



# Sampling and Analysis Report

**Lockport City Landfill  
Site No. 932010**

**City of Lockport  
Lockport, New York**

**December 2014**

SAMPLING AND ANALYSIS REPORT

LOCKPORT CITY LANDFILL

FOR

OCTOBER 15, 2014  
(YEAR - 18)

LOCKPORT CITY LANDFILL  
NYSDEC SITE NO. 9-32-010

Prepared for:

CITY OF LOCKPORT, NEW YORK  
DEPARTMENT OF PUBLIC WORKS

Prepared by:

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DECEMBER 2014

PROJECT NO. 8612191

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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, assigned the Site Registry Number 9-32-010, 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 on 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 dated July 25, 2012 between GHD Consulting Services, Inc. and the City of Lockport. The purpose of this report is to present the findings of the 18<sup>th</sup> sampling event conducted at the Lockport City Landfill on October 15, 2014.

## 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 GHD Consulting Services, Inc. on October 15, 2014. Of the six (6) sample monitoring points, a total of six (6) samples were collected. Monitoring Well MW-6D was sampled. Historically, monitoring well MW-6D could not be sampled due to lack of available groundwater present at the time of sampling. In 2014, groundwater parameters were not obtained due to the insufficient amount of groundwater available.

The samples were delivered to ESC Lab Sciences, 12065 Lebanon Road, Mt. Juliet, Tennessee 37122, 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 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 17 years. Groundwater sampling and analytical

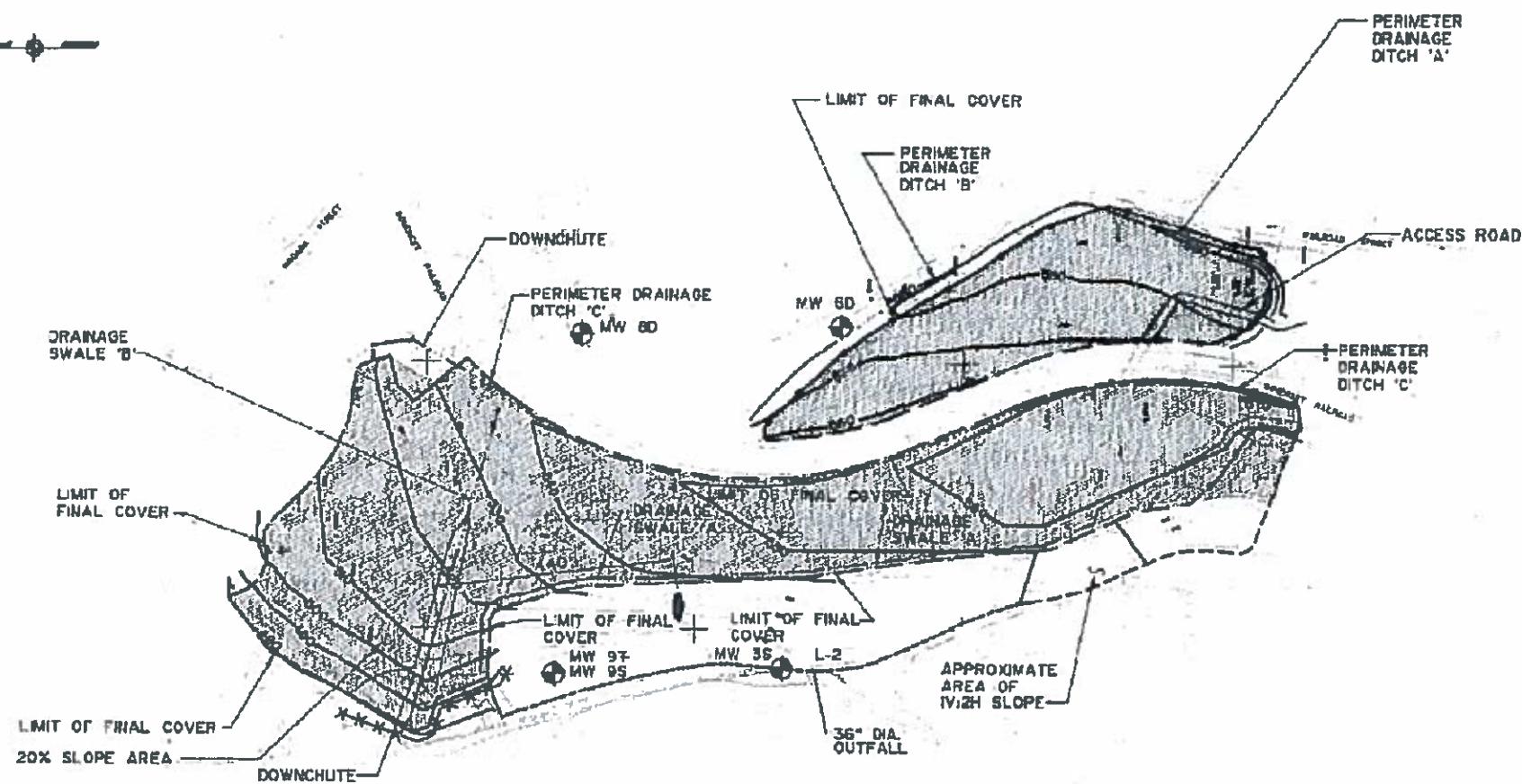


testing is presented for the monitoring years of 1997 through 2014. The established action levels for Monitoring Wells MW-8D and MW-9I, and Outfall L2 are noted on Table 1. Analytical test results presented on Table 1 indicate that there were no exceedances detected above the reported action levels. Since exceedances did not occur, contingent sampling and analysis are not required. The next sampling event will be scheduled for October 2015 representing year 19 of the Long Term Monitoring Program.

The volatile organic analytical test results detected concentrations of cis-1,2-dichloroethene in groundwater sampled from Monitoring Wells MW-8D and MW-9S. In past reporting, 1,2-dichloroethene (total) was reported in years (1997-2012) as the sum of the detected concentrations of cis-1,2-dichloroethene and trans-1,2-dichloroethene. Reporting in 2007 was the first year GHD conducted sampling and reporting. At that time and to be consistent with past reporting, 1,2-dichloroethene (total) was reported as the sum of the detected concentrations of cis-1,2-dichloroethene and trans-1,2-dichloroethene. For purposes of presenting the analytical test results in a more definitive manner, analytical test results for reporting years of 2007 through 2014 as presented on Table 1 has been revised in this 2014 report to include detected concentrations of cis-1,2-dichloroethene and not reported as concentrations of 1,2-dichloroethene (total).

The volatile organic analytical test results detected concentrations of Vinyl chloride in groundwater sampled from Monitoring Well MW-8D and Carbon disulfide and 1,1-Dichloroethane in Monitoring Well MW-3S. Carbon disulfide was the first time of detection in groundwater from Monitoring Well MW-3S.

