

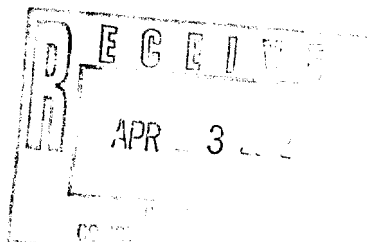
FEBRUARY 2002
OPERATION AND MAINTENANCE
MONTHLY REPORT

APRIL 1, 2002

ACTIVE INDUSTRIAL UNIFORM SITE
67 WEST MONTAUK HIGHWAY
VILLAGE OF LINDENHURST, NEW YORK

NYSDEC CONTRACT No. D004134

File on eDOCs X Yes No
Site Name Active Industrial
Site No. 152125
County SUFFOLK
Town BABYLON
Follable ✓ Yes No
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**FEBRUARY 2002
OPERATION AND MAINTENANCE
MONTHLY REPORT**

APRIL 1, 2002

PREPARED FOR

New York State Department of
Environmental Conservation
(NYSDEC)

PREPARED BY

Blue Water Environmental, Inc.
1610 New Highway
Farmingdale, New York
11735



Mark P. Soliman, Project Manager/Engineer



Michael J. Posillico, President

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- A Laboratory Analytical Results of Process Vapor Samples, Active Industrial Uniform Site, 67 West Montauk Highway, Lindenhurst, New York, NYSDEC Contract No. D004134
- B Laboratory Analytical Results of Process Water Samples, Active Industrial Uniform Site, 67 West Montauk Highway, Lindenhurst, New York, NYSDEC Contract No. D004134.



1. INTRODUCTION

This is the 2nd monthly report prepared for the New York State Department of Environmental Conservation (NYSDEC) in accordance with NYSDEC contract no. D004134 for the operation of a newly constructed groundwater treatment system at the Active Industrial Site located at 67 West Montauk Highway in Lindenhurst, New York. On March 3, 2002 Blue Water Environmental, Inc. (Blue Water) completed the monthly Operation and Maintenance (O&M) monitoring and sample collection of the Active Industrial groundwater pump and treatment system in accordance with the referenced contract. The following sections briefly describe the groundwater treatment system operation during the February 2002 operation period.

2. OPERATIONAL DESCRIPTION

The groundwater treatment system was in operation for 33 days during the February 2002 reporting period (January 31, 2002 to March 4, 2002). During this operation period, both wells (RW-1 and RW-2) and both air stripping towers (in-series) were on-line and the vapor phase granular activated carbon units were not changed-out.

The discharge flow meter recorded approximately 8,596,904 gallons of water treated by the system during the February 2002 reporting period with an average system flow of 180 gallons per minute (gpm). The RW-1 and RW-2 flow meters recorded an average recovery flow of 80 gpm and 100 gpm, respectively.

The following is a summary of system operation to date:

- **Total Water Treated to Date:** 17,577,514 gallons
- **Total Mass of VOCs Recovered to Date:** 55 pounds
- **Mass of VOCs Removed in February 2002 Period:** 27 pounds

3. SUMMARY OF ON-SITE MONTHLY ACTIVITIES

During the month of February 2002, the following tasks were performed:

- February 11, 2002: The cartridge filter media was replaced and brought back on-line. The system operated in the cartridge filter bypass mode while the change-out occurred.
- March 4, 2002: Influent and Effluent water samples were collected and analyzed for volatile organic compounds (VOCs). Effluent water samples were also collected and analyzed for RCRA Metals, alkalinity, chlorine demand, pH, chemical oxygen demand (COD), total dissolved solids (TDS), and total suspended solids



(TSS). The samples were submitted to Environmental Testing Laboratory, Inc. of Farmingdale, New York.

Carbon influent and midfluent air samples were collected and analyzed for VOCs under method 6021 by Microseeps and discharge air samples were collected and analyzed for VOCs under T014 by Air Toxics Ltd.

4. SUMMARY OF FIELD DATA AND ANALYTICAL RESULTS

The February ground-water influent analytical results indicate that the system is successfully recovering and treating approximately 0.033 pounds per hour of volatile organic compounds (VOCs). The in-series tower air stripping system is removing approximately 99.7% of the contaminant mass from the water into the vapor stream. The system cumulative mass removal since startup is approximately 55 pounds of VOCs.

There was an exceedance of manganese at 2.53 milligrams per liter (mg/L) in the treated water discharge vs. the NYSDEC effluent limit of 2.0 mg/L and an exceedance of TSS of 31 mg/L vs. the NYSDEC effluent limit of 20 mg/L. Therefore, Blue Water has changed the cartridge filter media in an effort to reduce manganese and TSS concentrations. Also, there was an exceedance of c-1,2-Dichloroethene at 0.004065 lbs/hr in the treated vapor discharge vs. NYSDEC permitted emission limit of 0.003 lbs/hr. Therefore, Blue Water changed the primary vapor phase carbon bed on Friday March 22, 2002 which was within 2-days of receipt of the March 4, 2002 analytical data.

Table 1 summarizes the process water analytical data, Table 2 summarizes the process air analytical data, Table 3 summarizes operational parameters collected during the February 2002 O&M monitoring and sampling event, Table 4 summarizes the TO-14 effluent vapor sample data, and Table 5 summarizes the VOC effluent discharge rates. Laboratory analytical data has been included in Appendices A and B.

Table 1. Summary of Process Water Analytical Data, February 2002 Sampling Event, Active Industrial Uniform Site, 67 West Mont
Lindenhurst, New York, NYSDEC Contract No. D004134.

Constituent:		Detection	NYSDEC	Sample ID/Port:	INFLUENT	EFFLUENT
Units as noted	Cas No.	Limit	Effluent Limits	Sample Location:	INF. HEADER	DISCHARGE
				Date Collected:	3/3/2002	3/3/2002
<u>Volatile Organic Compounds (ug/L)</u>						
Trichloroethene	79-01-6	0.17	10		62	ND
Tetrachloroethene	127-18-4	0.6	4		158	ND
c-1,2-Dichloroethene	156-59-2	0.9	10		142	1.1
1,1-Dichloroethene	75-35-4	0.22			ND	ND
1,1,1-Trichloroethane	71-55-6	0.14	5		3.4	ND
Total Xylene	--	--	5		ND	ND
Vinyl Chloride	75-01-4	0.85	10		ND	ND
1,1-Dichloroethane	75-34-3	0.25	NL		2.2	ND
Methyl t-butyl ether	75-34-3	0.18	NL		3	ND
Sum of VOC Constituents					370.6	1.1
<u>Inorganic Compounds</u>						
Iron (mg/L)	7439-89-6	0.096	4		--	0.11
Manganese (mg/L)	7439-96-5	0.0012	2		--	2.53
TDS (mg/l)	--	9.92	Monitor		--	3590
TSS (mg/l)	--	4.58	20		--	31
Aluminum (ug/L)	7429-90-5	0.086	4		--	ND
Arsenic (ug/L)	7440-38-2	0.0048	0.14		--	ND
Cadmium (ug/L)	7440-43-9	0.0012	0.03		--	ND
Copper (ug/L)	7440-50-8	0.0022	0.038		--	ND
Nickel (ug/L)	7440-02-0	0.0017	0.065		--	ND
Silver (ug/L)	7440-22-4	0.0015	0.009		--	0.0017
Zinc (ug/L)	7440-66-6	0.0036	0.37		--	0.035
Residual Chlorine (mg/L)	--	NA	NA		--	70.9
Antimony (ug/L)	7440-36-0	0.0036	NL		--	0.0084
Barium (ug/L)	7440-39-3	0.0012	NL		--	0.039
Calcium (ug/L)	7440-70-2	0.13	NL		--	96.1
Chromium (ug/L)	7440-47-3	0.0022	NL		--	0.012
Cobalt (ug/L)	7440-48-4	0.0012	NL		--	ND

Table 1. Summary of Process Water Analytical Data, February 2002 Sampling Event, Active Industrial Uniform Site, 67 West Mont
Lindenhurst, New York, NYSDEC Contract No. D004134.

