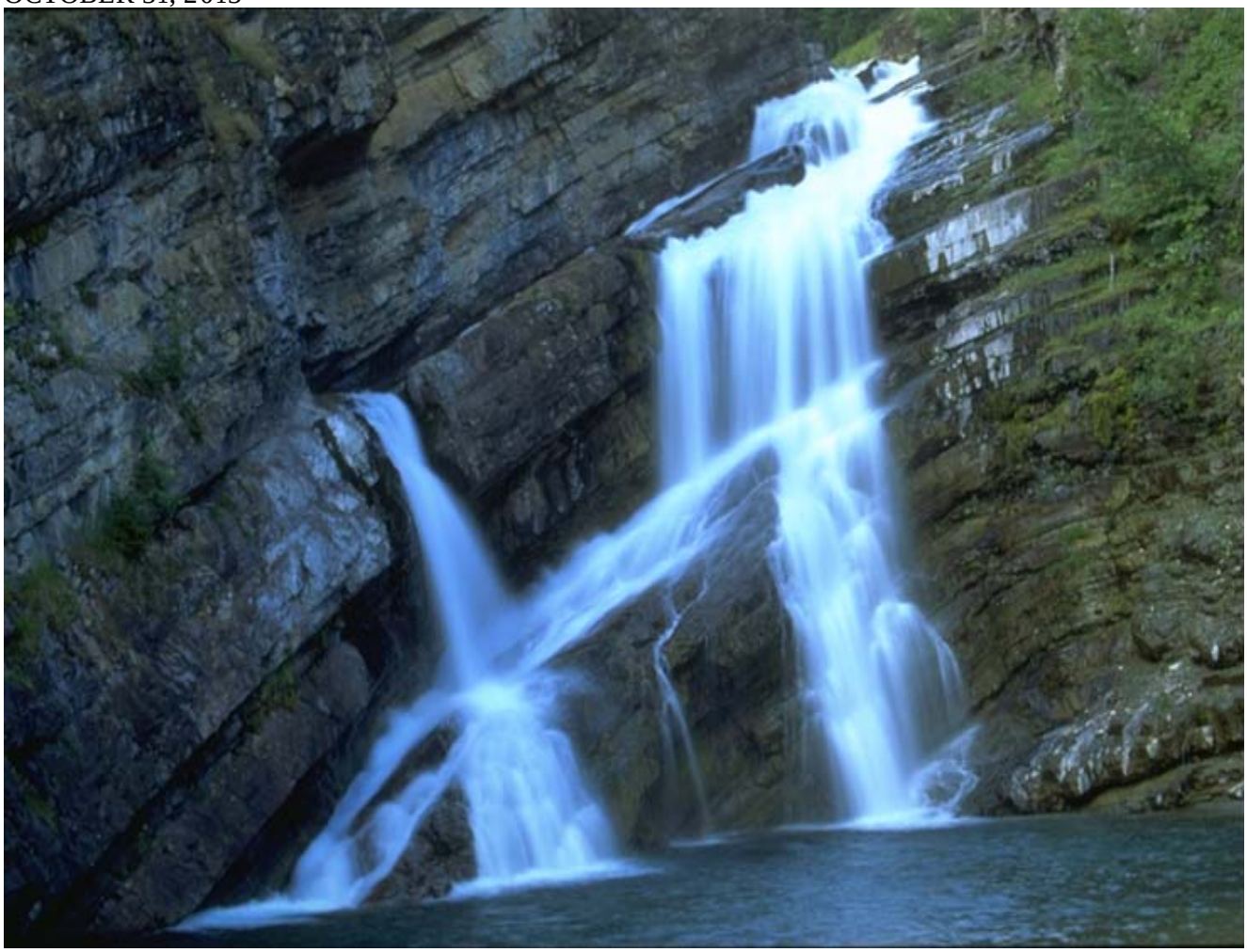
# QUARTERLY MONITORING PROGRESS REPORT, 3RD QUARTER, 2013

**MICHIGAN PLAZA**
**3801-3823 WEST MICHIGAN STREET**
**INDIANAPOLIS, INDIANA 46222**
IDEM INCIDENT NO.: 0000198
IDEM VRP NO.: 6061202
MUNDELL PROJECT NO.: M01046
OCTOBER 31, 2013




Mundell
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October 31, 2013

Mr. Corey Webb
Voluntary Remediation Program
Office of Land Quality
100 North Senate Avenue
Indianapolis, Indiana 46204

Re: **Quarterly Monitoring Progress Report – 3rd Quarter 2013**
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana 46222
IDEM Incident # 0000198
IDEM VRP # 6061202
MUNDELL Project No. M01046

Dear Mr. Webb:

This *Quarterly Monitoring Progress Report* is being submitted to the Indiana Department of Environmental Management (IDEM) by Mundell & Associates, Inc. (MUNDELL), on behalf of AIMCO Michigan Meadows Holdings, LLC (AMMH), to summarize remediation activities and quarterly monitoring performed between July 1 and September 30, 2013. The following sections provide detailed discussions of the results of this work. All activities were completed on schedule.

## 1 .0 SUMMARY OF MONITORING ACTIVITIES

### 1.1 Groundwater Monitoring Network Sampling

Between September 18 and September 27, 2013, quarterly groundwater sampling of twenty-eight (28) monitoring wells established with IDEM, twelve (12) additional MUNDELL monitoring wells on the Floral Park Cemetery property, and six (6) ENVIRON monitoring wells was completed. The following constitute this quarterly groundwater monitoring network:

A. *MUNDELL monitoring wells (40 total)*:

*Michigan Plaza and Vicinity (15):*

MMW-P-01, MMW-P-02, MMW-P-03S, MMW-P-03D, MMW-P-04, MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-09S, MMW-P-09D, MMW-P-10S, MMW-P-10D, MMW-P-12S, and MMW-P-12D.

*Maple Creek Village Apartment Complex (13):*

MMW-1S, MMW-4D, MMW-6D, MMW-8S, MMW-9S, MMW-10S, MMW-11S, MMW-11D, MMW-12S, MMW-13D, MMW-14D, MMW-15S, and MMW-15D.

*Floral Park Cemetery (12):*

MMW-C-01, MMW-C-02S, MMW-C-02D, MMW-C-16S, MMW-C-16D, MMW-C-17D, MMW-P-11S, MMW-P-11DR, MMW-P-13S, MMW-P-13D, MMW-P-14S, and MMW-P-14D.

B. *ENVIRON monitoring wells (6)*:

MW-167S, MW-167D, MW-168S, MW-168D, MW-170S, and MW-170D.

It should be noted that when the well was first accessed for water level gauging, ENVIRON well MW-168S did not have a well plug in place for the second consecutive quarter. The absence of a well cap made it possible for surface water to infiltrate. A sample was collected from the well but the analytical results are considered suspect and may not be representative of actual groundwater conditions in the area.

MUNDELL also measured static groundwater elevations via an electric oil/water interface probe from the above-listed monitoring well network on September 17, 2013. Additional wells gauged during this sampling event consist of:

*Maple Creek Village monitoring wells:*

MMW-2S, MMW-3S, MMW-7S, and MMW-5D.

*ENVIRON monitoring wells:*

MW-166S, MW-166D, MW-169S, MW-169D, MW-171S, MW-171D, MW-174S, MW-174D, MW-175S, and MW-175D.

*Little Eagle Creek Stream gauge Locations:*

SG-1 and SG-2

*U.S. EPA wells:*

MW-WES-01A, MW-WES-01B, MW-WES-01C, MW-WES-02A, MW-WES-02B, MW-WES-02C, MW-WES-03A, MW-WES-03B, MW-WES-04A, MW-WES-04B, MW-WES-05A, MW-WES-05B, and MW-WES-05C.

It should be noted that Stream Gauge Locations at SG-1 and SG-2 were re-established and surveyed during the third quarter of 2013. The gauge locations were surveyed and marked along the bridges positioned over Little Eagle Creek on the east side of Holt Road and the north side of Michigan Street. The stream elevation was gauged via an electric oil/water interface probe using the same technique for gauging monitoring wells.

Monitoring well gauging, survey and construction data are provided in **Table 1** and cumulative monitoring well gauging, survey data, and water levels are provided in **Table 2.** A site map depicting monitoring well locations is provided as **Figure 1**, and separate potentiometric surface maps for wells screened within the shallow portion and deeper portion of the upper sand and gravel aquifer are depicted on **Figure 2A** and **Figure 2B**, and **Figure 3A** and **Figure 3B**, respectively.