200 0 200



200 0 200  
SCALE IN FEET



JOB No.:8812191

LOCKPORT CITY LANDFILL  
LOCKPORT, NEW YORK  
CITY OF LOCKPORT

FIGURE 1  
SITE PLAN

## **TABLES**

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**TABLE I**  
**MONITORING WELL 3S**  
**GROUNDWATER ANALYTICAL TEST 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	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Vinyl chloride	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	6J	U	U	U	U	U	U	U	
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	1.2	
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
1,1-Dichloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	1J	U	U	3J	2J	3J	2.8J	U	1.8
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	4J	3J	2J	4J	3.2J	U	U	U	
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Trichloroethene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Bromodichromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	
1,1,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	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 in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

**TABLE I (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	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
Chloromethane	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	2 J	16	-	-	-	-	-	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	NS	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	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	I J	-	-	-	-	-	-	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	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	U	U	U	U	U	U	U	U	2 J	2 J	-	-	-	-	-	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
Xylene (Total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U
1,1,2-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

- = not sampled

NS = no standard

2007, 2008, 2009, 2010, 2011, 2012 : MW-6D not sampled due to dry conditions, no groundwater available

**TABLE 1 (Cont'd)**  
**MONITORING WELL 8D**  
**GROUNDWATER ANALYTICAL TEST 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	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	162	U	U	U	U	U	7	33	6	4J	U	U	U	U	U	U	U	U	U	2.1
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	1,580	100	90	110	18	25	41	120	7	28	27J	40	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	32	34	26	23	24	65	26	21
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	260	2	4	5	2	2	2	U	U	U	U	1J	U	U	U	U	3.2J	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	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 in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

**TABLE 1 (Cont'd)**  
**MONITORING WELL 9S**  
**GROUNDWATER ANALYTICAL TEST 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	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	162	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	1,580	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	2
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	260	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	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 in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

**TABLE 1 (Cont'd)**  
**MONITORING WELL 9I**  
**GROUNDWATER ANALYTICAL TEST 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	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	24	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	42	8.4	6	6	5	4J	4J	4J	4J	3J	3J	2J	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	3J	2J	U	2J	U	U	1.29	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	+	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	NS	1.6	2	2	1J	1J	1J	1J	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	+	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	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 in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

**TABLE 1 (Cont'd)**  
**OUTFALL L-2**  
**GROUNDWATER ANALYTICAL TEST 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	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	94	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	U	2J	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	280	U	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	NS	U	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	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 in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

## **APPENDICES**

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## **APPENDIX A**

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**GHD CONSULTING SERVICES, INC.**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/15/14

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).... 72.0 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>      </u>	Centrifugal	<u>      </u>	2in. casing: <u>4.67</u> ft. of water x .16 = <u>0.75</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 removed 2.30 gals.

> 3 volumes:	<u>YES</u>	<u>no</u>
dry:	<u>yes</u>	<u>NO</u>

Field Tests:

Temp:	<u>12.4 C</u>
pH	<u>7.89</u>
Conductivity	<u>2.30 mS/cm</u>
DO	<u>8.90 mg/l</u>
Turbidity	<u>34.8 NTUs</u>
Salinity	<u>0.11 %</u>

Sampling:

Time: 10:30 AM

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

Observations:

Weather/Temperature: Overcast, 55°, light rain

Physical Appearance and Odor of Sample: Clear, then yellowish

Comments:

Well pad is intact and the stickup protective cover is in good condition.

**GHD CONSULTING SERVICES, INC.**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/15/14

Sampler: Brian Doyle

SAMPLE ID MW-6D

Depth of well (from top of casing)..... 77.12 ft  
 Initial static water level (from top of casing).... 77.0 ft

Evacuation Method:

**Well Volume Calculation**

Submersible	<u>      </u>	Centrifugal	<u>      </u>	2in. casing: <u>          </u> ft. of water x .16 = <u>          </u> 0.03 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 removed 0.00 gals.

> 3 volumes:	<u>yes</u>	<u>NO</u>
dry:	<u>YES</u>	<u>no</u>

Field Tests:	Temp:	<u>NA</u>	<u>C</u>
	pH	<u>NA</u>	
	Conductivity	<u>NA</u>	<u>mS/cm</u>
	DO	<u>NA</u>	<u>mg/l</u>
	Turbidity	<u>NA</u>	<u>NTUs</u>
	Oxidation Reduction Potential(ORP)	<u>NA</u>	<u>mV</u>
	Salinity	<u>NA</u>	<u>%</u>

Sampling:

Time: 11:00 AM

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

Observations:

Weather/Temperature: Overcast, 55°, rain

Physical Appearance and Odor of Sample: clear

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

**GHD CONSULTING SERVICES, INC.**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/15/14

Sampler: Brian Doyle

SAMPLE ID MW-9S

Depth of well (from top of casing)..... 12.36 ft  
 Initial static water level (from top of casing).... 7.2 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>      </u>	Centrifugal	<u>      </u>	2in. casing: <u>5.16</u> ft. of water x .16 = <u>0.83</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 removed 2.5 gals.

> 3 volumes:	<u>YES</u>	<u>no</u>
dry:	<u>yes</u>	<u>NO</u>

Field Tests:	Temp:	<u>14.4 C</u>
	pH	<u>7.45</u>
	Conductivity	<u>1.76 mS/cm</u>
	DO	<u>5.42 mg/l</u>
	Turbidity	<u>296 NTUs</u>
	Salinity	<u>0.11 %</u>

Sampling:

Time: 3:00

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

Observations:

Weather/Temperature: Overcast, 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.

**GHD CONSULTING SERVICES, INC.**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill

DATE 10/15/14

Sampler: Brian Doyle

SAMPLE ID MW-91

Depth of well (from top of casing)..... 19.99 ft  
 Initial static water level (from top of casing).... 6.2 ft

Evacuation Method:

Well Volume Calculation

Submersible	<u>      </u>	Centrifugal	<u>      </u>	2in. casing: <u>13.79</u> ft. of water x .16 = <u>2.21</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 removed 6.6 gals.

> 3 volumes:	<u>YES</u>	<u>no</u>
dry:	<u>yes</u>	<u>NO</u>

Field Tests:	Temp:	<u>14.12 C</u>
	pH	<u>7.09</u>
	Conductivity	<u>1.47 mS/cm</u>
	DO	<u>6.64 mg/l</u>
	Turbidity	<u>5.4 NTUs</u>
	Salinity	<u>0.08 %</u>

Sampling:

Time: 2:30 PM

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

Observations:

Weather/Temperature: Overcast, 60°

Physical Appearance and Odor of Sample: clear, no odor

Comments: Well pad is intact and the stickup protective cover is in good condition.

**GHD CONSULTING SERVICES, INC.**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill DATE 10/15/14  
 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).... 3.9 ft

**Evacuation Method:**

**Well Volume Calculation**

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

Volume of water removed 1.75 gals.

> 3 volumes:	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> NO
dry:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> no

Field Tests: Temp: 14.63 C  
 pH 7.03  
 Conductivity 3.52 mS/cm  
 DO 6.24 mg/l  
 Turbidity 932 NTUs  
 Salinity 0.12 %

**Sampling:**

Time: 1:30 AM

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

**Observations:**

Weather/Temperature: Overcast, 60°

Physical Appearance and Odor of Sample: No odor, orange color, then brown, very turbid

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.