Constituent:		Detection	NYSDEC	Sample ID/Port:	INFLUENT	EFFLUENT
Units as noted	Cas No.	Limit	Effluent Limits	Sample Location:	INF. HEADER	DISCHARGE
				Date Collected:	3/3/2002	3/3/2002
Lead (ug/L)	7439-92-1	0.0022	NL		--	ND
Magnesium (ug/L)	7439-95-4	0.09	NL		--	130
Mercury (ug/L)	7439-97-6	0.00005	NL		--	ND
Potassium (ug/L)	7440-09-7	1.18	NL		--	37.8
Selenium (ug/L)	7782-49-2	0.0047	NL		--	0.0063
Sodium (ug/L)	7440-23-5	0.094	NL		--	ND
Thallium (ug/L)	7440-28-0	0.0039	NL		--	ND
General Chemistry						
COD, dissolved (mg/L)		4.8	NA		--	41
Conductivity, dissolved at 25°C (ms/cm)		NA	NA		6.5	6.68
Turbidity (NTU)		NA	NA		10	10
pH (s.u.)		NA	6 to 9		--	7.04
Alkalinity (mg/L)		0.28	NA		--	56
Dissolved Oxygen (mg/L)		NA	NA		1	6.02

- Only parameters that are required for effluent monitoring and parameters that have concentrations exceeding the detection limit are included in this table. A complete list of parameters is included in the Analytical Reports located in Appendix A.

** Analysis was performed by Environmental Testing Laboratories, Inc. of Farmingdale, New York

ug/L Micrograms per liter.

mg/L Milligrams per liter.

ms/cm Millisiemens per centimeter.

ND Not detected above detection limits

NTU Nephelometric turbidity units.

COD Chemical Oxygen Demand

s.u. Standard pH units.

TDS Total Dissolved Solids

TSS Total Suspended Solids

-- Sample not analyzed for specific parameter

Table 2. Summary of Process Vapor Analytical Data, February 2002 Sampling Event, Active Industrial Uniform Site,
67 West Montauk Highway, Lindenhurst, New York, NYSDEC Contract No. D004134

Constituent:	Detection	Sample ID/Port:	INFLUENT	MIDFLUENT
Units as noted	Limit	Sample Location:	TO CARBON	B/W CARBON
		Date Collected:	3/4/2002	3/4/2002
<u>VOCs - 601/602 (ppm_v):</u>				
1,1-Dichloroethane	0.01		0.012	ND
cis-1,2-Dichloroethene	0.01		0.63	0.19
1,1,1-Trichloroethane	0.005		0.012	ND
Toluene	0.1		0.12	ND
Tetrachloroethene	0.005		0.14	ND
Trichloroethene	0.005		0.12	ND

Notes:

- * Only parameters that have concentrations exceeding the detection limits have been included above.
A complete list of parameters is included in the Analytical Reports located in Appendix A.
 - ** Analysis was performed by Microseeps, Inc. of Pittsburgh, Pennsylvania
- ppm_v Parts per million by volume
- ND Not detected above method detection limits.

Table 3. OPERATION & MAINTENANCE FORM, Active Industrial Uniform Site, Lindenhurst, New York, NYSDEC Contract No. D004134.

DATE:	12/21/2001	1/30/2002	3/4/2002			
TECHNICIAN:	M-SOLIMAN	M-SOLIMAN	C-FERRITO			
WATER						
RW-1 Flow (gpm)	90	80	79.4			
RW-1 Total (gallons)	36300	3,972,000	7,739,697			
RW-2 Flow (gpm)	115	100	102			
RW-2 Total (gallons)	40810	4,959,775	9,718,481			
RW-1 Pressure (psi)	16.5	21	20			
RW-2 Pressure (psi)	17	32	30			
Combined Pressure (psi)	14	13.5	14			
P-1 Pressure (psi)	14	14	14			
P-2 Pressure (psi)	24	12	27			
Filter in Pressure (psi)	---	---	28			
Filter out Pressure (psi)	---	---	11			
Effluent Flow (gpm)	197	182	184			
Effluent Total (gallons)	---	8,980,610	17,577,514			
AIR						
Midfluent Vacuum (IWC)	5.5	0	0			
Blower Influent Vacuum (IWC)	10.5	13	13			
Blower Effluent Pressure (IWC)	---	5	5			
Carbon 1 Pressure (IWC)	7	5	4			
Carbon 1 Temperature (F)	65	70	60			
Carbon 2 Pressure (IWC)	4	3	5			
Carbon 2 Temperature (F)	65	65	60			
NOTES						
Cartridge Filter Bypassed	N	Y	N			
Lead Carbon Changeout	N	N	N			
Lag Carbon Changeout	N	N	N			
Water in Sump	Y	Y	Y			
Acid Wash Performed	N	N	N			
Air Samples Collected	Y	Y	Y			
Water Samples Collected	Y	Y	Y			
Well Samples Collected	N	N	N			

Table 4. Summary of TO-14 Effluent Vapor Sample Data, January 2002 Sampling Event, Active Industrial Uniform Site
67 West Montauk Highway, Lindenhurst, New York, NYSDEC Contract No. D004134

Compound	3/4/02 [Effluent] (ppb _v)	Reporting Limit (ppb _v)
Freon 12	ND	0.76
Freon 114	ND	0.76
Chloromethane	ND	0.76
Vinyl Chloride	5.3	0.76
Bromomethane	ND	0.76
Chloroethane	ND	0.76
Freon 11	ND	0.76
1,1-Dichloroethene	6.5	0.76
Freon 113	ND	0.76
Methylene Chloride	1.4	0.76
1,1-Dichloroethane	21	0.76
cis-1,2-Dichloroethene	200	0.76
Chloroform	ND	0.76
1,1,1-Trichloroethane	3.6	0.76
Carbon Tetrachloride	ND	0.76
Benzene	ND	0.76
1,2-Dichloroethane	ND	0.76
Trichloroethene	ND	0.76
1,2-Dichloropropane	ND	0.76
cis-1,3-Dichloropropene	ND	0.76
Toluene	ND	0.76
trans-1,3-Dichloropropene	ND	0.76
1,1,2-Trichloroethane	ND	0.76
Tetrachloroethene	ND	0.76
Ethylene Dibromide	ND	0.76
Chlorobenzene	ND	0.76
Ethyl Benzene	ND	0.76
m,p-Xylene	ND	0.76
o-Xylene	ND	0.76
Styrene	ND	0.76
1,1,2,2-Tetrachloroethane	ND	0.76
1,3,5-Trimethylbenzene	ND	0.76
1,2,4-Trimethylbenzene	ND	0.76
1,3-Dichlorobenzene	ND	0.76
1,4-Dichlorobenzene	ND	0.76
Chlorotoluene	ND	0.76
1,2-Dichlorobenzene	ND	0.76
1,2,4-Trichlorobenzene	ND	0.76
Hexachlorobutadiene	ND	0.76

