

# Sampling and Analysis Report Lockport City Landfill

Site No. 932010  
City of Lockport

March 2009

Amherst, New York

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SAMPLING AND ANALYSIS REPORT  
LOCKPORT CITY LANDFILL  
SITE NO. 932010

Prepared for  
CITY OF LOCKPORT, NEW YORK

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March 2009  
Project No. 71136

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## **SECTION 1 - INTRODUCTION**

The Lockport City Landfill site is located on Oakhurst Street in the City of Lockport, Niagara County, New York. The landfill has been assigned the Site Registry Number 9-32-010 and is the subject of this report.

The Remedial Action Design as approved by the NYSDEC for the site; included a Long Term Monitoring Plan and Operation and Maintenance Plan. The purpose of the long term monitoring plan is to provide information to evaluate and monitor the long term effectiveness of the remedial work. The Operation and Maintenance Plan includes regular site inspections and analytical testing to identify any potential problems at the landfill that are not being adequately addressed by routine maintenance, and to document the current condition of the landfill. A site plan of the Lockport City Landfill is presented in Figure 1.

The Long Term Monitoring Program started in 1997; six (6) events were conducted in the first five (5) years (two events in 1997 and one event per year afterwards). This is the 2<sup>nd</sup> monitoring event of the Long Term Monitoring contract between Stearns & Wheler, LLC and the City of Lockport that monitoring through 2011. The purpose of this report is to present the findings of the 12<sup>th</sup> sampling event conducted at the Lockport City Landfill on October 6, 2008.