The monitoring wells were sampled utilizing both dedicated and portable bladder pumps for uniform low-flow purging and sample collection. The Troll 9500 multi-parameter meter (used in-line with the bladder pumps) logs geochemical parameters (temperature, pH, dissolved oxygen, conductivity and oxidation-reduction potential), which help remove a minimal but sufficient amount of water (indicated by stabilization of geochemical parameters) to sample the well. The Troll helps assess the geochemical parameters to determine if conditions naturally conducive to natural attenuation exist in the aquifer. Excess purge water was transported to 55-gallon drums located at the Michigan Plaza property for subsequent proper off-site disposal. In accordance with IDEM guidelines, the contents in each drum were then identified with a label describing them as non-hazardous materials.

As agreed in the October 29th, 2008 meeting with IDEM and detailed in the *Remediation Work Plan Addendum* dated November 2008, groundwater samples were submitted to Pace Analytical Laboratories (Pace) in Indianapolis, Indiana, for the shorter list of Volatile Organic Compound (VOC) analysis utilizing U.S. EPA SW-846 Method 8260, along with appropriate duplicate (DUP), matrix spike (MS) and matrix spike duplicate (MSD) samples. Groundwater samples were transferred into three 40-milliliter glass sample vials containing the preservative hydrochloric acid (HCl). Groundwater sample vials were sealed in plastic bags and placed in a cooler containing ice and delivered to Pace using appropriate chain-of-custody protocol for laboratory tests. Pace laboratory certificates of analysis for the groundwater samples analyzed are presented in **Appendix A**.

Additional aquifer parameters, consisting of nitrate/nitrite (EPA 353.2), sulfate (ASTM D512-90,02), ferrous iron (field test - 1,10 Phenanthroline), total organic carbon (SM 5310C), methane (AM20GAX), ethane (AM20GAX) and ethane (AM20GAX) were analyzed to evaluate indicator compound breakdown and redox-sensitivity. In addition, volatile fatty acids (VFA) were tested to evaluate the bioremediation substrate CAP18 ME™ distribution and lifetime duration of the substrate product. These samples were collected in the previously selected indicator well locations representative of each plume to monitor the presence of residual CAP 18 ME™ in the aquifer and to provide additional monitoring of aquifer conditions. These identified locations consist of:

***Source Area A***: MMW-P-02, MMW-P-03S, MMW-P-03D, MMW-P-11S, MMW-P-11DR, and MMW-C-01;

***Source Area B***: MMW-P-01, MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-10S, MMW-P-10D, MMW-8S, MMW-P-12S, and MMW-P-12D;

***Source Area C***: MMW-1S, MMW-9S, and MMW-10S.

## 1.2 Post-Injection Subsurface Methane Monitoring

As requested by IDEM in their March 22, 2013 review letter associated with the proposed CAP18 ME™ Injections, and as subsequently proposed in the *Response to IDEM's Review of Second Revised Work Plan For the Third Round of CAP18® ME™ Injections* document dated April 29, 2013, MUNDELL completed methane monitoring in order to monitor methane production as a result of the fermentation process associated with the CAP18 ME™ injections in July 2013. MUNDELL collected air samples on September 29, 2013 from six (6) groundwater monitoring wells at the Site (MMW-11S, MMW-12S, MMW-P-11S, MMW-P-11DR, MMW-P-12S, MMW-P-12D). The purpose of collecting the samples was to monitor subsurface methane concentrations in relation to potential vapor intrusion concerns as well as the potential to reach threshold levels that could pose an explosion risk.

Prior to collecting the samples, MUNDELL measured static groundwater elevations via an electric oil/water interface probe. A temporary (air tight) cap was then placed on top of each well. Each well was purged of air in an amount equal to the volume of the air column inside the well. The valves on the caps were closed and the air inside the well was allowed to return for 24 hours before sampling. Samples were collected for 30 minutes in 6-L Summa canisters using 200ml/min flow regulators and were delivered to Pace for analysis via method TO-3 for methane using appropriate chain-of-custody protocol for laboratory tests. Pace laboratory certificates of analysis for the air samples analyzed are presented in **Appendix A**.

# 2 .0 MONITORING RESULTS

## 2.1 Groundwater Flow

During the preparation of the potentiometric surface maps for the Site, which are discussed below, static water level data collected at ENVIRON well MW-168S and EPA well MW-WES-05a (shallow zone) and EPA wells MW-WES-05b and MW-WES-05c (deep zone) did not conform to the relative changes in water levels from third quarter 2013 readings in nearby monitoring wells. Note that ENVIRON well MW-168S was found without a well cap in place prior to gauging. Therefore, water level elevations for these wells were considered suspect.

At the time of gauging on September 17, 2013, monitoring well MMW-P-03D was found to contain CAP18 ME™. By use of an electric oil/water interface probe, it was determined that the depth to water was 22.70 ft and that there was 2.0 ft or CAP18 ME™ on top of the groundwater. By use of Archimede's Principle, the corrected depth to groundwater was calculated as follows:

$$CDTW = MDTW - (SG_{Product} * PT)$$

Where CDTW = Corrected depth to water (ft)
MDTW = Measured depth to water (ft) = 22.70
$SG_{product}$ = Specific gravity of product with respect to water = 0.931
PT = Product thickness (ft) = 2.0

The value for the specific gravity of CAP18 ME™ was provided by Carus Corporation, the developers of CAP18 ME™. The calculation provided a corrected depth to water approximately equal to 20.84 ft. This was the value used in the creation of the deep potentiometric map.

A review of the potentiometric surface map for the wells screened within the shallow portion of the surficial aquifer zone (**Figure 2A**) shows that direction of groundwater flow in the vicinity of **Source Areas A**, **B** and **C** is from the north-northwest to the south-southeast. There is no component of groundwater flow towards the residential area west of Holt Road. This flow pattern exists even if the suspect static water elevations from MW-168S and MW-WES-05a are included (**Figure 2B**).

A review of the potentiometric surface map for the wells screened within the deeper portion of the surficial aquifer (**Figure 3A**) indicates that groundwater flows primarily from north to south in the vicinity of **Source Area A** with a slight north-northwest to the south-southeast component in the vicinity of **Source Areas B and C**. As with the shallow portion of the surficial aquifer, the direction of flow in the deeper portion remains the same even if the suspect water level in the deep monitor wells MW-WES-05b and

MW-WES-05c is considered (**Figure 3B**). Again, there is no component of groundwater flow towards the residential area west of Holt Road.

## 2.2 Groundwater Analytical Results

Groundwater analytical testing results for this quarter are summarized in **Table 3** and presented on **Figure 4A and Figure 4B** (shallower portion of aquifer, with contours depicting RDCL and IDCL exceedances, respectively) and **Figure 5** (deeper portion of aquifer), with the cumulative historic groundwater results included in **Table 4**, and the cumulative groundwater analytical data for enhanced anaerobic bioremediation included in **Table 5.** The historical indicator compounds trends in groundwater are presented in **Figure 6.** The most recent low-flow sampling data are provided in **Appendix B**. A summary of exceedances within the shallow monitoring well network and deep monitoring well network follows.

### *2.2.1 Shallow Monitoring Well Network Summary*

***PCE***

PCE concentrations were reported in exceedance of the associated IDEM RISC Industrial Default Closure Level (IDCL) in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-1S

*Floral Park Cemetery:* MMW-P-11S.

PCE was reported in exceedance of the IDEM RISC Residential Default Closure Level (RDCL) in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-8S and MMW-10S.

*Michigan Plaza and Vicinity:* MMW-P-01 and MMW-P-02

*Floral Park Cemetery:* MMW-C-01

***TCE***

TCE concentrations were reported in exceedance of the associated IDEM RISC IDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-1S

TCE concentrations were reported in exceedance of the associated IDEM RISC RDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-8S and MMW-10S.

*Michigan Plaza and Vicinity:* MMW-P-01

***Cis-1,2 DCE***

*Cis-1,2 DCE* concentrations were reported in exceedance of the IDEM RISC IDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-9S.

*Michigan Plaza and Vicinity:* MMW-P-06.

*Cis-1,2 DCE* concentrations were reported in exceedance of the IDEM RISC RDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-1S, MMW-10S, and MMW-12S.

*Michigan Plaza and Vicinity:* MMW-P-01 and MMW-P-12S.

***VC***

*VC* concentrations were reported in exceedance of the IDEM RISC IDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-1S, MMW-8S, MMW-9S, MMW-10S, and MMW-12S.

*Michigan Plaza and Vicinity:* MMW-P-01, MMW-P-02, MMW-P-03S, MMW-P-04, MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, and MMW-P-12S.