Table 4. Summary of TO-14 Effluent Vapor Sample Data, January 2002 Sampling Event, Active Industrial Uniform Site
67 West Montauk Highway, Lindenhurst, New York, NYSDEC Contract No. D004134

Compound	3/4/02 [Effluent] (ppb _v)	Reporting Limit (ppb _v)
Propylene	ND	3.0
1,3 Butadiene	ND	3.0
Acetone	4.4	3.0
Carbon Disulfide	ND	3.0
2-Propanol	ND	3.0
trans-1,2-Dichloroethene	3.0 J	3.0
Vinyl Acetate	ND	3.0
2-Butanone (Methyl Ethyl Ketone)	ND	3.0
Hexane	ND	3.0
Tetrahydrofuran	ND	3.0
Cyclohexane	ND	3.0
1,4-Dioxane	ND	3.0
Bromodichloromethane	ND	3.0
4-Methyl-2-pentanone	ND	3.0
2-Hexanone	ND	3.0
Dibromochloromethane	ND	3.0
Bromoform	ND	3.0
4-Ethyltoluene	ND	3.0
Ethanol	ND	3.0
Methyl tert-butyl Ether	ND	3.0
Heptane	ND	3.0
TOTAL VOCs:	245.200	ppb_v
	0.245	ppm_v

ND Compound not detected.
ppb_v Parts per billion by volume.
ppm_v Parts per million by volume.
VOCs Volatile organic compounds.
J Estimated Value

Table 5. Summary of Vapor Effluent Discharge Rates, February 2002 Sampling Event, Active Industrial Uniform Site, 67 West Montauk Highway, Lindenhurst, New York, NYSDEC Contract No. D004134.

Compound	Cas. No	Detection Limit (ppb _v)	NYSDEC Permitted Emission Limits (lbs/hr)	3/4/02 Effluent Concentration (ppb _v)	Air Flow Rate (cfm)	VOC Emission Rate (lbs/hr)
Trichloroethene	79-01-6	0.76	0.006	ND	1326	---
Tetrachloroethene	127-18-4	0.76	0.007	ND	1326	---
c-1,2-Dichloroethene	156-59-2	0.76	0.003	200	1326	0.004065
1,1,1-Trichloroethane	71-55-6	0.76	0.001	3.6	1326	0.000101
m-Xylene	108-38-3	0.76	0.001	ND	1326	---
p-Xylene	106-42-3	0.76	0.001	ND	1326	---
o-Xylene	95-47-6	0.76	0.001	ND	1326	---
Vinyl Chloride	75-01-4	0.76	0.014	5.3	1326	0.000069
1,1-Dichloroethene	75-35-4	0.76	NL	6.5	1326	0.000132
1,1-Dichloroethane	75-34-3	0.76	NL	21	1326	0.000436
Methylene Chloride	75-09-2	0.76	NL	1.4	1326	0.000025
Acetone	67-64-1	3.0	NL	4.4	1326	0.000057
trans-1,2-Dichloroethene	540-59-0	3.0	NL	3.0 J	1326	0.000064
Total			0.034	245.200		0.004948

ND Compound not detected.
 ppb_v Parts per billion by volume.
 VOCs Volatile organic compounds.
 NL No limit specified in permit application.
 NA Not available.
 J Estimated Value

Appendix A

Laboratory Analytical Results of
Process Vapor Samples
Active Industrial Uniform Site
67 West Montauk Highway
Lindenhurst, New York, NYSDEC
Contract No. D004134



Client Name: Blue Water Environmental
Contact: Mark Soliman
Address: 1610 New Highway

Farmington, NY 11735

Page 1 of 3
Order #: P0203041
Report Date: 03/13/02
Client Proj Name: Active
Client Proj #: 02370-01830

Sample Identification

Lab Sample #	Client Sample ID
P0203041-01	INFLUENT
P0203041-02	MIDFLUENT

Approved By: _____

Order #: P0203041
 Report Date: 03/13/02
 Client Proj Name: Active
 Client Proj #: 02370-01830

Client Name: Blue Water Environmental
 Contact: Mark Soliman
 Address: 1610 New Highway
 Farmington, NY 11735

Lab Sample #: P0203041-01

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received</u>
INFLUENT	Vapor	04 Mar. 02 13:00	05 Mar. 02

<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analyst</u>	<u>Analysis Date</u>
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Risk Analysis

Vapor						
1,1,1-Trichloroethane	0.012	0.005	PPMV	AM4.02	mm	3/8/02
1,1,2,2-Tetrachloroethane	< 0.005	0.005	PPMV		mm	3/8/02
1,1,2-Trichloroethane	< 0.005	0.005	PPMV		mm	3/8/02
1,1-Dichloroethane	0.012	0.010	PPMV		mm	3/8/02
1,1-Dichloroethene	< 0.010	0.010	PPMV		mm	3/8/02
1,2-Dichlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
1,2-Dichloroethane	< 0.010	0.010	PPMV		mm	3/8/02
1,2-Dichloropropane	< 0.010	0.010	PPMV		mm	3/8/02
1,3-Dichlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
1,4-Dichlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
Benzene	< 0.10	0.10	PPMV		mm	3/8/02
Bromodichloromethane	< 0.005	0.005	PPMV		mm	3/8/02
Bromoform	< 0.005	0.005	PPMV		mm	3/8/02
Bromomethane and Chloroethane	< 1.0	1.0	PPMV		mm	3/8/02
Carbon Tetrachloride	< 0.005	0.005	PPMV		mm	3/8/02
Chlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
Chlorodibromomethane	< 0.005	0.005	PPMV		mm	3/8/02
Chloroform	< 0.005	0.005	PPMV		mm	3/8/02
Chloromethane	< 1.0	1.0	PPMV		mm	3/8/02
cis-1,2-Dichloroethene	0.63	0.010	PPMV		mm	3/8/02
cis-1,3-Dichloropropene	< 0.010	0.010	PPMV		mm	3/8/02
Ethylbenzene	< 0.10	0.10	PPMV		mm	3/8/02
Methylene Chloride	< 2.0	2.0	PPMV		mm	3/8/02
Tetrachloroethene	0.14	0.005	PPMV		mm	3/8/02
Toluene	0.12	0.10	PPMV		mm	3/8/02
trans-1,2-Dichloroethene	< 0.010	0.010	PPMV		mm	3/8/02
trans-1,3-Dichloropropene	< 0.010	0.010	PPMV		mm	3/8/02
Trichloroethene	0.12	0.005	PPMV		mm	3/8/02
Trichlorofluoromethane	< 0.005	0.005	PPMV		mm	3/8/02
Vinyl Chloride	< 3.0	3.0	PPMV		mm	3/8/02

