From: RANDOLPH, TONYA
Sent: Tuesday, April 21, 2015 9:09 AM
Subject: FW: Copy of West Vermont revised source sample list (2) confirmed 03-31-15 by MJ.xlsx
Attachments: West Vermont Source Soil Sample Table Revised.pdf; West Vermont Source Soil Sample Data Validation Report Revised.pdf; EPA_Using Qualified Data Fact Sheet.pdf; Copy of West Vermont revised source sample list (2) confirmed 03-31-15 b....xlsx

From: Scott, Kevin [mailto:Kevin.Scott@tetratech.com]
Sent: Friday, April 10, 2015 4:28 PM
To: JAWORSKI, MARK
Cc: Muniz, Nuria; Lam, Shelly (lam.shelly@epa.gov)
Subject: RE: Copy of West Vermont revised source sample list (2) confirmed 03-31-15 by MJ.xlsx

Hi Mark,
Attached is the revised data validation report (DVR) that includes the additional reference documents that were referenced in the Source Soil Sample Data table as well as the revised Source Soil Sample Table. Also attached is the EPA fact that is referenced in the DVR. Vinyl chloride in sample MMW-P-22-LA (4-6), and tans-1,2-DCE and vinyl chloride in sample MMW-21-LA (12-14) were deleted from the source table because the adjusted values were lower than the reporting limit. In the source tables, the references are highlighted in yellow for the analytes that were adjusted. Let me know if you want Tetra Tech to add reference #s and Page #s to these documents. If so, please provide us with the reference numbers that you want us to use. The samples that are highlighted in red should be deleted, as there were no data sheets referenced (provide on table but on a separate sheet for easy deletion).

The figures showing the 4-mile TDL should be completed on Monday and I will send to you once they are final. Sorry they are not ready for me to send them to you today in this email.

Let me know if you have any questions.

Kevin Scott | R5 START Program Manager
1 S. Wacker Drive |Chicago, Illinois 60606 | www.tetratech.com
Direct: 312.201.7739 | Cell: 856.217.6072 | Fax: 312.201.0031

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From: JAWORSKI, MARK [mailto:MJAWORSK@idem.IN.gov]
Sent: Thursday, April 02, 2015 10:27 AM
To: Scott, Kevin
Cc: Lam, Shelly (lam.shelly@epa.gov); Muniz, Nuria
Subject: RE: Copy of West Vermont revised source sample list (2) confirmed 03-31-15 by MJ.xlsx

Hi Scott,
As per your email, I just uploaded West Vermont references, #27, #95, and #98 to the ESC.

Thanks

From: Scott, Kevin [mailto:Kevin.Scott@tetratech.com]
Sent: Wednesday, April 01, 2015 4:31 PM
To: JAWORSKI, MARK
Cc: Lam, Shelly (lam.shelly@epa.gov); Muniz, Nuria
Subject: RE: Copy of West Vermont revised source sample list (2) confirmed 03-31-15 by MJ.xlsx
Importance: High

Hi Mark,
References 27, 95, and 98 are listed in the table but were not provided/uploaded to the ESC folder. Can you send/upload so we can finish updating the table with RLs? Thx. ks

sample count	Lab ID	Consultant Sample #	Date	Location	Depth Below Ground Surface	Hazardous Substance	Hazardous Substance Concentration (Adjusted Concentration) mg/L	RL	Units	Reference	Can be Validated (Yes/No)
13	507931002	Sewer Exc. (9')	10/1/2007	Sewer Excavation	9 Feet	PCE	2.3			Ref. 40. p. 165;	No
						CIS 1,2-DCE	15.4				
						TCE	0.0554			27. pp. 517, 518	
										40. p. 164	
										40. p. 164	
18	5096084002	MMW-P-22-LA(4-6)	4/10/2014	MMW-P-22-LA(4-6)	4-6 Feet	CIS 1,2-DCE	0.234			Refs. 40. p. 161; 95, pp. 3, 7, 8	No
						PCE	0.0626				
						TCE	0.0461				
						VC	0.0281				
						Trans, 1,2-DCE	0.0368	4.1	ug/kg		
						PCE	49	2110	ug/kg		
						TCE	1.39	211	ug/kg		
						VC	0.0249	4.1	ug/kg		
23	5088407003	MGW-9D (8-10)	10/14/2013	MGW-9D (8-10)	8-10 Feet	PCE	11.1			Ref. 40. p. 156; 98, p. 390, 396, 397	No

From: Muniz, Nuria [mailto:Muniz.Nuria@epa.gov]
Sent: Wednesday, April 01, 2015 9:26 AM
To: Scott, Kevin
Subject: FW: Copy of West Vermont revised source sample list (2) confirmed 03-31-15 by MJ.xlsx

From: JAWORSKI, MARK [mailto:MJAWORSK@idem.IN.gov]
Sent: Wednesday, April 01, 2015 7:25 AM
To: Muniz, Nuria
Subject: Copy of West Vermont revised source sample list (2) confirmed 03-31-15 by MJ.xlsx

Nuria,
I also noticed that the ESC did not contain Reference 106. I just uploaded it. Reference 106 contains lab data for samples #48, #49, and #50.

DATA VALIDATION REPORT FOR SELECTED SOIL SAMPLES

This report documents the validation of the analytical results for selected soil samples collected during several different sampling events from the West Vermont Street Water Contamination site in Speedway, Indiana. The samples were collected by various consultant personnel as part of investigations that were submitted to the Indiana Department of Environmental Management (IDEM) under IDEM's voluntary remediation program to determine the nature and extent of contamination in various properties. IDEM has selected certain samples for use in scoring the site under the Environmental Protection Agency (EPA) hazard ranking system (HRS). IDEM has requested that EPA validate the analytical data so that it can be used for scoring, and EPA tasked Tetra Tech Superfund Technical Assessment and Response Team (START) with the validation. The selected soil samples were analyzed for volatile organic compounds (VOCs) by EPA SW-846 Method 8260B by local (Indianapolis-area) environmental laboratories. IDEM supplied Tetra Tech START with various "Reference," that comprise documents submitted to them by potentially responsible parties and their environmental consultants.

Tetra Tech START performed Stage 2A validation of the data from the samples in general accordance with the EPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Superfund Organic Methods Data Review, dated August 2014. The guidance provided in the NFG was modified as appropriate to correspond to the specific requirements of the non-CLP method used in these analyses and the START Quality Assurance Project Plan, dated April 2014. The validation was based on the following quality control (QC) parameters, as applicable to each analytical package:

- Holding times and sample preservation
- Blanks
- Laboratory control sample (LCS) results
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Surrogate recovery
- Sample quantitation

The following sections discuss the validation results for each reference, in turn, with the focus on the QC parameters with irregularities. The final section provides an overall evaluation of the validation results for all analyses, with the focus on data usability. Tetra Tech added validation qualifiers, as necessary. The added qualifiers may include:

- No qualifier: Data are acceptable as reported
- U: Analyte analyzed for, but not detected above the listed reporting limit.

- J: Analyte detected, but concentration is estimated for QC reasons
- J-: Analyte detected, but concentration is estimated for QC reasons and may be biased low
- J+: Analyte detected, but concentration is estimated for QC reasons and may be biased high
- UJ: Analyte not detected and the sample reporting limit is considered estimated for QC reasons
- R: Results are rejected; the analyte may or may not be present.

During the validation, it was noted that the non-CLP laboratories performing the analyses did not provide statistically-calculated sample quantitation limit (SQL) values. Instead, they provided sample reporting limit (SRL) numbers. The SRL provided by the laboratories are generally equivalent to an SQL as defined in HRS Section 1.1, Definition, as the quantity of a substance that can be reasonably quantified given the limits of detection for the methods of analysis and sample characteristics that may affect quantitation (for example, dilution, concentration) [and percent moisture for soil samples]. The SQL, or SRL in these data packages, correspond to the lowest calibration standard. The laboratories did not provide sample detection limits (SDL). The SDLs, if they had been provided by the laboratories, would be generally equivalent to method detection limits as defined in HRS Section 1.1, Definitions, and represent the lowest concentration of an analyte that a method can detect reliably in either a sample or blank. Also, the laboratories did not report detected results less than their SRL; therefore, there are no low-end extrapolated results. Exceedances of calibration range are discussed below as necessary.

Attachment 1 contains the adjusted analytical data table. Analytical data results that were flagged "J" (estimated) by the laboratory and through this data validation effort have been adjusted in accordance with the factsheet, "Using Qualified Data to Document Observed Release and Observed Contamination" dated November 1996. Attachment 2 presents copies of the sample results sheets from the laboratory data packages with hand-entered qualifications for results qualified based on the data validation effort.

1.0 Reference Number (No.) 26

Reference No. 26 includes three data packages (5023037, 5023333, and 5023501) for soil samples collected during February 2009 and analyzed by Pace Analytical Services, Inc. (Pace). There were no problems with holding times and sample preservation, blanks, and surrogate recoveries. Also included is a data package (SML09-003) from Sierra Mobile Laboratories. This data package is missing several QC items; therefore, only surrogate recoveries and sample quantitation could be evaluated.

Some LCSs yielded excessive recoveries for acetone, acrolein, and acrylonitrile. None of these analytes was detected in any of the associated samples; therefore, no qualifications were applied. However, one

LCS yielded a low recovery for tetrachloroethene. Therefore, the result for tetrachloroethene in the only accompanying sample, SB-15 (4-6') was qualified as estimated with a possible low bias (flagged "J-").

A number of MS/MSD analyses yielded irregular results. No qualifications were applied for those performed on samples from other sites. On the other hand, in the MS/MSD analyses performed on sample SB-14 (17-18'), the recoveries of tetrachloroethene could not be determined because the unspiked sample contained more than 700 times the spike concentration. Additionally, recoveries were below the QC limit for 1,2,3-trichlorobenzene; 1,2,4-trichlorobenzene; 1,4-dichlorobenzene; ethylbenzene; hexachloro-1,3-butadiene; isopropylbenzene; n-butylbenzene; naphthalene; sec-butylbenzene; and vinyl acetate. None of those analytes was detected in the unspiked sample; therefore, the reporting limits for these compounds in sample SB-14 (17-18') were qualified as estimated with a possible low bias (flagged "UJ"). Finally, although recoveries were within QC limits, 1,2,3-trichloropropane and 1,2,4-trimethylbenzene yielded excessive relative percent differences (RPDs). These compounds were not detected in the unspiked sample; therefore, no further qualifications were necessary.

The MS/MSD analyses performed on samples SB-9 (12-13') and SB-15 (8-10') yielded low recoveries for naphthalene; therefore, the non-detect results for naphthalene in samples SB-9 (12-13') and SB-15 (8-10') were qualified as estimated with a possible low bias (flagged "UJ"). Additionally, the tetrachloroethene yielded excessive recoveries, which may be due to a heterogeneous distribution of the analyte within the soil. Therefore, the result for tetrachloroethene in sample SB-15 (8-10') is qualified as estimated with a possible high bias (flagged "J+").

Surrogate dibromofluoromethane displayed recoveries above the QC limit for several samples. The positive results for samples SB-1 6-7; SB-1 14-15; SB-2 11-12; SB-2 15-16; SB-3 2-3; SB-4 10-11; SB-7 3-4; SB-7 15-16; were qualified as estimated with a possible high bias (flagged "J+").