*Floral Park Cemetery:* MMW-C-01 and MMW-P-11S.

*ENVIRON monitoring wells*: MW-168S.

### *2.2.2 Deep Monitoring Network Summary*

***PCE***

PCE was not identified at concentrations in exceedance of the associated IDEM RISC IDCL or RDCL within deep wells across the study area.

***TCE***

TCE was not identified at concentrations in exceedance of the associated IDEM RISC IDCL or RDCL within deep wells across the study area.

***Cis-1,2 DCE***

*Cis-1,2 DCE* concentrations were reported in exceedance of the IDEM RISC RDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-4D, MMW-11D, MMW-13D, and MMW-14D.

*Michigan Plaza and Vicinity*: MMW-P-10D and MMW-P-12D.

*ENVIRON monitoring wells*: MW-167D.

***VC***

*VC* concentrations were reported in exceedance of the IDEM RISC IDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-4D, MMW-6D, MMW-11D, MMW-13D, and MMW-14D.

*Michigan Plaza and Vicinity:* MMW-P-03D, MMW-P-09D, MMW-P-10D, and MMW-P-12D.

*Floral Park Cemetery:* MMW-C-02D, MMW-C-16D, MMW-C-17D, MMW-P-11DR, MMW-P-13D, and MMW-P-14D.

*ENVIRON monitoring wells*: MW-167D, MW-168D, and MW-170D.

*VC* concentrations were reported in exceedance of the IDEM RISC RDCL in the following monitoring wells:

*Maple Creek Village Apartments:* MMW-15D

The deep monitoring wells MMW-4D, MMW-11D, and MMW-13D located at the Maple Creek Village Apartment Complex exhibited cis-1,2-DCE groundwater concentrations exceeding the RISC RDCL. These wells also either currently exhibit or have historically exhibited vinyl chloride exceedances above IDCLs**.** Since these wells have been purposefully located hydraulically upgradient of all three ***Chemical Source Areas***, the impacts observed in these wells demonstrate groundwater impacts that are attributable to other upgradient, off-site sources and not to Michigan Plaza. The locations of all three ***Chemical Source Areas*** are presented on **Figure 1**. As seen on **Figure 5,** the indicator compound concentrations at the deep, upgradient wells MMW-4D, MMW-6D, MMW-11D, and MMW-13D can be considered as "background levels" defined as the concentration of contaminants from the Genuine source coming into the deeper aquifer in this area.

Based on a review of the ENVIRON *Remedial Progress Report* dated September 2013, which summarizes April 2013 sampling activities for Genuine Parts associated with VRP Site No. 6991004, groundwater sampling has identified the following RISC IDCL exceedances:

- TCE: MW-10-1R, MW-146, MW-148R; MW-152, MW-153, MW-156, MW-163, MW-173;
- Vinyl chloride: MW-148R, MW-160, MW-165D, MW-166D, MW-167D.

Also, cis-1,2-DCE was detected near Apartment Building No. 16 at a concentration of 465 parts per billion in ENVIRON well MW-166D.

The exceedances identified in the ENVIRON monitoring well network are further reinforced by exceedances detected along the northern property boundary this quarter from MUNDELL wells MMW-4D and MMW-6D, in addition to wells MMW-11D and MMW-13D, located further downgradient of the property boundary, but north of the Michigan Plaza ***Chemical Source Areas***. Annual sampling at MUNDELL well MMW-5D continues to confirm the elevated concentrations that have migrated onto the apartment complex over the years (see **Figure 6**).

## 2.3 In-Situ Bioremediation Progress

Based upon:

1) The extent and severity of the indicator compound concentrations and trends;
2) Site-specific operational constraints and uses;
3) Geochemical and physical characteristics of the aquifer; and
4) Economic factors;

In-situ bioremediation with CAP 18™ and CAP 18 ME™, followed by Monitored Natural Attenuation (MNA) is the appropriate remediation technology being used for the Site for treating groundwater, as detailed in the *RWP*. The initial CAP 18™ injection was performed in each of the three source areas in August 2007 using a direct push Geoprobe system. Locations and spacing of the injection points were designed to address the sewer line related ***Chemical Source Areas*** and provide injection locations in each ***Chemical Source Area***. The anticipated downgradient migration of the initial CAP 18™ was expected to remediate the most significant groundwater impacts.

A booster CAP 18 ME™ injection was performed in February 2009 to aggressively treat some areas where the chemical concentrations began to stabilize or were decreasing at a slow rate. In July 2013, a third round of CAP 18 ME™ injections was performed in accordance with the *Second Revised Work Plan for the Third Round of CAP18 ME™ Injections,* approved by IDEM on June 3, 2013. Injection logs for each individual point can be found in the *Remediation Work Plan*, submitted to IDEM on September 19, 2013. Injection quantities are summarized as follows:

- 255 gallons of CAP18 ME™ and 17,000 mL of BAC-9 were injected at 17 different points over 2 days of field time in **Source Area A**;

- 1,194 gallons of CAP18 ME™ and 27,100 mL of BAC-9 were injected at 27 different points over 4.5 days of field time in **Source Area B**;

- 759 gallons of CAP18 ME™ and 26,200 mL of BAC-9 were injected at 25 different points over 3.25 days if field time in **Source Area C**; and

- In total, 2,208 gallons of CAP18 ME™ and 70,300 mL of BAC-9 were injected at 69 different points over the course of two weeks.

The cumulative groundwater analytical data for enhanced anaerobic bioremediation are included in **Table 4.** Groundwater analytical results are attached in **Appendix A**.

***Indicator Chemical Trends***

A group of monitoring wells from the sampling network is utilized to monitor dissolved indicator compound concentration trends over time at various locations within the heart of the three ***Chemical Source Areas***. Graphs of historical PCE, TCE, cis-1,2-DCE and vinyl chloride concentrations are presented in **Figure 6** for the following monitoring wells:

***Source Area A***: MMW-P-02, MMW-P-03S, MMW-P-03D, MMW-P-04, MMW-P-11S, MMW-P-11DR, and MMW-C-01;

***Source Area B***: MMW-P-01, MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-10S, MMW-P-10D, MMW-8S; MMW-P-12S, and MMW-P-12D; and

***Source Area C***: MMW-1S, MMW-9S, and MMW-10S.

**Figures 6** and **7** illustrate the changes in the chlorinated solvent concentrations demonstrating reductive de-chlorination as a result of the CAP 18 ME™ remediation implementation. To illustrate the effect of the CAP 18 ME™ injections on dissolved chlorinated concentrations, injection dates are included on the graphs.

### *2.3.1 Source Area A*

***PCE***

The data associated with well MMW-P-11S shows that PCE concentrations in exceedance of the RISC IDCL are present south of the strip mall property in the shallow zone. This relationship is a good indicator of groundwater flow direction being to the south; if it were more to the southwest, PCE would also have been observed in MMW-P-13S/D. The PCE concentration decreased but remained above the RDCL in MMW-C-01. PCE was detected above the RDCL in MMW-P-02, which had previously been below detection limits for the two previous quarters. PCE was not detected above the laboratory reporting limit in indicator wells MMW-P-03S, MMW-P-03D, MMW-P-04, and MMW-P-11DR

located near ***Source Area A***. PCE concentrations had been generally declining to the southeast of the source area since the initial August 2007 CAP 18™ injections and the following February 2009 CAP 18 ME™ injections. However, the recent return of PCE in MMW-P-04 and MMW-C-01 during the first and second quarters of 2013 indicated that there may have been some rebounding occurring. The results from this quarter's sampling event indicate that the rebounding trend has ceased as PCE concentrations have begun to decrease. PCE has only been detected in the shallow wells; there have been no PCE detections in the deep wells.

***TCE***

TCE was not detected above the reporting limit in any ***Source Area A*** indicator wells.

***Cis-1,2-DCE***

Cis-1,2-DCE concentrations remain below the RDCL in MMW-P-02, MMW-P-03S, MMW-P-11S, MMW-P-11DR, and MMW-C-01. Concentrations also returned to levels below the RDCL in MMW-P-04 after increasing during the previous quarter. It was not detected above the reporting limit in MMW-P-03D.

***VC***

VC concentrations increased in all of the ***Source Area A*** indicator wells, with the exception of MMW-P-04 as concentrations remained above the IDCL in each of the **Source Area A** wells. MMW-P-03S showed the largest change, increasing by more than 10 times the previous concentration to a concentration, more than two times larger than the previously highest concentration observed.

