Strategic Environmental Management, Inc.

April 17, 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 Operations, Monitoring, and Maintenance Summary-March 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: 3003.050.04.03

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 March 10, 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 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.

During the latter part of February and the early part of March, the system had been observed to operate on an intermittent basis, with the influent flow periodically suspended due to the accumulation of water within the air stripper sump to a level that is detected by the high level float switch. This condition appeared to be the result of an inability of the air stripper discharge pump to transfer water from the air stripper through the carbon filters at a rate sufficient to manage the combined influent flow of ± 16 to 17 gallons per minute.

Based on these observations, the discharge pump was disassembled March 13, 2003. The internal components of the pump including the impellers were observed to be significantly clogged, and were thoroughly cleaned. Upon re-assembly and subsequent re-start of the system the discharge volume and pressure were observed to operate within normal parameters. This allowed the system through flow to maintain the 16 to 17 gpm influent supply.

3 Remington Avenue, Suite D, Canton, New York 13617
Telephone: (315) 386-2736 Facsimile: (315) 386-4736

25 1/2 Water Street, Baldwinsville, New York 13027
Telephone: (315) 635-8936 Facsimile: (315) 635-2380

At the time of the March 17 inspection, the flow meter/totalizer on the influent piping from recovery well RW-1 was not functioning. The meter was dismantled, cleaned, re-assembled and re-installed; however, the meter remained non-functional, despite the cleaning effort. As such, the meter was replaced with a new meter/totalizer at that time.

On March 24, the air stripper was cleaned by pressure washing, by Op-Tech. On March 31, SEM personnel visited the site and inspected the trays following the routine pressure washing by Op-Tech personnel. The air exchange perforations were observed to be clogged with mineral deposits thus restricting airflow and hindering the stripping process. Due to high system pressures, the system was not restarted. SEM scheduled Op-Tech to assist with a more aggressive cleaning process.

The air stripper unit was dismantled April 4, 2003 and the trays were manually scraped to remove mineral deposits. Additionally, the air exchange perforations in each tray bottom were reamed to clear deposits and restore proper air flow, thus allowing efficient stripping of VOCs from the influent water. The air stripper sump was cleaned of all residual mineral deposits and accumulated fine sand, and re-assembled. The system was restarted and observed to operate within normal parameters.

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

Sampling and Analysis/Operational Monitoring

Weekly monitoring samples are collected from several points of the groundwater recovery and treatment system. Discreet 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 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 March 3, 2003 (March 7)
- Week of March 10 (March 13)
- Week of March 17 (March 19)
- Week of March 24 (System shut down for cleaning-no samples collected)
- Week of March 31 (April 4)-Results Pending
- Week of April 7 (April 10)-Results Pending
- Week of April 14 (April 15)-Results Pending

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**
3/7/03	Ethyl Benzene	31	ND	ND	ND	10
	Toluene	580	ND	12	1.2	10
	Xylenes (total)	120	ND	2.5	ND	10
	Chloroethane	ND	12	ND	ND	30
	1,1-Dichloroethane	79	ND	2.0	ND	10
	1,1-Dichloroethene	7.8	ND	ND	ND	10
	t-1,2-Dichloroethene	ND	ND	ND	ND	30
	1,1,1-trichloroethane	39	ND	ND	ND	10
	Trichloroethene	46	ND	ND	ND	10
	Vinyl Chloride	190	56	ND	ND	50
3/13/03	Ethyl Benzene	17	ND	3.1	ND	10
	Toluene	360	ND	68	8.8	10
	Xylenes (total)	76	ND	16	1.1	10
	Chloroethane	ND	10	ND	ND	30
	1,1-Dichloroethane	75	ND	12	3.5	10
	1,1-Dichloroethene	7.4	ND	ND	ND	10
	t-1,2-Dichloroethene	5	ND	ND	ND	30
	1,1,1-trichloroethane	52	ND	3.8	ND	10
	Trichloroethene	67	ND	6.5	1	10
	Vinyl Chloride	110	56	6.7	1.3	50
3/19/03	Ethyl Benzene	26	ND	5.6	ND	10
	Toluene	480	ND	110	**19**	10
	Xylenes (total)	120	ND	28	3.8	10
	Chloroethane	ND	12	1.6	ND	30
	1,1-Dichloroethane	75	ND	19	6.4	10
	1,1-Dichloroethene	6.1	ND	ND	ND	10
	t-1,2-Dichloroethene	5.1	ND	1.5	ND	30
	1,1,1-trichloroethane	36	ND	5.2	1.6	10
	Trichloroethene	52	ND	10	2.0	10
	Vinyl Chloride	160	60	15	5.2	50
Week ending 3/30/03	System shut down for cleaning					
4/4/03	Results Pending					
4/10/03	Results Pending					
4/15/03	Results Pending					

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.

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 May. Please feel free to contact our office if you have any questions or concerns in the interim.

Respectfully,
STRATEGIC ENVIRONMENTAL MANAGEMENT, Inc.

H. Kevin Bradshaw / fm
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		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
March 2002						
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 and4
March 28	0900	*	None	*	None	Disassembled air stripper and began cleaning trays.
March 29	0900	*	None	*	None	Replaced carbon in filters 1 and 2
April 2002						
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.
May 2002						
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).

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		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
June 2002						
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.
July 2002						
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	RW-1		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
August 2002						
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 impellors.