A number of samples were analyzed at one or more dilutions (from 10- to 500-fold) to bring one or more analytes down within calibration range. These efforts succeeded; therefore, no qualifications were necessary. Tetrachloroethene in sample SB-4 10-11 exceeded the calibration range; however, the result was previously qualified as discussed above.

2.0 Reference No. 27

Reference No. 27 is data package 507931 from Pace for two sewer excavation soil samples collected in October 2007. There were no problems with holding times and sample preservation, blanks, and surrogate recoveries.

The LCS yielded an excessive recovery for acrolein. That analyte was not detected in either sample; therefore, no qualifications were applied.

In the MS/MSD analyses performed on sample SEWER EXC. (9'), recoveries of tetrachloroethene could not be determined because the unspiked sample contained much more than the amount of the spike. No qualifications were applied for this data gap. Both recoveries were below the laboratory limits for 1,2,3-trichlorobenzene; 1,2,4-trichlorobenzene; hexachloro-1,3-butadiene; n-butylbenzene; and naphthalene; and recoveries below 10 percent for vinyl acetate. The vinyl acetate results were rejected as unusable (flagged "R") and the remaining associated results were qualified as estimated with a low bias (flagged "UJ"). Additionally, both recoveries were above the laboratory limits for acetone, acrolein, and methylene chloride. None of these analytes was detected in the field sample; therefore, no qualifications were applied. Also, the RPDs exceeded the laboratory criteria for 1,2,3-trichlorobenzene; 1,2,4-trichlorobenzene; 1,2,4-trimethylbenzene; 1,2-dichlorobenzene; 1,3,5-trimethylbenzene; 1,3-dichlorobenzene; 1,4-dichlorobenzene; 2-chlorotoluene; 4-chlorotoluene; hexachloro-1,3-butadiene; isopropylbenzene; n-butylbenzene; n-propylbenzene; naphthalene; p-isopropyltoluene; sec-butylbenzene; styrene; tert-butylbenzene; vinyl acetate; and xylenes (total). The associated results were non-detect; therefore, no qualifications were required.

Sample SEWER EXC. (9') was re-analyzed at a 50-fold dilution to bring the tetrachloroethene concentration within calibration range. The effort succeeded; therefore, no qualification was applied.

3.0 Reference No. 28

Reference No. 28 includes four data packages (5077147, 5077222, 5077253, and 5077377) with soil samples collected in March 2013 and analyzed by Pace. There were no problems with holding times and sample preservation, blanks, and surrogate recoveries.

A few of the LCSs included in these packages yielded excessive recoveries for bromochloromethane and/or chloroform. Neither analyte was detected in any of the associated samples; therefore, no qualifications were applied.

The only MS/MSD irregularities were in analyses performed on a sample from another site. Therefore, no qualifications were applied.

A number of samples were analyzed at one or more dilutions (from 25- to 500-fold) to bring one or more analytes down within calibration range. These efforts succeeded; therefore, no qualifications were necessary.

4.0 Reference No. 73

Reference No. 73 is data package 5095863 from Pace with three soil samples and a trip blank collected in April 2014. There were no problems with holding times and sample preservation. No MS/MSD analyses were included. No qualifications were applied for this data gap.

One laboratory (method) blank yielded a low concentration of the common laboratory contaminant methylene chloride. Sample MMW-21-LA (14-16) yielded about twice that concentration, some or all of which may be laboratory contamination. The methylene chloride result in that sample was qualified as estimated with a possible high bias (flagged "J+").

Sample MMW-21-LA (12-14) yielded an excessive recovery for surrogate toluene-d_8 in the undiluted analysis, due to apparent matrix interference. The detected results for that sample in the undiluted analysis (trans-1,2-dichloroethene and vinyl chloride) were qualified as estimated with a possible high bias (flagged "J+").

Samples were re-analyzed at one or more dilutions (50- or 500-fold) to bring high concentration results of tetrachloroethene and/or trichloroethene within calibration range. These efforts succeeded; therefore, no qualifications were applied.

5.0 Reference No. 78

Reference No. 78 is data package 5096109 from Pace with seven soil samples, one field duplicate soil sample, and a trip blank collected in April 2014. The field duplicate sample was "blind" (no source specified); therefore, it could not be compared with its primary sample. There were no problems with holding times and sample preservation, blanks, LCSs, and MS/MSD.

Samples MMW-P-22-LA (16-18') and MMW-P-22-LA (18-20') yielded slightly excessive recoveries for surrogate dibromofluoromethane. Therefore, the associated undiluted positive results for these samples were qualified as estimated with a possible high bias (flagged "J+").

Some samples were re-analyzed at 50- or 100-fold dilutions to bring one analyte within calibration range. These efforts succeeded; therefore, no qualifications were applied.

6.0 Reference No. 95

Reference No. 95 is data package 5096084 from Pace for two soils and a trip blank collected in April 2014. There were no problems with sample preservation and blanks. The MS/MSD analyses were performed on a non-project sample. No qualifications were applied for this data gap.

Sample MMW-21D (4-6) was re-analyzed for tetrachloroethene at a 100-fold dilution and MMW-P-22-LA (4-6) was re-analyzed for cis-1,2-dichloroethene at a 50-fold dilution one day after expiration of holding time. Therefore, these results were qualified as estimated with a possible low bias (flagged "J-").

The LCS yielded excessive recoveries of trans-1,4-dichloro-2-butene and vinyl acetate. Neither analyte was detected in the associated field sample; therefore, no qualifications were applied.

Sample MMW-P-22-LA (4-6) yielded an excessive recovery of surrogate dibromofluoromethane. The undiluted detected results for sample MMW-P-22-LA (4-6) were qualified as estimated with a possible high bias (flagged "J+").

Both samples were re-analyzed at dilutions to bring high concentration results within quantitation limits. These efforts succeeded; therefore, no further qualifications were applied.

7.0 References Nos. 96, 97, and 106

References Nos. 96, 97, and 106 comprise five data packages from Heritage Environmental Services, LLC (Heritage) (4758, 4827, 4855, 4881, and 4929), reporting a series of soil samples collected in August, September, and October 2006. There were no problems with holding times and sample preservation, blanks, LCS results, and field duplicate precision.

Some MS/MSD analyses were for samples from other sites; therefore, no qualifications were applied for the irregularities in these results. Also, the recoveries of some analytes in some MS/MSD analyses could not be determined because the unspiked samples contained much more than the amount spiked, or exceeded the QC limit for analytes that were not detected in the unspiked samples. No qualifications were applied for these data gaps. The MS/MSD performed for sample KS-9 displayed recoveries below the QC limit for trichloroethene, and the MS/MSD performed for sample A3-WW-5-DUP displayed a low recovery for trichlorofluoromethane. Therefore, the trichloroethene result for sample KS-9 and the trichlorofluoromethane results for samples A3-WW-5 and A3-WW-5-DUP were qualified as estimated with a possible low bias (flagged "J-/UJ").

Matrix interference led to a recovery below the QC limit for surrogate 4-bromofluorobenzene in sample A2-WW-1 (4'). Therefore, the undiluted detected results for this sample were qualified as estimated with a possible low bias (flagged "J-/UJ").

Some analytical results exceeded the instruments calibration range. The laboratory re-analyzed these samples at various dilutions (5- to 100-fold), which brought the results within calibration range, and reported the latter. Therefore, no qualifications were applied.

8.0 Reference No. 98

Reference No. 98 is data package 5088407 from Pace with five soil samples and one blind field duplicate sample collected in October 2013. There were no problems with sample preservation and holding time, blanks, and LCS results. Although the field duplicate sample most closely matches MGW-6D (8-10'), the field duplicate was "blind" (no source specified) and therefore could not be compared with its primary sample

In the MS/MSD analyses performed on sample MGW-11D (10-11'), recoveries were below 10 percent for vinyl acetate. Therefore, the result was rejected as unusable (flagged "R").

In the 25-fold dilution analysis of sample MGW-9D (8-10'), surrogate dibromofluoromethane yielded a recovery below QC limits. Therefore, the non-detect results from the 25-fold dilution were qualified as estimated with a possible low bias (flagged "UJ").

Sample MGW-9D (8-10') was first analyzed at a 25-fold dilution, due to its volatile organic content, and all analytes except tetrachloroethene were non-detect at this dilution. It was re-analyzed at a 200-fold

dilution to bring the tetrachloroethene concentration within calibration range. This effort succeeded; therefore, no further qualifications were applied.

9.0 Reference No. 99

Reference No. 99 includes five data packages (5038030, 5038057, 5038108, 5038146, and 5038195) from Pace, with soil samples collected in August and September 2004. There were no problems with holding times and sample preservation, LCS results, and surrogate recoveries. The MS/MSD analyses were performed on a non-project sample. No qualifications were applied for this data gap.

One laboratory blank yielded a low concentration of the common laboratory contaminant methylene chloride. Methylene chloride was not detected in the associated sample; therefore, no qualification was applied.

Sample MMW-1S was reanalyzed at a 25-fold dilution to bring the tetrachloroethene concentration within calibration range. That effort succeeded; therefore, no qualification was applied.

10.0 Overall Evaluation

The analyses went well. The only rejections were for the non-detect vinyl acetate results for the samples included in Reference Nos. 27 and 98. Otherwise, the most significant problems with the analyses are due to the nature of some samples, with high concentrations and heterogeneous distributions of contaminants and other organic compounds. The high concentrations required analysis at a dilution, raising sample detection and reporting limits and possibly masking low concentrations of some contaminants. The data can be used as qualified with the data use limitations previously discussed.

ATTACHMENT 1

ADJUSTED ANALYTICAL DATA TABLE

Sample ID	Hazardous Substance	Concentration	Bias Type	Calculation and Concentration
Genuine Auto Parts				
A2-WW-1 (4')	cis-1,2-DCE	1.0 J- mg/kg	Matrix interference led to a recovery below the QC limit Low Bias	1.0 mg/kg
A2-WW-1 (4')	PCE	0.030 J- mg/kg	Matrix interference led to a recovery below the QC limit Low Bias	0.030 mg/kg
KS-9	TCE	18 J- mg/kg	The MS/MSD displayed recoveries below the QC limit Low Bias	18 mg/kg
Michigan Plaza				
SB-3 (2-3)	PCE	0.071 J+ mg/kg	Surrogate displayed recoveries above the QC limit High Bias	0.071 ÷ 10 = 0.0071 mg/kg
SB-15 (4-6)	PCE	110 J- µg/kg	LCS yielded a low recovery Low Bias	110 µg/kg
MMW-P-22-LA (4-6)	cis-1,2-DCE	234 J- µg/kg	Re-analysis outside holding time Low Bias	234 µg/kg
MMW-P-22-LA (4-6)	PCE	62.6 J+ µg/kg	Excessive surrogate recovery High Bias	62.6 ÷ 10 = 6.26 µg/kg
MMW-P-22-LA (4-6)	TCE	46.1 J+ µg/kg	Excessive surrogate recovery High Bias	46.1 ÷ 2.11 = 21.84 µg/kg
MMW-P-22-LA (4-6)	VC	28.1 J+ µg/kg	Excessive surrogate recovery High Bias	28.1 ÷ 10 = 2.81 µg/kg
SB-15 (8-10)	PCE	130 J+ µg/kg	Excessive surrogate recovery High Bias	130 ÷ 10 = 13.0 µg/kg

Sample ID	Hazardous Substance	Concentration	Bias Type	Calculation and Concentration
SB-4 (10-11)	PCE	0.118 J+ mg/kg	Surrogate displayed recoveries above the QC limit High Bias	0.118 ÷ 10 = 0.0118 mg/kg
MMW-21-LA (12-14)	trans-1,2-DCE	36.8 J+ µg/kg	Excessive surrogate recovery High Bias	36.8 ÷ 10 = 3.68 µg/kg
MMW-21-LA (12-14)	VC	24.9 J+ µg/kg	Excessive surrogate recovery High Bias	24.9 ÷ 10 = 2.49 µg/kg

Notes:

DCE	Dichloroethene
ID	Identification number
J-	Analyte detected, but concentration is estimated for QC reasons and may be biased low.
J+	Analyte detected, but concentration is estimated for QC reasons and may be biased high.
LCS	Laboratory control sample
µg/kg	Micrograms per kilogram
mg/kg	Milligrams per kilogram
MS/MSD	Matrix spike/matrix spike duplicate
PCE	Tetrachloroethene
QC	Quality control
TCE	Trichloroethene
VC	Vinyl chloride

Analyte concentrations were adjusted in accordance with the U.S. Environmental Protection Agency factsheet, “Using Qualified Data to Document Observed Release and Observed Contamination” dated November 1996.