**GHD CONSULTING SERVICES, INC.**  
**SURFACE WATER FIELD SAMPLING RECORD**

SITE Lockport City Landfill DATE 10/15/14  
Samplers: Brian Doyle SAMPLE ID Outfall L-2

Sampling Method:

Submersible GRAB Centrifugal \_\_\_\_\_  
Airlift \_\_\_\_\_ Pos. Displ. \_\_\_\_\_  
Bailer \_\_\_\_\_ >>> No. of bails \_\_\_\_\_

Field Tests: Temp: 14.45 C  
pH 8.37  
Conductivity 1.58 mS/cm  
DO 9.89 mg/l  
Turbidity 10 NTUs  
Salinity 0.1 %

Sampling: Time: 13:00 PM

Sampling Method: Stainless Steel Bailer \_\_\_\_\_  
Teflon Bailer \_\_\_\_\_  
Disposable Pump \_\_\_\_\_  
Other Grab

Observations:

Weather/Temperature: Overcast, 55°

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

Comments: Iron bacteria was present on outfall and rocks.

## **APPENDIX B**

---





12065 Lebanon Rd.  
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Est. 1970

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 101  
Amherst, NY 14228

### Report Summary

Wednesday October 22, 2014

Report Number: L727978

Samples Received: 10/16/14

Client Project:

Description: Lockport Landfill

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton, ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample #: L727978-01

Date Received : October 16, 2014  
Description : Lockport Landfill

Site ID :

Sample ID : MW-8D

Project # :

Collected By : Brian Doyle  
Collection Date : 10/15/14 10:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/18/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/18/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/18/14	1
Carbon disulfide	BDL	1.0	ug/l	8260C	10/18/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/18/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/18/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/18/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/18/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/18/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Cis-1,2-Dichloroethene	21.	1.0	ug/l	8260C	10/18/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/18/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/18/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/18/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/18/14	1
Styrene	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Toluene	BDL	5.0	ug/l	8260C	10/18/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1

BDL = Below Detection Limit

Det. Limit = Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

October 22, 2014

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : MW-8D  
Collected By : Brian Doyle  
Collection Date : 10/15/14 10:30

ESC Sample # : L727978-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Trichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Vinyl chloride	2.1	1.0	ug/l	8260C	10/18/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/18/14	1
Surrogate Recovery						
Toluene-d8	98.0		% Rec.	8260C	10/18/14	1
Dibromofluoromethane	99.5		% Rec.	8260C	10/18/14	1
a,a,a-Trifluorotoluene	96.3		% Rec.	8260C	10/18/14	1
4-Bromofluorobenzene	102.		% Rec.	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L727978-02

Date Received : October 16, 2014  
Description : Lockport Landfill

Site ID :

Sample ID : MW-6D

Project # :

Collected By : Brian Doyle  
Collection Date : 10/15/14 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/18/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/18/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/18/14	1
Carbon disulfide	BDL	1.0	ug/l	8260C	10/18/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/18/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/18/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/18/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/18/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/18/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/18/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/18/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/18/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/18/14	1
Styrene	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Toluene	BDL	5.0	ug/l	8260C	10/18/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

October 22, 2014

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : MW-6D  
Collected By : Brian Doyle  
Collection Date : 10/15/14 11:00

ESC Sample # : L727978-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Trichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Vinyl chloride	BDL	1.0	ug/l	8260C	10/18/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/18/14	1
Surrogate Recovery						
Toluene-d8	99.6		% Rec.	8260C	10/18/14	1
Dibromofluoromethane	99.7		% Rec.	8260C	10/18/14	1
a,a,a-Trifluorotoluene	97.3		% Rec.	8260C	10/18/14	1
4-Bromofluorobenzene	99.5		% Rec.	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L727978-03

Date Received : October 16, 2014  
Description : Lockport Landfill

Site ID :

Sample ID : MW-9S

Project # :

Collected By : Brian Doyle  
Collection Date : 10/15/14 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/18/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/18/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/18/14	1
Carbon disulfide	BDL	1.0	ug/l	8260C	10/18/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/18/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/18/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/18/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/18/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/18/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,2-Dichloroethene	2.0	1.0	ug/l	8260C	10/18/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/18/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/18/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/18/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/18/14	1
Styrene	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Toluene	BDL	5.0	ug/l	8260C	10/18/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

October 22, 2014

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : MW-9S  
Collected By : Brian Doyle  
Collection Date : 10/15/14 15:00

ESC Sample # : L727978-03

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Trichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Vinyl chloride	BDL	1.0	ug/l	8260C	10/18/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/18/14	1
Surrogate Recovery						
Toluene-d8	100.		% Rec.	8260C	10/18/14	1
Dibromofluoromethane	99.4		% Rec.	8260C	10/18/14	1
a,a,a-Trifluorotoluene	98.1		% Rec.	8260C	10/18/14	1
4-Bromofluorobenzene	101.		% Rec.	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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\* Reported: 10/22/14 16:33 Printed: 10/22/14 16:34



L·A·B S·C·I·E·N·C·E·S

Y·O·U·R L·A·B O·F C·H·O·I·C·E

12065 Lebanon Rd.  
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Tax I.D. 62-0814289

Est. 1970

## REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy, Ste 10  
Amherst, NY 14228

ESC Sample # : L727978-04

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : MW-9I  
Collected By : Brian Doyle  
Collection Date : 10/15/14 14:30

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
<b>Volatile Organics</b>						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/18/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/18/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/18/14	1
Carbon disulfide	BDL	1.0	ug/l	8260C	10/18/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/18/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/18/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/18/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/18/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/18/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/18/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/18/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/18/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/18/14	1
Styrene	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Toluene	BDL	5.0	ug/l	8260C	10/18/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

October 22, 2014

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : MW-9I  
Collected By : Brian Doyle  
Collection Date : 10/15/14 14:30

ESC Sample # : L727978-04

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Trichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Vinyl chloride	BDL	1.0	ug/l	8260C	10/18/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/18/14	1
Surrogate Recovery						
Toluene-d8	100.		% Rec.	8260C	10/18/14	1
Dibromofluoromethane	103.		% Rec.	8260C	10/18/14	1
a,a,a-Trifluorotoluene	97.4		% Rec.	8260C	10/18/14	1
4-Bromofluorobenzene	102.		% Rec.	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy, Ste 10  
Amherst, NY 14228

ESC Sample #: L727978-05

Date Received : October 16, 2014  
Description : Lockport Landfill

Site ID :

Sample ID : MW-3S

Project # :

Collected By : Brian Doyle  
Collection Date : 10/15/14 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/18/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/18/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/18/14	1
Carbon disulfide	1.2	1.0	ug/l	8260C	10/18/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/18/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/18/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/18/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/18/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/18/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethane	1.4	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/18/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/18/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/18/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/18/14	1
Styrene	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Toluene	BDL	5.0	ug/l	8260C	10/18/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



YOUR LAB OF CHOICE

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REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : MW-3S  
Collected By : Brian Doyle  
Collection Date : 10/15/14 13:30

ESC Sample # : L727978-05

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Trichloroethylene	BDL	1.0	ug/l	8260C	10/18/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Vinyl chloride	BDL	1.0	ug/l	8260C	10/18/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/18/14	1
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260C	10/18/14	1
Dibromofluoromethane	99.6		% Rec.	8260C	10/18/14	1
a,a,a-Trifluorotoluene	98.7		% Rec.	8260C	10/18/14	1
4-Bromofluorobenzene	97.0		% Rec.	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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## REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy, Ste 10  
Amherst, NY 14228

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : OUTFALL L-Z  
Collected By : Brian Doyle  
Collection Date : 10/15/14 13:00