***Area A Summary***

Much of ***Source Area A*** is beginning to show positive trends following the most recent injections. MNA parameters indicating reducing conditions had previously been established over the years with associated sulfate reduction, increased ethene generation, and apparent methanogenesis (MMW-P-03S).

Generation of vinyl chloride as a byproduct of PCE reductive de-chlorination appears to have increased in ***Source Area A*** during the most recent quarter following injections. Also, the increasing trend of PCE, TCE and cis-1,2-DCE previously observed in many of the wells appears to have reversed. Low dissolved oxygen levels indicate a favorable environment for *Dehalococcoides,* bacteria populations which were injected during the July 2013 event, which should allow for additional de-chlorination of VC into ethene.

### *2.3.2 Source Area B*

***PCE***

PCE concentrations decreased somewhat but remain at levels above the RDCL in the vicinity of MMW-P-01, located immediately downgradient of sewer line source areas identified during soil investigation activities completed during 2005. The PCE concentration in MMW-8S decreased after a substantial increase in the previous quarter and was detected at a concentration below the RDCL. PCE was not detected in any of the other wells in ***Source Area B***. PCE has only been detected in the shallow wells; there have been no PCE detections in the deep wells.

***TCE***

TCE decreased in MMW-8S but remained above the RDCL for the second consecutive quarter. TCE concentrations decreased slightly and remained above the RDCL at MMW-P-01. TCE was not detected in any of the other wells in ***Source Area B***.

***Cis-1,2-DCE***

Cis-1,2-DCE concentrations increased in MMW-P-06 and remained in exceedance of the IDCL. Cis-1,2-DCE concentrations increased in MMW-P-01, MMW-P-10D, MMW-P-12S, and MMW-P-12D. The concentration in MMW-P-10D increased by almost a factor of 10. Concentrations were above the RDCL in all four of those wells. Levels remain below the RDCL in MMW-8S, MMW-P-07, and MMW-P-10D. Cis-1,2-DCE was not detected above laboratory reporting limits in MMW-P-05 and MMW-P-10S.

***VC***

Elevated VC levels in exceedance of the IDCL are identified in each indicator well, with the exception of MMW-P-10S, in which VC was not detected above laboratory reporting limits. Increases are noted in MMW-8S, MMW-P-08, MMW-P-01, and MMW-P-12D, with even greater increases in MMW-P-06 and MMW-P-10D. Decreases are noted in MMW-P-07 and MMW-P-12S as well as a substantial decrease in MMW-P-08. The concentration in MMW-P-05 remained relatively unchanged.

***Area B Summary***

Indicator compound concentration trends in the vicinity of ***Source Area B*** highlight that in certain areas (*e.g.,* MMW-P-07) reductive de-chlorination processes have been successful in consuming PCE and TCE while generating

daughter products (cis-1,2 DCE, VC). MNA indicator parameters also indicate reducing conditions have been established over the years and sulfate reduction and methanogenesis are occurring (*e.g*., MMW-P-05, MMW-P-06). Recent rebounds of PCE and TCE levels (MMW-8S) appear to have decreased since the injections in July.

### *2.3.3 Source Area C*

***PCE***

The PCE concentration in MMW-1S decreased for the second consecutive quarter but remained above the IDCL. PCE decreased in MMW-10S for the second consecutive quarter while remaining above the RDCL. PCE was not detected above the laboratory reporting limit in MMW-9S or south of Michigan Street in ENVIRON well MW-168S. PCE has only been detected in the shallow wells; there have been no PCE detections in the deep wells.

***TCE***

The TCE concentration at MMW-1S increased and remained above the RDCL. Additionally, the TCE footprint, which was previously noted as rebounding in MMW-9S and MMW-10S since the third quarter 2012 sampling event, appears to be decreasing in size. The TCE concentration in MMW-10S decreased but remains above the RDCL. TCE was not detected above the laboratory reporting limit in MMW-9S.

***Cis-1,2-DCE***

Cis-1,2-DCE concentrations were above the IDCL in MMW-9S and above the RDCL in MMW-10S. However, concentrations decreased in both wells for the second consecutive quarter. The cis-1,2-DCE concentration increased but remained below the RDCL in MMW-1S.

***VC***

VC concentrations at ***Source Area C*** increased in all three indicator wells. VC levels in MMW-9S and MMW-10S remained above the IDCL, with MMW-9S demonstrating a large increase in VC concentration. The VC concentration in MMW-1S was above the reporting limit for the first time since the third quarter of 2012.

***Area C Summary***

MNA indicator parameters also indicate reducing conditions have been established over the years with associated sulfate reduction, ethene generation, and apparent methanogenesis (*e.g.*, see MMW-9S and MMW-10S). Ethene concentrations have increased since the latest round of injections.

The most recent evidence of decreasing PCE and TCE concentrations observed near ***Source Area C***, and the increasing rates of daughter product generation observed in the vicinity indicate that the most recent round of injections are successfully breaking down the parent compounds.

In conclusion, the most recent round of CAP 18 ME™ injections appears to have stimulated the reductive de-chlorination processes, as evidenced by decreasing PCE and TCE concentrations and increased generation of breakdown products (cis-1,2-DCE and VC). The concentration of the remaining PCE in the source areas is expected to continue to decline over the next several quarters. Concentrations of cis-1,2-DCE and VC continue to increase in the deep aquifer as the plume from the Genuine Site continues to migrate south.

The cumulative groundwater analytical data for enhanced anaerobic bioremediation are included in **Table 4.** Groundwater analytical results are attached in **Appendix A**.

## 2.4 Post-Injection Subsurface Methane Monitoring Results

Subsurface air analytical results are summarized in **Table 6**. Methane was below the laboratory detection limits in samples collected from MMW-11S and MMW-P-11S. Methane was slightly above the detection limits in MMW-P-12S, MMW-P-12D, and MMW-P-11DR. However, the methane concentration in the sample collected from MMW-12S (29,100 ppmv) was greater than the other samples collected, but still below the lower explosive limit (50,000 ppmv) for methane. In order to better assess the methane vapor present in the subsurface environment, MUNDELL will install 12 additional soil gas wells throughout the Site during the fourth quarter of 2013. These wells will also be used to monitor PCE, TCE, cis-1,2-DCE and VC vapor concentrations as remediation progresses.

As a precautionary measure, MUNDELL also analyzed the air samples collected from the indoor air mitigation systems for methane to be sure that concentrations in the soil were not at potentially hazardous levels. The methane concentrations were slightly above detection limits in all samples collected. The results of those analyses are also included in **Table 6**.

## 2.5 Indoor Air Mitigation Systems Performance

Four sub-floor slab depressurization units were installed at Michigan Plaza by *Air Quality Control (AQC)* under the oversight of MUNDELL in September 2006. Three additional sub-floor slab depressurization units were installed at the apartment complex by AQC under the oversight of MUNDELL on March 19 and 26, 2008.

Unit/blowers were installed in the following spaces at Michigan Plaza: 1) the former Village Pantry (B1); 2) the veterinary clinic (B2); 3) the Arca de Salvacion (B3); and 4) the laundromat (Michigan Plaza Family Laundry) (B4). The systems installed at the Maple Creek Village Apartments are: Building No. 1, Basement Apartment 101 (B5); Building No. 6, Basement Apartment 602 (B6); and Building No. 10, Basement Apartment 1001 (B7). The system locations are illustrated on **Figure 8**.

Since the time of installation, system stack air samples were collected weekly during October 2006, followed by bi-weekly sampling during November and December 2006, monthly throughout 4th quarter, 2006, and then on a quarterly basis thereafter. PID readings have also been concurrently measured in each of the stacks. The historical PCE concentration trends and cumulative pounds of PCE and total contaminants removed by each of the systems (B1 through B7) are summarized in **Figures 9** through **15.**

Note that during the 3rd quarter sampling event, the flow meter in subfloor depressurization system B6 had a reading of 0 cubic feet per minute. It is believed that the system was down as a result of an electrical issue, which will be addressed during the 4th quarter of 2013. For the sake of calculating the mass of pollutants removed during the quarter, it was assumed that the blower in unit B6 shut off on August 3, 2013, which is half way between when the system was sampled and inspected during the 2nd and 3rd quarters. It was also assumed that the system was operating at 115 cubic feet per minute during that time frame, which is the average flow rate over the course of the previous 8 quarters.

Please note that at the time of the writing of this QMR, final results for volatile fatty acid analysis were delayed due to laboratory instrumentation issues. MUNDELL was informed by the Pace project manager that the samples needed to be re-run, and the results were not available for inclusion in this report. The data will be summarized in the Fourth Quarter 2013 *QMR*.

