1	ug/l		8/6/03	BD
	1,2-Dichloroethane	<1	ug/l		8/6/03	BD
	1,1-Dichloroethene	<1	ug/l		8/6/03	BD
	trans-1,2-Dichloroethene	<1	ug/l		8/6/03	BD
	1,2-Dichloropropane	<1	ug/l		8/6/03	BD
	cis-1,3-Dichloropropene	<1	ug/l		8/6/03	BD
	trans-1,3-Dichloropropene	<1	ug/l		8/6/03	BD
	Methylene chloride	<1	ug/l		8/6/03	BD
	1,1,2,2-Tetrachloroethane	<1	ug/l		8/6/03	BD
	Tetrachloroethene	<1	ug/l		8/6/03	BD
	1,1,1-Trichloroethane	<1	ug/l		8/6/03	BD
	1,1,2-Trichloroethane	<1	ug/l		8/6/03	BD
	Trichloroethene	<1	ug/l		8/6/03	BD
	Trichlorofluoromethane (Frcon 11)	<1	ug/l		8/6/03	BD
	Vinyl chloride	54	ug/l		8/6/03	BD
	Surrogate (1,2-DCA-d4)	108	%R		8/6/03	BD
	Surrogate (Tol-d8)	109	%R		8/6/03	BD
	Surrogate (4-BFB)	102	%R		8/6/03	BD

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Date Printed: 8/8/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

Sample ID:	Influent-RW-1	LSL Sample ID:	0311524-002	
Location:	NES			
Sampled:	07/29/03 13:20	Sampled By:	MG	
Sample Matrix:	NPW			
Analytical Method			Prep Date	Analysis Date & Time
Analyte		Result	Units	Analyst Initials
(1) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA				
Benzene		<5	ug/l	8/6/03 BD
Chlorobenzene		<5	ug/l	8/6/03 BD
1,2-Dichlorobenzene		<5	ug/l	8/6/03 BD
1,3-Dichlorobenzene		<5	ug/l	8/6/03 BD
1,4-Dichlorobenzene		<5	ug/l	8/6/03 BD
Ethyl benzene		25	ug/l	8/6/03 BD
MTBE		<5	ug/l	8/6/03 BD
Toluene		550	ug/l	8/6/03 BD
Xylenes (Total)		140	ug/l	8/6/03 BD
t-Butyl alcohol		<1000	ug/l	8/6/03 BD
Surrogate (1,2-DCA-d4)		108	%R	8/6/03 BD
Surrogate (Tol-d8)		101	%R	8/6/03 BD
Surrogate (4-BFB)		102	%R	8/6/03 BD
(1) ITEM #GW-02- , EPA 601 Vol.				
Bromodichloromethane		<5	ug/l	8/6/03 BD
Bromoform		<5	ug/l	8/6/03 BD
Bromomethane		<5	ug/l	8/6/03 BD
Carbon tetrachloride		<5	ug/l	8/6/03 BD
Chlorobenzene		<5	ug/l	8/6/03 BD
Chloroethane		<5	ug/l	8/6/03 BD
2-Chloroethylvinyl ether		<50	ug/l	8/6/03 BD
Chloroform		<5	ug/l	8/6/03 BD
Chlormethane		<5	ug/l	8/6/03 BD
Dibromochloromethane		<5	ug/l	8/6/03 BD
1,2-Dichlorobenzene		<5	ug/l	8/6/03 BD
1,3-Dichlorobenzene		<5	ug/l	8/6/03 BD
1,4-Dichlorobenzene		<5	ug/l	8/6/03 BD
Dichlorodifluoromethane		<5	ug/l	8/6/03 BD
1,1-Dichloroethane		93	ug/l	8/6/03 BD
1,2-Dichloroethane		<5	ug/l	8/6/03 BD
1,1-Dichloroethene		7.3	ug/l	8/6/03 BD
trans-1,2-Dichloroethene		6.0	ug/l	8/6/03 BD
1,2-Dichloropropane		<5	ug/l	8/6/03 BD
cis-1,3-Dichloropropene		<5	ug/l	8/6/03 BD
trans-1,3-Dichloropropene		<5	ug/l	8/6/03 BD
Methylene chloride		<5	ug/l	8/6/03 BD
1,1,2,2-Tetrachloroethane		<5	ug/l	8/6/03 BD
Tetrachloroethene		<5	ug/l	8/6/03 BD
1,1,1-Trichloroethane		63	ug/l	8/6/03 BD
1,1,2-Trichloroethane		<5	ug/l	8/6/03 BD
Trichloroethene		58	ug/l	8/6/03 BD
Trichlorofluoromethane (Freon 11)		<5	ug/l	8/6/03 BD
Vinyl chloride		230	ug/l	8/6/03 BD
Surrogate (1,2-DCA-d4)		108	%R	8/6/03 BD
Surrogate (Tol-d8)		101	%R	8/6/03 BD
Surrogate (4-BFB)		102	%R	8/6/03 BD