ESC Sample # : L727978-06

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
<b>Volatile Organics</b>						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/18/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/18/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/18/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/18/14	1
Carbon disulfide	BDL	1.0	ug/l	8260C	10/18/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/18/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/18/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/18/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/18/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/18/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/18/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/18/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/18/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/18/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/18/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/18/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/18/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/18/14	1
Styrene	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Toluene	BDL	5.0	ug/l	8260C	10/18/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



YOUR LAB OF CHOICE

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REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample #: L727978-06

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : OUTFALL L-Z  
Collected By : Brian Doyle  
Collection Date : 10/15/14 13:00

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Trichloroethene	BDL	1.0	ug/l	8260C	10/18/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/18/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/18/14	1
Vinyl chloride	BDL	1.0	ug/l	8260C	10/18/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/18/14	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260C	10/18/14	1
Dibromofluoromethane	101.		% Rec.	8260C	10/18/14	1
a,a,a-Trifluorotoluene	98.6		% Rec.	8260C	10/18/14	1
4-Bromofluorobenzene	101.		% Rec.	8260C	10/18/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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## REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L727978-07

Date Received : October 16, 2014  
Description : Lockport Landfill

Site ID :

Sample ID : TRIP BLANK

Project # :

Collected By : Brian Doyle  
Collection Date : 10/15/14 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
<b>Volatile Organics</b>						
Acetone	BDL	50.	ug/l	8260C	10/22/14	1
Benzene	BDL	1.0	ug/l	8260C	10/17/14	1
Bromochloromethane	BDL	1.0	ug/l	8260C	10/17/14	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	10/17/14	1
Bromoform	BDL	1.0	ug/l	8260C	10/17/14	1
Bromomethane	BDL	5.0	ug/l	8260C	10/17/14	1
Carbon disulfide	BDL	1.0	ug/l	8260C	10/17/14	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	10/17/14	1
Chlorobenzene	BDL	1.0	ug/l	8260C	10/17/14	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	10/17/14	1
Chloroethane	BDL	5.0	ug/l	8260C	10/17/14	1
Chloroform	BDL	5.0	ug/l	8260C	10/17/14	1
Chloromethane	BDL	2.5	ug/l	8260C	10/17/14	1
Cyclohexane	BDL	1.0	ug/l	8260C	10/17/14	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	10/17/14	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	10/17/14	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/17/14	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/17/14	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	10/17/14	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	10/17/14	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	10/17/14	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	10/17/14	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	10/17/14	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/17/14	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	10/17/14	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	10/17/14	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/17/14	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	10/22/14	1
Ethylbenzene	BDL	1.0	ug/l	8260C	10/17/14	1
2-Hexanone	BDL	10.	ug/l	8260C	10/17/14	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	10/17/14	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl Acetate	BDL	20.	ug/l	8260C	10/17/14	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	10/17/14	1
Methylene Chloride	BDL	5.0	ug/l	8260C	10/17/14	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	10/22/14	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	10/17/14	1
Styrene	BDL	1.0	ug/l	8260C	10/17/14	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	10/17/14	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	10/17/14	1
Toluene	BDL	5.0	ug/l	8260C	10/17/14	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/17/14	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	10/17/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 22, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

Date Received : October 16, 2014  
Description : Lockport Landfill  
Sample ID : TRIP BLANK  
Collected By : Brian Doyle  
Collection Date : 10/15/14 00:00

ESC Sample # : L727978-07

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	10/17/14	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	10/17/14	1
Trichloroethene	BDL	1.0	ug/l	8260C	10/17/14	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	10/17/14	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	10/17/14	1
Vinyl chloride	BDL	1.0	ug/l	8260C	10/17/14	1
Xylenes, Total	BDL	3.0	ug/l	8260C	10/17/14	1
Surrogate Recovery						
Toluene-d8	97.8		% Rec.	8260C	10/17/14	1
Dibromofluoromethane	106.		% Rec.	8260C	10/17/14	1
a,a,a-Trifluorotoluene	94.8		% Rec.	8260C	10/17/14	1
4-Bromofluorobenzene	99.2		% Rec.	8260C	10/17/14	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/22/14 16:33 Printed: 10/22/14 16:34

Summary of Remarks For Samples Printed  
10/22/14 at 16:34:17

TSR Signing Reports: 044  
R5 - Desired TAT

TERMS AGREEMENT NEEDED

Sample: L727978-01 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33  
NYSDOH Deliverable

Sample: L727978-02 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33

Sample: L727978-03 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33

Sample: L727978-04 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33

Sample: L727978-05 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33

Sample: L727978-06 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33

Sample: L727978-07 Account: STEARNSANY Received: 10/16/14 09:00 Due Date: 10/23/14 00:00 RPT Date: 10/22/14 16:33



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Quality Assurance Report  
Level II

October 22, 2014

L727978

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
1,1,1-Trichloroethane	< .001	mg/l			WG749074	10/17/14 20:17
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG749074	10/17/14 20:17
1,1,2-Trichloroethane	< .001	mg/l			WG749074	10/17/14 20:17
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG749074	10/17/14 20:17
1,1-Dichloroethane	< .001	mg/l			WG749074	10/17/14 20:17
1,1-Dichloroethene	< .001	mg/l			WG749074	10/17/14 20:17
1,2,3-Trichlorobenzene	< .001	mg/l			WG749074	10/17/14 20:17
1,2,4-Trichlorobenzene	< .001	mg/l			WG749074	10/17/14 20:17
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG749074	10/17/14 20:17
1,2-Dibromoethane	< .001	mg/l			WG749074	10/17/14 20:17
1,2-Dichlorobenzene	< .001	mg/l			WG749074	10/17/14 20:17
1,2-Dichloroethane	< .001	mg/l			WG749074	10/17/14 20:17
1,2-Dichloropropane	< .001	mg/l			WG749074	10/17/14 20:17
1,3-Dichlorobenzene	< .001	mg/l			WG749074	10/17/14 20:17
1,4-Dichlorobenzene	< .001	mg/l			WG749074	10/17/14 20:17
2-Hexanone	< .01	mg/l			WG749074	10/17/14 20:17
Benzene	< .001	mg/l			WG749074	10/17/14 20:17
Bromochloromethane	< .001	mg/l			WG749074	10/17/14 20:17
Bromodichloromethane	< .001	mg/l			WG749074	10/17/14 20:17
Bromoform	< .001	mg/l			WG749074	10/17/14 20:17
Bromomethane	< .005	mg/l			WG749074	10/17/14 20:17
Carbon disulfide	< .001	mg/l			WG749074	10/17/14 20:17
Carbon tetrachloride	< .001	mg/l			WG749074	10/17/14 20:17
Chlorobenzene	< .001	mg/l			WG749074	10/17/14 20:17
Chlorodibromomethane	< .001	mg/l			WG749074	10/17/14 20:17
Chloroethane	< .005	mg/l			WG749074	10/17/14 20:17
Chloroform	< .005	mg/l			WG749074	10/17/14 20:17
Chloromethane	< .0025	mg/l			WG749074	10/17/14 20:17
cis-1,2-Dichloroethene	< .001	mg/l			WG749074	10/17/14 20:17
cis-1,3-Dichloropropene	< .001	mg/l			WG749074	10/17/14 20:17
Cyclohexane	< .001	mg/l			WG749074	10/17/14 20:17
Dichlorodifluoromethane	< .005	mg/l			WG749074	10/17/14 20:17
Ethylbenzene	< .001	mg/l			WG749074	10/17/14 20:17
Isopropylbenzene	< .001	mg/l			WG749074	10/17/14 20:17
Methyl Acetate	< .02	mg/l			WG749074	10/17/14 20:17
Methyl Cyclohexane	< .001	mg/l			WG749074	10/17/14 20:17
Methyl tert-butyl ether	< .001	mg/l			WG749074	10/17/14 20:17
Methylene Chloride	< .005	mg/l			WG749074	10/17/14 20:17
Styrene	< .001	mg/l			WG749074	10/17/14 20:17
Tetrachloroethene	< .001	mg/l			WG749074	10/17/14 20:17
Toluene	< .005	mg/l			WG749074	10/17/14 20:17
trans-1,2-Dichloroethene	< .001	mg/l			WG749074	10/17/14 20:17
Trichloroethene	< .001	mg/l			WG749074	10/17/14 20:17
Trichlorofluoromethane	< .005	mg/l			WG749074	10/17/14 20:17
Vinyl chloride	< .001	mg/l			WG749074	10/17/14 20:17
Xylenes, Total	< .003	mg/l			WG749074	10/17/14 20:17
4-Bromofluorobenzene		% Rec.	94.80	71-126	WG749074	10/17/14 20:17
Dibromofluoromethane		% Rec.	90.60	78.3-121	WG749074	10/17/14 20:17
Toluene-d8		% Rec.	102.0	88.5-111	WG749074	10/17/14 20:17
a,a,a-Trifluorotoluene		% Rec.	100.0	85-114	WG749074	10/17/14 20:17
2-Butanone (MEK)	< .01	mg/l			WG749940	10/22/14 00:29
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG749940	10/22/14 00:29
Acetone	< .05	mg/l			WG749940	10/22/14 00:29
trans-1,3-Dichloropropene	< .001	mg/l			WG749940	10/22/14 00:29
4-Bromofluorobenzene		% Rec.	92.90	71-126	WG749940	10/22/14 00:29
Dibromofluoromethane		% Rec.	106.0	78.3-121	WG749940	10/22/14 00:29
Toluene-d8		% Rec.	102.0	88.5-111	WG749940	10/22/14 00:29