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	RW-1		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
August 2002 (cont.)						
August 28	1520 1603 1702 1720 1840	374270 374630 375260 375440 376350	None 10.7 10.0 11.38 Ave. = 10.96 GPM	366200 366250 366640 366760 367350	None 6.6 6.7 7.4 Ave. = 7.0 GPM	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.
August 29	1228 1412	386320 387110	11 GPM	373800 374310	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.
September 2002						
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

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		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
September 2002 (cont.)						
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.
October 2002						
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.
November 2002						
November 4	1252	96510	11.5 GPM	703400	7 GPM	Carbon filters 1 through 4 backflushed. System operation 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

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		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
November 2002 (cont.)						
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 Kime 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.
	1607	991760	10 GPM	776770	6.7 GPM	
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.
December 2002						
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	RW-1		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
January 2003						
January 3	PM	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	1615	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-impellors 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		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
February 2003						
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.
March 2003						
3/7/03	0807	1697690	10 GPM	1256640	6.5	System operating intermittently upon arrival due to buidlup 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

Date	Time	RW-1		WP-5D		Activities/Comments
		Flow Totalizer	Flow Rate (GPM)	Flow Totalizer	Flow Rate (GPM)	
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.
April 2003						
4/403	1512	148120	11 GPM	1369510	6.75 GPM	Dissassembled 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	1417270	5.5 GPM	System operating upon arrival; floor wet; carbon drums dripping. Shut off from backflush hose of drum #2 overflowing settling drum. Collected monitoring samples including pH (from 001A). Magnehelic gauge 12 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 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
NYSDEC Spill No. 01-60024/PIN No. H-0529

		Flow Totalizer Readings				Analysis Results-Total VOC (ppb)				
Date	**Time**	**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)**
7/18/02	**Carbon in filters 1,2,3 and 4 replaced by Op-Tech**									
7/31/02	**Air Stripper Dismantled and Cleaned(by Op-Tech)**									
7/31/02	1515	252830	NA	342370	NA	NS	NS	NS	NS	
7/31-8/9/02	***System operation limited to RW-1 only, due to problems with operation of pump for WP-5D***									
8/9-8/19/02	***System operating with both pumps in operation. Trouble with operation of air stripper discharge pump due to significant fouling of discharge pump and piping.***									
8/19-8/28/02	***System down to replace plumbing and repair air stripper discharge pump.***									
8/9/02	1540	331300	78,470	342540	170	541.9	69	ND	ND	78,640
8/28/02	1720	375440	122,610	366760	24,390	1,432.4	67	ND	ND	147,000
9/6/02	1445	NR	NA	NR	NA	748	65	ND	ND	NA
9/17/02	1231	576220	323,390	475670	133,300	136	61	ND	ND	456,690
9/24/02	1935	653200	400,370	516400	174,030	NA	72	ND	ND	574,400
10/1/02	1000	704020	451,190	544040	201,670	654	80	20	ND	652,860
10/8/02	1100	758400	505,570	575840	233,470	1,093	70.8	ND	ND	739,040
10/23/02	1206	914680	661,850	670670	328,300	1,127	59	61.6	47	990,150
11/4/02	1252	967510	714,680	703400	361,030	1,208.1	73	268.9	73	1,075,710
11/6/02	**Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).**									
11/12/02	1345	991750	24,240*	746460	43,060	219.6	69	ND	ND	67,300
11/18/02	1337	991750*	UNK*	776690	73,290	1,547.9	62.2	7.8	ND	UNK*
11/27/02	1540	1051970	84,460*	819600	116,200	1,516.7	60.5	33	4.1	200,660
12/3/02	1840	1102720	135,210*	854110	150,710	779	74	133.1	63.1	285,920
12/12/02	1354	1178370	210,860*	903950	200,550	884.5	55	173	20.4	441,410
12/17/02	*System shut down based on results of analyses performed on samples collected on December 3.*									
12/20/02	**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.**									
12/30/02	*GWT system effluent piping replaced and system re-started.*									
1/7/03	0905	1297680	119,310	983460	79,510	1,091.3	74	60.9	ND	198,820

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

		Flow Totalizer Readings				Analysis Results-Total VOC (ppb)				
Date	**Time**	**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
02/03/03	**Air stripper dismantled and cleaned, and carbon in filters 1,2,3 and 4 changed (by Op-Tech).**									
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**
3/31/03	**Air stripper shut down for cleaning.**									
4/04/03	1512	148120	NA	1369510	NA	*Results Pending*				NA
4/10/03	1104	236050	87,930	1417227	47,717	*Results Pending*				135,647
4/15/03	1105	313060	164,940	1417270	47,760	*Results Pending*				212,700

NOTES: -Δ indicates number of gallons recovered from respective well since the air stripper was last cleaned.
-NR=Not Recorded
-NA=Not Applicable
-ND=None Detected
-ppb=Parts-per-billion (ug/L)
-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

Copy

Timothy 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: **0303295**

Receive Date/Time: 03/11/03 15:38 **by:** RD

"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."

Linda Water QC 3/24/03

Reviewed By **Date**

Life Science Laboratories, Inc.

LSL Central Lab	LSL North Lab	LSL Finger Lakes Lab	LSL Southern Tier Lab	LSL Middlesex Lab
5854 Butternut Drive	131 St. Lawrence Avenue	16 N. Main St., PO Box 424	30 East Main St.	5611 Water St.
East Syracuse, NY 13057	Waddington, NY 13694	Wayland, NY 14572	Cuba, NY 14727	Middlesex, NY 14507
Tel. (315) 445-1105	Tel. (315) 388-4476	Tel. (585) 728-3320	Tel. (585) 968-2640	Tel. (585) 554-5347
Fax (315) 445-1301	Fax (315) 388-4061	Fax (585) 728-2711	Fax (585) 968-0906	Fax. (585) 554-6743
NYS DOH ELAP #10248	NYS DOH ELAP #10900	NYS DOH ELAP #11667	NYS DOH ELAP #10760	NYS DOH ELAP #11369

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

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Trip Blank **LSL Sample ID:** 0303295-001