Order #: P0203041

Report Date: 03/13/02

Client Proj Name: Active

Client Proj #: 02370-01830

Client Name: Blue Water Environmental

Lab Sample #: P0203041-02

Contact: Mark Soliman

Address: 1610 New Highway
Farmington, NY 11735

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received</u>
MIDFLUENT	Vapor	04 Mar. 02 13:00	05 Mar. 02

<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analyst</u>	<u>Analysis Date</u>
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Risk Analysis

Vapor						
1,1-Trichloroethane	< 0.005	0.005	PPMV	AM4.02	mm	3/8/02
1,2,2-Tetrachloroethane	< 0.005	0.005	PPMV		mm	3/8/02
1,1,2-Trichloroethane	< 0.005	0.005	PPMV		mm	3/8/02
1,1-Dichloroethane	< 0.010	0.010	PPMV		mm	3/8/02
1-Dichloroethene	< 0.010	0.010	PPMV		mm	3/8/02
1,2-Dichlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
1,2-Dichloroethane	< 0.010	0.010	PPMV		mm	3/8/02
1,2-Dichloropropane	< 0.010	0.010	PPMV		mm	3/8/02
1,3-Dichlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
1,4-Dichlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
Benzene	< 0.10	0.10	PPMV		mm	3/8/02
Bromodichloromethane	< 0.005	0.005	PPMV		mm	3/8/02
Bromoform	< 0.005	0.005	PPMV		mm	3/8/02
Bromomethane and Chloroethane	< 1.0	1.0	PPMV		mm	3/8/02
Carbon Tetrachloride	< 0.005	0.005	PPMV		mm	3/8/02
Chlorobenzene	< 0.070	0.070	PPMV		mm	3/8/02
Chlorodibromomethane	< 0.005	0.005	PPMV		mm	3/8/02
Chloroform	< 0.005	0.005	PPMV		mm	3/8/02
Chloromethane	< 1.0	1.0	PPMV		mm	3/8/02
cis-1,2-Dichloroethene	0.19	0.010	PPMV		mm	3/8/02
cis-1,3-Dichloropropene	< 0.010	0.010	PPMV		mm	3/8/02
Ethylbenzene	< 0.10	0.10	PPMV		mm	3/8/02
Methylene Chloride	< 2.0	2.0	PPMV		mm	3/8/02
Tetrachloroethene	< 0.005	0.005	PPMV		mm	3/8/02
Toluene	< 0.10	0.10	PPMV		mm	3/8/02
trans-1,2-Dichloroethene	< 0.010	0.010	PPMV		mm	3/8/02
trans-1,3-Dichloropropene	< 0.010	0.010	PPMV		mm	3/8/02
Trichloroethene	< 0.005	0.005	PPMV		mm	3/8/02
Trichlorofluoromethane	< 0.005	0.005	PPMV		mm	3/8/02
Vinyl Chloride	< 3.0	3.0	PPMV		mm	3/8/02



AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0203087

Work Order Summary

CLIENT:	Ms. Karen Albacker Law Engineering and Environmental Services, Inc. 1 Summit Square, Suite # 402 Route 413 and Doublewoods Rd. Langhorne, PA 19047 215-860-1963	BILL TO:	Mr. Mark Soliman Bluewater Environmental 1610 New Highway Farmingdale, NY 11735
PHONE:	215-860-1963	P.O. #	02370.01830
FAX:	215-860-5360	PROJECT #	02370.01830 Active
DATE RECEIVED:	3/5/02	CONTACT:	Betty Chu
DATE COMPLETED:	3/18/02		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>
01A	EFFLUENT	TO-14	3.5 "Hg
02A	Lab Blank	TO-14	NA
03A	LCS	TO-14	NA

CERTIFIED BY: _____

Linda J. Freeman

Laboratory Director

DATE: 03/18/02

Certification numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217, FL NELAP - E87680, LA - AI 30763
Name of Accrediting Agency: NELAP/State of New York Department of Health, Scope of Accreditation : Non Potable Water
Accreditation number : 11291, Effective date: 6/7/01, Expiration date: 4/1/02

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
TO-14
Bluewater Environmental
Workorder# 0203087

One 6 Liter Summa Canister sample was received on March 05, 2002. The laboratory performed analysis via EPA Method TO-14 using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

During the five point calibration, two low-level standards are used. The low-level standard for TO-14 compounds is spiked at 0.5 ppbv and represents the reporting limit for these compounds. The low-level standard for the non-TO-14 compounds is spiked at 2.0 ppbv and represents the reporting limit for these compounds. The TO-14 compounds are present in both standards but are excluded from reporting in the 2.0 ppbv standard since a lower level is already included in the curve.

Method modifications taken to run these samples include:

<i>Requirement</i>	<i>TO-14</i>	<i>ATL Modifications</i>
Internal standard retention times.	Not specified.	Within 0.50 minutes of most recent daily CCV internal standards
Internal standard recoveries.	Not specified.	Within 40% of the daily CCV internal standard area for blanks and samples.
Initial calibration criteria.	Not specified.	RSD of 30% or less for standard compounds, 40% or less for non-standard and polar compounds
Continuing calibration verification criteria	Not specified.	70 - 130% for at least 90% of standard compounds, 60 - 140% for at least 80% of non-standard and polar compounds

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit(background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

N - The identification is based on presumptive evidence.

AIR TOXICS LTD.

SAMPLE NAME: EFFLUENT

ID#: 0203087-01A

EPA METHOD TO-14 GC/MS FULL SCAN

Method: EPA 821-R-01-01	Sample ID: 0203087-01A	Analysis Date: 8/4/02
Lab: AIR TOXICS LTD.	Lab: 152	Lab: 0203087-01A
		Analysis Date: 8/8/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.76	3.8	Not Detected	Not Detected
Freon 114	0.76	5.4	Not Detected	Not Detected
Chloromethane	0.76	1.6	Not Detected	Not Detected
Vinyl Chloride	0.76	2.0	5.3	14
Bromomethane	0.76	3.0	Not Detected	Not Detected
Chloroethane	0.76	2.0	Not Detected	Not Detected
Freon 11	0.76	4.3	Not Detected	Not Detected
1,1-Dichloroethene	0.76	3.1	6.5	26
Freon 113	0.76	5.9	Not Detected	Not Detected
Methylene Chloride	0.76	2.7	1.4	4.9
1,1-Dichloroethane	0.76	3.1	21	87
cis-1,2-Dichloroethene	0.76	3.1	200	790
Chloroform	0.76	3.8	Not Detected	Not Detected
1,1,1-Trichloroethane	0.76	4.2	3.6	20
Carbon Tetrachloride	0.76	4.9	Not Detected	Not Detected
Benzene	0.76	2.5	Not Detected	Not Detected
1,2-Dichloroethane	0.76	3.1	Not Detected	Not Detected
Trichloroethene	0.76	4.2	Not Detected	Not Detected
1,2-Dichloropropane	0.76	3.6	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.76	3.5	Not Detected	Not Detected
Toluene	0.76	2.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.76	3.5	Not Detected	Not Detected
1,1,2-Trichloroethane	0.76	4.2	Not Detected	Not Detected
Tetrachloroethene	0.76	5.2	Not Detected	Not Detected
Ethylene Dibromide	0.76	5.9	Not Detected	Not Detected
Chlorobenzene	0.76	3.6	Not Detected	Not Detected
Ethyl Benzene	0.76	3.4	Not Detected	Not Detected
m,p-Xylene	0.76	3.4	Not Detected	Not Detected
o-Xylene	0.76	3.4	Not Detected	Not Detected
Styrene	0.76	3.3	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.76	5.3	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.76	3.8	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.76	3.8	Not Detected	Not Detected
1,3-Dichlorobenzene	0.76	4.6	Not Detected	Not Detected
1,4-Dichlorobenzene	0.76	4.6	Not Detected	Not Detected
Chlorotoluene	0.76	4.0	Not Detected	Not Detected
1,2-Dichlorobenzene	0.76	4.6	Not Detected	Not Detected
1,2,4-Trichlorobenzene	0.76	5.7	Not Detected	Not Detected
Hexachlorobutadiene	0.76	8.2	Not Detected	Not Detected
Propylene	3.0	5.3	Not Detected	Not Detected
1,3-Butadiene	3.0	6.8	Not Detected	Not Detected
Acetone	3.0	7.3	4.4	11