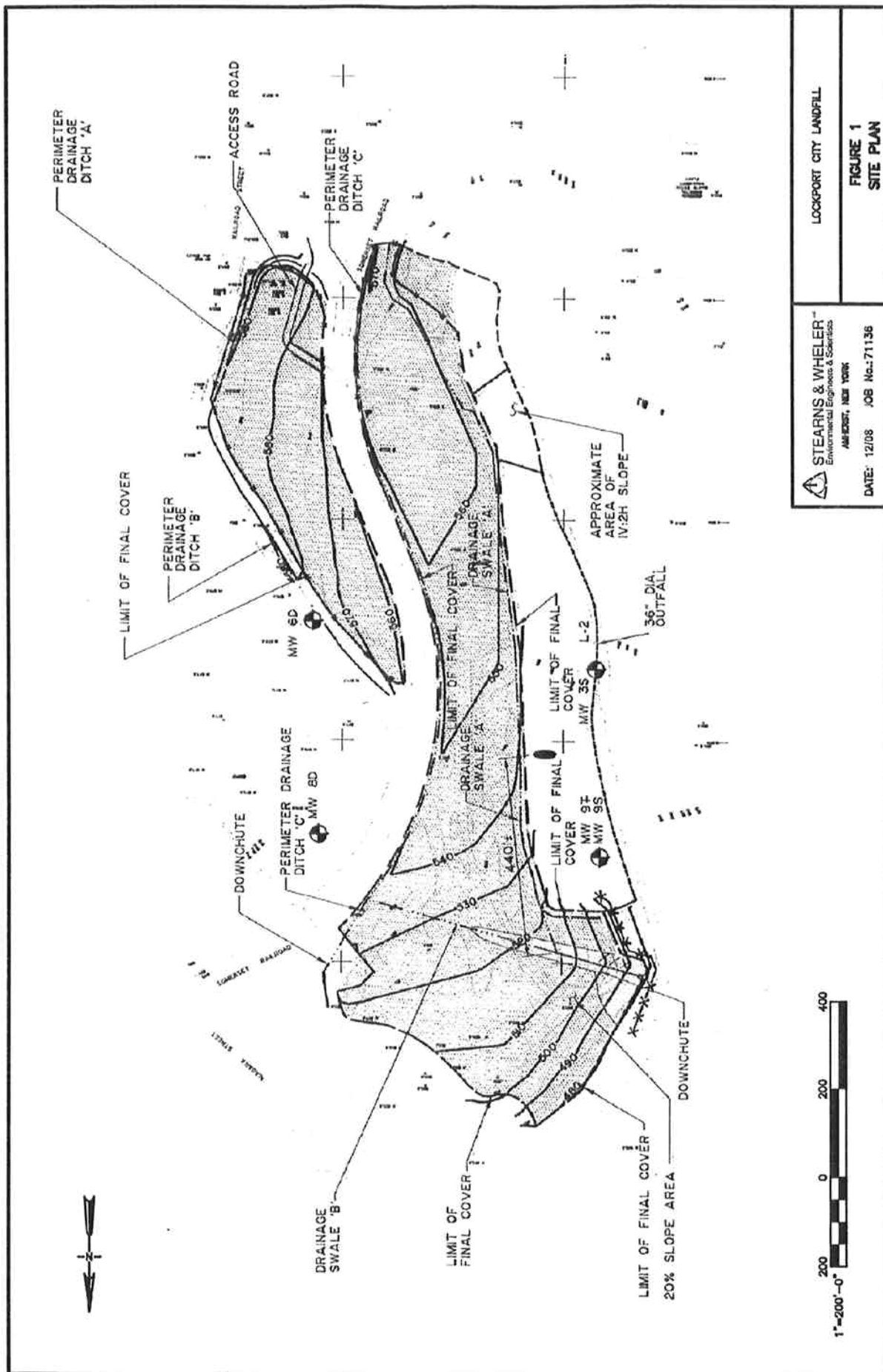
## **SECTION 2 - LONG TERM MONITORING**

In accordance with the NYSDEC approved Long Term Monitoring Plan, and included in the Operation and Maintenance Plan, five (5) groundwater wells, and one (1) outfall were sampled by Stearns & Wheler, LLC on October 6, 2008. Of the 6 sample monitoring points, a total of 5 samples were collected. Monitoring Well MW-6D was not sampled, due to lack of available groundwater present at the time of sampling. The samples were delivered to Upstate Laboratories Inc. of Syracuse, New York, and analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) CLP Statement of Work (SOW) OLM04.2.

Analytical data sheets (i.e. laboratory report Form I VOA) are provided in Appendix A and Groundwater Field Sampling Records are presented in Appendix B. Table 1 summarizes analytical testing data from groundwater samples collected from monitoring wells and the outfall for past 12 years. Groundwater sampling and analytical testing is presented for the monitoring

years of 1997 through 2008. The established action levels for monitoring wells MW-8D and 9I, and Outfall L2 are noted on Table 1.

Analytical results presented on Table 1 indicate that there were no exceedances detected above the reported action levels. Since exceedances did not occur, contingent sampling and analysis are not required. Therefore, the next sampling event will be scheduled for October 2009 representing year 13 of the Long Term Monitoring Program.




**STEARNS & WHEELER**  
 Environmental Engineers & Scientists  
 AMHERST, NEW YORK  
 DATE: 12/08 JOB No.: 71136

LOCKPORT CITY LANDFILL  
**FIGURE 1**  
**SITE PLAN**

# TABLES

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**TABLE I**  
Monitoring Well 3S  
Groundwater Analytical Results  
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Vinyl chloride	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	U	6 J	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	4 J	3 J
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	1 J	U	U	3 J
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Trichloroethene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U

**Notes:**

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

1,2-Dichloroethene (Total) is reported as the sum of the detected concentrations of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene



TABLE 1 (Cont'd)  
Monitoring Well 6D  
Groundwater Analytical Results  
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	16	-	-
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-
2-Butanone	µg/L	NS	U	U	U	U	U	U	U	U	U	U	1 J	-	-
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	2 J	-	-
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (Total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

- = not sampled

NS = no standard

Oct. 2007, Oct. 2008: MW-6D not sampled due to dry conditions, no groundwater available

1,2-Dichloroethene (Total) is reported as the sum of the detected concentrations of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene

TABLE 1 (Cont'd)  
Monitoring Well 8D  
Groundwater Analytical Results  
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Vinyl chloride	µg/L	162	U	U	U	U	U	7	33	6	4 J	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethene (total)	µg/L	1,580	100	90	110	18	25	41	120	7	28	27 J	40	32	34
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Trichloroethene	µg/L	260	2	4	5	2	2	2	U	U	U	U	1 J	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U

**Notes:**

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

1,2-Dichloroethene (Total) is reported as the sum of the detected concentrations of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene

**TABLE 1 (Cont'd)**  
Monitoring Well 9S  
Groundwater Analytical Results  
Lockport City Landfill

<b>Volatile Compounds</b>	<b>Units</b>	<b>Action Level</b>	<b>Jun-97</b>	<b>Nov-97</b>	<b>Sep-98</b>	<b>Sep-99</b>	<b>Sep-00</b>	<b>Sep-01</b>	<b>Oct-02</b>	<b>Dec-03</b>	<b>Oct-04</b>	<b>Oct-05</b>	<b>Oct-06</b>	<b>Oct-07</b>	<b>Oct-08</b>
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Vinyl chloride	µg/L	162	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethene (total)	µg/L	1,580	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Trichloroethene	µg/L	260	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U

**Notes:**

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

1,2-Dichloroethene (Total) is reported as the sum of the detected concentrations of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene

**TABLE 1 (Cont'd)**  
**Monitoring Well 91**  
**Groundwater Analytical Results**  
**Lockport City Landfill**

<b>Volatile Compounds</b>	<b>Units</b>	<b>Action Level</b>	<b>Jun-97</b>	<b>Nov-97</b>	<b>Sep-98</b>	<b>Sep-99</b>	<b>Sep-00</b>	<b>Sep-01</b>	<b>Oct-02</b>	<b>Dec-03</b>	<b>Oct-04</b>	<b>Oct-05</b>	<b>Oct-06</b>	<b>Oct-07</b>	<b>Oct-08</b>
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Vinyl chloride	µg/L	24	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethene (total)	µg/L	42	8.4	6	6	5	4 J	4 J	4 J	4 J	3 J	3 J	2 J	3 J	2 J
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Trichloroethene	µg/L	NS	1.6	2	2	1 J	1 J	1 J	1 J	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U

**Notes:**

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

trans-1,3-Dichloropropene

1,2-Dichloroethene (Total) is reported as the sum of the detected concentrations of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene

TABLE 1 (Cont'd)  
 Outfall L-2  
 Groundwater Analytical Results  
 Lockport City Landfill

Volatilic Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Vinyl chloride	µg/L	94	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethene (total)	µg/L	280	U	2	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Trichloroethene	µg/L	NS	U	3	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Chlorobenzene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U

**Notes:**

VOC analysis by USEPA CLP SOW OLM04.2

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

1,2-Dichloroethene (Total) is reported as the sum of the detected concentrations of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene

# APPENDICES

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**STEARNS & WHEELER<sup>LLC</sup>**  
Environmental Engineers and Scientists

# APPENDIX A

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**STEARNS & WHEELER<sup>uc</sup>**  
Environmental Engineers and Scientists

**STEARNS & WHEELER, LLC**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill DATE 10/06/08

Sampler: Brian Doyle SAMPLE ID MW-3S

Depth of well (from top of casing)..... 13.24 ft  
Initial static water level (from top of casing).... 3.5 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>          </u>	Centrifugal	<u>          </u>	2in. casing:	<u>9.7</u> ft. of water x .16 =	<u>1.56</u> gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	3in. casing:	<u>          </u> ft. of water x .36 =	<u>          </u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u>          </u>	4in. casing:	<u>          </u> ft. of water x .65 =	<u>          </u> gallons

Volume of water to be removed 4.7 gals. Removed 2.0 gals.