ATTACHMENT 2

SAMPLE LABORATORY DATA SHEETS WITH HAND-ENTERED QUALIFICATIONS

Pace Analytical®
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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Michigan Meadows
Pace Project No.: 5023501

Sample: SB-9 (12-13') **Lab ID: 5023501007** **Collected: 02/16/09 15:50** **Received: 02/19/09 13:33** **Matrix: Solid**

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.2	1		02/23/09 17:45	71-43-2	
Carbon tetrachloride	ND	ug/kg	5.2	1		02/23/09 17:45	56-23-5	
Chloroform	ND	ug/kg	5.2	1		02/23/09 17:45	67-66-3	
1,1-Dichloroethane	ND	ug/kg	5.2	1		02/23/09 17:45	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.2	1		02/23/09 17:45	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.2	1		02/23/09 17:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.2	1		02/23/09 17:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.2	1		02/23/09 17:45	156-60-5	
Ethylbenzene	ND	ug/kg	5.2	1		02/23/09 17:45	100-41-4	
Methylene chloride	ND	ug/kg	20.8	1		02/23/09 17:45	75-09-2	
Naphthalene	ND	ug/kg UJ	5.2	1		02/23/09 17:45	91-20-3	
Tetrachloroethene	10.4	ug/kg	5.2	1		02/23/09 17:45	127-18-4	
Toluene	ND	ug/kg	5.2	1		02/23/09 17:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.2	1		02/23/09 17:45	71-55-6	
Trichloroethene	ND	ug/kg	5.2	1		02/23/09 17:45	79-01-6	
Vinyl chloride	ND	ug/kg	5.2	1		02/23/09 17:45	75-01-4	
Xylene (Total)	ND	ug/kg	10.4	1		02/23/09 17:45	1330-20-7	
Dibromofluoromethane (S)	104	%	80-124	1		02/23/09 17:45	1868-53-7	
Toluene-d8 (S)	101	%	58-145	1		02/23/09 17:45	2037-26-5	
4-Bromofluorobenzene (S)	98	%	61-131	1		02/23/09 17:45	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	3.8	%	0.10	1		02/23/09 19:01		

gw
04/09/15

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ANALYTICAL RESULTS

Project: Michigan Plaza
Pace Project No.: 5023333

Sample: SB-14 (17-18) **Lab ID: 5023333013** **Collected: 02/13/09 15:00** **Received: 02/13/09 16:58** **Matrix: Solid**

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	115	1		02/14/09 08:59	67-64-1	
Acrolein	ND	ug/kg	115	1		02/14/09 08:59	107-02-8	
Acrylonitrile	ND	ug/kg	115	1		02/14/09 08:59	107-13-1	
Benzene	ND	ug/kg	5.8	1		02/14/09 08:59	71-43-2	
Bromobenzene	ND	ug/kg	5.8	1		02/14/09 08:59	108-86-1	
Bromochloromethane	ND	ug/kg	5.8	1		02/14/09 08:59	74-97-5	
Bromodichloromethane	ND	ug/kg	5.8	1		02/14/09 08:59	75-27-4	
Bromoform	ND	ug/kg	5.8	1		02/14/09 08:59	75-25-2	
Bromomethane	ND	ug/kg	5.8	1		02/14/09 08:59	74-83-9	
2-Butanone (MEK)	ND	ug/kg	28.8	1		02/14/09 08:59	78-93-3	
n-Butylbenzene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	104-51-8	
sec-Butylbenzene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.8	1		02/14/09 08:59	98-06-6	
Carbon disulfide	ND	ug/kg	11.5	1		02/14/09 08:59	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.8	1		02/14/09 08:59	56-23-5	
Chlorobenzene	ND	ug/kg	5.8	1		02/14/09 08:59	108-90-7	
Chloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	75-00-3	
Chloroform	ND	ug/kg	5.8	1		02/14/09 08:59	67-66-3	
Chloromethane	ND	ug/kg	5.8	1		02/14/09 08:59	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.8	1		02/14/09 08:59	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.8	1		02/14/09 08:59	106-43-4	
Dibromochloromethane	ND	ug/kg	5.8	1		02/14/09 08:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.8	1		02/14/09 08:59	106-93-4	
Dibromomethane	ND	ug/kg	5.8	1		02/14/09 08:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.8	1		02/14/09 08:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.8	1		02/14/09 08:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/kg	115	1		02/14/09 08:59	110-57-6	
Dichlorodifluoromethane	ND	ug/kg	5.8	1		02/14/09 08:59	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.8	1		02/14/09 08:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.8	1		02/14/09 08:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.8	1		02/14/09 08:59	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.8	1		02/14/09 08:59	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.8	1		02/14/09 08:59	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.8	1		02/14/09 08:59	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.8	1		02/14/09 08:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.8	1		02/14/09 08:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.8	1		02/14/09 08:59	10061-02-6	
Ethylbenzene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	100-41-4	
Ethyl methacrylate	ND	ug/kg	11.5	1		02/14/09 08:59	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	87-68-3	
n-Hexane	ND	ug/kg	5.8	1		02/14/09 08:59	110-54-3	
2-Hexanone	ND	ug/kg	115	1		02/14/09 08:59	591-78-6	
Iodomethane	ND	ug/kg	115	1		02/14/09 08:59	74-88-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Michigan Plaza
Pace Project No.: 5023333

Sample: SB-14 (17-18) **Lab ID: 5023333013** **Collected: 02/13/09 15:00** **Received: 02/13/09 16:58** **Matrix: Solid**

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg UJ	5.8	1		02/14/09 08:59	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.8	1		02/14/09 08:59	99-87-6	
Methylene chloride	ND	ug/kg	23.0	1		02/14/09 08:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	28.8	1		02/14/09 08:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.8	1		02/14/09 08:59	1634-04-4	
Naphthalene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	91-20-3	
n-Propylbenzene	ND	ug/kg	5.8	1		02/14/09 08:59	103-65-1	
Styrene	ND	ug/kg	5.8	1		02/14/09 08:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	79-34-5	
Tetrachloroethene	41100	ug/kg	2880	500		02/16/09 17:21	127-18-4	
Toluene	ND	ug/kg	5.8	1		02/14/09 08:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg UJ	5.8	1		02/14/09 08:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.8	1		02/14/09 08:59	79-00-5	
Trichloroethene	27.6	ug/kg	5.8	1		02/14/09 08:59	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.8	1		02/14/09 08:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.8	1		02/14/09 08:59	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.8	1		02/14/09 08:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.8	1		02/14/09 08:59	108-67-8	
Vinyl acetate	ND	ug/kg UJ	115	1		02/14/09 08:59	108-05-4	
Vinyl chloride	ND	ug/kg	5.8	1		02/14/09 08:59	75-01-4	
Xylene (Total)	ND	ug/kg	11.5	1		02/14/09 08:59	1330-20-7	
Dibromofluoromethane (S)	92	%	80-124	1		02/14/09 08:59	1868-53-7	
Toluene-d8 (S)	108	%	58-145	1		02/14/09 08:59	2037-26-5	
4-Bromofluorobenzene (S)	84	%	61-131	1		02/14/09 08:59	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	13.2	%	0.10	1		02/13/09 18:18		

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ANALYTICAL RESULTS

Project: Michigan Meadows
Pace Project No.: 5023501

Sample: SB-15 (4-6') **Lab ID: 5023501014** **Collected: 02/17/09 13:00** **Received: 02/19/09 13:33** **Matrix: Solid**

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.4	1		02/24/09 13:03	71-43-2	
Carbon tetrachloride	ND	ug/kg	5.4	1		02/24/09 13:03	56-23-5	
Chloroform	ND	ug/kg	5.4	1		02/24/09 13:03	67-66-3	
1,1-Dichloroethane	ND	ug/kg	5.4	1		02/24/09 13:03	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.4	1		02/24/09 13:03	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.4	1		02/24/09 13:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.4	1		02/24/09 13:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.4	1		02/24/09 13:03	156-60-5	
Ethylbenzene	ND	ug/kg	5.4	1		02/24/09 13:03	100-41-4	
Methylene chloride	ND	ug/kg	21.6	1		02/24/09 13:03	75-09-2	
Naphthalene	ND	ug/kg	5.4	1		02/24/09 13:03	91-20-3	
Tetrachloroethene	110	ug/kg J-	5.4	1		02/24/09 13:03	127-18-4	
Toluene	ND	ug/kg	5.4	1		02/24/09 13:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.4	1		02/24/09 13:03	71-55-6	
Trichloroethene	ND	ug/kg	5.4	1		02/24/09 13:03	79-01-6	
Vinyl chloride	ND	ug/kg	5.4	1		02/24/09 13:03	75-01-4	
Xylene (Total)	ND	ug/kg	10.8	1		02/24/09 13:03	1330-20-7	
Dibromofluoromethane (S)	104	%	80-124	1		02/24/09 13:03	1868-53-7	
Toluene-d8 (S)	99	%	58-145	1		02/24/09 13:03	2037-26-5	
4-Bromofluorobenzene (S)	98	%	61-131	1		02/24/09 13:03	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	7.3	%	0.10	1		02/23/09 19:03		