AIR TOXICS LTD.

SAMPLE NAME: EFFLUENT

ID#: 0203087-01A

EPA METHOD TO-14 GC/MS FULL SCAN

File Name: 0203087-01A	Date of Collection: 4/4/02
Client: EPA	Date of Analysis: 6/11/02

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Carbon Disulfide	3.0	9.6	Not Detected	Not Detected
2-Propanol	3.0	7.6	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.0	12	3.0 J	12 J
Vinyl Acetate	3.0	11	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.0	9.1	Not Detected	Not Detected
Hexane	3.0	11	Not Detected	Not Detected
Tetrahydrofuran	3.0	9.1	Not Detected	Not Detected
Cyclohexane	3.0	11	Not Detected	Not Detected
1,4-Dioxane	3.0	11	Not Detected	Not Detected
Bromodichloromethane	3.0	21	Not Detected	Not Detected
4-Methyl-2-pentanone	3.0	13	Not Detected	Not Detected
2-Hexanone	3.0	13	Not Detected	Not Detected
Dibromochloromethane	3.0	26	Not Detected	Not Detected
Bromoform	3.0	32	Not Detected	Not Detected
4-Ethyltoluene	3.0	15	Not Detected	Not Detected
Ethanol	3.0	5.8	Not Detected	Not Detected
Methyl tert-Butyl Ether	3.0	11	Not Detected	Not Detected
Heptane	3.0	13	Not Detected	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Page ____ of ____

Contact Person <u>MARCO SOLIMAN</u>						Project info: P.O. # <u>02370-01830</u> Project # <u>02370-01830</u> Project Name <u>ACTIVE</u>			Turn Around Time: ☒ Normal ☐ Rush _____ Specify _____		
Company <u>BUE WATER ENVIRONMENTAL</u>											
Address <u>112 NEW HIGHWAY</u> City <u>FARMINGDALE</u> State <u>NY</u> Zip <u>11735</u>											
Phone <u>(516) 247-1876 ext 216</u> FAX <u>(516) 752-3008</u>											
Collected By: Signature <u>[Signature]</u>									<u>AIR SAMPLE</u>		
Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested				Canister Pressure / Vacuum				
	EFLUENT	3-4-02 1:00 PM	TD-14				Initial	Final	Receipt		
Relinquished By: (Signature) Date/Time <u>[Signature]</u> 3-11-02						Notes:					
Received By: (Signature) Date/Time											
Relinquished By: (Signature) Date/Time											
Received By: (Signature) Date/Time											
Relinquished By: (Signature) Date/Time											
Received By: (Signature) Date/Time											
Lab Use Only	Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #				
						Yes No None					

Appendix B

Laboratory Analytical Results of
Process Water Samples
Active Industrial Uniform Site
67 West Montauk Highway
Lindenhurst, New York, NYSDEC
Contract No. D004134

Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale NY 11735

Phone - 631-249-1456 Fax - 631-249-8344

03/13/2002

Custody Document: N9159

Received: 03/04/2002 13:56

Sampled by: Des Corrigan

Client: Blue Waters (11260)

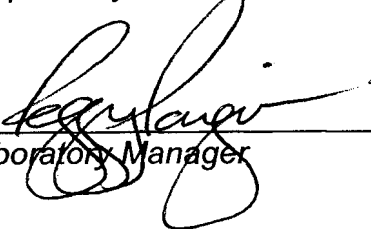
1610 New Highway
Farmingdale,
NY 11735

Project: Active Industrial

67 West Montauk Hwy
Lindenhurst,
NY

Manager: M. Soliman

Respectfully submitted,



Laboratory Manager

NYS Lab ID # 10969
NJ Cert. # 73812
CT Cert. # PH0645
MA Cert. # NY061
PA Cert. # 68-535
VA Cert. # 108
NH Cert. # 252592-BA
RI Cert. # 161



Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale NY 11735

Phone - 631-249-1456 Fax - 631-249-8344

03/13/2002

Volatiles - EPA 8260B

Sample: N9159-1

Client Sample ID: Influent

Matrix: Liquid

Remarks: See Case Narrative

Analyzed Date: 03/06/2002

Type: Grab

Collected: 03/03/2002

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
75-71-8	Dichlorodifluoromethane	C 443 -7764	0.24	0.24	ppb	U
75-45-6	Chlorodifluoromethane	C 443 -7764	0.21	0.21	ppb	U
74-87-3	Chloromethane	C 443 -7764	0.85	0.85	ppb	U
75-01-4	Vinyl Chloride	C 443 -7764	0.85	0.85	ppb	U
74-83-9	Bromomethane	C 443 -7764	0.65	0.65	ppb	U
75-00-3	Chloroethane	C 443 -7764	0.67	0.67	ppb	U
75-69-4	Trichlorofluoromethane	C 443 -7764	0.12	0.12	ppb	U
76-13-1	1,1,2-Trichlorotrifluoroethane	C 443 -7764	0.19	0.19	ppb	U
75-35-4	1,1-Dichloroethene	C 443 -7764	0.22	0.22	ppb	U
67-64-1	Acetone	C 443 -7764	2.30	2.30	ppb	U
75-15-0	Carbon disulfide	C 443 -7764	0.33	0.33	ppb	U
75-09-2	Methylene Chloride	C 443 -7764	0.37	0.37	ppb	U
156-60-5	t-1,2-Dichloroethene	C 443 -7764	0.28	0.28	ppb	U
1634-04-4	Methyl t-butyl ether	C 443 -7764	0.18	3.00	ppb	
75-34-3	1,1-Dichloroethane	C 443 -7764	0.25	2.20	ppb	
590-20-7	2,2-Dichloropropane	C 443 -7764	0.30	0.30	ppb	U
156-59-2	c-1,2-Dichloroethene	C 445 -7809	0.90	142	ppb	
78-93-3	2-Butanone	C 443 -7764	17.2	17.2	ppb	U
74-97-5	Bromochloromethane	C 443 -7764	0.15	0.15	ppb	U
67-66-3	Chloroform	C 443 -7764	0.22	0.22	ppb	U
71-55-6	1,1,1-Trichloroethane	C 443 -7764	0.14	3.40	ppb	
56-23-5	Carbon Tetrachloride	C 443 -7764	0.10	0.10	ppb	U
563-58-6	1,1-Dichloropropene	C 443 -7764	0.18	0.18	ppb	U
71-43-2	Benzene	C 443 -7764	0.17	0.17	ppb	U
107-06-2	1,2-Dichloroethane	C 443 -7764	0.16	0.16	ppb	U
79-01-6	Trichloroethene	C 443 -7764	0.17	62.0	ppb	
78-87-5	1,2-Dichloropropane	C 443 -7764	0.14	0.14	ppb	U
74-95-3	Dibromomethane	C 443 -7764	0.16	0.16	ppb	U
75-27-4	Bromodichloromethane	C 443 -7764	0.16	0.16	ppb	U
110-75-8	2-Chloroethylvinylether	C 443 -7764	0.29	0.29	ppb	U
10061-01-5	c-1,3-Dichloropropene	C 443 -7764	0.22	0.22	ppb	U
108-10-1	4-Methyl-2-pentanone	C 443 -7764	9.00	9.00	ppb	U
108-88-3	Toluene	C 443 -7764	0.14	0.14	ppb	U
10061-02-6	t-1,3-Dichloropropene	C 443 -7764	0.14	0.14	ppb	U
79-00-5	1,1,2-Trichloroethane	C 443 -7764	0.19	0.19	ppb	U
127-18-4	Tetrachloroethene	C 445 -7809	0.60	158	ppb	



Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale NY 11735

Phone - 631-249-1456 Fax - 631-249-8344

03/13/2002

Volatiles - EPA 8260B

Sample: N9159-1...continue

Client Sample ID: Influent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks: See Case Narrative

Analyzed Date: 03/06/2002

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
142-28-9	1,3-Dichloropropane	C 443 -7764	0.12	0.12	ppb	U
591-78-6	2-Hexanone	C 443 -7764	5.00	5.00	ppb	U
124-48-1	Dibromochloromethane	C 443 -7764	0.17	0.17	ppb	U
106-93-4	1,2-Dibromoethane	C 443 -7764	0.19	0.19	ppb	U
108-90-7	Chlorobenzene	C 443 -7764	0.19	0.19	ppb	U
630-20-6	1,1,1,2-Tetrachloroethane	C 443 -7764	0.15	0.15	ppb	U
100-41-4	Ethylbenzene	C 443 -7764	0.16	0.16	ppb	U
108-38-3	m,p-xylene	C 443 -7764	0.21	0.21	ppb	U
95-47-6	o-xylene	C 443 -7764	0.16	0.16	ppb	U
100-42-5	Styrene	C 443 -7764	0.13	0.13	ppb	U
75-25-2	Bromoform	C 443 -7764	0.27	0.27	ppb	U
98-82-8	Isopropylbenzene	C 443 -7764	0.10	0.10	ppb	U
108-86-1	Bromobenzene	C 443 -7764	0.21	0.21	ppb	U
79-34-5	1,1,2,2-Tetrachloroethane	C 443 -7764	0.15	0.15	ppb	U
103-65-1	n-Propylbenzene	C 443 -7764	0.14	0.14	ppb	U
96-18-4	1,2,3-Trichloropropane	C 443 -7764	0.24	0.24	ppb	U
622-96-8	p-Ethyltoluene	C 443 -7764	0.24	0.24	ppb	U
108-67-8	1,3,5-Trimethylbenzene	C 443 -7764	0.12	0.12	ppb	U
95-49-8	2-Chlorotoluene	C 443 -7764	0.21	0.21	ppb	U
106-43-4	4-Chlorotoluene	C 443 -7764	0.16	0.16	ppb	U
98-06-6	tert-Butylbenzene	C 443 -7764	0.13	0.13	ppb	U
95-63-6	1,2,4-Trimethylbenzene	C 443 -7764	0.13	0.13	ppb	U
135-98-8	sec-Butylbenzene	C 443 -7764	0.080	0.080	ppb	U
99-87-6	4-Isopropyltoluene	C 443 -7764	0.10	0.10	ppb	U
541-73-1	1,3-Dichlorobenzene	C 443 -7764	0.15	0.15	ppb	U
106-46-7	1,4-Dichlorobenzene	C 443 -7764	0.15	0.15	ppb	U
95-50-1	1,2-Dichlorobenzene	C 443 -7764	0.14	0.14	ppb	U
105-05-5	p-Diethylbenzene	C 443 -7764	0.27	0.27	ppb	U
104-51-8	n-Butylbenzene	C 443 -7764	0.14	0.14	ppb	U
95-93-2	1,2,4,5-Tetramethylbenzene	C 443 -7764	0.27	0.27	ppb	U
96-12-8	1,2-Dibromo-3-chloropropane	C 443 -7764	0.50	0.50	ppb	U
120-82-1	1,2,4-Trichlorobenzene	C 443 -7764	0.25	0.25	ppb	U
87-68-3	Hexachlorobutadiene	C 443 -7764	0.24	0.24	ppb	U
91-20-3	Naphthalene	C 443 -7764	0.27	0.27	ppb	U
87-61-6	1,2,3-Trichlorobenzene	C 443 -7764	0.38	0.38	ppb	U



Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale NY 11735

Phone - 631-249-1456 Fax - 631-249-8344

03/13/2002

Volatiles - EPA 8260B

Sample: N9159-1...continue

Client Sample ID: Influent

Matrix: Liquid

Remarks: See Case Narrative

Analyzed Date: 03/06/2002

Type: Grab

Collected: 03/03/2002

Gas No.	Surrogate	File ID	% Recovery	QC Limits	Q
460-00-4	4-BROMOFLUOROBENZENE	C443-7764	98.4 %	(76 - 118)	
2037-26-5	TOLUENE-D8	C443-7764	99.9 %	(90 - 111)	
4774-33-8	DIBROMOFLUOROMETHANE	C443-7764	98.0 %	(83 - 113)	
460-00-4	4-BROMOFLUOROBENZENE	C445-7809	99.0 %	(76 - 118)	
2037-26-5	TOLUENE-D8	C445-7809	99.8 %	(90 - 111)	
4774-33-8	DIBROMOFLUOROMETHANE	C445-7809	98.8 %	(83 - 113)	



Environmental Testing Laboratories, Inc.