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Date Printed: 8/8/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER      Syracuse, NY

<b>Sample ID:</b>	Post-Air Stripper (Pre-Carbon)	<b>LSL Sample ID:</b>	0311524-003		
<b>Location:</b>	NES				
<b>Sampled:</b>	07/29/03 13:15	<b>Sampled By:</b>	MG		
<b>Sample Matrix:</b>	NPW				
<b>Analytical Method</b>					
Analyte	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA					
Benzene	<1	ug/l		8/6/03	BD
Chlorobenzene	<1	ug/l		8/6/03	BD
1,2-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,3-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,4-Dichlorobenzene	<1	ug/l		8/6/03	BD
Ethyl benzene	<1	ug/l		8/6/03	BD
MTBE	<1	ug/l		8/6/03	BD
Toluene	<1	ug/l		8/6/03	BD
Xylenes (Total)	<1	ug/l		8/6/03	BD
t-Butyl alcohol	<200	ug/l		8/6/03	BD
Surrogate (1,2-DCA-d4)	107	%R		8/6/03	BD
Surrogate (Tol-d8)	108	%R		8/6/03	BD
Surrogate (4-BFB)	100	%R		8/6/03	BD
(2) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		8/6/03	BD
Bromoform	<1	ug/l		8/6/03	BD
Bromomethane	<1	ug/l		8/6/03	BD
Carbon tetrachloride	<1	ug/l		8/6/03	BD
Chlorobenzene	<1	ug/l		8/6/03	BD
Chloroethane	<1	ug/l		8/6/03	BD
2-Chloroethylvinyl ether	<10	ug/l		8/6/03	BD
Chlreform	<1	ug/l		8/6/03	BD
Chloromethane	<1	ug/l		8/6/03	BD
Dibromochloromethane	<1	ug/l		8/6/03	BD
1,2-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,3-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,4-Dichlorobenzene	<1	ug/l		8/6/03	BD
Dichlorodifluoromethane	<1	ug/l		8/6/03	BD
1,1-Dichloroethane	<1	ug/l		8/6/03	BD
1,2-Dichloroethane	<1	ug/l		8/6/03	BD
1,1-Dichloroethene	<1	ug/l		8/6/03	BD
trans-1,2-Dichloroethene	<1	ug/l		8/6/03	BD
1,2-Dichloropropane	<1	ug/l		8/6/03	BD
cis-1,3-Dichloropropene	<1	ug/l		8/6/03	BD
trans-1,3-Dichloropropene	<1	ug/l		8/6/03	BD
Methylene chloride	<1	ug/l		8/6/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		8/6/03	BD
Tetrachloroethene	<1	ug/l		8/6/03	BD
1,1,1-Trichloroethane	<1	ug/l		8/6/03	BD
1,1,2-Trichloroethane	<1	ug/l		8/6/03	BD
Trichloroethene	<1	ug/l		8/6/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		8/6/03	BD
Vinyl chloride	<1	ug/l		8/6/03	BD
Surrogate (1,2-DCA-d4)	107	%R		8/6/03	BD
Surrogate (Tol-d8)	108	%R		8/6/03	BD
Surrogate (4-BFB)	100	%R		8/6/03	BD

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Date Printed: 8/8/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --****New York State DEC - Region 7, ER      Syracuse, NY**