As of the end of the 3rd quarter of 2013, approximately 31.35 *pounds* of total chlorinated solvents, including 18.77 *pounds* of PCE, have been removed at the *Maple Creek Village Apartments property* (subfloor depressurization systems B5, B6 and B7); and approximately 125.58 *pounds* of total chlorinated solvents, including *106.92 pounds* of PCE have been removed at the *Michigan Plaza property* (subfloor depressurization

systems B1, B2, B3 and B4). The associated calculations are provided in **Appendix C.** A concentration of half the PQL (practical quantitation limit) is assumed for the indicator compounds demonstrating concentrations below the laboratory PQL, with the exception of vinyl chloride where an average concentration of 0.015 parts per million vapor (PPMV) (derived from the J flag values for vinyl chloride concentrations below PQL) is used for calculation purposes.

After three consecutive quarters of higher concentrations, PCE concentrations in B1 (Unit 3801) have returned to levels closer to those observed during the eleven quarters that preceded the period of elevated concentrations. After a sharp increase last quarter, PCE concentrations in B2 (Unit 3811) returned to levels more typical of the previous three quarters. Concentrations in B3 (Unit 3819) continue to level off after steadily increasing since January 2012. PCE concentrations in mitigation system B4 remain low and have decreased by an order of magnitude since air monitoring was initiated. PCE concentrations in B5 (Apartment Building No. 1) showed another decrease, returning to levels more typical of previous quarters after an increase during the first quarter. PCE concentrations in B6 (Apartment Building No. 6) and B7 (Apartment Building No. 10) remained at levels similar to the previous quarter. Overall, the air mitigation systems have shown generally declining PCE concentrations; reductions of PCE concentrations by approximately 500 to 5000 ug/$m^3$ since air monitoring was initiated have been observed.

Recently, VC concentrations have been higher than previously observed in stack air samples from the mitigation systems at Michigan Plaza. Vinyl chloride concentrations were largely non-detect through the fourth quarter of 2011, but elevated VC levels have been observed since. The historical vinyl chloride concentration trends and cumulative pounds of vinyl chloride removed by each of the systems (B1 through B7) are summarized in **Figures 18** through **26.** The Plaza mitigation systems showed spikes in vinyl chloride concentrations during the first quarter of 2012 and then spiked again in the fourth quarter of 2012. The most recent sampling event revealed that the concentrations have spiked once again in the Plaza mitigation systems while decreasing slightly in the Apartment complex. The concentration in B3 (Unit 3819) was detected at the highest concentration ever observed in that unit.

It is believed by MUNDELL that the recent elevated VC subslab concentrations are the result of the ongoing degradation of PCE into its daughter products migrating further downgradient from ***Source Area B***. The 3rd round of CAP 18 ME™ injections is expected to stimulate this degradation, and the associated addition of *Dehalococcoides,* bacteria populations, which have been demonstrated to completely degrade parent cVOCs to ethene, is expected to help decrease VC concentrations. The bacteria were injected during the 3rd injection event along with the CAP 18 ME™. During this first sampling event following the injections, there have already been instances of increased ethene concentrations observed in the groundwater samples collected (MMW-10S and

MMW-P-05). MUNDELL will continue to monitor these trends during quarterly system sampling. In the event that the VC concentrations are not decreased at an acceptable rate, MUNDELL has proposed the use of a temporary SVE system to remove additional contaminants from the subsurface soil. This contingency plan was described in the most recent *Remediation Work Plan* (RWP) dated September 18, 2013 that has been submitted to IDEM and is currently in review.

## 2.6 Continuous Water Level Monitoring

As requested by IDEM, MUNDELL conducted water level and CAP 18® measurements at selected locations in connection with the 3rd CAP 18ME™ injection event. The following wells were monitored before, during and after the injection:

> MMW-01S, MMW-09S, MMW-10S, MMW-P-01, MMW-P-02, MMW-P-07, MMW-P-11S/D, MMW-P-12S/D, MMW-P-13S/D, MMW-P-14S/D, and MW170S/D.

Groundwater level measurements were made with transducers in the monitoring wells listed above at a frequency of one reading per minute. Water level measurements were also taken in monitor wells at greater distances with water level indicators at a rate of approximately once per hour. Water level measurements taken before, during and after the injections were completed to verify that either 'no rise' in groundwater level had been observed, or the water level returned to pre-injection conditions. Monitoring wells utilized for water level measurements were probed with an oil/water interface indicator to determine the presence/absence of any CAP18 ME™.

The short term results were previously discussed in the RWP. In summary, the hydraulic response of the aquifer during the 3rd round of injections was consistent with the previous analysis MUNDELL provided to IDEM, which indicated no significant mounding would occur during the injection activities, even in the immediate vicinity of the injections. In addition, whatever mounding was observed would quickly dissipate within a few hours. The data collected during the 3rd injection also confirmed that the injections would not alter the south-southeast groundwater flow direction from the Source Areas.

A review of the gauging data also indicated that a short-term rise in water levels occurred across the study area prior to the injection coincident with the July 3rd, 2013 rise in Little Eagle and Eagle Creek, followed by a gradual drop in water levels over the two-week injection period. This gradual drop is typical of water levels in the area during the time period in which the measurements were taken, specifically during the summer when recharge via precipitation is more limited than at other times during the year.

In order to provide additional longer-term water level data following the injection event, transducers were left in MMW-P-11S/D, MMW-P-13S/D, and MMW-P-14S/D to observe long-term water level fluctuations during the remainder of the quarter following injections. The transducers were removed prior to the quarterly sampling event at the end of

September. The long-term data for those six wells, as well as stream level and precipitation data, are depicted in **Figure 27**. Note that some gaps exist in the data due to short-term technical issues with a few transducers (MMW-P-14S, MMW-P-11DR, and MMW-P-11S) while other data were overwritten and due to a lack of memory (MMW-P-13S and MMW-P-13D). There were four additional rain events (July 27, August 3, August 8, and August 31) that occurred after the short-term transducers were removed on July 24, all of which produced results similar to those previously observed during the high water stage on July 3rd.

## 3 .0 FUTURE ACTIONS

MUNDELL will continue to conduct groundwater monitoring at the Site and provide results to IDEM on a quarterly basis. As specified in paragraph 5 of the March 22, 2013 IDEM letter, quarterly reports will be submitted approximately 60 days after the sampling event is completed.

During the fourth quarter of 2013, MUNDELL will install nested soil gas monitoring wells screened across shallow and deep portions of the vadose zone at six different locations on-Site (total of 12 soil gas monitoring wells). Each well nest will help provide a more representative profile of the subsurface vapor conditions and allow MUNDELL to properly monitor methane levels as a result of the most recent round of CAP18 ME™ injections. The wells will also be used to better monitor vapor trends as remediation progresses and, in the event that the remedial SVE system proposed in the RWP is employed at the Site, allow for radius of influence measurements.

In addition, MUNDELL remains concerned about the Genuine Parts contamination that continues to migrate onto the Site. As set forth in Section 2.2.2, multiple monitoring wells upgradient of the Maple Creek Village and Michigan Plaza properties show cVOC concentrations at levels in excess of residential and commercial standards. Based on a review of the March 2012 ENVIRON report, VRP Tier II cleanup levels were established at the Genuine Parts site based upon the presumption that cleanup to Residential Cleanup Goals (RCGs) was not likely because of the presence of off-site sources (interpreted to mean source areas associated with Michigan Plaza). MUNDELL continues to point out that source areas associated with Michigan Plaza are located well to the south of the property boundary of the Genuine Parts facility. Accordingly, there appears to be no reason why Genuine Parts could not achieve RCGs at the aforementioned wells.

Nevertheless, if IDEM is not going to require a more thorough remedial response for the remaining groundwater impacts migrating from Genuine Parts onto the Maple Creek Village property, concentrations coming onto the Maple Creek Village and passing into the remedial area for Michigan Plaza (*e.g.*, in upgradient wells MMW-11D, MMW-13D, MMW-14D, MW-165D, MW-166D, MMW-4D and MMW-5D) will be used as 'background

concentrations' that will aid in distinguishing between the Michigan Plaza source impacts and the Genuine Site impacts, and ultimately will be used to support the setting of target cleanup goals for the deeper portion of the surficial aquifer at the Michigan Plaza site.