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

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Quality Assurance Report  
Level II

L727978

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

October 22, 2014

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
a,a,a-Trifluorotoluene			106.0	85-114		10/22/14 00:29
Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
1,1,1-Trichloroethane	mg/l	.025	0.0243	97.3	73.2-123	WG749074
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0265	106.	70.7-122	WG749074
1,1,2-Trichloroethane	mg/l	.025	0.0270	108.	77.7-118	WG749074
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0200	80.0	67.2-143	WG749074
1,1-Dichloroethane	mg/l	.025	0.0236	94.3	70.7-126	WG749074
1,1-Dichloroethene	mg/l	.025	0.0235	94.0	67.8-129	WG749074
1,2,3-Trichlorobenzene	mg/l	.025	0.0260	104.	64.9-135	WG749074
1,2,4-Trichlorobenzene	mg/l	.025	0.0271	108.	69.7-136	WG749074
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0230	91.9	65.4-128	WG749074
1,2-Dibromoethane	mg/l	.025	0.0273	109.	76.6-121	WG749074
1,2-Dichlorobenzene	mg/l	.025	0.0262	105.	78.4-117	WG749074
1,2-Dichloroethane	mg/l	.025	0.0255	102.	68.8-124	WG749074
1,2-Dichloropropane	mg/l	.025	0.0258	103.	76.5-119	WG749074
1,3-Dichlorobenzene	mg/l	.025	0.0287	115.	70.8-128	WG749074
1,4-Dichlorobenzene	mg/l	.025	0.0257	103.	70.8-115	WG749074
2-Hexanone	mg/l	.125	0.129	103.	65.6-144	WG749074
Benzene	mg/l	.025	0.0247	98.7	74.8-121	WG749074
Bromochloromethane	mg/l	.025	0.0265	106.	77.6-119	WG749074
Bromodichloromethane	mg/l	.025	0.0253	101.	75.1-116	WG749074
Bromoform	mg/l	.025	0.0269	107.	67.5-130	WG749074
Bromomethane	mg/l	.025	0.0315	126.	49.9-162	WG749074
Carbon disulfide	mg/l	.025	0.0195	77.9	64.6-140	WG749074
Carbon tetrachloride	mg/l	.025	0.0244	97.7	70.2-123	WG749074
Chlorobenzene	mg/l	.025	0.0266	106.	78.1-119	WG749074
Chlorodibromomethane	mg/l	.025	0.0247	99.0	74-121	WG749074
Chloroethane	mg/l	.025	0.0238	95.1	61.7-135	WG749074
Chloroform	mg/l	.025	0.0258	103.	76-121	WG749074
Chloromethane	mg/l	.025	0.0213	85.2	61.5-129	WG749074
cis-1,2-Dichloroethene	mg/l	.025	0.0244	97.7	76-119	WG749074
cis-1,3-Dichloropropene	mg/l	.025	0.0249	99.6	78.2-120	WG749074
Dichlorodifluoromethane	mg/l	.025	0.0205	81.8	54.8-135	WG749074
Ethylbenzene	mg/l	.025	0.0264	106.	78.8-122	WG749074
Isopropylbenzene	mg/l	.025	0.0269	108.	78.6-132	WG749074
Methyl tert-butyl ether	mg/l	.025	0.0242	96.6	71.2-126	WG749074
Methylene Chloride	mg/l	.025	0.0240	95.9	70.3-120	WG749074
Styrene	mg/l	.025	0.0272	109.	80.4-126	WG749074
Tetrachloroethene	mg/l	.025	0.0274	109.	72.6-126	WG749074
Toluene	mg/l	.025	0.0257	103.	79.7-116	WG749074
trans-1,2-Dichloroethene	mg/l	.025	0.0246	98.6	72.6-121	WG749074
Trichloroethene	mg/l	.025	0.0259	104.	77.7-118	WG749074
Trichlorofluoromethane	mg/l	.025	0.0252	101.	63.5-135	WG749074
Vinyl chloride	mg/l	.025	0.0237	94.6	65.9-128	WG749074
Xylenes, Total	mg/l	.075	0.0795	106.	78.7-121	WG749074
4-Bromofluorobenzene				98.60	71-126	WG749074
Dibromofluoromethane				96.50	78.3-121	WG749074
Toluene-d8				99.20	80.5-111	WG749074
a,a,a-Trifluorotoluene				99.20	85-114	WG749074
2-Butanone (MEK)	mg/l	.125	0.124	99.0	55-149	WG749940
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.112	89.6	70.5-133	WG749940
Acetone	mg/l	.125	0.171	137.	35.6-163	WG749940
trans-1,3-Dichloropropene	mg/l	.025	0.0245	98.0	74.3-123	WG749940
4-Bromofluorobenzene				97.50	71-126	WG749940

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A "List of Analytes with QC Qualifiers."