208 Route 109, Farmingdale NY 11735

Phone - 631-249-1456 Fax - 631-249-8344

03/13/2002

Volatiles - EPA 8260B

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks: See Case Narrative

Analyzed Date: 03/06/2002

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
75-71-8	Dichlorodifluoromethane	C 443 -7765	0.24	0.24	ppb	U
75-45-6	Chlorodifluoromethane	C 443 -7765	0.21	0.21	ppb	U
74-87-3	Chloromethane	C 443 -7765	0.85	0.85	ppb	U
75-01-4	Vinyl Chloride	C 443 -7765	0.85	0.85	ppb	U
74-83-9	Bromomethane	C 443 -7765	0.65	0.65	ppb	U
75-00-3	Chloroethane	C 443 -7765	0.67	0.67	ppb	U
75-69-4	Trichlorofluoromethane	C 443 -7765	0.12	0.12	ppb	U
76-13-1	1,1,2-Trichlorotrifluoroethane	C 443 -7765	0.19	0.19	ppb	U
75-35-4	1,1-Dichloroethene	C 443 -7765	0.22	0.22	ppb	U
67-64-1	Acetone	C 443 -7765	2.30	2.30	ppb	U
75-15-0	Carbon disulfide	C 443 -7765	0.33	0.33	ppb	U
75-09-2	Methylene Chloride	C 443 -7765	0.37	0.37	ppb	U
156-60-5	t-1,2-Dichloroethene	C 443 -7765	0.28	0.28	ppb	U
1634-04-4	Methyl t-butyl ether	C 443 -7765	0.18	0.18	ppb	U
75-34-3	1,1-Dichloroethane	C 443 -7765	0.25	0.25	ppb	U
590-20-7	2,2-Dichloropropane	C 443 -7765	0.30	0.30	ppb	U
156-59-2	c-1,2-Dichloroethene	C 443 -7765	0.18	1.10	ppb	
78-93-3	2-Butanone	C 443 -7765	17.2	17.2	ppb	U
74-97-5	Bromochloromethane	C 443 -7765	0.15	0.15	ppb	U
67-66-3	Chloroform	C 443 -7765	0.22	0.22	ppb	U
71-55-6	1,1,1-Trichloroethane	C 443 -7765	0.14	0.14	ppb	U
56-23-5	Carbon Tetrachloride	C 443 -7765	0.10	0.10	ppb	U
563-58-6	1,1-Dichloropropene	C 443 -7765	0.18	0.18	ppb	U
71-43-2	Benzene	C 443 -7765	0.17	0.17	ppb	U
107-06-2	1,2-Dichloroethane	C 443 -7765	0.16	0.16	ppb	U
79-01-6	Trichloroethene	C 443 -7765	0.17	0.17	ppb	U
78-87-5	1,2-Dichloropropane	C 443 -7765	0.14	0.14	ppb	U
74-95-3	Dibromomethane	C 443 -7765	0.16	0.16	ppb	U
75-27-4	Bromodichloromethane	C 443 -7765	0.16	0.16	ppb	U
110-75-8	2-Chloroethylvinylether	C 443 -7765	0.29	0.29	ppb	U
10061-01-5	c-1,3-Dichloropropene	C 443 -7765	0.22	0.22	ppb	U
108-10-1	4-Methyl-2-pentanone	C 443 -7765	9.00	9.00	ppb	U
108-88-3	Toluene	C 443 -7765	0.14	0.14	ppb	U
10061-02-6	t-1,3-Dichloropropene	C 443 -7765	0.14	0.14	ppb	U
79-00-5	1,1,2-Trichloroethane	C 443 -7765	0.19	0.19	ppb	U
127-18-4	Tetrachloroethene	C 443 -7765	0.12	0.12	ppb	U



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03/13/2002

Volatiles - EPA 8260B

Sample: N9159-2...continue

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks: See Case Narrative

Analyzed Date: 03/06/2002

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
142-28-9	1,3-Dichloropropane	C 443 -7765	0.12	0.12	ppb	U
591-78-6	2-Hexanone	C 443 -7765	5.00	5.00	ppb	U
124-48-1	Dibromochloromethane	C 443 -7765	0.17	0.17	ppb	U
106-93-4	1,2-Dibromoethane	C 443 -7765	0.19	0.19	ppb	U
108-90-7	Chlorobenzene	C 443 -7765	0.19	0.19	ppb	U
630-20-6	1,1,1,2-Tetrachloroethane	C 443 -7765	0.15	0.15	ppb	U
100-41-4	Ethylbenzene	C 443 -7765	0.16	0.16	ppb	U
108-38-3	m,p-xylene	C 443 -7765	0.21	0.21	ppb	U
95-47-6	o-xylene	C 443 -7765	0.16	0.16	ppb	U
100-42-5	Styrene	C 443 -7765	0.13	0.13	ppb	U
75-25-2	Bromoform	C 443 -7765	0.27	0.27	ppb	U
98-82-8	Isopropylbenzene	C 443 -7765	0.10	0.10	ppb	U
108-86-1	Bromobenzene	C 443 -7765	0.21	0.21	ppb	U
79-34-5	1,1,2,2-Tetrachloroethane	C 443 -7765	0.15	0.15	ppb	U
103-65-1	n-Propylbenzene	C 443 -7765	0.14	0.14	ppb	U
96-18-4	1,2,3-Trichloropropane	C 443 -7765	0.24	0.24	ppb	U
622-96-8	p-Ethyltoluene	C 443 -7765	0.24	0.24	ppb	U
108-67-8	1,3,5-Trimethylbenzene	C 443 -7765	0.12	0.12	ppb	U
95-49-8	2-Chlorotoluene	C 443 -7765	0.21	0.21	ppb	U
106-43-4	4-Chlorotoluene	C 443 -7765	0.16	0.16	ppb	U
98-06-6	tert-Butylbenzene	C 443 -7765	0.13	0.13	ppb	U
95-63-6	1,2,4-Trimethylbenzene	C 443 -7765	0.13	0.13	ppb	U
135-98-8	sec-Butylbenzene	C 443 -7765	0.080	0.080	ppb	U
99-87-6	4-Isopropyltoluene	C 443 -7765	0.10	0.10	ppb	U
541-73-1	1,3-Dichlorobenzene	C 443 -7765	0.15	0.15	ppb	U
106-46-7	1,4-Dichlorobenzene	C 443 -7765	0.15	0.15	ppb	U
95-50-1	1,2-Dichlorobenzene	C 443 -7765	0.14	0.14	ppb	U
105-05-5	p-Diethylbenzene	C 443 -7765	0.27	0.27	ppb	U
104-51-8	n-Butylbenzene	C 443 -7765	0.14	0.14	ppb	U
95-93-2	1,2,4,5-Tetramethylbenzene	C 443 -7765	0.27	0.27	ppb	U
96-12-8	1,2-Dibromo-3-chloropropane	C 443 -7765	0.50	0.50	ppb	U
120-82-1	1,2,4-Trichlorobenzene	C 443 -7765	0.25	0.25	ppb	U
87-68-3	Hexachlorobutadiene	C 443 -7765	0.24	0.24	ppb	U
91-20-3	Naphthalene	C 443 -7765	0.27	0.27	ppb	U
87-61-6	1,2,3-Trichlorobenzene	C 443 -7765	0.38	0.38	ppb	U



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03/13/2002

Volatiles - EPA 8260B

Sample: N9159-2...continue

Client Sample ID: Effluent

Matrix: Liquid

Remarks: See Case Narrative

Analyzed Date: 03/06/2002

Type: Grab

Collected: 03/03/2002

Gas No	Surrogate	File ID	% Recovery	QC Limits	Q
460-00-4	4-BROMOFLUOROBENZENE	C443-7765	99.4 %	(76 - 118)	
2087-26-5	TOLUENE-D8	C443-7765	99.8 %	(90 - 111)	
4774-33-8	DIBROMOFLUOROMETHANE	C443-7765	97.8 %	(83 - 113)	