Location: NES

Sampled: 03/06/03 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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	<1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	<1	ug/l		3/14/03	BD
Xylenes (Total)	<1	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	93	%R		3/14/03	BD
Surrogate (Tol-d8)	108	%R		3/14/03	BD
Surrogate (4-BFB)	106	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	<1	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	<1	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	<1	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	<1	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	93	%R		3/14/03	BD
Surrogate (Tol-d8)	108	%R		3/14/03	BD
Surrogate (4-BFB)	106	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Influent-RW-1 **LSL Sample ID:** 0303295-002

Location: NES

Sampled: 03/07/03 8:50 **Sampled By:** HN

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	<5	ug/l		3/14/03	BD
Chlorobenzene	<5	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<5	ug/l		3/14/03	BD
Ethyl benzene	31	ug/l		3/14/03	BD
MTBE	<5	ug/l		3/14/03	BD
Toluene	580	ug/l		3/14/03	BD
Xylenes (Total)	120	ug/l		3/14/03	BD
t-Butyl alcohol	<1000	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	110	%R		3/14/03	BD
Surrogate (Tol-d8)	98	%R		3/14/03	BD
Surrogate (4-BFB)	96	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<5	ug/l		3/14/03	BD
Bromoform	<5	ug/l		3/14/03	BD
Bromomethane	<5	ug/l		3/14/03	BD
Carbon tetrachloride	<5	ug/l		3/14/03	BD
Chlorobenzene	<5	ug/l		3/14/03	BD
Chloroethane	<5	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<50	ug/l		3/14/03	BD
Chloroform	<5	ug/l		3/14/03	BD
Chloromethane	<5	ug/l		3/14/03	BD
Dibromochloromethane	<5	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<5	ug/l		3/14/03	BD
Dichlorodifluoromethane	<5	ug/l		3/14/03	BD
1,1-Dichloroethane	79	ug/l		3/14/03	BD
1,2-Dichloroethane	<5	ug/l		3/14/03	BD
1,1-Dichloroethene	7.8	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<5	ug/l		3/14/03	BD
1,2-Dichloropropane	<5	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<5	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<5	ug/l		3/14/03	BD
Methylene chloride	<5	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<5	ug/l		3/14/03	BD
Tetrachloroethene	<5	ug/l		3/14/03	BD
1,1,1-Trichloroethane	39	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<5	ug/l		3/14/03	BD
Trichloroethene	46	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<5	ug/l		3/14/03	BD
Vinyl chloride	190	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	110	%R		3/14/03	BD
Surrogate (Tol-d8)	98	%R		3/14/03	BD
Surrogate (4-BFB)	96	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Influent-WP-5D **LSL Sample ID:** 0303295-003

Location: NES

Sampled: 03/07/03 8:55 **Sampled By:** HN

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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	<1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	<1	ug/l		3/14/03	BD
Xylenes (Total)	<1	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	115	%R		3/14/03	BD
Surrogate (Tol-d8)	94	%R		3/14/03	BD
Surrogate (4-BFB)	100	%R		3/14/03	BD
(I) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	12	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	<1	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	<1	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	56	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	115	%R		3/14/03	BD
Surrogate (Tol-d8)	94	%R		3/14/03	BD
Surrogate (4-BFB)	100	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Post Air Stripper (Pre-Carbon) **LSL Sample ID:** 0303295-004

Location: NES

Sampled: 03/07/03 9:00 **Sampled By:** HN

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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	<1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	12	ug/l		3/14/03	BD
Xylenes (Total)	2.5	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	114	%R		3/14/03	BD
Surrogate (Tol-d8)	97	%R		3/14/03	BD
Surrogate (4-BFB)	95	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	<1	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	2.0	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	<1	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	<1	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	114	%R		3/14/03	BD
Surrogate (Tol-d8)	97	%R		3/14/03	BD
Surrogate (4-BFB)	95	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: **Final GWT System Effluent (Outfall 01A)** **LSL Sample ID:** **0303295-005**

Location: NES

Sampled: 03/07/03 9:15 **Sampled By:** HN

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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	<1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	1.2	ug/l		3/14/03	BD
Xylenes (Total)	<1	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	97	%R		3/14/03	BD
Surrogate (Tol-d8)	108	%R		3/14/03	BD
Surrogate (4-BFB)	107	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	<1	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	<1	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	<1	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	<1	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	97	%R		3/14/03	BD
Surrogate (Tol-d8)	108	%R		3/14/03	BD
Surrogate (4-BFB)	107	%R		3/14/03	BD

LSL

SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS

8/14/02

Method	Surrogate(s)	Water Limits, %R	SHW Limits, %R
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	70-130	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

Life Science Laboratories, Inc.

CHAIN OF CUSTODY RECORD

LSL North Lab.
131 St. Lawrence Ave.
Waddington, N.Y. 13694
Phone: 315-388-4476
Fax: 315-388-4061

LSL Central Lab.
5854 Butternut Drive
E. Syracuse, N.Y. 13057
Phone: 315-445-1105
Fax: 315-445-1301

LSL Finger Lakes Lab.
16 N. Main St., PO Box 424
Wayland, NY 14572
Phone: 716-728-3320
Fax: 716-728-2711

0303295
NYSDEC7SyrCR

Turnaround Time

Normal	Pre-Authorized				
14 DAY ☑	Next Day* ☐	3-Day * ☐	*Additional Charges may apply
	2-Day * ☐	7-Day* ☐	

Report Address:
Name: TIMOTHY DiGIULIO, P.E.
Company: NYSDEC REGION 7
Street: 615 ERIE BLVD. WEST
City/State: SYRACUSE NEW YORK Zip: 13202
Phone: (315) 426-7471 Fax:
Email:

Date Needed or Special Instructions:
COPY OF REPORT TO: NEVIN BRADFORD STRATEGIC ENVIRONMENTAL MANAGEMENT, INC. 25½ WATER STREET, BALDWINSVILLE, NY 13027