> 3 volumes:      yes      no

dry:      yes      no

Field Tests:

Temp:	<u>13.8</u> C
pH	<u>6.35</u>
Conductivity	<u>3.02</u> mS/cm
DO	<u>0.56</u> mg/l
Turbidity	<u>140</u> NTUs
Salinity	<u>0.10</u> %

Sampling: Time: 2:10 PM

Sampling Method:

Stainless Steel Bailer	<u>          </u>
Disposable Bailer	<u>X</u>
Disposable Pump	<u>          </u>
Other	<u>          </u>

Observations:

Weather/Temperature: Clear, 60°

Physical Appearance and Odor of Sample: No odor, reddish-brown color

Comments: Debris around monitoring well.  
Unable to fully purge well due to obstruction in well between the riser and the screen.  
Well pad is intact and the stickup protective cover is in good condition.



**STEARNS & WHELER, LLC**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/06/07

Sampler: Brian Doyle

SAMPLE ID MW-6D

Depth of well (from top of casing).....	78.7 ft
Initial static water level (from top of casing)....	76.8 ft

Initial static water level (from top of casing)....	76.8 ft
---	---------

Evacuation Method:

### Well Volume Calculation

Submersible	_____	Centrifugal	_____	2in. casing:	_____ 1.9 ft. of water x .16 =	_____ 0.30 gallons
Airlift	_____	Pos. Displ.	_____	3in. casing:	_____ ft. of water x .36 =	_____ gallons
Bailer	X	>>> No. of bails	_____	4in. casing:	_____ ft. of water x .65 =	_____ gallons

Volume of water to be removed 0.9 gals. Removed 0.0 gals.

> 3 volumes:                    yes                    no

dry:            yes            no

### Field Tests:

Temp:	_____	C
pH	_____	
Conductivity	_____	mS/cm
DO%	_____	%
DO	_____	mg/l
Turbidity	_____	NTUs
Oxidation Reduction Potential(ORP)	_____	mV
Salinity	_____	%

Sampling:

Time: 11:15 AM

Sampling Method:	Stainless Steel Bailer	<u>          </u>
	Disposable Bailer	<u>          X          </u>
	Disposable Pump	<u>          </u>
	Other	<u>          </u>

Observations:

Weather/Temperature: Clear, 55°

Physical Appearance and Odor of Sample: \_\_\_\_\_

Comments: Unable to test for water quality parameters and take samples due to a negligible amount of water in well.  
Well pad is intact and the stickup protective cover is in good condition.

**STEARNS & WHEELER, LLC**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill DATE 10/06/08

Sampler: Brian Doyle SAMPLE ID MW-8D

Depth of well (from top of casing)..... 76.67 ft  
Initial static water level (from top of casing).... 71.6 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>          </u>	Centrifugal	<u>          </u>	2in. casing:	<u>5</u>	ft. of water x .16 =	<u>0.80</u> gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	3in. casing:	<u>          </u>	ft. of water x .36 =	<u>          </u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u>          </u>	4in. casing:	<u>          </u>	ft. of water x .65 =	<u>          </u> gallons

Volume of water to be removed 2.4 gals. Removed 1.0 gals.

> 3 volumes:      yes      no

dry:                yes      no

Field Tests:

Temp:	<u>12.0 C</u>
pH	<u>7.04</u>
Conductivity	<u>2.78 mS/cm</u>
DO	<u>1.15 mg/l</u>
Turbidity	<u>145 NTUs</u>
Salinity	<u>0.10 %</u>

Sampling: Time: 10:30 AM

Sampling Method:

Stainless Steel Bailer	<u>          </u>
Disposable Bailer	<u>X</u>
Disposable Pump	<u>          </u>
Other	<u>          </u>

Observations:

Weather/Temperature: Clear, 55°

Physical Appearance and Odor of Sample: No odor, slight yellow color

Comments: Well purged dry after 1.0 gallon.  
Well pad is intact and the stickup protective cover is in good condition. Well casing painted yellow.