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ANALYTICAL RESULTS

Project: Michigan Meadows
Pace Project No.: 5023501

Sample: SB-15 (8-10') **Lab ID: 5023501015** Collected: 02/17/09 13:10 Received: 02/19/09 13:33 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.2	1		02/23/09 18:01	71-43-2	
Carbon tetrachloride	ND	ug/kg	5.2	1		02/23/09 18:01	56-23-5	
Chloroform	ND	ug/kg	5.2	1		02/23/09 18:01	67-66-3	
1,1-Dichloroethane	ND	ug/kg	5.2	1		02/23/09 18:01	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.2	1		02/23/09 18:01	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.2	1		02/23/09 18:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.2	1		02/23/09 18:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.2	1		02/23/09 18:01	156-60-5	
Ethylbenzene	ND	ug/kg	5.2	1		02/23/09 18:01	100-41-4	
Methylene chloride	ND	ug/kg	20.8	1		02/23/09 18:01	75-09-2	
Naphthalene	ND	ug/kg UJ	5.2	1		02/23/09 18:01	91-20-3	
Tetrachloroethene	130	ug/kg J+	5.2	1		02/23/09 18:01	127-18-4	
Toluene	ND	ug/kg	5.2	1		02/23/09 18:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.2	1		02/23/09 18:01	71-55-6	
Trichloroethene	ND	ug/kg	5.2	1		02/23/09 18:01	79-01-6	
Vinyl chloride	ND	ug/kg	5.2	1		02/23/09 18:01	75-01-4	
Xylene (Total)	ND	ug/kg	10.4	1		02/23/09 18:01	1330-20-7	
Dibromofluoromethane (S)	103	%	80-124	1		02/23/09 18:01	1868-53-7	
Toluene-d8 (S)	100	%	58-145	1		02/23/09 18:01	2037-26-5	
4-Bromofluorobenzene (S)	100	%	61-131	1		02/23/09 18:01	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	4.0	%	0.10	1		02/23/09 19:03		

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www.sierramobilelabs.com

Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0101 Matrix: soil Date Collected: 2/3/09
Client Sample ID: SB-1 6-7 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/4/09 22:14	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/4/09 22:14	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/4/09 22:14	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Styrene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Tetrachloroethene	0.010 J+	mg/kg	0.005	1	2/4/09 22:14	SAH	
Toluene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/4/09 22:14	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/4/09 22:14	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/4/09 22:14	SAH	
4-Bromofluorobenzene (surr)	95.0	%	70-130	1	2/4/09 22:14	SAH	
Dibromofluoromethane (surr)	136	%	70-130	1	2/4/09 22:14	SAH	1
Toluene-d8 (surr)	104	%	70-130	1	2/4/09 22:14	SAH	
Total Solids by EPA 1684							
Total Solids	86.6	%	0.1	1	2/5/09 7:35	SAH	

Soil results are reported on a dry weight basis.

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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0091 Matrix: soil Date Collected: 2/3/09
Client Sample ID: SB-1 14-15 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/4/09 17:14	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/4/09 17:14	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/4/09 17:14	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Styrene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Tetrachloroethene	0.012 J+	mg/kg	0.005	1	2/4/09 17:14	SAH	
Toluene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/4/09 17:14	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/4/09 17:14	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/4/09 17:14	SAH	
4-Bromofluorobenzene (surr)	80.0	%	70-130	1	2/4/09 17:14	SAH	
Dibromofluoromethane (surr)	137	%	70-130	1	2/4/09 17:14	SAH	1
Toluene-d8 (surr)	93.4	%	70-130	1	2/4/09 17:14	SAH	
Total Solids by EPA 1684							
Total Solids	95.7	%	0.1	1	2/5/09 7:35	SAH	

Soil results are reported on a dry weight basis.

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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0103 Matrix: soil Date Collected: 2/3/09
Client Sample ID: SB-2 11-12 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/5/09 7:37	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/5/09 7:37	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/5/09 7:37	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Styrene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Tetrachloroethene	0.006 J+	mg/kg	0.005	1	2/5/09 7:37	SAH	
Toluene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/5/09 7:37	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/5/09 7:37	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/5/09 7:37	SAH	
4-Bromofluorobenzene (surr)	82.8	%	70-130	1	2/5/09 7:37	SAH	
Dibromofluoromethane (surr)	134	%	70-130	1	2/5/09 7:37	SAH	1
Toluene-d8 (surr)	95.5	%	70-130	1	2/5/09 7:37	SAH	
Total Solids by EPA 1684							
Total Solids	96.0	%	0.1	1	2/5/09 7:35	SAH	

Soil results are reported on a dry weight basis.

04/09/15

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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0104 Matrix: soil Date Collected: 2/3/09
Client Sample ID: SB-2 15-16 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/4/09 23:43	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/4/09 23:43	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/4/09 23:43	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Styrene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Tetrachloroethene	0.017 J+	mg/kg	0.005	1	2/4/09 23:43	SAH	
Toluene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/4/09 23:43	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/4/09 23:43	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/4/09 23:43	SAH	
4-Bromofluorobenzene (surr)	81.9	%	70-130	1	2/4/09 23:43	SAH	
Dibromofluoromethane (surr)	139	%	70-130	1	2/4/09 23:43	SAH	1
Toluene-d8 (surr)	98.0	%	70-130	1	2/4/09 23:43	SAH	
Total Solids by EPA 1684							
Total Solids	96.1	%	0.1	1	2/5/09 7:35	SAH	

Soil results are reported on a dry weight basis.

GAW
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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0105 Matrix: soil Date Collected: 2/3/09
Client Sample ID: SB-3 2-3 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/5/09 0:41	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/5/09 0:41	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/5/09 0:41	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Styrene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Tetrachloroethene	0.071 J+	mg/kg	0.005	1	2/5/09 0:41	SAH	
Toluene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/5/09 0:41	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/5/09 0:41	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/5/09 0:41	SAH	
4-Bromofluorobenzene (surr)	87.5	%	70-130	1	2/5/09 0:41	SAH	
Dibromofluoromethane (surr)	137	%	70-130	1	2/5/09 0:41	SAH	1
Toluene-d8 (surr)	99.1	%	70-130	1	2/5/09 0:41	SAH	
Total Solids by EPA 1684							
Total Solids	87.8	%	0.1	1	2/5/09 7:35	SAH	

Soil results are reported on a dry weight basis.

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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0094 Matrix: soil Date Collected: 2/3/09
Client Sample ID: SB-4 10-11 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/4/09 19:45	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/4/09 19:45	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/4/09 19:45	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Styrene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Tetrachloroethene	0.118 J+	mg/kg	0.005	1	2/4/09 19:45	SAH	E
Toluene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/4/09 19:45	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/4/09 19:45	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/4/09 19:45	SAH	
4-Bromofluorobenzene (surr)	83.4	%	70-130	1	2/4/09 19:45	SAH	
Dibromofluoromethane (surr)	147	%	70-130	1	2/4/09 19:45	SAH	1
Toluene-d8 (surr)	85.3	%	70-130	1	2/4/09 19:45	SAH	
Total Solids by EPA 1684							
Total Solids	96.3	%	0.1	1	2/5/09 7:35	SAH	

Soil results are reported on a dry weight basis.

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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0108 Matrix: soil Date Collected: 2/4/09
Client Sample ID: SB-7 3-4 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/5/09 1:40	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/5/09 1:40	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/5/09 1:40	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Styrene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Tetrachloroethene	0.009 J+	mg/kg	0.005	1	2/5/09 1:40	SAH	
Toluene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/5/09 1:40	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/5/09 1:40	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/5/09 1:40	SAH	
4-Bromofluorobenzene (surr)	85.8	%	70-130	1	2/5/09 1:40	SAH	
Dibromofluoromethane (surr)	134	%	70-130	1	2/5/09 1:40	SAH	1
Toluene-d8 (surr)	96.1	%	70-130	1	2/5/09 1:40	SAH	
Total Solids by EPA 1684							
Total Solids	89.1	%	0.1	1	2/5/09 7:35	SAH	

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Lab Project Number: SML09-003
Client: Mundell & Associates, Inc.
Client Project ID: M01046 / Michigan Plaza

Lab Sample Number: 09-0110 Matrix: soil Date Collected: 2/4/09
Client Sample ID: SB-7 15-16 Date Received: 2/4/09

Analyses	Result	Units	Reporting Limit	DF	Date & Time Analyzed	Analyst	Quals
GCMS VOCs by EPA 8260B/5035							
2-Hexanone	ND	mg/kg	0.013	1	2/5/09 7:08	SAH	
Hexachlorobutadiene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Iodomethane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Isopropylbenzene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
p-Isopropyltoluene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Methyl Ethyl Ketone (2-Butanone)	ND	mg/kg	0.013	1	2/5/09 7:08	SAH	
Methyl(tert) butyl ether (MTBE)	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.013	1	2/5/09 7:08	SAH	
Naphthalene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
n-Propylbenzene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Styrene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Tetrachloroethene	0.010 J+	mg/kg	0.005	1	2/5/09 7:08	SAH	
Toluene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,2,3-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,2,4-Trichlorobenzene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,1,1-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,1,2-Trichloroethane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Trichloroethene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Trichlorofluoromethane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,2,3-Trichloropropane	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,2,4-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
1,3,5-Trimethylbenzene	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Vinyl acetate	ND	mg/kg	0.005	1	2/5/09 7:08	SAH	
Vinyl chloride	ND	mg/kg	0.002	1	2/5/09 7:08	SAH	
Xylenes, Total	ND	mg/kg	0.015	1	2/5/09 7:08	SAH	
4-Bromofluorobenzene (surr)	80.5	%	70-130	1	2/5/09 7:08	SAH	
Dibromofluoromethane (surr)	134	%	70-130	1	2/5/09 7:08	SAH	1
Toluene-d8 (surr)	93.5	%	70-130	1	2/5/09 7:08	SAH	
Total Solids by EPA 1684							
Total Solids	96.4	%	0.1	1	2/5/09 7:35	SAH	

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Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Michigan Plaza
Pace Project No.: 507931

Sample: SEWER EXC. (9') **Lab ID: 507931002** Collected: 10/01/07 15:45 Received: 10/04/07 10:36 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	109	1		10/11/07 08:35	67-64-1	
Acrolein	ND	ug/kg	109	1		10/11/07 08:35	107-02-8	
Acrylonitrile	ND	ug/kg	109	1		10/11/07 08:35	107-13-1	
Benzene	ND	ug/kg	5.5	1		10/11/07 08:35	71-43-2	
Bromobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	108-86-1	
Bromochloromethane	ND	ug/kg	5.5	1		10/11/07 08:35	74-97-5	
Bromodichloromethane	ND	ug/kg	5.5	1		10/11/07 08:35	75-27-4	
Bromoform	ND	ug/kg	5.5	1		10/11/07 08:35	75-25-2	
Bromomethane	ND	ug/kg	5.5	1		10/11/07 08:35	74-83-9	
2-Butanone (MEK)	ND	ug/kg	27.3	1		10/11/07 08:35	78-93-3	
n-Butylbenzene	ND	ug/kg UJ	5.5	1		10/11/07 08:35	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.5	1		10/11/07 08:35	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.5	1		10/11/07 08:35	98-06-6	
Carbon disulfide	ND	ug/kg	10.9	1		10/11/07 08:35	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.5	1		10/11/07 08:35	56-23-5	
Chlorobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	108-90-7	
Chloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	75-00-3	
Chloroform	ND	ug/kg	5.5	1		10/11/07 08:35	67-66-3	
Chloromethane	ND	ug/kg	5.5	1		10/11/07 08:35	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.5	1		10/11/07 08:35	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.5	1		10/11/07 08:35	106-43-4	
Dibromochloromethane	ND	ug/kg	5.5	1		10/11/07 08:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.5	1		10/11/07 08:35	106-93-4	
Dibromomethane	ND	ug/kg	5.5	1		10/11/07 08:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/kg	109	1		10/11/07 08:35	110-57-6	
Dichlorodifluoromethane	ND	ug/kg	5.5	1		10/11/07 08:35	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.5	1		10/11/07 08:35	75-35-4	
cis-1,2-Dichloroethene	15.4	ug/kg	5.5	1		10/11/07 08:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.5	1		10/11/07 08:35	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.5	1		10/11/07 08:35	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.5	1		10/11/07 08:35	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.5	1		10/11/07 08:35	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.5	1		10/11/07 08:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.5	1		10/11/07 08:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.5	1		10/11/07 08:35	10061-02-6	
Ethylbenzene	ND	ug/kg	5.5	1		10/11/07 08:35	100-41-4	
Ethyl methacrylate	ND	ug/kg	10.9	1		10/11/07 08:35	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/kg UJ	5.5	1		10/11/07 08:35	87-68-3	
n-Hexane	ND	ug/kg	5.5	1		10/11/07 08:35	110-54-3	
2-Hexanone	ND	ug/kg	109	1		10/11/07 08:35	591-78-6	
Iodomethane	ND	ug/kg	109	1		10/11/07 08:35	74-88-4	