Authorization or P.O. #
NYSDEC SPILL NO. 01-60024 / PIN No. H-0529

Client Project ID/Client Site ID
NYSDEC SPILL No. 01-60024 / PIN No. H-0529

LSL Project Number

Client's Sample Identifications	Sample Date	Sample Time	Type grab/comp	Matrix	Preserv Added	Containers #	Containers size/type	Analyses	Preserv Check	LSL ID#
TRIP BLANK	3/6/03	1700	GRAB	NPW	1:1 HCl/ 4°C	2	40 mL VOA	EPA METHODS 601 & 602		001 A B
INFLUENT - RW-1	3/7/03	0850	↓	↓	↓	↓	↓	↓		002
INFLUENT - WP-SD	↓	0855	↓	↓	↓	↓	↓	↓		003
POST AIR STRIPPER (PRE-CARBON)	↓	0900	↓	↓	↓	↓	↓	↓		004
FINAL GWT SYSTEM EFFLUENT (OUTFALL 01A)	↓	0915	↓	↓	↓	↓	↓	↓		005

LSL use only:

Containers this C-O-C

Custody Transfers

		Date	Time
Sampled By: H. Nevin Bradford / SEM	Received By:		
Relinquished By:	Received By:		
Relinquished By: Jamie Dambrosi	Rec'd for Lab By: R. Dunbar	03-11-03	15:38 IN
Shipment Method:	Received Intact: (Y) N @ 4°C on blue ice	Sample Temp	

*** All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner IN PEN ONLY***

Coc

LSL

Copy

Timothy 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: **0303445**

Receive Date/Time: 03/13/03 14:19 **by:** RD

"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."

Linda Waters QC 3/24/03

Reviewed By **Date**

Life Science Laboratories, Inc.

LSL Central Lab	LSL North Lab	LSL Finger Lakes Lab	LSL Southern Tier Lab	LSL Middlesex Lab
5854 Butternut Drive	131 St. Lawrence Avenue	16 N. Main St , PO Box 424	30 East Main St.	5611 Water St.
East Syracuse, NY 13057	Waddington, NY 13694	Wayland, NY 14572	Cuba, NY 14727	Middlesex, NY 14507
Tel. (315) 445-1105	Tel. (315) 388-4476	Tel. (585) 728-3320	Tel. (585) 968-2640	Tel. (585) 554-5347
Fax (315) 445-1301	Fax (315) 388-4061	Fax (585) 728-2711	Fax (585) 968-0906	Fax. (585) 554-6743
NYS DOH ELAP #10248	NYS DOH ELAP #10900	NYS DOH ELAP #11667	NYS DOH ELAP #10760	NYS DOH ELAP #11369

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

- - LABORATORY ANALYSIS REPORT - -

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

Sample ID: Influent-RW-1 **LSL Sample ID:** 0303445-001

Location: NES

Sampled: 03/13/03 12:50 **Sampled By:** HB

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	<5	ug/l		3/14/03	BD
Chlorobenzene	<5	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<5	ug/l		3/14/03	BD
Ethyl benzene	17	ug/l		3/14/03	BD
MTBE	<5	ug/l		3/14/03	BD
Toluene	360	ug/l		3/14/03	BD
Xylenes (Total)	76	ug/l		3/14/03	BD
t-Butyl alcohol	<1000	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	109	%R		3/14/03	BD
Surrogate (Tol-d8)	98	%R		3/14/03	BD
Surrogate (4-BFB)	104	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<5	ug/l		3/14/03	BD
Bromoform	<5	ug/l		3/14/03	BD
Bromomethane	<5	ug/l		3/14/03	BD
Carbon tetrachloride	<5	ug/l		3/14/03	BD
Chlorobenzene	<5	ug/l		3/14/03	BD
Chloroethane	<5	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<50	ug/l		3/14/03	BD
Chloroform	<5	ug/l		3/14/03	BD
Chloromethane	<5	ug/l		3/14/03	BD
Dibromochloromethane	<5	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<5	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<5	ug/l		3/14/03	BD
Dichlorodifluoromethane	<5	ug/l		3/14/03	BD
1,1-Dichloroethane	75	ug/l		3/14/03	BD
1,2-Dichloroethane	<5	ug/l		3/14/03	BD
1,1-Dichloroethene	7.4	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	5	ug/l		3/14/03	BD
1,2-Dichloropropane	<5	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<5	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<5	ug/l		3/14/03	BD
Methylene chloride	<5	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<5	ug/l		3/14/03	BD
Tetrachloroethene	<5	ug/l		3/14/03	BD
1,1,1-Trichloroethane	52	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<5	ug/l		3/14/03	BD
Trichloroethene	67	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<5	ug/l		3/14/03	BD
Vinyl chloride	110	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	109	%R		3/14/03	BD
Surrogate (Tol-d8)	98	%R		3/14/03	BD
Surrogate (4-BFB)	104	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Influent-WP-5D **LSL Sample ID:** 0303445-002

Location: NES

Sampled: 03/13/03 12:45 **Sampled By:** HB

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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	<1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	<1	ug/l		3/14/03	BD
Xylenes (Total)	<1	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	109	%R		3/14/03	BD
Surrogate (Tol-d8)	94	%R		3/14/03	BD
Surrogate (4-BFB)	94	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	10	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	<1	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	<1	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	56	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	109	%R		3/14/03	BD
Surrogate (Tol-d8)	94	%R		3/14/03	BD
Surrogate (4-BFB)	94	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Post Air Stripper/ Pre-Carbon **LSL Sample ID:** 0303445-003