Because of these continued elevated groundwater levels beneath most of the Apartments, MUNDELL recommends that IDEM require indoor air sampling of the Apartments near the north property line by Genuine to continue to confirm no indoor air impacts are resulting from the groundwater. The last indoor air sampling event for the Apartments to the north (Building No. 20) was completed by AMMH in October 2004.

AMMH and MUNDELL currently await the results of the IDEM RWP document review.

We appreciate the opportunity to update IDEM on the progress of remedial activities and monitoring at the Site. If you have any questions, please do not hesitate to contact us at (317) 630-9060 or via email (jmundell@MundellAssociates.com; mbreting@mundellassociates.com).

Sincerely,

**MUNDELL & ASSOCIATES, INC.**

Matthew Bono
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Attachments: Tables
Figures
Appendices

cc: Mr. Peter Cappel, AMMH

# TABLES


Table 1 Groundwater Level Measurements and Monitoring Well Construction Data

Table 2 Cumulative Groundwater Level Measurements

Table 3 Monitoring Well Groundwater Analytical Results – 3rd Quarter 2013

Table 4 Cumulative Monitoring Well Groundwater Analytical Results

Table 5 Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation

Table 6 Post-Injection Subsurface Methane Monitoring Results

**Table 1**
Tabulated Water Level Measurements and Monitoring Well Construction Data
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Monitoring Well | Date of Water Level | Top of Casing Elevation (feet MSL) | Total Depth (feet) | Screened Interval (feet) | | | Depth To Water (feet) | Groundwater Elevation (feet MSL) |
|---|---|---|---|---|---|---|---|---|
| **Monitoring Wells (Plaza)** | | | | | | | | |
| *Shallow Wells* | | | | | | | | |
| MMW-P-01 | 9/17/2013 | 715.26 | 28 | 18.0 | - | 28.0 | 19.75 | 695.51 |
| MMW-P-02 | 9/17/2013 | 716.09 | 30 | 20.0 | - | 30.0 | 20.81 | 695.28 |
| MMW-P-03S | 9/17/2013 | 715.95 | 28 | 18.0 | - | 28.0 | 20.69 | 695.26 |
| MMW-P-04 | 9/17/2013 | 716.04 | 28 | 18.0 | - | 28.0 | 20.58 | 695.46 |
| MMW-P-05 | 9/17/2013 | 715.55 | 28 | 18.0 | - | 28.0 | 20.11 | 695.44 |
| MMW-P-06 | 9/17/2013 | 716.14 | 28 | 18.0 | - | 28.0 | 20.71 | 695.43 |
| MMW-P-07 | 9/17/2013 | 714.90 | 28 | 18.0 | - | 28.0 | 19.01 | 695.89 |
| MMW-P-08 | 9/17/2013 | 714.53 | 28 | 18.0 | - | 28.0 | 18.53 | 696.00 |
| MMW-P-09S | 9/17/2013 | 714.80 | 28 | 18.0 | - | 28.0 | 20.44 | 694.36 |
| MMW-P-10S | 9/17/2013 | 714.35 | 28 | 18.0 | - | 28.0 | 18.76 | 695.59 |
| MMW-P-12S | 9/17/2013 | 715.83 | 26 | 16.0 | - | 26.0 | 19.28 | 696.55 |
| *Deep Wells* | | | | | | | | |
| MMW-P-03D | 9/17/2013 | 716.02 | 35 | 25.0 | - | 35.0 | 20.84* | 695.18 |
| MMW-P-09D | 9/17/2013 | 714.82 | 45 | 35.0 | - | 45.0 | 20.40 | 694.42 |
| MMW-P-10D | 9/17/2013 | 714.42 | 38 | 28.0 | - | 38.0 | 18.52 | 695.90 |
| MMW-P-12D | 9/17/2013 | 715.33 | 36.5 | 31.5 | - | 36.5 | 18.73 | 696.60 |
| **Monitoring Wells (Apartments)** | | | | | | | | |
| *Shallow Wells* | | | | | | | | |
| MMW-1S | 9/17/2013 | 712.92 | 20 | 10.0 | - | 20.0 | 16.55 | 696.37 |
| MMW-2S | 9/17/2013 | 712.95 | 20 | 10.0 | - | 20.0 | 16.09 | 696.86 |
| MMW-3S | 9/17/2013 | 710.20 | 30 | 18.0 | - | 28.0 | 13.01 | 697.19 |
| MMW-7S | 9/17/2013 | 712.09 | 26 | 12.0 | - | 22.0 | 14.67 | 697.42 |
| MMW-8S | 9/17/2013 | 714.24 | 24 | 14.0 | - | 24.0 | 17.56 | 696.68 |
| MMW-9S | 9/17/2013 | 713.71 | 25 | 15.0 | - | 25.0 | 17.79 | 695.92 |
| MMW-10S | 9/17/2013 | 712.69 | 25 | 15.0 | - | 25.0 | 16.84 | 695.85 |
| MMW-11S | 9/17/2013 | 713.17 | 24 | 14.0 | - | 24.0 | 16.72 | 696.45 |
| MMW-12S | 9/17/2013 | 712.15 | 24 | 14.0 | - | 24.0 | 15.78 | 696.37 |
| MMW-15S | 9/17/2013 | 713.36 | 32 | 22.0 | | 32.0 | 16.58 | 696.78 |
| *Deep Wells* | | | | | | | | |
| MMW-4D | 9/17/2013 | 711.29 | 66 | 56.0 | - | 66.0 | 14.21 | 697.08 |
| MMW-5D | 9/17/2013 | 711.27 | 51 | 36.0 | - | 46.0 | 14.01 | 697.26 |
| MMW-6D | 9/17/2013 | 712.40 | 51 | 39.0 | - | 49.0 | 15.07 | 697.33 |
| MMW-11D | 9/17/2013 | 713.33 | 33 | 23.0 | - | 33.0 | 16.51 | 696.82 |
| MMW-13D | 9/17/2013 | 713.28 | 50 | 35.0 | - | 50.0 | 16.52 | 696.76 |
| MMW-14D | 9/17/2013 | 712.41 | 50 | 40.0 | - | 50.0 | 15.56 | 696.85 |
| MMW-15D | 9/17/2013 | 713.08 | 39 | 34.0 | | 39.0 | 16.30 | 696.78 |
| **Floral Park Cemetery Monitoring Wells (Off-Site)** | | | | | | | | |
| *Shallow Wells* | | | | | | | | |
| MMW-C-01 | 9/17/2013 | 715.73 | 28 | 18.0 | - | 28.0 | 20.45 | 695.28 |
| MMW-C-02S | 9/17/2013 | 714.64 | 28 | 18.0 | - | 28.0 | 19.86 | 694.78 |
| MMW-C-16S | 9/17/2013 | 717.32 | 25.9 | 15.9 | - | 25.9 | 22.40 | 694.92 |
| MMW-P-11S | 9/17/2013 | 716.42 | 26 | 16.0 | - | 26.0 | 21.20 | 695.22 |
| MMW-P-13S | 9/17/2013 | 713.83 | 26 | 16.0 | - | 26.0 | 18.60 | 695.23 |
| MMW-P-14S | 9/17/2013 | 714.50 | 28 | 18.0 | - | 28.0 | 19.64 | 694.86 |
| *Deep Wells* | | | | | | | | |
| MMW-C-02D | 9/17/2013 | 713.90 | 36 | 31.0 | - | 36.0 | 19.10 | 694.80 |
| MMW-C-16D | 9/17/2013 | 717.27 | 40 | 35.0 | - | 40.0 | 22.38 | 694.89 |
| MMW-C-17D | 9/17/2013 | 714.57 | 38.7 | 33.7 | - | 38.7 | 20.95 | 693.62 |
| MMW-P-11DR | 9/17/2013 | 715.63 | 33 | 28.0 | - | 33.0 | 20.42 | 695.21 |
| MMW-P-13D | 9/17/2013 | 713.57 | 33 | 28.0 | - | 33.0 | 18.35 | 695.22 |
| MMW-P-14D | 9/17/2013 | 714.76 | 34 | 29.0 | - | 34.0 | 19.94 | 694.82 |