<b>Sample ID:</b>	<b>Final GWT System Discharge (Outfall 01A)</b>	<b>LSL Sample ID:</b>	<b>0311524-004</b>	
<b>Location:</b>	<b>NES</b>			
<b>Sampled:</b>	<b>07/29/03 13:10</b>	<b>Sampled By:</b>	<b>MG</b>	
<b>Sample Matrix:</b>	<b>NPW</b>			
<b>Analytical Method</b>			<b>Prep Date</b>	<b>Analysis Date &amp; Time</b>
<b>Analyte</b>	<b>Result</b>	<b>Units</b>		<b>Analyst Initials</b>
<b>(1) ITEM #GW-01- ,EPA 602 Vol. Xyl+MTBE+TBA</b>				
Benzene	<1	ug/l	8/6/03	BD
Chlorobenzene	<1	ug/l	8/6/03	BD
1,2-Dichlorobenzene	<1	ug/l	8/6/03	BD
1,3-Dichlorobenzene	<1	ug/l	8/6/03	BD
1,4-Dichlorobenzene	<1	ug/l	8/6/03	BD
Ethyl benzene	<1	ug/l	8/6/03	BD
MTBE	<1	ug/l	8/6/03	BD
Toluene	<1	ug/l	8/6/03	BD
Xylenes (Total)	<1	ug/l	8/6/03	BD
t-Butyl alcohol	<200	ug/l	8/6/03	BD
Surrogate (1,2-DCA-d4)	112	%R	8/6/03	BD
Surrogate (Tol-d8)	108	%R	8/6/03	BD
Surrogate (4-BFB)	102	%R	8/6/03	BD
<b>(1) ITEM #GW-02- , EPA 601 Vol.</b>				
Bromodichloromethane	<1	ug/l	8/6/03	BD
Bromoform	<1	ug/l	8/6/03	BD
Bromomethane	<1	ug/l	8/6/03	BD
Carbon tetrachloride	<1	ug/l	8/6/03	BD
Chlorobenzene	<1	ug/l	8/6/03	BD
Chloroethane	<1	ug/l	8/6/03	BD
2-Chloroethylvinyl ether	<10	ug/l	8/6/03	BD
Chloroform	<1	ug/l	8/6/03	BD
Chlormethane	<1	ug/l	8/6/03	BD
Dibromochloromethane	<1	ug/l	8/6/03	BD
1,2-Dichlorobenzene	<1	ug/l	8/6/03	BD
1,3-Dichlorobenzene	<1	ug/l	8/6/03	BD
1,4-Dichlorobenzene	<1	ug/l	8/6/03	BD
Dichlorodifluoromethane	<1	ug/l	8/6/03	BD
1,1-Dichloroethane	<1	ug/l	8/6/03	BD
1,2-Dichloroethane	<1	ug/l	8/6/03	BD
1,1-Dichloroethene	<1	ug/l	8/6/03	BD
trans-1,2-Dichloroethene	<1	ug/l	8/6/03	BD
1,2-Dichloropropane	<1	ug/l	8/6/03	BD
cis-1,3-Dichloropropene	<1	ug/l	8/6/03	BD
trans-1,3-Dichloropropene	<1	ug/l	8/6/03	BD
Methylene chloride	<1	ug/l	8/6/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l	8/6/03	BD
Tetrachloroethene	<1	ug/l	8/6/03	BD
1,1,1-Trichloroethane	<1	ug/l	8/6/03	BD
1,1,2-Trichloroethane	<1	ug/l	8/6/03	BD
Trichloroethene	<1	ug/l	8/6/03	BD
Trichloroefluoromethane (Freon 11)	<1	ug/l	8/6/03	BD
Vinyl chloride	<1	ug/l	8/6/03	BD
Surrogate (1,2-DCA-d4)	112	%R	8/6/03	BD
Surrogate (Tol-d8)	108	%R	8/6/03	BD
Surrogate (4-BFB)	102	%R	8/6/03	BD

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Date Printed: 8/8/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**-- LABORATORY ANALYSIS REPORT --**

New York State DEC - Region 7, ER Syracuse, NY

Sample ID:	Trip Blank	LSL Sample ID:	0311524-005
Location:	NES		
Sampled:	07/29/03 0:00	Sampled By:	
Sample Matrix:	TB		

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
<b>Analyst</b>					
(I) ITEM #GW-01- ,EPA 602 Vol. Xyl.+MTBE+TBA					
Benzene	<1	ug/l		8/6/03	BD
Chlorobenzene	<1	ug/l		8/6/03	BD
1,2-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,3-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,4-Dichlorobenzene	<1	ug/l		8/6/03	BD
Ethyl benzene	<1	ug/l		8/6/03	BD
MTBE	<1	ug/l		8/6/03	BD
Toluene	<1	ug/l		8/6/03	BD
Xylenes (Total)	<1	ug/l		8/6/03	BD
t-Butyl alcohol	<200	ug/l		8/6/03	BD
Surrogate (1,2-DCA-d4)	108	%R		8/6/03	BD
Surrogate (Tel-d8)	109	%R		8/6/03	BD
Surrogate (4-BFB)	98	%R		8/6/03	BD
<b>(II) ITEM #GW-02- , EPA 601 Vol.</b>					
Bromodichloromethane	<1	ug/l		8/6/03	BD
Bromoform	<1	ug/l		8/6/03	BD
Bromomethane	<1	ug/l		8/6/03	BD
Carbon tetrachloride	<1	ug/l		8/6/03	BD
Chlorobenzene	<1	ug/l		8/6/03	BD
Chloroethane	<1	ug/l		8/6/03	BD
2-Chloroethylvinyl ether	<10	ug/l		8/6/03	BD
Chloroform	<1	ug/l		8/6/03	BD
Chloromethane	<1	ug/l		8/6/03	BD
Dibromochloromethane	<1	ug/l		8/6/03	BD
1,2-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,3-Dichlorobenzene	<1	ug/l		8/6/03	BD
1,4-Dichlorobenzene	<1	ug/l		8/6/03	BD
Dichlorodifluoromethane	<1	ug/l		8/6/03	BD
1,1-Dichloroethane	<1	ug/l		8/6/03	BD
1,2-Dichloroethane	<1	ug/l		8/6/03	BD
1,1-Dichloroethene	<1	ug/l		8/6/03	BD
trans-1,2-Dichloroethane	<1	ug/l		8/6/03	BD
1,2-Dichloropropane	<1	ug/l		8/6/03	BD
cis-1,3-Dichloropropene	<1	ug/l		8/6/03	BD
trans-1,3-Dichloropropene	<1	ug/l		8/6/03	BD
Methylene chloride	<1	ug/l		8/6/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		8/6/03	BD
Tetrachloroethene	<1	ug/l		8/6/03	BD
1,1,1-Trichloroethane	<1	ug/l		8/6/03	BD
1,1,2-Trichloroethane	<1	ug/l		8/6/03	BD
Trichloroethene	<1	ug/l		8/6/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		8/6/03	BD
Vinyl chloride	<1	ug/l		8/6/03	BD
Surrogate (1,2-DCA-d4)	108	%R		8/6/03	BD
Surrogate (Tel-d8)	109	%R		8/6/03	BD
Surrogate (4-BFB)	98	%R		8/6/03	BD