**STEARNS & WHELER, LLC**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/06/08

Sampler: Brian Doyle

SAMPLE ID MW-9S, FD

Depth of well (from top of casing)..... 12.36 ft  
Initial static water level (from top of casing).... 7.0 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>          </u>	Centrifugal	<u>          </u>	2in. casing:	<u>5.3</u> ft. of water x .16 =	<u>0.85</u> gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	3in. casing:	<u>          </u> ft. of water x .36 =	<u>          </u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u>          </u>	4in. casing:	<u>          </u> ft. of water x .65 =	<u>          </u> gallons

Volume of water to be removed	<u>2.5</u> gals.	Removed	<u>2.5</u> gals.
> 3 volumes:	<u>yes</u> <u>no</u>		
dry:	<u>yes</u> <u>no</u>		

Field Tests:	Temp:	<u>14.3</u> C
	pH	<u>6.67</u>
	Conductivity	<u>1.85</u> mS/cm
	DO	<u>0.95</u> mg/l
	Turbidity	<u>358</u> NTUs
	Salinity	<u>0.10</u> %

Sampling: Time: 12:45 PM

Sampling Method:   Stainless Steel Bailer             
                          Disposable Bailer X  
                          Disposable Pump             
                          Other           

Observations:

Weather/Temperature: Clear, 60°

Physical Appearance and Odor of Sample: Very turbid, brownish color, no odor.

Comments: Well pad is intact and the stickup protective cover is in good condition.  
yellow cover - insignificant piece used as landmark ID for well.

**STEARNS & WHELER, LLC**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill DATE 10/06/08

Sampler: Brian Doyle SAMPLE ID MW-9I, MS/MSD

Depth of well (from top of casing)..... 19.99 ft  
Initial static water level (from top of casing).... 6.0 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>          </u>	Centrifugal	<u>          </u>	2in. casing:	<u>14.0</u> ft. of water x .16 =	<u>2.24</u> gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	3in. casing:	<u>          </u> ft. of water x .36 =	<u>          </u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u>          </u>	4in. casing:	<u>          </u> ft. of water x .65 =	<u>          </u> gallons

Volume of water to be removed 6.7 gals. Removed 6.7 gals.

> 3 volumes:      yes      no

dry:      yes      no

Field Tests:

Temp:	<u>13.1</u> C
pH	<u>6.75</u>
Conductivity	<u>1.87</u> mS/cm
DO	<u>0.49</u> mg/l
Turbidity	<u>136</u> NTUs
Salinity	<u>0.10</u> %

Sampling: Time: 1:15 PM

Sampling Method:

Stainless Steel Bailer	<u>          </u>
Disposable Bailer	<u>X</u>
Disposable Pump	<u>          </u>
Other	<u>          </u>

Observations:

Weather/Temperature: Clear, 60°

Physical Appearance and Odor of Sample: Turbid, reddish brown, no odor, purge water contained sediment particles.

Comments: Well pad is intact and the stickup protective cover is in good condition.  
Smaller cover rusted, of no concern, metallic casing.

**STEARNS & WHELER, LLC**  
**SURFACE WATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/06/08

Samplers: Brian Doyle

SAMPLE ID Outfall L-2

Sampling Method:

Submersible GRAB Centrifugal           

Airlift            Pos. Displ.           

Bailer            >>> No. of bails           

Field Tests:	Temp:	<u>11.9</u> C
	pH	<u>6.61</u>
	Conductivity	<u>1.77</u> mS/cm
	DO	<u>2.05</u> mg/l
	Turbidity	<u>366</u> NTUs
	Salinity	<u>0.10</u> %

Sampling: Time: 2:40 PM

Sampling Method:	Stainless Steel Bailer	<u>          </u>
	Teflon Bailer	<u>          </u>
	Disposable Pump	<u>          </u>
	Other	<u>Grab</u>

Observations:

Weather/Temperature: Clear, 60°

Physical Appearance and Odor of Sample: No odor, light brown color, slightly turbid.

Comments: Iron bacteria present on outfall & rocks. Iron deposits fell into sampling bucket causing high turbidity.