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03/13/2002

Mercury, Total

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/06/2002

Cas No	Analyte	MDL	Concentration	Units	Q
7439-97-6	Mercury	0.000050	0.000050	ppm	U



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03/13/2002

TAL Metals by EPA7000 Series

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/06/2002

Cas No	Analyte	MDL	Concentration	Units	Q
7429-90-5	Aluminum	0.086	0.086	ppm	U
7440-36-0	Antimony	0.0036	0.0084	ppm	
7440-38-2	Arsenic	0.0048	0.0048	ppm	U
7440-39-3	Barium	0.0012	0.039	ppm	
7440-41-7	Beryllium	0.0012	0.0012	ppm	U
7440-43-9	Cadmium	0.0012	0.0012	ppm	U
7440-70-2	Calcium	0.13	96.1	ppm	
7440-47-3	Chromium	0.0022	0.012	ppm	
7440-48-4	Cobalt	0.0012	0.0012	ppm	U
7440-50-8	Copper	0.0022	0.0022	ppm	U
7439-89-6	Iron	0.096	0.11	ppm	
7439-92-1	Lead	0.0022	0.0022	ppm	U
7439-95-4	Magnesium	0.090	130	ppm	
7439-96-5	Manganese	0.0012	2.53	ppm	
7440-02-0	Nickel	0.0017	0.0017	ppm	U
7440-09-7	Potassium	1.18	37.8	ppm	
7782-49-2	Selenium	0.0047	0.0063	ppm	
7440-22-4	Silver	0.0015	0.0017	ppm	
7440-23-5	Sodium	0.094	0.094	ppm	U
7440-28-0	Thallium	0.0039	0.0039	ppm	U
7440-62-2	Vanadium	0.0028	0.0028	ppm	U
7440-66-6	Zinc	0.0036	0.035	ppm	



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03/13/2002

Alkalinity - EPA 310.1

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/12/2002

Cas No	Analyte	MDL	Result	Units	Q
	Alkalinity as CaCO3	0.28	56.0	ppm	



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03/13/2002

Chlorine Demand

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/05/2002

Cas No	Analyte	MDL	Result	Units	Q
	Chlorine Demand	NA	70.9	ppm	
	pH	NA	7.04		
	Temperature	NA	23.0	C	



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03/13/2002

Chemical Oxygen Demand (COD) - EPA 410.4

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/11/2002

Cas No	Analyte	MDL	Result	Units	Q
	COD	4.80	41.0	ppm	



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03/13/2002

Total Dissolved Solids - 2540C

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/07/2002

Cas No	Analyte	MDL	Result	Units	Q
	Total Dissolved Solids	9.92	3590	mg/l	



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03/13/2002

Total Suspended Solids - 2540D

Sample: N9159-2

Client Sample ID: Effluent

Collected: 03/03/2002

Matrix: Liquid

Type: Grab

Remarks:

Analyzed Date: 03/06/2002

Cas No	Analyte	MDL	Result	Units	Q
	Total Suspended Solids	4.58	31.0	mg/L	



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03/13/2002

Case Narrative

EPA 8260

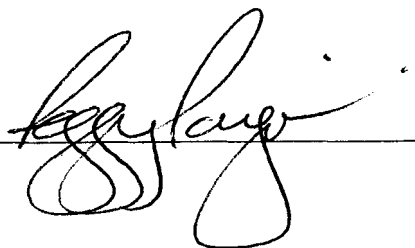
The following compounds were calibrated at 25, 50, 100, 150 and 200 ppb levels in the initial calibration curve:

Acetone
2-Butanone
4-Methyl-2-pentanone
2-Hexanone

M&P-Xylenes and 2-Chloro ethyl vinyl ether were calibrated at 10, 40, 100, 200 and 300 ppb levels.

All other compounds were calibrated at 5, 20, 50, 100 and 150 ppb levels.

Reviewed by: _____

A handwritten signature in black ink, appearing to read "K. J. Lauer", is written over a horizontal line.

Environmental Testing Laboratories, Inc.

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03/13/2002

ORGANIC METHOD QUALIFIERS

Q - Qualifier - specified entries and their meanings are as follows:

- U - The analytical result is a non-detect.
- J - Indicates an estimated value. The concentration reported was detected below the Method Detection Limit.
- B - The analyte was found in the associated method blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- E - The concentration of the analyte exceeded the calibration range of the instrument.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution. In the case of a surrogate this flag indicates a system monitoring compound diluted out.

INORGANIC METHOD QUALIFIERS

C - (Concentration) qualifiers are as follows:

- B - Entered if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).

U - Entered when the analyte was analyzed for, but not detected.

Q - Qualifier specific entries and their meanings are as follows:

- E - Reported value is estimated because of the presence of interferences.

M - (Method) qualifiers are as follows:

- A - Flame AA
- AS - Semi-automated Spectrophotometric
- AV - Automated Cold Vapor AA
- C - Manual Spectrophotometric
- F - Furnace AA
- P - ICP
- T - Titrimetric

OTHER QUALIFIERS

- NR - Not Required
- ND - Not Detected
- NA - Not Applicable
- * - Outside Expected Range (NYCDEP Table I/II or Surrogate Limits)

OTHER

- All soil and sediment samples are reported on a dry weight basis.



ETL

Environmental Testing Laboratories, Inc.

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CHAIN OF CUSTODY DOCUMENT

N 09159

Project Name: <u>ACTIVE</u>		Project Manager: <u>M. Sullivan</u>		Sampler (Signature): <u>[Signature]</u>		(Print): <u>D. S. Corcoran</u>			
Project Address: <u>67 W. MONTAUC HILL, LINDENHURST, NY</u>						601/602 BTX/BTEX MTBE 624/626/8021 625/8270/BN PCB/Pesticides Pet. Prods./8100M PCRA Metals (PML) PH/Flash/React 418.1 - TRPH TDS - 16.2 TSS - 16.2 COD - 110.1 CL - 110.1 ALK - 110.1			
Client: <u>Blue Water</u> J/N: <u>02370-01832</u>		☐ Rush by <u>1/1</u>							
SAMPLE INFO Type: SS = Split Spoon, G = Grab, C = Composite, B = Blank Matrix: L = Liquid, S = Soil, SL = Sludge, A* = Air, W = Wipe *Air - Vol. (Liters) include: Flow (CFM)									
ID	Date	Time	Type	Matrix	Sample Location			Total # Cont.	
1	3/3/02		G	L	Influent	2			
2	3/3/02		G	L	Effluent	5			
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
Relinquished by (Signature): <u>[Signature]</u>		Date	Printed Name & Agent: <u>B. V. C.</u>		Received by (Signature):		Date	Printed Name & Agent	
Relinquished by (Signature):		Time	Printed Name & Agent:		Received for Lab by (Signature): <u>[Signature]</u>		Date: <u>3-4-02</u>	Printed Name	
		Time					Time: <u>1:56</u>	<u>Corcoran</u>	
Comments & Special Instructions			QA/QC Type:		Number & Type of Containers:		Preservatives:		Temp:

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