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**Quality Assurance Report**  
**Level II**

October 22, 2014

L727978

Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
Dibromofluoromethane					109.0	78.3-121		
Toluene-d8					102.0	88.5-111		
a,a,a-Trifluorotoluene					105.0	85-114		
Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
1,1,1-Trichloroethane	mg/l	0.0221	0.0243	88.0	73.2-123	9.47	20	WG749074
1,1,2,2-Tetrachloroethane	mg/l	0.0266	0.0265	106.	70.7-122	0.230	20	WG749074
1,1,2-Trichloroethane	mg/l	0.0252	0.0270	101.	77.7-118	6.98	20	WG749074
1,1,2-Trichlorotrifluoroethane	mg/l	0.0185	0.0200	74.0	67.2-143	7.91	20	WG749074
1,1-Dichloroethane	mg/l	0.0221	0.0236	88.0	70.7-126	6.66	20	WG749074
1,1-Dichloroethene	mg/l	0.0211	0.0235	84.0	67.8-129	10.7	20	WG749074
1,2,3-Trichlorobenzene	mg/l	0.0239	0.0260	96.0	64.9-135	8.58	20	WG749074
1,2,4-Trichlorobenzene	mg/l	0.0245	0.0271	98.0	69.7-136	10.1	20	WG749074
1,2-Dibromo-3-Chloropropane	mg/l	0.0203	0.0230	81.0	65.4-128	12.5	20	WG749074
1,2-Dibromoethane	mg/l	0.0261	0.0273	104.	76.6-121	4.59	20	WG749074
1,2-Dichlorobenzene	mg/l	0.0248	0.0262	99.0	78.4-117	5.28	20	WG749074
1,2-Dichloroethane	mg/l	0.0234	0.0255	94.0	68.8-124	8.71	20	WG749074
1,2-Dichloropropane	mg/l	0.0219	0.0258	87.0	76.5-119	16.5	20	WG749074
1,3-Dichlorobenzene	mg/l	0.0267	0.0287	107.	70.8-128	7.23	20	WG749074
1,4-Dichlorobenzene	mg/l	0.0240	0.0257	96.0	78.8-115	6.91	20	WG749074
2-Hexanone	mg/l	0.125	0.129	100.	65.6-144	3.30	20	WG749074
Benzene	mg/l	0.0226	0.0247	90.0	74.8-121	8.84	20	WG749074
Bromochloromethane	mg/l	0.0242	0.0265	97.0	77.6-119	8.85	20	WG749074
Bromodichloromethane	mg/l	0.0231	0.0253	92.0	75.1-116	9.39	20	WG749074
Bromoform	mg/l	0.0257	0.0269	103.	67.5-130	4.59	20	WG749074
Bromomethane	mg/l	0.0280	0.0315	112.	49.9-162	11.7	20	WG749074
Carbon disulfide	mg/l	0.0173	0.0195	69.0	64.6-140	11.7	20	WG749074
Carbon tetrachloride	mg/l	0.0221	0.0244	88.0	70.2-123	10.0	20	WG749074
Chlorobenzene	mg/l	0.0264	0.0266	106.	78.1-119	0.670	20	WG749074
Chlorodibromomethane	mg/l	0.0241	0.0247	96.0	74-121	2.73	20	WG749074
Chloroethane	mg/l	0.0204	0.0238	82.0	61.7-135	15.3	20	WG749074
Chloroform	mg/l	0.0241	0.0258	96.0	76-121	6.64	20	WG749074
Chloromethane	mg/l	0.0167	0.0213	75.0	61.5-129	12.9	20	WG749074
cis-1,2-Dichloroethene	mg/l	0.0226	0.0244	90.0	76-119	7.82	20	WG749074
cis-1,3-Dichloropropene	mg/l	0.0239	0.0249	96.0	78.2-120	4.19	20	WG749074
Dichlorodifluoromethane	mg/l	0.0224	0.0205	90.0	54.8-135	9.15	20	WG749074
Ethylbenzene	mg/l	0.0251	0.0264	100.	78.8-122	5.17	20	WG749074
Isopropylbenzene	mg/l	0.0249	0.0269	100.	78.6-132	7.67	20	WG749074
Methyl tert-butyl ether	mg/l	0.0226	0.0242	90.0	71.2-126	6.56	20	WG749074
Methylene Chloride	mg/l	0.0218	0.0240	87.0	70.3-120	9.64	20	WG749074
Styrene	mg/l	0.0258	0.0272	103.	80.4-126	5.07	20	WG749074
Tetrachloroethene	mg/l	0.0256	0.0274	102.	72.6-126	6.73	20	WG749074
Toluene	mg/l	0.0233	0.0257	93.0	79.7-116	9.85	20	WG749074
trans-1,2-Dichloroethene	mg/l	0.0219	0.0246	87.0	72.6-121	11.9	20	WG749074
Trichloroethene	mg/l	0.0231	0.0259	92.0	77.7-118	11.6	20	WG749074
Trichlorofluoromethane	mg/l	0.0220	0.0252	86.0	63.5-135	13.5	20	WG749074
Vinyl chloride	mg/l	0.0208	0.0237	83.0	65.9-128	12.7	20	WG749074
Xylenes, Total	mg/l	0.0742	0.0795	99.0	78.7-121	6.88	20	WG749074
4-Bromofluorobenzene				98.80	71-126			WG749074
Dibromofluoromethane				95.40	78.3-121			WG749074
Toluene-d8				98.60	88.5-111			WG749074
a,a,a-Trifluorotoluene				96.90	85-114			WG749074
2-Butanone (MEK)	mg/l	0.121	0.124	97.0	55-149	2.34	20	WG749940
4-Methyl-2-pentanone (MIBK)	mg/l	0.109	0.112	87.0	70.5-133	3.15	20	WG749940
Acetone	mg/l	0.164	0.171	131.	35.6-163	4.27	23.9	WG749940

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A \*List of Analytes with QC Qualifiers.\*



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Quality Assurance Report  
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Tax I.D. 62-0814289