Location: NES

Sampled: 03/13/03 12:55 **Sampled By:** HB

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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	3.1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	68	ug/l		3/14/03	BD
Xylenes (Total)	16	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	116	%R		3/14/03	BD
Surrogate (Tol-d8)	98	%R		3/14/03	BD
Surrogate (4-BFB)	106	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	<1	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	12	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	3.8	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	6.5	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	6.7	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	116	%R		3/14/03	BD
Surrogate (Tol-d8)	98	%R		3/14/03	BD
Surrogate (4-BFB)	106	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Final GWT System Effluent - Outfall 01A **LSL Sample ID:** 0303445-004

Location: NES

Sampled: 03/13/03 13:00 **Sampled By:** HB

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		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Ethyl benzene	<1	ug/l		3/14/03	BD
MTBE	<1	ug/l		3/14/03	BD
Toluene	8.8	ug/l		3/14/03	BD
Xylenes (Total)	1.1	ug/l		3/14/03	BD
t-Butyl alcohol	<200	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	113	%R		3/14/03	BD
Surrogate (Tol-d8)	99	%R		3/14/03	BD
Surrogate (4-BFB)	98	%R		3/14/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/14/03	BD
Bromoform	<1	ug/l		3/14/03	BD
Bromomethane	<1	ug/l		3/14/03	BD
Carbon tetrachloride	<1	ug/l		3/14/03	BD
Chlorobenzene	<1	ug/l		3/14/03	BD
Chloroethane	<1	ug/l		3/14/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/14/03	BD
Chloroform	<1	ug/l		3/14/03	BD
Chloromethane	<1	ug/l		3/14/03	BD
Dibromochloromethane	<1	ug/l		3/14/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/14/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/14/03	BD
Dichlorodifluoromethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethane	3.5	ug/l		3/14/03	BD
1,2-Dichloroethane	<1	ug/l		3/14/03	BD
1,1-Dichloroethene	<1	ug/l		3/14/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/14/03	BD
1,2-Dichloropropane	<1	ug/l		3/14/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/14/03	BD
Methylene chloride	<1	ug/l		3/14/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/14/03	BD
Tetrachloroethene	<1	ug/l		3/14/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/14/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/14/03	BD
Trichloroethene	1	ug/l		3/14/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/14/03	BD
Vinyl chloride	1.3	ug/l		3/14/03	BD
Surrogate (1,2-DCA-d4)	113	%R		3/14/03	BD
Surrogate (Tol-d8)	99	%R		3/14/03	BD
Surrogate (4-BFB)	98	%R		3/14/03	BD

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Trip Blank **LSL Sample ID:** 0303445-005

Location: NES

Sampled: 03/13/03 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		3/18/03	BD
Chlorobenzene	<1	ug/l		3/18/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/18/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/18/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/18/03	BD
Ethyl benzene	<1	ug/l		3/18/03	BD
MTBE	<1	ug/l		3/18/03	BD
Toluene	<1	ug/l		3/18/03	BD
Xylenes (Total)	<1	ug/l		3/18/03	BD
t-Butyl alcohol	<200	ug/l		3/18/03	BD
Surrogate (1,2-DCA-d4)	95	%R		3/18/03	BD
Surrogate (Tol-d8)	106	%R		3/18/03	BD
Surrogate (4-BFB)	106	%R		3/18/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/18/03	BD
Bromoform	<1	ug/l		3/18/03	BD
Bromomethane	<1	ug/l		3/18/03	BD
Carbon tetrachloride	<1	ug/l		3/18/03	BD
Chlorobenzene	<1	ug/l		3/18/03	BD
Chloroethane	<1	ug/l		3/18/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/18/03	BD
Chloroform	<1	ug/l		3/18/03	BD
Chloromethane	<1	ug/l		3/18/03	BD
Dibromochloromethane	<1	ug/l		3/18/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/18/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/18/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/18/03	BD
Dichlorodifluoromethane	<1	ug/l		3/18/03	BD
1,1-Dichloroethane	<1	ug/l		3/18/03	BD
1,2-Dichloroethane	<1	ug/l		3/18/03	BD
1,1-Dichloroethene	<1	ug/l		3/18/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/18/03	BD
1,2-Dichloropropane	<1	ug/l		3/18/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/18/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/18/03	BD
Methylene chloride	<1	ug/l		3/18/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/18/03	BD
Tetrachloroethene	<1	ug/l		3/18/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/18/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/18/03	BD
Trichloroethene	<1	ug/l		3/18/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/18/03	BD
Vinyl chloride	<1	ug/l		3/18/03	BD
Surrogate (1,2-DCA-d4)	95	%R		3/18/03	BD
Surrogate (Tol-d8)	106	%R		3/18/03	BD
Surrogate (4-BFB)	106	%R		3/18/03	BD

LSL

SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS

8/14/02

Method	Surrogate(s)	Water Limits, %R	SHW Limits, %R
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	70-130	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

Life Science Laboratories, Inc.

CHAIN OF CUSTODY RECORD

LSL North Lab.
131 St. Lawrence Ave.
Waddington, N.Y. 13694
Phone: 315-388-4476
Fax: 315-388-4061

LSL Central Lab.
5854 Butternut Drive
E. Syracuse, N.Y. 13057
Phone: 315-445-1105
Fax: 315-445-1301

LSL Finger Lakes Lab.
16 N. Main St., PO Box 424
Wayland, NY 14572
Phone: 716-728-3320
Fax: 716-728-2711

0303445
NYSDEC7SyrCR

Turnaround Time

Normal	Pre-Authorized				
14 DAY ☑	Next Day* ☐	3-Day * ☐	*Additional Charges may apply
	2-Day * ☐	7-Day* ☐	

Report Address:
Name: TIMOTHY DiGIULIO, P.E.
Company: NYSDEC REGION 7
Street: 615 ERIE BOULEVARD WEST
City/State: SYRACUSE, NEW YORK Zip: ~~13202~~ 13202
Phone: (315) 426-7471 Fax:
Email:

Date Needed or Special Instructions: COPY OF REPORT TO: KEVIN BRADFORD - STRATEGIC ENVIRONMENTAL MGMT., INC. 25½ WATER STREET, BALDWINSVILLE, NY 13027

Authorization or P.O. #
NYSDEC SPILL NO. 01-60024 / PIN NO. H-0529

Client Project ID/Client Site ID
NYSDEC SPILL NO. 01-60024 / PIN No. H-0529

LSL Project Number

Client's Sample Identifications	Sample Date	Sample Time	Type grab/comp	Matrix	Preserv Added	Containers #	Containers size/type	Analyses	Preserv Check	LSL ID#
INFLUENT - RW-1	3/13/03	1250	GRAB	NPW	1:1 HCl 4°C	2	40 ml VOA	EPA METHODS 601+602		001 A,B
INFLUENT - WP-5D		1245								002
POST AIR STRIPPER/ PRE-CARBON		1255								003
FINAL GWT SYSTEM EFFLUENT - OUTFALL 01A		1300								004
TRIP BLANK	3/13/03	0700				(1) HCl				005

LSL use only:

Containers this C-O-C

Custody Transfers

		Date	Time
Sampled By: H. Kevin Bradford (SEM)	Received By:		
Relinquished By:	Received By:		
Relinquished By: H. Kevin Bradford	Rec'd for Lab By: R. Dunbar	03-13-03	14:10 IN
Shipment Method:	Received Intact: Y N	11.6 °C on ice	Sample Temp

*** All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner IN PEN ONLY***

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: **0303721**

Receive Date/Time: 03/19/03 13:38 **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."

Kinda Waters QC 3/27/03

Reviewed By **Date**

Life Science Laboratories, Inc.

LSL Central Lab	LSL North Lab	LSL Finger Lakes Lab	LSL Southern Tier Lab	LSL Middlesex Lab
5854 Butternut Drive	131 St. Lawrence Avenue	16 N. Main St., PO Box 424	30 East Main St.	5611 Water St.
East Syracuse, NY 13057	Waddington, NY 13694	Wayland, NY 14572	Cuba, NY 14727	Middlesex, NY 14507
Tel. (315) 445-1105	Tel. (315) 388-4476	Tel. (585) 728-3320	Tel. (585) 968-2640	Tel. (585) 554-5347
Fax (315) 445-1301	Fax (315) 388-4061	Fax (585) 728-2711	Fax (585) 968-0906	Fax. (585) 554-6743
NYS DOH ELAP #10248	NYS DOH ELAP #10900	NYS DOH ELAP #11667	NYS DOH ELAP #10760	NYS DOH ELAP #11369

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

Date Printed: 3/26/03

-- LABORATORY ANALYSIS REPORT --

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

Sample ID: Influent WP-5D **LSL Sample ID:** 0303721-001

Location: NES

Sampled: 03/19/03 11:42 **Sampled By:** MG

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		3/25/03	BD
Chlorobenzene	<1	ug/l		3/25/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/25/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/25/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/25/03	BD
Ethyl benzene	<1	ug/l		3/25/03	BD
MTBE	<1	ug/l		3/25/03	BD
Toluene	<1	ug/l		3/25/03	BD
Xylenes (Total)	<1	ug/l		3/25/03	BD
t-Butyl alcohol	<200	ug/l		3/25/03	BD
Surrogate (1,2-DCA-d4)	98	%R		3/25/03	BD
Surrogate (Tol-d8)	113	%R		3/25/03	BD
Surrogate (4-BFB)	107	%R		3/25/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/25/03	BD
Bromoform	<1	ug/l		3/25/03	BD
Bromomethane	<1	ug/l		3/25/03	BD
Carbon tetrachloride	<1	ug/l		3/25/03	BD
Chlorobenzene	<1	ug/l		3/25/03	BD
Chloroethane	12	ug/l		3/25/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/25/03	BD
Chloroform	<1	ug/l		3/25/03	BD
Chloromethane	<1	ug/l		3/25/03	BD
Dibromochloromethane	<1	ug/l		3/25/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/25/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/25/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/25/03	BD
Dichlorodifluoromethane	<1	ug/l		3/25/03	BD
1,1-Dichloroethane	<1	ug/l		3/25/03	BD
1,2-Dichloroethane	<1	ug/l		3/25/03	BD
1,1-Dichloroethene	<1	ug/l		3/25/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/25/03	BD
1,2-Dichloropropane	<1	ug/l		3/25/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/25/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/25/03	BD
Methylene chloride	<1	ug/l		3/25/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/25/03	BD
Tetrachloroethene	<1	ug/l		3/25/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/25/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/25/03	BD
Trichloroethene	<1	ug/l		3/25/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/25/03	BD
Vinyl chloride	60	ug/l		3/25/03	BD
Surrogate (1,2-DCA-d4)	98	%R		3/25/03	BD
Surrogate (Tol-d8)	113	%R		3/25/03	BD
Surrogate (4-BFB)	107	%R		3/25/03	BD