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ANALYTICAL RESULTS

Project: Michigan Plaza
Pace Project No.: 507931

Sample: SEWER EXC. (9') **Lab ID: 507931002** Collected: 10/01/07 15:45 Received: 10/04/07 10:36 Matrix: Solid

Solid results reported on dry weight basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg	5.5	1		10/11/07 08:35	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.5	1		10/11/07 08:35	99-87-6	
Methylene chloride	ND	ug/kg	21.9	1		10/11/07 08:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	27.3	1		10/11/07 08:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.5	1		10/11/07 08:35	1634-04-4	
Naphthalene	ND	ug/kg	5.5	1		10/11/07 08:35	91-20-3	UJ
n-Propylbenzene	ND	ug/kg	5.5	1		10/11/07 08:35	103-65-1	
Styrene	ND	ug/kg	5.5	1		10/11/07 08:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	79-34-5	
Tetrachloroethene	**2300**	ug/kg	273	50		10/11/07 15:59	127-18-4	
Toluene	ND	ug/kg	5.5	1		10/11/07 08:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	87-61-6	UJ
1,2,4-Trichlorobenzene	ND	ug/kg	5.5	1		10/11/07 08:35	120-82-1	UJ
1,1,1-Trichloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.5	1		10/11/07 08:35	79-00-5	
Trichloroethene	**55.4**	ug/kg	5.5	1		10/11/07 08:35	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.5	1		10/11/07 08:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.5	1		10/11/07 08:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.5	1		10/11/07 08:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.5	1		10/11/07 08:35	108-67-8	
Vinyl acetate	~~ND~~	~~ug/kg~~	~~109~~	1		10/11/07 08:35	108-05-4	R
Vinyl chloride	ND	ug/kg	5.5	1		10/11/07 08:35	75-01-4	
Xylene (Total)	ND	ug/kg	10.9	1		10/11/07 08:35	1330-20-7	
Dibromofluoromethane (S)	106	%	82-130	1		10/11/07 08:35	1868-53-7	
Toluene-d8 (S)	105	%	81-120	1		10/11/07 08:35	2037-26-5	
4-Bromofluorobenzene (S)	89	%	65-117	1		10/11/07 08:35	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**8.5**	%	0.10	1		10/15/07 14:43		

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ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5095863

Sample: MMW-21-LA (12-14) **Lab ID: 5095863002** Collected: 04/07/14 14:32 Received: 04/08/14 13:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	82.9	1		04/21/14 17:25	67-64-1	
Acrolein	ND	ug/kg	82.9	1		04/21/14 17:25	107-02-8	
Acrylonitrile	ND	ug/kg	82.9	1		04/21/14 17:25	107-13-1	
Benzene	ND	ug/kg	4.1	1		04/21/14 17:25	71-43-2	
Bromobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	1		04/21/14 17:25	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	1		04/21/14 17:25	75-27-4	
Bromoform	ND	ug/kg	4.1	1		04/21/14 17:25	75-25-2	
Bromomethane	ND	ug/kg	4.1	1		04/21/14 17:25	74-83-9	
2-Butanone (MEK)	ND	ug/kg	20.7	1		04/21/14 17:25	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	98-06-6	
Carbon disulfide	ND	ug/kg	8.3	1		04/21/14 17:25	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.1	1		04/21/14 17:25	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	108-90-7	
Chloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	75-00-3	
Chloroform	ND	ug/kg	4.1	1		04/21/14 17:25	67-66-3	
Chloromethane	ND	ug/kg	4.1	1		04/21/14 17:25	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	1		04/21/14 17:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1		04/21/14 17:25	106-43-4	
Dibromochloromethane	ND	ug/kg	4.1	1		04/21/14 17:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	1		04/21/14 17:25	106-93-4	
Dibromomethane	ND	ug/kg	4.1	1		04/21/14 17:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/kg	82.9	1		04/21/14 17:25	110-57-6	
Dichlorodifluoromethane	ND	ug/kg	4.1	1		04/21/14 17:25	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	1		04/21/14 17:25	75-35-4	
cis-1,2-Dichloroethene	**1310**	ug/kg	211	50		04/22/14 19:07	156-59-2	
trans-1,2-Dichloroethene	**36.8**	ug/kg J+	4.1	1		04/21/14 17:25	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.1	1		04/21/14 17:25	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1		04/21/14 17:25	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.1	1		04/21/14 17:25	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	1		04/21/14 17:25	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	1		04/21/14 17:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	1		04/21/14 17:25	10061-02-6	
Ethylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	100-41-4	
Ethyl methacrylate	ND	ug/kg	82.9	1		04/21/14 17:25	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	1		04/21/14 17:25	87-68-3	
n-Hexane	ND	ug/kg	4.1	1		04/21/14 17:25	110-54-3	N2
2-Hexanone	ND	ug/kg	82.9	1		04/21/14 17:25	591-78-6	
Iodomethane	ND	ug/kg	82.9	1		04/21/14 17:25	74-88-4	

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ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5095863

Sample: MMW-21-LA (12-14) **Lab ID: 5095863002** Collected: 04/07/14 14:32 Received: 04/08/14 13:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1		04/21/14 17:25	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1		04/21/14 17:25	99-87-6	
Methylene Chloride	ND	ug/kg	16.6	1		04/21/14 17:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	20.7	1		04/21/14 17:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1		04/21/14 17:25	1634-04-4	
Naphthalene	ND	ug/kg	4.1	1		04/21/14 17:25	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	103-65-1	
Styrene	ND	ug/kg	4.1	1		04/21/14 17:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	79-34-5	
Tetrachloroethene	**49000**	ug/kg	2110	500		04/22/14 19:45	127-18-4	
Toluene	ND	ug/kg	4.1	1		04/21/14 17:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	1		04/21/14 17:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	1		04/21/14 17:25	79-00-5	
Trichloroethene	**1390**	ug/kg	211	50		04/22/14 19:07	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.1	1		04/21/14 17:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	1		04/21/14 17:25	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1		04/21/14 17:25	108-67-8	
Vinyl acetate	ND	ug/kg	82.9	1		04/21/14 17:25	108-05-4	
Vinyl chloride	**24.9**	ug/kg J+	4.1	1		04/21/14 17:25	75-01-4	
Xylene (Total)	ND	ug/kg	8.3	1		04/21/14 17:25	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%.	85-118	1		04/21/14 17:25	1868-53-7	
Toluene-d8 (S)	138	%.	71-128	1		04/21/14 17:25	2037-26-5	S0
4-Bromofluorobenzene (S)	68	%.	56-144	1		04/21/14 17:25	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**5.9**	%	0.10	1		04/09/14 12:51		

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ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5095863

Sample: MMW-21-LA (14-16) **Lab ID: 5095863003** Collected: 04/07/14 14:06 Received: 04/08/14 13:55 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg	5.6	1		04/21/14 18:10	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.6	1		04/21/14 18:10	99-87-6	
Methylene Chloride	**37.9**	ug/kg J+	22.3	1		04/21/14 18:10	75-09-2	B,C9
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	27.9	1		04/21/14 18:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.6	1		04/21/14 18:10	1634-04-4	
Naphthalene	ND	ug/kg	5.6	1		04/21/14 18:10	91-20-3	
n-Propylbenzene	ND	ug/kg	5.6	1		04/21/14 18:10	103-65-1	
Styrene	ND	ug/kg	5.6	1		04/21/14 18:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.6	1		04/21/14 18:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.6	1		04/21/14 18:10	79-34-5	
Tetrachloroethene	**1620**	ug/kg	279	50		04/22/14 20:22	127-18-4	
Toluene	ND	ug/kg	5.6	1		04/21/14 18:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.6	1		04/21/14 18:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.6	1		04/21/14 18:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.6	1		04/21/14 18:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.6	1		04/21/14 18:10	79-00-5	
Trichloroethene	**55.1**	ug/kg	5.6	1		04/21/14 18:10	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.6	1		04/21/14 18:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.6	1		04/21/14 18:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.6	1		04/21/14 18:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.6	1		04/21/14 18:10	108-67-8	
Vinyl acetate	ND	ug/kg	112	1		04/21/14 18:10	108-05-4	
Vinyl chloride	ND	ug/kg	5.6	1		04/21/14 18:10	75-01-4	
Xylene (Total)	ND	ug/kg	11.2	1		04/21/14 18:10	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%.	85-118	1		04/21/14 18:10	1868-53-7	
Toluene-d8 (S)	113	%.	71-128	1		04/21/14 18:10	2037-26-5	
4-Bromofluorobenzene (S)	84	%.	56-144	1		04/21/14 18:10	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**10.5**	%	0.10	1		04/09/14 12:51		

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ANALYTICAL RESULTS

Project: Michigan Plaza / M01046
Pace Project No.: 5096109

Sample: MMW-P-22-LA (16-18') **Lab ID: 5096109002** Collected: 04/11/14 09:03 Received: 04/12/14 12:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.0	1		04/25/14 00:55	71-43-2	
Carbon tetrachloride	ND	ug/kg	6.0	1		04/25/14 00:55	56-23-5	
Chloroform	ND	ug/kg	6.0	1		04/25/14 00:55	67-66-3	
1,1-Dichloroethene	ND	ug/kg	6.0	1		04/25/14 00:55	75-35-4	
cis-1,2-Dichloroethene	**921**	ug/kg	600	100		04/25/14 15:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	6.0	1		04/25/14 00:55	156-60-5	
Ethylbenzene	ND	ug/kg	6.0	1		04/25/14 00:55	100-41-4	
Methylene Chloride	ND	ug/kg	24.0	1		04/25/14 00:55	75-09-2	
Naphthalene	ND	ug/kg	6.0	1		04/25/14 00:55	91-20-3	
Tetrachloroethene	ND	ug/kg	6.0	1		04/25/14 00:55	127-18-4	
Toluene	ND	ug/kg	6.0	1		04/25/14 00:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	6.0	1		04/25/14 00:55	71-55-6	
Trichloroethene	ND	ug/kg	6.0	1		04/25/14 00:55	79-01-6	
Vinyl chloride	**13.2**	ug/kg J+	6.0	1		04/25/14 00:55	75-01-4	
Xylene (Total)	ND	ug/kg	12.0	1		04/25/14 00:55	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	122	%.	85-118	1		04/25/14 00:55	1868-53-7	S5
Toluene-d8 (S)	95	%.	71-128	1		04/25/14 00:55	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	56-144	1		04/25/14 00:55	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**16.7**	%	0.10	1		04/14/14 15:04		