Est. 1970

October 22, 2014

L727978

Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	% Rec				
trans-1,3-Dichloropropene	mg/l	0.0235	0.0245	94.0	74.3-123	3.95	20	WG749940
4-Bromofluorobenzene				98.20	71-126			WG749940
Dibromofluoromethane				105.0	78.3-121			WG749940
Toluene-d8				102.0	88.5-111			WG749940
a,a,a-Trifluorotoluene				104.0	85-114			WG749940
Analyte	Matrix Spike				Limit	Ref Samp	Batch	
	Units	MS Res	Ref Res	TV	% Rec			
1,1,1-Trichloroethane	mg/l	0.0247	0.0	.025	99.0	58.7-134	L727908-01	WG749074
1,1,2,2-Tetrachloroethane	mg/l	0.0294	0.0	.025	120.	56-132	L727908-01	WG749074
1,1,2-Trichloroethane	mg/l	0.0261	0.0	.025	100.	66.3-125	L727908-01	WG749074
1,1,2-Trichlorotrifluoroethane	mg/l	0.0186	0.0	.025	74.0	54.8-154	L727908-01	WG749074
1,1-Dichloroethane	mg/l	0.0234	0.0	.025	94.0	58.5-132	L727908-01	WG749074
1,1-Dichloroethene	mg/l	0.0240	0.0	.025	96.0	51.1-140	L727908-01	WG749074
1,2,3-Trichlorobenzene	mg/l	0.0251	0.0	.025	100.	59.1-138	L727908-01	WG749074
1,2,4-Trichlorobenzene	mg/l	0.0258	0.0	.025	100.	63.6-143	L727908-01	WG749074
1,2-Dibromo-3-Chloropropane	mg/l	0.0241	0.0	.025	96.0	57.3-136	L727908-01	WG749074
1,2-Dibromoethane	mg/l	0.0268	0.0	.025	110.	67.1-125	L727908-01	WG749074
1,2-Dichlorobenzene	mg/l	0.0263	0.0	.025	100.	68.2-123	L727908-01	WG749074
1,2-Dichloroethane	mg/l	0.0258	0.0	.025	100.	60-126	L727908-01	WG749074
1,2-Dichloropropane	mg/l	0.0234	0.0	.025	94.0	64.2-123	L727908-01	WG749074
1,3-Dichlorobenzene	mg/l	0.0269	0.0	.025	110.	63.1-131	L727908-01	WG749074
1,4-Dichlorobenzene	mg/l	0.0245	0.0	.025	98.0	68.6-123	L727908-01	WG749074
2-Hexanone	mg/l	0.123	0.0	.125	98.0	43.3-137	L727908-01	WG749074
Benzene	mg/l	0.0245	0.000393	.025	96.0	54.3-133	L727908-01	WG749074
Bromochloromethane	mg/l	0.0274	0.0	.025	110.	66.5-122	L727908-01	WG749074
Bromodichloromethane	mg/l	0.0244	0.0	.025	98.0	63.9-121	L727908-01	WG749074
Bromoform	mg/l	0.0243	0.0	.025	97.0	59.5-134	L727908-01	WG749074
Bromomethane	mg/l	0.0315	0.0	.025	130.	41.7-155	L727908-01	WG749074
Carbon disulfide	mg/l	0.0188	0.0	.025	75.0	43.3-149	L727908-01	WG749074
Carbon tetrachloride	mg/l	0.0242	0.0	.025	97.0	55.7-134	L727908-01	WG749074
Chlorobenzene	mg/l	0.0254	0.0	.025	100.	67-125	L727908-01	WG749074
Chlorodibromomethane	mg/l	0.0236	0.0	.025	94.0	64.3-125	L727908-01	WG749074
Chloroethane	mg/l	0.0237	0.0	.025	95.0	51.5-136	L727908-01	WG749074
Chloroform	mg/l	0.0266	0.00122	.025	100.	63-129	L727908-01	WG749074
Chloromethane	mg/l	0.0204	0.0	.025	81.0	42.4-135	L727908-01	WG749074
cis-1,2-Dichloroethene	mg/l	0.0250	0.0	.025	100.	59.2-129	L727908-01	WG749074
cis-1,3-Dichloropropene	mg/l	0.0238	0.0	.025	95.0	66.4-125	L727908-01	WG749074
Dichlorodifluoromethane	mg/l	0.0228	0.0	.025	91.0	40.6-144	L727908-01	WG749074
Ethylbenzene	mg/l	0.0243	0.0	.025	97.0	61.4-133	L727908-01	WG749074
Isopropylbenzene	mg/l	0.0248	0.0	.025	99.0	66.8-141	L727908-01	WG749074
Methyl tert-butyl ether	mg/l	0.0246	0.000796	.025	95.0	57.7-134	L727908-01	WG749074
Methylene Chloride	mg/l	0.0241	0.0	.025	96.0	58.1-122	L727908-01	WG749074
Styrene	mg/l	0.0251	0.0	.025	100.	66.8-133	L727908-01	WG749074
Tetrachloroethene	mg/l	0.0260	0.000994	.025	100.	53-139	L727908-01	WG749074
Toluene	mg/l	0.0241	0.0	.025	96.0	61.4-130	L727908-01	WG749074
trans-1,2-Dichloroethene	mg/l	0.0240	0.0	.025	96.0	56.5-129	L727908-01	WG749074
Trichloroethene	mg/l	0.0247	0.0	.025	99.0	44.1-149	L727908-01	WG749074
Trichlorofluoromethane	mg/l	0.0233	0.0	.025	93.0	49.6-145	L727908-01	WG749074
Vinyl chloride	mg/l	0.0213	0.0	.025	85.0	47.8-137	L727908-01	WG749074
Xylenes, Total	mg/l	0.0727	0.0	.075	97.0	63.3-131	L727908-01	WG749074
4-Bromofluorobenzene					97.60	71-126		WG749074
Dibromofluoromethane					104.0	78.3-121		WG749074
Toluene-d8					97.20	88.5-111		WG749074
a,a,a-Trifluorotoluene					99.10	85-114		WG749074
2-Butanone (MEK)	mg/l	0.0992	0.0	.125	79.0	22.4-138	L728293-06	WG749940

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**Quality Assurance Report**  
**Level II**

October 22, 2014

L727978

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
4-Methyl-2-pentanone (MIBK)	mg/l	0.116	0.0	.125	93.0	60.0-140	L728293-06	WG749940
Acetone	mg/l	0.0955	0.00515	.125	72.0	10-130	L728293-06	WG749940
trans-1,3-Dichloropropene	mg/l	0.0242	0.0	.025	97.0	64.1-128	L728293-06	WG749940
4-Bromofluorobenzene					95.90	71-126		WG749940
Dibromofluoromethane					103.0	78.3-121		WG749940
Toluene-d8					108.0	88.5-111		WG749940
a,a,a-Trifluorotoluene					91.60	85-114		WG749940