# APPENDIX B

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**STEARNS & WHEELER<sup>LLC</sup>**  
Environmental Engineers and Scientists

# ***Upstate Laboratories, Inc.***

**Shipping: 6034 Corporate Dr. \* E. Syracuse, NY 13057-1017 \* (315) 437-0255 \* Fax (315) 437-1209**

**Mailing: Box 169 \* Syracuse, NY 13206**

Albany (518) 459-3134 \* Binghamton (607) 724-0478 \* Buffalo (716) 972-0371

Rochester (866) 437-0255 \* New Jersey (908) 247-4313

Mr. David Rowlinson  
Stearns & Wheeler, LLC  
415 N. French Rd.  
Amherst, NY 14228

Wednesday, October 15, 2008

RE: Analytical Report:  
Lockport City Landfill

Order No.: U0810138

Dear Mr. David Rowlinson:

Upstate Laboratories, Inc. received 6 sample(s) on 10/7/2008 for the analyses presented in the following report.

All analytical results relate to the samples as received by the laboratory.

All analytical data conforms with standard approved methodologies and quality control. Our quality control narrative will be included should any anomalies occur.

We have included the Chain of Custody Record as part of your report. You may need to reference this form for a more detailed explanation of your samples. Samples will be disposed of approximately one month from final report date.

Should you have any questions regarding these tests, please feel free to give us a call.

Thank you for your patronage.

Sincerely,

UPSTATE LABORATORIES, INC.

Anthony J. Scala  
President/CEO

Confidentiality Statement: This report is meant for the use of the intended recipient. It may contain confidential information, which is legally privileged or otherwise protected by law. If you have received this report in error, you are strictly prohibited from reviewing, using, disseminating, distributing or copying the information.

# Upstate Laboratories, Inc.

## Analytical Report

Date: 15-Oct-08

CLIENT: Stearns & Wheeler, LLC  
Lab Order: U0810138  
Project: Lockport City Landfill  
Lab ID: U0810138-001

Client Sample ID: MW-8D  
Collection Date: 10/6/2008 10:30:00 AM  
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER			SW8260B		Analyst: LEF	
Chloromethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Vinyl chloride	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Bromomethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Chloroethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Acetone	ND	10		µg/L	1	10/14/2008 10:24:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
2-Butanone	ND	10		µg/L	1	10/14/2008 10:24:00 PM
cis-1,2-Dichloroethene	34	5.0		µg/L	1	10/14/2008 10:24:00 PM
Chloroform	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Benzene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Trichloroethene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/14/2008 10:24:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Toluene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
2-Hexanone	ND	10		µg/L	1	10/14/2008 10:24:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
o-Xylene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Styrene	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
Bromoform	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/14/2008 10:24:00 PM

### NOTES:

TICS: No compounds were detected.

Approved By: PMH

Date: 10-15-08

Page 1 of 6

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits



# Upstate Laboratories, Inc.

## Analytical Report

Date: 15-Oct-08

CLIENT: Stearns & Wheeler, LLC  
Lab Order: U0810138  
Project: Lockport City Landfill  
Lab ID: U0810138-002

Client Sample ID: MW-9S  
Collection Date: 10/6/2008 12:45:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER			SW8260B		Analyst: LEF	
Chloromethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Vinyl chloride	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Bromomethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Chloroethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Acetone	ND	10		µg/L	1	10/14/2008 11:02:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
2-Butanone	ND	10		µg/L	1	10/14/2008 11:02:00 PM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Chloroform	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Benzene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Trichloroethene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/14/2008 11:02:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Toluene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
2-Hexanone	ND	10		µg/L	1	10/14/2008 11:02:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
o-Xylene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Styrene	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
Bromoform	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/14/2008 11:02:00 PM

### NOTES:

TICS: No compounds were detected.

Approved By: PMH

Date: 10-15-08

Page 2 of 6

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 15-Oct-08

CLIENT: Stearns & Wheler, LLC  
Lab Order: U0810138  
Project: Lockport City Landfill  
Lab ID: U0810138-003

Client Sample ID: MW-9I (MS/MSD)  
Collection Date: 10/6/2008 1:15:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER				SW8260B	Analyst: LEF	
Chloromethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Vinyl chloride	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Bromomethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Chloroethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Acetone	ND	10		µg/L	1	10/14/2008 11:42:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
2-Butanone	ND	10		µg/L	1	10/14/2008 11:42:00 PM
cis-1,2-Dichloroethene	2	5.0	J	µg/L	1	10/14/2008 11:42:00 PM
Chloroform	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Benzene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Trichloroethene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/14/2008 11:42:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Toluene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
2-Hexanone	ND	10		µg/L	1	10/14/2008 11:42:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
o-Xylene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Styrene	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
Bromoform	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/14/2008 11:42:00 PM

### NOTES:

TICS: No compounds were detected.