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ANALYTICAL RESULTS

Project: Michigan Plaza / M01046
Pace Project No.: 5096109

Sample: MMW-P-22-LA (18-20') **Lab ID: 5096109003** Collected: 04/11/14 09:05 Received: 04/12/14 12:42 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.9	1		04/25/14 01:35	71-43-2	
Carbon tetrachloride	ND	ug/kg	5.9	1		04/25/14 01:35	56-23-5	
Chloroform	ND	ug/kg	5.9	1		04/25/14 01:35	67-66-3	
1,1-Dichloroethene	ND	ug/kg	5.9	1		04/25/14 01:35	75-35-4	
cis-1,2-Dichloroethene	**754**	ug/kg	587	100		04/25/14 15:27	156-59-2	
trans-1,2-Dichloroethene	**20.2**	ug/kg J+	5.9	1		04/25/14 01:35	156-60-5	
Ethylbenzene	ND	ug/kg	5.9	1		04/25/14 01:35	100-41-4	
Methylene Chloride	ND	ug/kg	23.5	1		04/25/14 01:35	75-09-2	
Naphthalene	ND	ug/kg	5.9	1		04/25/14 01:35	91-20-3	
Tetrachloroethene	**7.4**	ug/kg J+	5.9	1		04/25/14 01:35	127-18-4	
Toluene	ND	ug/kg	5.9	1		04/25/14 01:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.9	1		04/25/14 01:35	71-55-6	
Trichloroethene	ND	ug/kg	5.9	1		04/25/14 01:35	79-01-6	
Vinyl chloride	**10.7**	ug/kg J+	5.9	1		04/25/14 01:35	75-01-4	
Xylene (Total)	ND	ug/kg	11.7	1		04/25/14 01:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	124	%.	85-118	1		04/25/14 01:35	1868-53-7	S5
Toluene-d8 (S)	95	%.	71-128	1		04/25/14 01:35	2037-26-5	
4-Bromofluorobenzene (S)	109	%.	56-144	1		04/25/14 01:35	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**14.8**	%	0.10	1		04/14/14 15:04		

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ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5096084

Sample: MMW-21D (4-6) **Lab ID: 5096084001** Collected: 04/10/14 08:31 Received: 04/11/14 14:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg	5.3	1		04/24/14 21:57	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.3	1		04/24/14 21:57	99-87-6	
Methylene Chloride	ND	ug/kg	21.1	1		04/24/14 21:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	26.4	1		04/24/14 21:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.3	1		04/24/14 21:57	1634-04-4	
Naphthalene	ND	ug/kg	5.3	1		04/24/14 21:57	91-20-3	
n-Propylbenzene	ND	ug/kg	5.3	1		04/24/14 21:57	103-65-1	
Styrene	ND	ug/kg	5.3	1		04/24/14 21:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.3	1		04/24/14 21:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.3	1		04/24/14 21:57	79-34-5	
Tetrachloroethene	**0.16**	ug/kg J-	0.053	100		04/25/14 13:32	127-18-4	H5
Toluene	ND	ug/kg	5.3	1		04/24/14 21:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.3	1		04/24/14 21:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.3	1		04/24/14 21:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.3	1		04/24/14 21:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.3	1		04/24/14 21:57	79-00-5	
Trichloroethene	**5.4**	ug/kg	5.3	1		04/24/14 21:57	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.3	1		04/24/14 21:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.3	1		04/24/14 21:57	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.3	1		04/24/14 21:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.3	1		04/24/14 21:57	108-67-8	
Vinyl acetate	ND	ug/kg	106	1		04/24/14 21:57	108-05-4	
Vinyl chloride	ND	ug/kg	5.3	1		04/24/14 21:57	75-01-4	
Xylene (Total)	ND	ug/kg	10.6	1		04/24/14 21:57	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	114	%.	85-118	1		04/24/14 21:57	1868-53-7	
Toluene-d8 (S)	102	%.	71-128	1		04/24/14 21:57	2037-26-5	
4-Bromofluorobenzene (S)	90	%.	56-144	1		04/24/14 21:57	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.5**	%	0.10	1		04/14/14 14:36		

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ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5096084

Sample: MMW-P-22-LA (4-6) **Lab ID: 5096084002** Collected: 04/10/14 17:43 Received: 04/11/14 14:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	ug/kg	80.5	1		04/24/14 20:18	67-64-1	
Acrolein	ND	ug/kg	80.5	1		04/24/14 20:18	107-02-8	
Acrylonitrile	ND	ug/kg	80.5	1		04/24/14 20:18	107-13-1	
Benzene	ND	ug/kg	4.0	1		04/24/14 20:18	71-43-2	
Bromobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	108-86-1	
Bromochloromethane	ND	ug/kg	4.0	1		04/24/14 20:18	74-97-5	
Bromodichloromethane	ND	ug/kg	4.0	1		04/24/14 20:18	75-27-4	
Bromoform	ND	ug/kg	4.0	1		04/24/14 20:18	75-25-2	
Bromomethane	ND	ug/kg	4.0	1		04/24/14 20:18	74-83-9	
2-Butanone (MEK)	ND	ug/kg	20.1	1		04/24/14 20:18	78-93-3	
n-Butylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	98-06-6	
Carbon disulfide	ND	ug/kg	8.0	1		04/24/14 20:18	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.0	1		04/24/14 20:18	56-23-5	
Chlorobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	108-90-7	
Chloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	75-00-3	
Chloroform	ND	ug/kg	4.0	1		04/24/14 20:18	67-66-3	
Chloromethane	ND	ug/kg	4.0	1		04/24/14 20:18	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.0	1		04/24/14 20:18	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.0	1		04/24/14 20:18	106-43-4	
Dibromochloromethane	ND	ug/kg	4.0	1		04/24/14 20:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.0	1		04/24/14 20:18	106-93-4	
Dibromomethane	ND	ug/kg	4.0	1		04/24/14 20:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/kg	80.5	1		04/24/14 20:18	110-57-6	
Dichlorodifluoromethane	ND	ug/kg	4.0	1		04/24/14 20:18	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.0	1		04/24/14 20:18	75-35-4	
cis-1,2-Dichloroethene	**234**	ug/kg J-	203	50		04/25/14 14:05	156-59-2	H5
trans-1,2-Dichloroethene	ND	ug/kg	4.0	1		04/24/14 20:18	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.0	1		04/24/14 20:18	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.0	1		04/24/14 20:18	142-28-9	
2,2-Dichloropropane	ND	ug/kg	4.0	1		04/24/14 20:18	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.0	1		04/24/14 20:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.0	1		04/24/14 20:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.0	1		04/24/14 20:18	10061-02-6	
Ethylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	100-41-4	
Ethyl methacrylate	ND	ug/kg	80.5	1		04/24/14 20:18	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/kg	4.0	1		04/24/14 20:18	87-68-3	
n-Hexane	ND	ug/kg	4.0	1		04/24/14 20:18	110-54-3	N2
2-Hexanone	ND	ug/kg	80.5	1		04/24/14 20:18	591-78-6	
Iodomethane	ND	ug/kg	80.5	1		04/24/14 20:18	74-88-4	

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ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5096084

Sample: MMW-P-22-LA (4-6) **Lab ID: 5096084002** Collected: 04/10/14 17:43 Received: 04/11/14 14:25 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg	4.0	1		04/24/14 20:18	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.0	1		04/24/14 20:18	99-87-6	
Methylene Chloride	ND	ug/kg	16.1	1		04/24/14 20:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	20.1	1		04/24/14 20:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.0	1		04/24/14 20:18	1634-04-4	
Naphthalene	ND	ug/kg	4.0	1		04/24/14 20:18	91-20-3	
n-Propylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	103-65-1	
Styrene	ND	ug/kg	4.0	1		04/24/14 20:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	79-34-5	
Tetrachloroethene	**62.6**	ug/kg J+	4.0	1		04/24/14 20:18	127-18-4	
Toluene	ND	ug/kg	4.0	1		04/24/14 20:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.0	1		04/24/14 20:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.0	1		04/24/14 20:18	79-00-5	
Trichloroethene	**46.1**	ug/kg J+	4.0	1		04/24/14 20:18	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.0	1		04/24/14 20:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.0	1		04/24/14 20:18	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.0	1		04/24/14 20:18	108-67-8	
Vinyl acetate	ND	ug/kg	80.5	1		04/24/14 20:18	108-05-4	
Vinyl chloride	**28.1**	ug/kg J+	4.0	1		04/24/14 20:18	75-01-4	
Xylene (Total)	ND	ug/kg	8.0	1		04/24/14 20:18	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	120	%.	85-118	1		04/24/14 20:18	1868-53-7	S5
Toluene-d8 (S)	97	%.	71-128	1		04/24/14 20:18	2037-26-5	
4-Bromofluorobenzene (S)	107	%.	56-144	1		04/24/14 20:18	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**13.8**	%	0.10	1		04/14/14 14:37		

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Sample ID: A744587 KS-9

DRY WT - TOLUENE	BDL	0.0054	mg/kg
DRY WT - 1,2,3-TRICHLOROBENZENE	BDL	0.0054	mg/kg
DRY WT - 1,2,4-TRICHLOROBENZENE	BDL	0.0054	mg/kg
DRY WT - 1,1,1-TRICHLOROETHANE	BDL	0.0054	mg/kg
DRY WT - 1,1,2-TRICHLOROETHANE	BDL	0.0054	mg/kg
DRY WT - TRICHLOROETHENE	EX	0.0054	mg/kg
DRY WT - TRICHLOROFLUOROMETHANE	BDL	0.0054	mg/kg
DRY WT - 1,2,3-TRICHLOROPROPANE	BDL	0.0054	mg/kg
DRY WT - 1,2,4-TRIMETHYLBENZENE	BDL	0.0054	mg/kg
DRY WT - 1,3,5-TRIMETHYLBENZENE	BDL	0.0054	mg/kg
DRY WT - VINYL ACETATE	BDL	0.0054	mg/kg
DRY WT - VINYL CHLORIDE	BDL	0.0054	mg/kg
DRY WT - XYLENES (O/M/P-XYLENE)	BDL	0.011	mg/kg
SURROGATE RECOVERY			
DICHLOROETHANE-D4	103		% Rec
TOLUENE-D8	93		% Rec
4-BROMOFLUOROBENZENE	81		% Rec
DIBROMOFLUOROMETHANE	106		% Rec

Dilution necessary due to high concentration of target compounds.