Analyte	Units	Matrix Spike Duplicate				Limit	RPD	Limit Ref Samp	Batch
		MSD	Ref	%Rec					
1,1,1-Trichloroethane	mg/l	0.0242	0.0247	96.6	58.7-134	2.22	20	L727908-01	WG749074
1,1,2,2-Tetrachloroethane	mg/l	0.0275	0.0294	110.	56-132	6.41	22.2	L727908-01	WG749074
1,1,2-Trichloroethane	mg/l	0.0243	0.0261	97.3	66.3-125	7.21	20	L727908-01	WG749074
1,1,2-Trichlorotrifluoroethane	mg/l	0.0181	0.0186	72.2	54.8-154	2.88	22.5	L727908-01	WG749074
1,1-Dichloroethane	mg/l	0.0226	0.0234	90.2	58.5-132	3.69	20	L727908-01	WG749074
1,1-Dichloroethene	mg/l	0.0228	0.0240	91.3	51.1-140	5.06	20.2	L727908-01	WG749074
1,2,3-Trichlorobenzene	mg/l	0.0249	0.0251	99.4	59.1-138	0.950	23.7	L727908-01	WG749074
1,2,4-Trichlorobenzene	mg/l	0.0245	0.0258	98.2	63.6-143	5.04	21.9	L727908-01	WG749074
1,2-Dibromo-3-Chloropropane	mg/l	0.0241	0.0241	96.3	57.3-136	0.260	27	L727908-01	WG749074
1,2-Dibromoethane	mg/l	0.0266	0.0268	106.	67.1-125	0.970	20	L727908-01	WG749074
1,2-Dichlorobenzene	mg/l	0.0244	0.0263	97.5	68.2-123	7.71	20	L727908-01	WG749074
1,2-Dichloroethane	mg/l	0.0258	0.0258	103.	60-126	0.0700	20	L727908-01	WG749074
1,2-Dichloropropane	mg/l	0.0232	0.0234	92.7	64.2-123	0.860	20	L727908-01	WG749074
1,3-Dichlorobenzene	mg/l	0.0246	0.0269	98.3	63.1-131	8.99	20	L727908-01	WG749074
1,4-Dichlorobenzene	mg/l	0.0237	0.0245	94.8	68.6-123	3.28	20	L727908-01	WG749074
2-Hexanone	mg/l	0.120	0.123	96.0	43.3-137	2.12	25.5	L727908-01	WG749074
Benzene	mg/l	0.0241	0.0245	94.9	54.3-133	1.37	20	L727908-01	WG749074
Bromochloromethane	mg/l	0.0263	0.0274	105.	66.5-122	3.84	20.8	L727908-01	WG749074
Bromodichloromethane	mg/l	0.0242	0.0244	96.9	63.9-121	0.630	20	L727908-01	WG749074
Bromoform	mg/l	0.0233	0.0243	93.0	59.5-134	4.50	20.5	L727908-01	WG749074
Bromomethane	mg/l	0.0308	0.0315	123.	41.7-155	2.46	21.9	L727908-01	WG749074
Carbon disulfide	mg/l	0.0181	0.0180	72.2	43.3-149	4.28	20.3	L727908-01	WG749074
Carbon tetrachloride	mg/l	0.0232	0.0242	92.7	55.7-134	4.50	20	L727908-01	WG749074
Chlorobenzene	mg/l	0.0238	0.0254	95.3	67-125	6.53	20	L727908-01	WG749074
Chlorodibromomethane	mg/l	0.0226	0.0236	90.2	64.3-125	4.29	20.8	L727908-01	WG749074
Chloroethane	mg/l	0.0238	0.0237	95.3	51.5-136	0.470	40	L727908-01	WG749074
Chloroform	mg/l	0.0265	0.0266	101.	63-129	0.380	20	L727908-01	WG749074
Chloromethane	mg/l	0.0198	0.0204	79.3	42.4-135	2.67	20	L727908-01	WG749074
cis-1,2-Dichloroethene	mg/l	0.0240	0.0250	96.1	59.2-129	3.92	20	L727908-01	WG749074
cis-1,3-Dichloropropene	mg/l	0.0237	0.0238	94.9	66.4-125	0.310	20	L727908-01	WG749074
Dichlorodifluoromethane	mg/l	0.0205	0.0228	81.8	40.6-144	10.8	20.2	L727908-01	WG749074
Ethylbenzene	mg/l	0.0233	0.0243	93.1	61.4-133	4.14	20	L727908-01	WG749074
Isopropylbenzene	mg/l	0.0232	0.0248	92.6	66.8-141	6.78	20	L727908-01	WG749074
Methyl tert-butyl ether	mg/l	0.0247	0.0246	95.6	57.7-134	0.440	20	L727908-01	WG749074
Methylene Chloride	mg/l	0.0233	0.0241	93.3	58.1-122	3.07	20	L727908-01	WG749074
Styrene	mg/l	0.0238	0.0251	95.1	66.8-133	5.33	20	L727908-01	WG749074
Tetrachloroethene	mg/l	0.0252	0.0260	96.8	53-139	3.10	20	L727908-01	WG749074
Toluene	mg/l	0.0243	0.0241	97.3	61.4-130	0.830	20	L727908-01	WG749074
trans-1,2-Dichloroethene	mg/l	0.0229	0.0240	91.5	56.5-129	4.93	20	L727908-01	WG749074
Trichloroethene	mg/l	0.0242	0.0247	96.9	44.1-149	1.79	20	L727908-01	WG749074
Trichlorofluoromethane	mg/l	0.0241	0.0233	96.6	49.6-145	3.68	21.2	L727908-01	WG749074
Vinyl chloride	mg/l	0.0220	0.0213	88.0	47.8-137	3.17	20	L727908-01	WG749074
Xylenes, Total	mg/l	0.0685	0.0727	91.4	63.3-131	5.97	20	L727908-01	WG749074
4-Bromofluorobenzene				93.90	71-126			WG749074	
Dibromofluoromethane				102.0	78.3-121			WG749074	
Toluene-d8				99.40	88.5-111			WG749074	
a,a,a-Trifluorotoluene				96.80	85-114			WG749074	

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L727978

Analyte	Units	Matrix	Spike	Duplicate	Ref	%Rec	Limit	RPD	Limit	Ref	Samp	Batch
2-Butanone (MEK)	mg/l	0.0978	0.0992	78.2			22.4-138	1.48	27	L728293-06		WG749940
4-Methyl-2-pentanone (MIBK)	mg/l	0.113	0.116	90.2			60.8-140	3.06	25.1	L728293-06		WG749940
Acetone	mg/l	0.0938	0.0955	70.9			10-130	1.85	27.9	L728293-06		WG749940
trans-1,3-Dichloropropene	mg/l	0.0241	0.0242	96.2			64.1-128	0.700	20	L728293-06		WG749940
4-Bromofluorobenzene				96.20			71-126					WG749940
Dibromofluoromethane				103.0			78.3-121					WG749940
Toluene-d8				108.0			80.5-111					WG749940
a,a,a-Trifluorotoluene				92.30			85-114					WG749940

Batch number /Run number / Sample number cross reference

WG749074: R2998803: L727978-01 02 03 04 05 06 07  
WG749940: R2999360 R2999517: L727978-01 02 03 04 05 06 07

\* \* Calculations are performed prior to rounding of reported values.

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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

GHD		Billing Information:		Analysis / Container / Preservative	
200 John James Audubon Pkwy; Ste 101 Amherst, NY 14228		Mr. Dave Rowlinson 200 John James Audubon Pkwy; Ste 101 Amherst, NY 14228			
Report to: <b>Mr. Dave Rowlinson</b>	Project <b>Groundwater Sampling</b> Description: Lockport Landfill	Email To: dave.rowlinson@ghd.com	City/State Collected: <b>Lockport, NY</b>		
Phone: 716-691-8503	Client Project #	Lab Project #	<b>STEARN5ANY-LOCKPORT</b>		
Fax: 716-748-6621	Site/Facility ID #	P.O.#			
Collected by (print): <b>Brian Dole</b>	Collected by (Signature): <i>Brian Dole</i>	Date/Facility ID #	Date Results Needed		
Immediately Packed on Ice: N	Same Day _____ Next Day _____ Two Day _____ Three Day _____	200% 100% 50% 25%	Email? No _____ Yes _____ FAX? No _____ Yes _____	No. of Carts	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time
MW-8D	GW			10/15/14	10:30
MW-GD	GW			10/15/14	11:00
MW-QS	GW			10/15/14	15:00
MW-9T	GW			10/15/14	14:30
MW-3S	GW			10/19/14	13:30
Offfall L-2	GW			10/15/14	13:00
TRIP BLANK	GW				1
					X
V826OTCL 40MLAMB-HCl-BLK					
V826OTCL 40MLAMB-HCl					
* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other					
Remarks: <b>6144 4942 2907</b>					
Relinquished by: (Signature): <i>Brian Dole</i>	Date: <b>10/15/14</b>	Time: <b>16:00</b>	Received by: (Signature)	pH _____ Temp _____ Hold # _____	
Relinquished by: (Signature):	Date:	Time:	Received by: (Signature)	pH _____ Temp _____	Condition: (Lab use only) <b>OK</b>
Relinquished by: (Signature):	Date: <b>10/16/14</b>	Time: <b>09:00</b>	Received for lab by: (Signature)	Flow _____ Other _____	COG Seal Intact: <b>✓</b> V <b>N</b> NA
				pH Checked: <b>NC</b>	