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Date Printed: 08/03

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667, (4) 10760, (5) 11369

**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

8/14/02

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	80-120	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Dodecane	40-110	40-110
DOH 310-14	Dodecane	40-110	40-110
DOH 310-15	Dodecane	40-110	40-110
DOH 310-34*	4-BFB	50-150	50-150
8015M_GRO*	4-BFB	50-150	50-150
8015M_DRO*	Terphenyl-d14	50-150	50-150

\*Run by GC/MS.

<b>Units Key:</b>	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery

**STRATEGIC ENVIRONMENTAL MANAGEMENT**  
**SAMPLE CUSTODY RECORD**

6311524  
NYSDEC/NSCA

<b>BALDWINVILLE OFFICE</b> 25 ½ Water Street Baldwinsville, New York 13027 Telephone: (315) 635-8936 Facsimile: (315) 635-2380		SEM Project Number: 3003.0050 SEM Contact Person: Nevin Bradford Project Location: Canastota, New York		- - - - - Avenue, Suite D Canton, New York 13617 Telephone: (315) 386-2736 Facsimile: (315) 386-4736	
Laboratory: Life Science Laboratories Project Identification: NES NYSDEC Spill No. 01-60024/Pin # H-0329 Page <u>1</u> of <u>1</u>		Report and Invoice Address: Timothy DiGiulio, P.E. NYSDEC Region 7 615 Erie Boulevard W. Syracuse, NY 13202 Phone: 315-426-7471		Parameters EPA Method 601 + 602 Matrix	
Client's Sample Identification <u>WPSD</u> <u>Rws1</u> <u>001A</u> <u>002A</u> <u>003</u> <u>004</u> <u>005</u> <u>Tb</u>		Date <u>7/29/03</u> <u>1/20</u> <u>1/3/04</u> <u>1/3/04</u> <u>1/3/04</u> <u>1/3/04</u> <u>1/3/04</u>		Collection Time <u>1325</u> <u>Influent RW-1</u> <u>Post-Air Stripper (Pre-Carbon)</u> <u>Final GWT System Discharge (Outfall 01A)</u> <u>Trip Blank</u>	
		Sample Location <u>Influent-WP-5D</u> <u>Influent RW-1</u> <u>Final GWT System Discharge (Outfall 01A)</u> <u>Trip Blank</u>		Number of Containers <u>2</u> <u>1</u> <u>1</u> <u>1</u>	
				Comp or Grab <u>G</u> <u>Hef</u> <u>Hef</u> <u>Hef</u>	
				Preservatives <u>N/A</u> <u>N/A</u> <u>N/A</u> <u>N/A</u>	
				Sample Matrix <u>N/A</u> <u>N/A</u> <u>N/A</u> <u>N/A</u>	
Hand Delivered on 1/29/04					

Sample Custody <b>SAMPLE COLLECTION</b>		RELINQUISH SAMPLE CUSTODY <b>ACCEPT AND RECEIVE SAMPLE CUSTODY</b>	
Name: <u>Mark N. Hayes</u> Signature: <u>Mark N. Hayes</u> Sample TAT: Normal 14 Day		Name: <u>Mark N. Hayes</u> Signature: <u>Mark N. Hayes</u> Laboratory: <u>10/7-3/3-03</u> Signature: <u>Mark N. Hayes</u>	
		Time: _____ Date: _____	

240° on Ta