**Table 1**
Tabulated Water Level Measurements and Monitoring Well Construction Data
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Monitoring Well | Date of Water Level | Top of Casing Elevation (feet MSL) | Total Depth (feet) | Screened Interval (feet) | | | Depth To Water (feet) | Groundwater Elevation (feet MSL) |
|---|---|---|---|---|---|---|---|---|
| **ENVIRON Monitoring Wells (Off-Site)** | | | | | | | | |
| *Shallow Wells* | | | | | | | | |
| MW-166S | 9/17/2013 | 712.70 | 20 | 10.0 | | 20.0 | 15.56 | 697.14 |
| MW-167S | 9/17/2013 | 716.07 | 22 | 12.0 | - | 22.0 | 19.24 | 696.83 |
| MW-168S | 9/17/2013 | 714.58 | 22 | 12.0 | - | 22.0 | 18.55 | 696.03 |
| MW-169S | 9/17/2013 | 715.92 | 25 | 15.0 | - | 25.0 | 21.16 | 694.76 |
| MW-170S | 9/17/2013 | 717.14 | 27 | 17.0 | - | 27.0 | 21.74 | 695.40 |
| MW-171S | 9/17/2013 | 711.58 | 22 | 12.0 | - | 22.0 | NG | NG |
| MW-174S | 9/17/2013 | 717.78 | 24 | 14.0 | | 24.0 | 21.37 | 696.41 |
| MW-175S | 9/17/2013 | 718.66 | 25 | 15.0 | | 25.0 | 22.11 | 696.55 |
| *Deep Wells* | | | | | | | | |
| MW-166D | 9/17/2013 | 712.49 | 51 | 46.0 | - | 51.0 | 15.42 | 697.07 |
| MW-167D | 9/17/2013 | 715.61 | 33 | 28.0 | - | 33.0 | 18.85 | 696.76 |
| MW-168D | 9/17/2013 | 714.46 | 31 | 26.0 | - | 31.0 | 18.41 | 696.05 |
| MW-169D | 9/17/2013 | 715.69 | 37 | 32.0 | - | 37.0 | 20.97 | 694.72 |
| MW-170D | 9/17/2013 | 717.07 | 39 | 34.0 | - | 39.0 | 21.68 | 695.39 |
| MW-171D | 9/17/2013 | 711.62 | 49 | 44.0 | - | 49.0 | 16.76 | 694.86 |
| MW-174D | 9/17/2013 | 717.72 | 48 | 43.0 | - | 48.0 | 21.32 | 696.40 |
| MW-175D | 9/17/2013 | 718.75 | 41 | 37.0 | - | 42.0 | 22.00 | 696.75 |
| **U.S. EPA Monitoring Wells (Off-Site)** | | | | | | | | |
| *Shallow Wells* | | | | | | | | |
| MW-WES-01a | 9/17/2013 | 716.13 | 37.5 | 32.5 | - | 37.5 | 20.74 | 695.39 |
| MW-WES-02a | 9/17/2013 | 716.24 | 29 | 24 | - | 29 | 20.75 | 695.49 |
| MW-WES-03a | 9/17/2013 | 717.42 | 35 | 30 | - | 35 | 23.02 | 694.40 |
| MW-WES-04a | 9/17/2013 | 717.85 | 35 | 30 | - | 35 | 21.67 | 696.18 |
| MW-WES-05a | 9/17/2013 | 717.04 | 25 | 20 | - | 25 | 19.41 | 697.63 |
| *Intermediate/Deep Wells* | | | | | | | | |
| MW-WES-01b | 9/17/2013 | 716.05 | 46 | 41 | - | 46 | 20.93 | 695.12 |
| MW-WES-01c | 9/17/2013 | 715.96 | 55 | 50 | - | 55 | 20.86 | 695.10 |
| MW-WES-02b | 9/17/2013 | 716.28 | 40 | 35 | - | 40 | 20.84 | 695.44 |
| MW-WES-02c | 9/17/2013 | 716.23 | 50 | 40 | - | 50 | 20.34 | 695.89 |
| MW-WES-03b | 9/17/2013 | 717.41 | 45 | 40 | - | 45 | 23.05 | 694.36 |
| MW-WES-04b | 9/17/2013 | 717.85 | 45 | 40 | - | 45 | 21.62 | 696.23 |
| MW-WES-05b | 9/17/2013 | 716.60 | 37.5 | 32.5 | - | 37.5 | 19.94 | 696.66 |
| MW-WES-05c | 9/17/2013 | 715.95 | 50 | 45 | - | 50 | 20.34 | 695.61 |
| **Little Eagle Creek Stream Gauge Locations** | | | | | | | | |
| **Location ID** | **Date of Water Level** | **Top of Stream Gauge Elevation (Feet MSL)** | | | | | **Water Surface Gauge Elevation (Feet MSL)** | **Water Surface Elevation (Feet MSL)** |
| SG-1 | 9/17/2013 | 719.82 | | | | | 22.75 | 697.07 |
| SG-2 | 9/17/2013 | 718.36 | | | | | 23.30 | 695.06 |

Notes:
1) All Top of Casing (TOC) data was obtained from or referenced to the Unified U.S. EPA Elevation Survey completed on October 13, 2011.
2) NG = Not Gauged;
3) Depth to water at MMW-P-03D was adjusted to account for the 2 feet of CAP18 present in the well with a specific gravity of 0.931