Prep Method SW846-5030B Purge and Trap

VOLATILE ORGANICS, CAPILLARY COLUMN TECHNIQUE SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 30-AUG-06 12:44 Instrument: GC/MS VOA Test: O510.5.1

Prep: HIGH CONC. SOIL PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030B P510.3.0

Parameter	Result	Det. Limit	Units
DRY WT - TRICHLOROETHENE	18. J-	0.68	mg/kg
DRY WT - CIS-1,2-DICHLOROETHENE	0.91	0.68	mg/kg
SURROGATE RECOVERY			
DICHLOROETHANE-D4	98		% Rec
TOLUENE-D8	105		% Rec
4-BROMOFLUOROBENZENE	116		% Rec
DIBROMOFLUOROMETHANE	102		% Rec

DILUTION 1:100

HIGH CONC. SOIL PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030B

Analyst: H. WILLIAMS Analysis Date: 29-AUG-06 Instrument: PREP Test: P510.3.0

Parameter	Result	Det. Limit	Units

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HERITAGE ENVIRONMENTAL SERVICES, LLC

Sample ID: A747904 A3-WW-5

DRY WT - TOLUENE	0.020	0.0055	mg/kg
DRY WT - 1,2,3-TRICHLOROBENZENE	BDL	0.0055	mg/kg
DRY WT - 1,2,4-TRICHLOROBENZENE	BDL	0.0055	mg/kg
DRY WT - 1,1,1-TRICHLOROETHANE	BDL	0.0055	mg/kg
DRY WT - 1,1,2-TRICHLOROETHANE	BDL	0.0055	mg/kg
DRY WT - TRICHLOROETHENE	0.0093	0.0055	mg/kg
DRY WT - TRICHLOROFLUOROMETHANE	BDL	UJ 0.0055	mg/kg
DRY WT - 1,2,3-TRICHLOROPROPANE	BDL	0.0055	mg/kg
DRY WT - 1,2,4-TRIMETHYLBENZENE	BDL	0.0055	mg/kg
DRY WT - 1,3,5-TRIMETHYLBENZENE	BDL	0.0055	mg/kg
DRY WT - VINYL ACETATE	BDL	0.0055	mg/kg
DRY WT - VINYL CHLORIDE	EX	0.0055	mg/kg
DRY WT - XYLENES (O/M/P-XYLENE)	BDL	0.0055	mg/kg
SURROGATE RECOVERY			
DICHLOROETHANE-D4	101		% Rec
TOLUENE-D8	99		% Rec
4-BROMOFLUOROBENZENE	86		% Rec
DIBROMOFLUOROMETHANE	103		% Rec

Dilution necessary due to high concentration of target compounds.

Prep Method SW846-5030B Purge and Trap

VOLATILE ORGANICS, CAPILLARY COLUMN TECHNIQUE SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 04-OCT-06 13:35 Instrument: GC/MS VOA Test: O510.5.1

Prep: HIGH CONC. SOIL PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030B P510.3.0

Parameter	Result	Det. Limit	Units
DRY WT - CIS-1,2-DICHLOROETHENE	23.	0.69	mg/kg
DRY WT - VINYL CHLORIDE	1.3	0.69	mg/kg
SURROGATE RECOVERY			
DICHLOROETHANE-D4	97		% Rec
TOLUENE-D8	98		% Rec
4-BROMOFLUOROBENZENE	104		% Rec
DIBROMOFLUOROMETHANE	97		% Rec

DILUTION 1:100

HIGH CONC. SOIL PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030B

Analyst: H. WILLIAMS Analysis Date: 28-SEP-06 Instrument: PREP Test: P510.3.0

Parameter	Result	Det. Limit	Units

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HERITAGE ENVIRONMENTAL SERVICES, LLC

Sample ID: A747905 A3-WW-5 DUP

DRY WT - TOLUENE	0.014	0.0056	mg/kg
DRY WT - 1,2,3-TRICHLOROBENZENE	BDL	0.0056	mg/kg
DRY WT - 1,2,4-TRICHLOROBENZENE	BDL	0.0056	mg/kg
DRY WT - 1,1,1-TRICHLOROETHANE	BDL	0.0056	mg/kg
DRY WT - 1,1,2-TRICHLOROETHANE	BDL	0.0056	mg/kg
DRY WT - TRICHLOROETHENE	0.012	0.0056	mg/kg
DRY WT - TRICHLOROFLUOROMETHANE	BDL	UJ 0.0056	mg/kg
DRY WT - 1,2,3-TRICHLOROPROPANE	BDL	0.0056	mg/kg
DRY WT - 1,2,4-TRIMETHYLBENZENE	BDL	0.0056	mg/kg
DRY WT - 1,3,5-TRIMETHYLBENZENE	BDL	0.0056	mg/kg
DRY WT - VINYL ACETATE	BDL	0.0056	mg/kg
DRY WT - VINYL CHLORIDE	EX	0.0056	mg/kg
DRY WT - XYLENES (O/M/P-XYLENE)	BDL	0.0056	mg/kg
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	105		% Rec
TOLUENE-D8	93		% Rec
4-BROMOFLUOROBENZENE	66		% Rec
DIBROMOFLUOROMETHANE	107		% Rec

Dilution necessary due to high concentration of target compounds.

Prep Method SW846-5030B Purge and Trap

Internal standard areas do not meet QC requirements.

VOLATILE ORGANICS, CAPILLARY COLUMN TECHNIQUE SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 04-OCT-06 14:13 Instrument: GC/MS VOA Test: O510.5.1

Prep: HIGH CONC. SOIL PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030B P510.3.0

Parameter	Result	Det. Limit	Units
DRY WT - VINYL CHLORIDE	1.1	0.70	mg/kg
DRY WT - CIS-1,2-DICHLOROETHENE	22.	0.70	mg/kg
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	92		% Rec
TOLUENE-D8	100		% Rec
4-BROMOFLUOROBENZENE	106		% Rec
DIBROMOFLUOROMETHANE	94		% Rec

DILUTION 1:100

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HERITAGE

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	13-OCT-06	5029	A749078
	Completed	PO Number	
	24-OCT-06	GENUINE PARTS	
	Printed	Sampled	
	24-OCT-06	05-OCT-06 12:30	

Report To	Bill To
ROB FEDORCHAK KERAMIDA ENVIRONMENTAL, INC. 401 NORTH COLLEGE AVENUE INDIANAPOLIS, IN 46202	ACCOUNTS PAYABLE KERAMIDA ENVIRONMENTAL, INC. 401 N. COLLEGE AVENUE INDIANAPOLIS, IN 46202

Sample Description

CLIENT ID: A2-WW-1(4')
MATRIX TYPE: SLUDGE, SOIL, SOLID OR SEDIMENT
SUBMITTER CODE: 1618
PROJECT NAME: GENUINE PARTS
PROJECT NUMBER: 2829E
PROJECT DESCRIPTION: TOTAL LEAD, VOC, TOTAL SOLIDS

TOTAL SOLIDS EPA 160.3 NELAC:Y
Analyst: B. ADKINS Analysis Date: 17-OCT-06 16:10 Test: G401.7.0

Parameter	Result	Det. Limit	Units
SOLIDS	91	0.001	Percent

VOLATILE ORGANICS, CAPILLARY COLUMN TECHNIQUE SW846-8260B NELAC:Y
Analyst: H. WILLIAMS Analysis Date: 17-OCT-06 10:16 Instrument: GC/MS VOA Test: O510.5.0

Parameter	Result	Det. Limit	Units
DRY WT - ACETONE (2-PROPANONE)	BDL	UJ 0.11	mg/kg
DRY WT - ACROLEIN	BDL	0.13	mg/kg
DRY WT - ACRYLONITRILE	BDL	0.13	mg/kg
DRY WT - BENZENE	BDL	0.027	mg/kg
DRY WT - BROMOBENZENE	BDL	0.027	mg/kg
DRY WT - BROMOCHLOROMETHANE	BDL	0.027	mg/kg
DRY WT - BROMODICHLOROMETHANE	BDL	0.027	mg/kg
DRY WT - BROMOFORM	BDL	0.027	mg/kg
DRY WT - BROMOMETHANE	BDL	0.055	mg/kg
DRY WT - N-BUTYLBENZENE	0.77 J-	0.027	mg/kg
DRY WT - SEC-BUTYLBENZENE	1.6 J-	0.027	mg/kg
DRY WT - TERT-BUTYLBENZENE	BDL	UJ 0.027	mg/kg
DRY WT - CARBON DISULFIDE	BDL	0.027	mg/kg
DRY WT - CARBON TETRACHLORIDE	BDL	0.027	mg/kg
DRY WT - CHLOROBENZENE	BDL	0.027	mg/kg
DRY WT - DIBROMOCHLOROMETHANE	BDL	0.027	mg/kg
DRY WT - CHLOROETHANE	BDL	0.055	mg/kg

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HERITAGE ENVIRONMENTAL SERVICES, LLC

Sample ID: A749078 A2-WW-1(4')

DRY WT.- CHLOROFORM	BDL	UJ	0.027	mg/kg
DRY WT - CHLOROMETHANE	BDL		0.027	mg/kg
DRY WT - 2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL		0.027	mg/kg
DRY WT - 4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL		0.027	mg/kg
DRY WT - 2-CHLOROETHYLVINYLETHER	BDL		0.027	mg/kg
DRY WT - 1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL		0.027	mg/kg
DRY WT - 1,2-DIBROMOETHANE (EDB)	BDL		0.027	mg/kg
DRY WT - DIBROMOMETHANE	BDL		0.027	mg/kg
DRY WT - 1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL		0.027	mg/kg
DRY WT - 1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL		0.027	mg/kg
DRY WT - 1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL		0.027	mg/kg
DRY WT - DICHLORODIFLUOROMETHANE	BDL		0.027	mg/kg
DRY WT - TRANS-1,4-DICHLORO-2-BUTENE	BDL		0.055	mg/kg
DRY WT - 1,1-DICHLOROETHANE	BDL		0.027	mg/kg
DRY WT - 1,2-DICHLOROETHANE	BDL		0.027	mg/kg
DRY WT - 1,1-DICHLOROETHENE	BDL		0.027	mg/kg
DRY WT - CIS-1,2-DICHLOROETHENE	1.0 J-		0.027	mg/kg
DRY WT - TRANS-1,2-DICHLOROETHENE	BDL	UJ	0.027	mg/kg
DRY WT - 1,2-DICHLOROPROPANE	BDL		0.027	mg/kg
DRY WT - 1,3-DICHLOROPROPANE	BDL		0.027	mg/kg
DRY WT - 2,2-DICHLOROPROPANE	BDL		0.027	mg/kg
DRY WT - 1,1-DICHLOROPROPENE	BDL		0.027	mg/kg
DRY WT - CIS-1,3-DICHLOROPROPENE	BDL		0.027	mg/kg
DRY WT - TRANS-1,3-DICHLOROPROPENE	BDL		0.027	mg/kg
DRY WT - ETHYL BENZENE	0.49 J-		0.027	mg/kg
DRY WT - ETHYL METHACRYLATE	BDL	UJ	0.27	mg/kg
DRY WT - 2-HEXANONE	BDL		0.027	mg/kg
DRY WT - HEXACHLOROBUTADIENE	BDL		0.027	mg/kg
DRY WT - IODOMETHANE	BDL		0.027	mg/kg
DRY WT - ISOPROPYLBENZENE (CUMENE)	2.0 J-		0.027	mg/kg
DRY WT - 4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	EX		0.027	mg/kg
DRY WT - DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	UJ	0.027	mg/kg
DRY WT - METHYL ETHYL KETONE	BDL		0.055	mg/kg
DRY WT - METHYL-T-BUTYL ETHER (MTBE)	BDL		0.027	mg/kg
DRY WT - METHYL ISOBUTYL KETONE	BDL		0.055	mg/kg
DRY WT - NAPHTHALENE	0.64 J-		0.027	mg/kg
DRY WT - N-PROPYLBENZENE	EX		0.027	mg/kg
DRY WT - STYRENE	BDL	UJ	0.027	mg/kg
DRY WT - 1,1,1,2-TETRACHLOROETHANE	BDL		0.027	mg/kg
DRY WT - 1,1,2,2-TETRACHLOROETHANE	BDL		0.027	mg/kg
DRY WT - TETRACHLOROETHENE	0.030 J-		0.027	mg/kg

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Sample ID: A749078 A2-WW-1(4')

DRY WT - TOLUENE	0.031 J-	0.027	mg/kg
DRY WT - 1,2,3-TRICHLOROBENZENE	BDL	UJ 0.027	mg/kg
DRY WT - 1,2,4-TRICHLOROBENZENE	BDL	0.027	mg/kg
DRY WT - 1,1,1-TRICHLOROETHANE	BDL	0.027	mg/kg
DRY WT - 1,1,2-TRICHLOROETHANE	BDL	0.027	mg/kg
DRY WT - TRICHLOROETHENE	BDL	0.027	mg/kg
DRY WT - TRICHLOROFLUOROMETHANE	BDL	0.027	mg/kg
DRY WT - 1,2,3-TRICHLOROPROPANE	BDL	0.027	mg/kg
DRY WT - 1,2,4-TRIMETHYLBENZENE	EX	0.027	mg/kg
DRY WT - 1,3,5-TRIMETHYLBENZENE	EX	0.027	mg/kg
DRY WT - VINYL ACETATE	BDL	UJ 0.027	mg/kg
DRY WT - VINYL CHLORIDE	BDL	UJ 0.027	mg/kg
DRY WT - XYLENES (O/M/P-XYLENE)	1.6 J-	0.027	mg/kg
SURROGATE RECOVERY			
DICHLOROETHANE-D4	97		% Rec
TOLUENE-D8	104		% Rec
4-BROMOFLUOROBENZENE	* 58		% Rec
DIBROMOFLUOROMETHANE	106		% Rec

Dilution necessary due to high concentration of target compounds.