- - LABORATORY ANALYSIS REPORT - -

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

Sample ID: Influent RW-1 **LSL Sample ID:** 0303721-002

Location: NES

Sampled: 03/19/03 11:39 **Sampled By:** MG

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	<5	ug/l		3/22/03	BD
Chlorobenzene	<5	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<5	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<5	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<5	ug/l		3/22/03	BD
Ethyl benzene	26	ug/l		3/22/03	BD
MTBE	<5	ug/l		3/22/03	BD
Toluene	480	ug/l		3/22/03	BD
Xylenes (Total)	120	ug/l		3/22/03	BD
t-Butyl alcohol	<1000	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	82	%R		3/22/03	BD
Surrogate (Tol-d8)	89	%R		3/22/03	BD
Surrogate (4-BFB)	86	%R		3/22/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<5	ug/l		3/22/03	BD
Bromoform	<5	ug/l		3/22/03	BD
Bromomethane	<5	ug/l		3/22/03	BD
Carbon tetrachloride	<5	ug/l		3/22/03	BD
Chlorobenzene	<5	ug/l		3/22/03	BD
Chloroethane	<5	ug/l		3/22/03	BD
2-Chloroethylvinyl ether	<50	ug/l		3/22/03	BD
Chloroform	<5	ug/l		3/22/03	BD
Chloromethane	<5	ug/l		3/22/03	BD
Dibromochloromethane	<5	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<5	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<5	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<5	ug/l		3/22/03	BD
Dichlorodifluoromethane	<5	ug/l		3/22/03	BD
1,1-Dichloroethane	75	ug/l		3/22/03	BD
1,2-Dichloroethane	<5	ug/l		3/22/03	BD
1,1-Dichloroethene	6.1	ug/l		3/22/03	BD
trans-1,2-Dichloroethene	5.1	ug/l		3/22/03	BD
1,2-Dichloropropane	<5	ug/l		3/22/03	BD
cis-1,3-Dichloropropene	<5	ug/l		3/22/03	BD
trans-1,3-Dichloropropene	<5	ug/l		3/22/03	BD
Methylene chloride	<5	ug/l		3/22/03	BD
1,1,2,2-Tetrachloroethane	<5	ug/l		3/22/03	BD
Tetrachloroethene	<5	ug/l		3/22/03	BD
1,1,1-Trichloroethane	36	ug/l		3/22/03	BD
1,1,2-Trichloroethane	<5	ug/l		3/22/03	BD
Trichloroethene	52	ug/l		3/22/03	BD
Trichlorofluoromethane (Freon 11)	<5	ug/l		3/22/03	BD
Vinyl chloride	160	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	82	%R		3/22/03	BD
Surrogate (Tol-d8)	89	%R		3/22/03	BD
Surrogate (4-BFB)	86	%R		3/22/03	BD

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:** 0303721-003

Location: NES

Sampled: 03/19/03 11:44 **Sampled By:** MG

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		3/22/03	BD
Chlorobenzene	<1	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/22/03	BD
Ethyl benzene	5.6	ug/l		3/22/03	BD
MTBE	<1	ug/l		3/22/03	BD
Toluene	110	ug/l		3/22/03	BD
Xylenes (Total)	28	ug/l		3/22/03	BD
t-Butyl alcohol	<200	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	86	%R		3/22/03	BD
Surrogate (Tol-d8)	90	%R		3/22/03	BD
Surrogate (4-BFB)	86	%R		3/22/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/22/03	BD
Bromoform	<1	ug/l		3/22/03	BD
Bromomethane	<1	ug/l		3/22/03	BD
Carbon tetrachloride	<1	ug/l		3/22/03	BD
Chlorobenzene	<1	ug/l		3/22/03	BD
Chloroethane	1.6	ug/l		3/22/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/22/03	BD
Chloroform	<1	ug/l		3/22/03	BD
Chloromethane	<1	ug/l		3/22/03	BD
Dibromochloromethane	<1	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/22/03	BD
Dichlorodifluoromethane	<1	ug/l		3/22/03	BD
1,1-Dichloroethane	19	ug/l		3/22/03	BD
1,2-Dichloroethane	<1	ug/l		3/22/03	BD
1,1-Dichloroethene	<1	ug/l		3/22/03	BD
trans-1,2-Dichloroethene	1.5	ug/l		3/22/03	BD
1,2-Dichloropropane	<1	ug/l		3/22/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/22/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/22/03	BD
Methylene chloride	<1	ug/l		3/22/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/22/03	BD
Tetrachloroethene	<1	ug/l		3/22/03	BD
1,1,1-Trichloroethane	5.2	ug/l		3/22/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/22/03	BD
Trichloroethene	10	ug/l		3/22/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/22/03	BD
Vinyl chloride	15	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	86	%R		3/22/03	BD
Surrogate (Tol-d8)	90	%R		3/22/03	BD
Surrogate (4-BFB)	86	%R		3/22/03	BD

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 **LSL Sample ID:** 0303721-004

Location: NES

Sampled: 03/19/03 11:48 **Sampled By:** MG

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		3/22/03	BD
Chlorobenzene	<1	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/22/03	BD
Ethyl benzene	<1	ug/l		3/22/03	BD
MTBE	<1	ug/l		3/22/03	BD
Toluene	19	ug/l		3/22/03	BD
Xylenes (Total)	3.8	ug/l		3/22/03	BD
t-Butyl alcohol	<200	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	81	%R		3/22/03	BD
Surrogate (Tol-d8)	89	%R		3/22/03	BD
Surrogate (4-BFB)	81	%R		3/22/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/22/03	BD
Bromoform	<1	ug/l		3/22/03	BD
Bromomethane	<1	ug/l		3/22/03	BD
Carbon tetrachloride	<1	ug/l		3/22/03	BD
Chlorobenzene	<1	ug/l		3/22/03	BD
Chloroethane	<1	ug/l		3/22/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/22/03	BD
Chloroform	<1	ug/l		3/22/03	BD
Chloromethane	<1	ug/l		3/22/03	BD
Dibromochloromethane	<1	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/22/03	BD
Dichlorodifluoromethane	<1	ug/l		3/22/03	BD
1,1-Dichloroethane	6.4	ug/l		3/22/03	BD
1,2-Dichloroethane	<1	ug/l		3/22/03	BD
1,1-Dichloroethene	<1	ug/l		3/22/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/22/03	BD
1,2-Dichloropropane	<1	ug/l		3/22/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/22/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/22/03	BD
Methylene chloride	<1	ug/l		3/22/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/22/03	BD
Tetrachloroethene	<1	ug/l		3/22/03	BD
1,1,1-Trichloroethane	1.6	ug/l		3/22/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/22/03	BD
Trichloroethene	2.0	ug/l		3/22/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/22/03	BD
Vinyl chloride	5.2	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	81	%R		3/22/03	BD
Surrogate (Tol-d8)	89	%R		3/22/03	BD
Surrogate (4-BFB)	81	%R		3/22/03	BD