Approved By: PMH

Date: 10-15-08

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 15-Oct-08

CLIENT: Stearns & Wheler, LLC  
Lab Order: U0810138  
Project: Lockport City Landfill  
Lab ID: U0810138-004

Client Sample ID: MW-3S  
Collection Date: 10/6/2008 2:10:00 PM  
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER				SW8260B	Analyst: LEF	
Chloromethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Vinyl chloride	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Bromomethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Chloroethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Acetone	ND	10		µg/L	1	10/15/2008 1:41:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Carbon disulfide	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Methylene chloride	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
1,1-Dichloroethane	3	5.0	J	µg/L	1	10/15/2008 1:41:00 AM
2-Butanone	ND	10		µg/L	1	10/15/2008 1:41:00 AM
cis-1,2-Dichloroethene	3	5.0	J	µg/L	1	10/15/2008 1:41:00 AM
Chloroform	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Benzene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Trichloroethene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/15/2008 1:41:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Toluene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
2-Hexanone	ND	10		µg/L	1	10/15/2008 1:41:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Chlorobenzene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Ethylbenzene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
m,p-Xylene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
o-Xylene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Styrene	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
Bromoform	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/15/2008 1:41:00 AM

### NOTES:

TICS: No compounds were detected.

Approved By: PH

Date: 10-15-08

Page 4 of 6

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 15-Oct-08

CLIENT: Stearns & Wheler, LLC  
Lab Order: U0810138  
Project: Lockport City Landfill  
Lab ID: U0810138-005

Client Sample ID: Outfall L-2  
Collection Date: 10/6/2008 2:40:00 PM

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER				SW8260B	Analyst: LEF	
Chloromethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Vinyl chloride	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Bromomethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Chloroethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Acetone	ND	10		µg/L	1	10/15/2008 2:21:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Carbon disulfide	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Methylene chloride	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
2-Butanone	ND	10		µg/L	1	10/15/2008 2:21:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Chloroform	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Benzene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Trichloroethene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/15/2008 2:21:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Toluene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
2-Hexanone	ND	10		µg/L	1	10/15/2008 2:21:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Chlorobenzene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Ethylbenzene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
m,p-Xylene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
o-Xylene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Styrene	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
Bromoform	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/15/2008 2:21:00 AM

### NOTES:

TICS: No compounds were detected.

Approved By: PMH

Date: 10-15-08

Page 5 of 6

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 15-Oct-08

CLIENT: Stearns & Wheler, LLC  
Lab Order: U0810138  
Project: Lockport City Landfill  
Lab ID: U0810138-006

Client Sample ID: Trip Blank  
Collection Date: 10/6/2008

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILE WATER			SW8260B		Analyst: LEF	
Chloromethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Vinyl chloride	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Bromomethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Chloroethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Acetone	ND	10		µg/L	1	10/15/2008 3:01:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Carbon disulfide	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Methylene chloride	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
2-Butanone	ND	10		µg/L	1	10/15/2008 3:01:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Chloroform	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Benzene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Trichloroethene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/15/2008 3:01:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Toluene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
2-Hexanone	ND	10		µg/L	1	10/15/2008 3:01:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Chlorobenzene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Ethylbenzene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
m,p-Xylene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
o-Xylene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Styrene	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
Bromoform	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/15/2008 3:01:00 AM

### NOTES:

TICS: No compounds were detected.

Approved By: PMH

Date: 10-15-08

Page 6 of 6

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Chart of Custody Record

Fax 437 1209

**Fair Lawn (NJ)**