* ISTD AREAS AND SURROGATE RECOVERY FAILS QC CRITERIA

1G

Prep Method SW846-5030B Purge and Trap

VOLATILE ORGANICS, CAPILLARY COLUMN TECHNIQUE SW846-8260B NELAC:Y

Analyst: H. WILLIAMS Analysis Date: 17-OCT-06 14:06 Instrument: GC/MS VOA Test: O510.5.1

Prep: HIGH CONC. SOIL PURGE AND TRAP METHOD FOR ORGANIC ANALYTES SW846-5030B P510.3.0

Parameter	Result	Det. Limit	Units
DRY WT - 1,3,5-TRIMETHYLBENZENE	5.0	0.69	mg/kg
DRY WT - N-PROPYLBENZENE	4.0	0.69	mg/kg
DRY WT - 4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	6.5	0.69	mg/kg
DRY WT - 1,2,4-TRIMETHYLBENZENE	24	0.69	mg/kg
SURROGATE RECOVERY			
DICHLOROETHANE-D4	91		% Rec
TOLUENE-D8	109		% Rec
4-BROMOFLUOROBENZENE	113		% Rec
DIBROMOFLUOROMETHANE	101		% Rec

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ANALYTICAL RESULTS

Project: Michigan Plaza M01046
Pace Project No.: 5088407

Sample: MGW-9D (8-10') **Lab ID: 5088407003** Collected: 10/14/13 13:05 Received: 10/15/13 15:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Acetone	ND	ug/kg UJ	2220	25		10/25/13 05:33	67-64-1	
Acrolein	ND	ug/kg	2220	25		10/25/13 05:33	107-02-8	
Acrylonitrile	ND	ug/kg	2220	25		10/25/13 05:33	107-13-1	
Benzene	ND	ug/kg	111	25		10/25/13 05:33	71-43-2	
Bromobenzene	ND	ug/kg	111	25		10/25/13 05:33	108-86-1	
Bromochloromethane	ND	ug/kg	111	25		10/25/13 05:33	74-97-5	
Bromodichloromethane	ND	ug/kg	111	25		10/25/13 05:33	75-27-4	
Bromoform	ND	ug/kg	111	25		10/25/13 05:33	75-25-2	
Bromomethane	ND	ug/kg	111	25		10/25/13 05:33	74-83-9	
2-Butanone (MEK)	ND	ug/kg	555	25		10/25/13 05:33	78-93-3	
n-Butylbenzene	ND	ug/kg	111	25		10/25/13 05:33	104-51-8	
sec-Butylbenzene	ND	ug/kg	111	25		10/25/13 05:33	135-98-8	
tert-Butylbenzene	ND	ug/kg	111	25		10/25/13 05:33	98-06-6	
Carbon disulfide	ND	ug/kg	222	25		10/25/13 05:33	75-15-0	
Carbon tetrachloride	ND	ug/kg	111	25		10/25/13 05:33	56-23-5	
Chlorobenzene	ND	ug/kg	111	25		10/25/13 05:33	108-90-7	
Chloroethane	ND	ug/kg	111	25		10/25/13 05:33	75-00-3	
Chloroform	ND	ug/kg	111	25		10/25/13 05:33	67-66-3	
Chloromethane	ND	ug/kg	111	25		10/25/13 05:33	74-87-3	
2-Chlorotoluene	ND	ug/kg	111	25		10/25/13 05:33	95-49-8	
4-Chlorotoluene	ND	ug/kg	111	25		10/25/13 05:33	106-43-4	
Dibromochloromethane	ND	ug/kg	111	25		10/25/13 05:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	111	25		10/25/13 05:33	106-93-4	
Dibromomethane	ND	ug/kg	111	25		10/25/13 05:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	111	25		10/25/13 05:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	111	25		10/25/13 05:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	111	25		10/25/13 05:33	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/kg	2220	25		10/25/13 05:33	110-57-6	
Dichlorodifluoromethane	ND	ug/kg	111	25		10/25/13 05:33	75-71-8	
1,1-Dichloroethane	ND	ug/kg	111	25		10/25/13 05:33	75-34-3	
1,2-Dichloroethane	ND	ug/kg	111	25		10/25/13 05:33	107-06-2	
1,1-Dichloroethene	ND	ug/kg	111	25		10/25/13 05:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	111	25		10/25/13 05:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	111	25		10/25/13 05:33	156-60-5	
1,2-Dichloropropane	ND	ug/kg	111	25		10/25/13 05:33	78-87-5	
1,3-Dichloropropane	ND	ug/kg	111	25		10/25/13 05:33	142-28-9	
2,2-Dichloropropane	ND	ug/kg	111	25		10/25/13 05:33	594-20-7	
1,1-Dichloropropene	ND	ug/kg	111	25		10/25/13 05:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	111	25		10/25/13 05:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	111	25		10/25/13 05:33	10061-02-6	
Ethylbenzene	ND	ug/kg	111	25		10/25/13 05:33	100-41-4	
Ethyl methacrylate	ND	ug/kg	2220	25		10/25/13 05:33	97-63-2	
Hexachloro-1,3-butadiene	ND	ug/kg	111	25		10/25/13 05:33	87-68-3	
n-Hexane	ND	ug/kg	111	25		10/25/13 05:33	110-54-3	N2
2-Hexanone	ND	ug/kg	2220	25		10/25/13 05:33	591-78-6	
Iodomethane	ND	ug/kg	2220	25		10/25/13 05:33	74-88-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Michigan Plaza M01046
Pace Project No.: 5088407

Sample: MGW-9D (8-10') **Lab ID: 5088407003** Collected: 10/14/13 13:05 Received: 10/15/13 15:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg UJ	111	25		10/25/13 05:33	98-82-8	
p-Isopropyltoluene	ND	ug/kg	111	25		10/25/13 05:33	99-87-6	
Methylene Chloride	ND	ug/kg	444	25		10/25/13 05:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	555	25		10/25/13 05:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	111	25		10/25/13 05:33	1634-04-4	
Naphthalene	ND	ug/kg	111	25		10/25/13 05:33	91-20-3	
n-Propylbenzene	ND	ug/kg	111	25		10/25/13 05:33	103-65-1	
Styrene	ND	ug/kg	111	25		10/25/13 05:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	111	25		10/25/13 05:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	111	25		10/25/13 05:33	79-34-5	
Tetrachloroethene	**11100**	ug/kg	888	200		10/25/13 06:11	127-18-4	
Toluene	ND	ug/kg UJ	111	25		10/25/13 05:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	111	25		10/25/13 05:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	111	25		10/25/13 05:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	111	25		10/25/13 05:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	111	25		10/25/13 05:33	79-00-5	
Trichloroethene	ND	ug/kg	111	25		10/25/13 05:33	79-01-6	
Trichlorofluoromethane	ND	ug/kg	111	25		10/25/13 05:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	111	25		10/25/13 05:33	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	111	25		10/25/13 05:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	111	25		10/25/13 05:33	108-67-8	
Vinyl acetate	ND	ug/kg	2220	25		10/25/13 05:33	108-05-4	
Vinyl chloride	ND	ug/kg	111	25		10/25/13 05:33	75-01-4	
Xylene (Total)	ND	ug/kg	222	25		10/25/13 05:33	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	78	%.	85-118	25		10/25/13 05:33	1868-53-7	D4,S5
Toluene-d8 (S)	96	%.	71-128	25		10/25/13 05:33	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	56-144	25		10/25/13 05:33	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**3.7**	%	0.10	1		10/16/13 16:54		

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ANALYTICAL RESULTS

Project: Michigan Plaza M01046
Pace Project No.: 5088407

Sample: MGW-11D (10-11') **Lab ID: 5088407005** Collected: 10/14/13 14:58 Received: 10/15/13 15:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260							
Isopropylbenzene (Cumene)	ND	ug/kg	4.4	1		10/25/13 16:31	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.4	1		10/25/13 16:31	99-87-6	
Methylene Chloride	ND	ug/kg	17.8	1		10/25/13 16:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	22.2	1		10/25/13 16:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.4	1		10/25/13 16:31	1634-04-4	
Naphthalene	ND	ug/kg	4.4	1		10/25/13 16:31	91-20-3	
n-Propylbenzene	ND	ug/kg	4.4	1		10/25/13 16:31	103-65-1	
Styrene	ND	ug/kg	4.4	1		10/25/13 16:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.4	1		10/25/13 16:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.4	1		10/25/13 16:31	79-34-5	
Tetrachloroethene	**23.6**	ug/kg	4.4	1		10/25/13 16:31	127-18-4	
Toluene	ND	ug/kg	4.4	1		10/25/13 16:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.4	1		10/25/13 16:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.4	1		10/25/13 16:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.4	1		10/25/13 16:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.4	1		10/25/13 16:31	79-00-5	
Trichloroethene	ND	ug/kg	4.4	1		10/25/13 16:31	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.4	1		10/25/13 16:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.4	1		10/25/13 16:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.4	1		10/25/13 16:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.4	1		10/25/13 16:31	108-67-8	
Vinyl acetate	~~ND~~ ~~ug/kg~~ R		~~89.0~~	1		10/25/13 16:31	108-05-4	
Vinyl chloride	ND	ug/kg	4.4	1		10/25/13 16:31	75-01-4	
Xylene (Total)	ND	ug/kg	8.9	1		10/25/13 16:31	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%.	85-118	1		10/25/13 16:31	1868-53-7	
Toluene-d8 (S)	105	%.	71-128	1		10/25/13 16:31	2037-26-5	
4-Bromofluorobenzene (S)	93	%.	56-144	1		10/25/13 16:31	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**2.8**	%	0.10	1		10/16/13 16:54		

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04/09/15

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