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:** 0303721-005

Location: NES

Sampled: 03/19/03 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		3/22/03	BD
Chlorobenzene	<1	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/22/03	BD
Ethyl benzene	<1	ug/l		3/22/03	BD
MTBE	<1	ug/l		3/22/03	BD
Toluene	<1	ug/l		3/22/03	BD
Xylenes (Total)	<1	ug/l		3/22/03	BD
t-Butyl alcohol	<200	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	85	%R		3/22/03	BD
Surrogate (Tol-d8)	89	%R		3/22/03	BD
Surrogate (4-BFB)	83	%R		3/22/03	BD
(1) ITEM #GW-02- , EPA 601 Vol.					
Bromodichloromethane	<1	ug/l		3/22/03	BD
Bromoform	<1	ug/l		3/22/03	BD
Bromomethane	<1	ug/l		3/22/03	BD
Carbon tetrachloride	<1	ug/l		3/22/03	BD
Chlorobenzene	<1	ug/l		3/22/03	BD
Chloroethane	<1	ug/l		3/22/03	BD
2-Chloroethylvinyl ether	<10	ug/l		3/22/03	BD
Chloroform	<1	ug/l		3/22/03	BD
Chloromethane	<1	ug/l		3/22/03	BD
Dibromochloromethane	<1	ug/l		3/22/03	BD
1,2-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,3-Dichlorobenzene	<1	ug/l		3/22/03	BD
1,4-Dichlorobenzene	<1	ug/l		3/22/03	BD
Dichlorodifluoromethane	<1	ug/l		3/22/03	BD
1,1-Dichloroethane	<1	ug/l		3/22/03	BD
1,2-Dichloroethane	<1	ug/l		3/22/03	BD
1,1-Dichloroethene	<1	ug/l		3/22/03	BD
trans-1,2-Dichloroethene	<1	ug/l		3/22/03	BD
1,2-Dichloropropane	<1	ug/l		3/22/03	BD
cis-1,3-Dichloropropene	<1	ug/l		3/22/03	BD
trans-1,3-Dichloropropene	<1	ug/l		3/22/03	BD
Methylene chloride	<1	ug/l		3/22/03	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/22/03	BD
Tetrachloroethene	<1	ug/l		3/22/03	BD
1,1,1-Trichloroethane	<1	ug/l		3/22/03	BD
1,1,2-Trichloroethane	<1	ug/l		3/22/03	BD
Trichloroethene	<1	ug/l		3/22/03	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/22/03	BD
Vinyl chloride	<1	ug/l		3/22/03	BD
Surrogate (1,2-DCA-d4)	85	%R		3/22/03	BD
Surrogate (Tol-d8)	89	%R		3/22/03	BD
Surrogate (4-BFB)	83	%R		3/22/03	BD

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

Method	Surrogate(s)	Water Limits, %R	SHW Limits, %R
EPA 504	TCMX	60-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	60-120	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	60-120	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	70-130	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

Life Science Laboratories, Inc.

CHAIN OF CUSTODY RECORD

LSL North Lab.
131 St. Lawrence Ave.
Waddington, N.Y. 13694
Phone: 315-388-4476
Fax: 315-388-4061

LSL Central Lab.
5854 Butternut Drive
E. Syracuse, N.Y. 13057
Phone: 315-445-1105
Fax: 315-445-1301

LSL Finger Lakes Lab.
16 N. Main St., PO Box 424
Wayland, NY 14572
Phone: 716-728-3320
Fax: 716-728-2711

0303721
NYSDEC7SytCR

Turnaround Time

Normal	Pre-Authorized				
14 DAY	Next Day*	☐	3-Day*	☐	*Additional Charges may apply
☒	2-Day*	☐	7-Day*	☐	

Report Address:
Name: [redacted] Tim DiGiulio PE.
Company: NYSDEC Region 7
Street: 615 Erie Blvd West.
City/State: Syracuse NY Zip: 13202
Phone: 315-426-7471 Fax:
Email:

Date Needed or Special Instructions:
COPY REPORT TO: NEVIN BRADFORD

Authorization or P.O. #
NYSDEC SoW # 01-60024 / PIN # H-0529

Client Project ID/Client Site ID

LSL Project Number

Client's Sample Identifications	Sample Date	Sample Time	Type grab/comp	Matrix	Preserv Added	Containers #	Containers size/type	Analyses	Preserv Check	LSL ID#
Influent WP-5D	3/18/03	1142	GRAB	GW	Ice	2	40ml	EPA METHOD 601/602		001 AB
Influent RW-1		1139								002
Post Air Stripper-PrCarbon		1144								003
Final GWT System		1148								004
discharge (outfall 01A)		—								
Trip blank		—								005 AB

LSL use only:

Containers this C-O-C

Custody Transfers

		Date	Time
Sampled By: M. GRAVES	Received By:	3/18/03	
Relinquished By: [signature]	Received By:	3/19/03	
Relinquished By:	Rec'd for Lab By: [signature]	03-19-03	13:38 RCVD
Shipment Method: HAND DELIVERED TO LAB	Received Intact: Y N	Sample Temp	

*** All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner IN PEN ONLY ***

Coc

8.2°C on Ice