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| **Monitoring Wells (Plaza)** | | | | | | | | | |
| *Shallow Wells* | | | | | | | | | |
| MMW-P-01 | 9/28/2005 | 715.79 | 28 | 18.00 | 28.00 | 11/7/2005 | | 19.51 | 696.28 |
| | | | | | | 2/21/2007 | | 18.17 | 697.62 |
| | | | | | | 6/14/2007 | | 18.95 | 696.84 |
| | | | | | | 9/19/2007 | | 19.69 | 696.10 |
| | | | | | | 12/12/2007 | | 19.13 | 696.66 |
| | | | | | | 3/21/2008 | | 17.45 | 698.34 |
| | | | | | | 6/2/2008 | | 17.91 | 697.88 |
| | | | | | | 9/9/2008 | | 19.27 | 696.52 |
| | | | | | | 11/20/2008 | | 19.68 | 696.11 |
| | | | | | | 3/17/2009 | | 19.09 | 696.70 |
| | | | | | | 6/15/2009 | | 17.44 | 698.35 |
| | | 714.903 | | | | 8/5/2009 | | 17.91 | 696.99 |
| | | | | | | 11/2/2009 | | 19.07 | 695.83 |
| | | | | | | 2/3/2010 | | 19.29 | 695.61 |
| | | | | | | 4/20/2010 | | 18.80 | 696.10 |
| | | | | | | 7/20/2010 | | 18.06 | 696.84 |
| | | | | | | 10/11/2010 | | 19.82 | 695.08 |
| | | | | | | 1/17/2011 | | 19.77 | 695.13 |
| | | 715.26 | | | | 4/28/2011 | | 16.91 | 698.35 |
| | | | | | | 9/27/2011 | | 19.06 | 696.20 |
| | | | | | | 10/17/2011 | | 19.71 | 695.55 |
| | | | | | | 1/18/2012 | | 18.59 | 696.67 |
| | | | | | | 4/23/2012 | | 17.95 | 697.31 |
| | | | | | | 7/30/2012 | | 20.06 | 695.20 |
| | | | | | | 11/12/2012 | | 19.04 | 696.22 |
| | | | | | | 3/1/2013 | | 18.26 | 697.00 |
| | | | | | | 5/16/2013 | | 17.51 | 697.75 |
| | | | | | | 9/17/2013 | | 19.75 | 695.51 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-02 | 9/27/2005 | 716.70 | 30 | 20.00 | 30.00 | 11/7/2005 | | 20.78 | 695.92 |
| | | | | | | 2/21/2007 | | 19.13 | 697.57 |
| | | | | | | 6/14/2007 | | 19.96 | 696.74 |
| | | | | | | 9/19/2007 | | 20.90 | 695.80 |
| | | | | | | 12/12/2007 | | 20.42 | 696.28 |
| | | | | | | 3/21/2008 | | 18.61 | 698.10 |
| | | | | | | 6/2/2008 | | 19.05 | 697.65 |
| | | | | | | 9/9/2008 | | 20.41 | 696.29 |
| | | | | | | 11/20/2008 | | 20.91 | 695.79 |
| | | | | | | 3/17/2009 | | 20.19 | 696.51 |
| | | | | | | 6/15/2009 | | 18.38 | 698.32 |
| | | 715.686 | | | | 8/5/2009 | | 18.85 | 696.84 |
| | | | | | | 11/2/2009 | | 20.19 | 695.50 |
| | | | | | | 2/3/2010 | | 20.29 | 695.40 |
| | | | | | | 4/20/2010 | | 19.72 | 695.97 |
| | | | | | | 7/20/2010 | | 18.92 | 696.77 |
| | | | | | | 10/11/2010 | | 20.88 | 694.81 |
| | | 716.09 | | | | 1/17/2011 | | 20.78 | 695.31 |
| | | | | | | 4/28/2011 | | 17.79 | 698.30 |
| | | | | | | 9/27/2011 | | 20.25 | 695.84 |
| | | | | | | 10/17/2011 | | 19.78 | 696.31 |
| | | | | | | 1/18/2012 | | 19.58 | 696.51 |
| | | | | | | 4/23/2012 | | 19.92 | 696.17 |
| | | | | | | 7/30/2012 | | 21.11 | 694.98 |
| | | | | | | 11/12/2012 | | 20.11 | 695.98 |
| | | | | | | 3/1/2013 | | 19.21 | 696.88 |
| | | | | | | 5/16/2013 | | 18.20 | 697.89 |
| | | | | | | 9/17/2013 | | 20.81 | 695.28 |
| MMW-P-03S | 9/26/2005 | 716.55 | 28 | 18.00 | 28.00 | 11/7/2005 | | 20.60 | 695.95 |
| | | | | | | 2/21/2007 | | 19.03 | 697.52 |
| | | | | | | 6/14/2007 | | 19.79 | 696.76 |
| | | | | | | 9/19/2007 | | 20.79 | 695.76 |
| | | | | | | 12/12/2007 | | 20.19 | 696.36 |
| | | | | | | 3/21/2008 | | 18.39 | 698.16 |
| | | | | | | 6/2/2008 | | 18.88 | 697.67 |
| | | | | | | 9/9/2008 | | 20.21 | 696.34 |
| | | | | | | 11/20/2008 | | 20.73 | 695.82 |
| | | | | | | 3/17/2009 | | 20.05 | 696.50 |
| | | | | | | 6/15/2009 | | 18.25 | 698.30 |
| | | 715.60 | | | | 8/5/2009 | | 18.70 | 696.90 |
| | | | | | | 11/2/2009 | | 18.70 | 696.90 |
| | | | | | | 2/3/2010 | | 20.20 | 695.40 |
| | | | | | | 4/20/2010 | | 19.65 | 695.95 |
| | | | | | | 7/20/2010 | | 18.85 | 696.75 |
| | | | | | | 10/11/2010 | | 20.75 | 694.85 |
| | | 715.95 | | | | 1/17/2011 | | 20.65 | 695.30 |
| | | | | | | 4/28/2011 | | 17.68 | 698.27 |
| | | | | | | 9/27/2011 | | 20.05 | 695.90 |
| | | | | | | 10/17/2011 | | 20.65 | 695.30 |
| | | | | | | 1/18/2012 | | 19.47 | 696.48 |
| | | | | | | 4/23/2012 | | 19.83 | 696.12 |
| | | | | | | 7/30/2012 | | 20.99 | 694.96 |
| | | | | | | 11/12/2012 | | 19.98 | 695.97 |
| | | | | | | 3/1/2013 | | 19.10 | 696.85 |
| | | | | | | 5/16/2013 | | 18.16 | 697.79 |
| | | | | | | 9/17/2013 | | 20.69 | 695.26 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-04 | 9/26/2005 | 716.27 | 28 | 18.00 | 28.00 | 11/7/2005 | | 20.27 | 696.00 |
| | | | | | | 2/21/2007 | | 18.77 | 697.50 |
| | | | | | | 6/14/2007 | | 19.51 | 696.76 |
| | | | | | | 9/19/2007 | | 20.49 | 695.78 |
| | | | | | | 12/12/2007 | | 23.33 | 692.94 |
| | | | | | | 3/21/2008 | | 18.52 | 697.75 |
| | | | | | | 6/2/2008 | | 18.94 | 697.33 |
| | | | | | | 9/9/2008 | | 20.58 | 695.69 |
| | | | | | | 11/20/2008 | | 20.90 | 695.37 |
| | | | | | | 3/17/2009 | | 19.76 | 696.51 |
| | | | | | | 6/15/2009 | | 18.01 | 698.26 |
| | | 715.492 | | | | 8/5/2009 | | 18.90 | 696.59 |
| | | | | | | 11/2/2009 | | 19.91 | 695.58 |
| | | | | | | 2/3/2010 | | NG | |
| | | | | | | 4/20/2010 | | 19.56 | 695.93 |
| | | | | | | 7/20/2010 | | 18.75 | 696.74 |
| | | | | | | 10/11/2010 | | 20.65 | 694.84 |
| | | 716.04 | | | | 1/17/2011 | | 20.42 | 695.62 |
| | | | | | | 4/28/2011 | | 17.54 | 698.50 |
| | | | | | | 9/27/2011 | | 19.90 | 696.14 |
| | | | | | | 10/17/2011 | | 20.58 | 695.46 |
| | | | | | | 1/18/2012 | | 19.36 | 696.68 |
| | | | | | | 4/23/2012 | | 19.75 | 696.29 |
| | | | | | | 7/30/2012 | | 20.88 | 695.16 |
| | | | | | | 11/12/2012 | | 19.86 | 696.18 |
| | | | | | | 3/1/2013 | | 19.03 | 697.01 |
| | | | | | | 5/16/2013 | | 18.11 | 697.93 |
| | | | | | | 9/17/2013 | | 20.58 | 695.46 |
| MMW-P-05 | 9/26/2005 | 716.12 | 28 | 18.00 | 28.00 | 11/7/2005 | | 19.99 | 696.13 |
| | | | | | | 2/21/2007 | | 18.58 | 697.54 |
| | | | | | | 6/14/2007 | | 19.31 | 696.81 |
| | | | | | | 9/19/2007 | | 20.14 | 695.98 |
| | | | | | | 12/12/2007 | | 19.57 | 696.55 |
| | | | | | | 3/21/2008 | | 17.92 | 698.20 |
| | | | | | | 6/2/2008 | | 18.34 | 697.78 |
| | | | | | | 9/9/2008 | | 19.67 | 696.45 |
| | | | | | | 11/20/2008 | | 20.14 | 695.98 |
| | | | | | | 3/17/2009 | | 19.52 | 696.60 |
| | | | | | | 6/15/2009 | | 18.83 | 697.29 |
| | | 715.17 | | | | 8/5/2009 | | 18.21 | 696.96 |
| | | | | | | 11/2/2009 | | 19.44 | 695.73 |
| | | | | | | 2/3/2010 | | 19.64 | 695.53 |
| | | | | | | 4/20/2010 | | 19.16 | 696.01 |
| | | | | | | 7/20/2010 | | 18.40 | 696.77 |
| | | | | | | 10/11/2010 | | 20.19 | 694.98 |
| | | 715.55 | | | | 1/17/2011 | | 20.09 | 695.46 |
| | | | | | | 4/28/2011 | | 17.20 | 698.35 |
| | | | | | | 9/27/2011 | | 19.42 | 696.13 |
| | | | | | | 10/17/2011 | | 20.11 | 695.44 |
| | | | | | | 1/18/2012 | | 18.95 | 696.60 |
| | | | | | | 4/23/2012 | | 19.29 | 696.26 |
| | | | | | | 7/30/2012 | | 20.42 | 695.13 |
| | | | | | | 11/12/2012 | | 19.41 | 696.14 |
| | | | | | | 3/1/2013 | | 18.59 | 696.96 |
| | | | | | | 5/16/2013 | | 17.83 | 697.72 |
| | | | | | | 9/17/2013 | | 20.11 | 695.44 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-06 | 9/28/2005 | 716.50 | 28 | 18.00 | 28.00 | 11/7/2005 | | 20.42 | 696.08 |
| | | | | | | 2/21/2007 | | 18.94 | 697.56 |
| | | | | | | 6/14/2007 | | 19.70 | 696.80 |
| | | | | | | 9/19/2007 | | 20.57 | 695.93 |
| | | | | | | 12/12/2007 | | 20.06 | 696.44 |
| | | | | | | 3/21/2008 | | 18.34 | 698.16 |
| | | | | | | 6/2/2008 | | 18.44 | 698.06 |
| | | | | | | 9/9/2008 | | 20.08 | 696.42 |
| | | | | | | 11/20/2008 | | 20.57 | 695.93 |
| | | | | | | 3/17/2009 | | 19.91 | 696.59 |
| | | | | | | 6/15/2009 | | 18.17 | 698.33 |
| | | 715.721 | | | | 8/5/2009 | | 19.81 | 695.91 |
| | | | | | | 11/2/2009 | | 20.05 | 695.67 |
| | | | | | | 2/3/2010 | | 20.24 | 695.48 |
| | | | | | | 4/20/2010 | | 19.72 | 696.00 |
| | | | | | | 7/20/2010 | | 18.95 | 696.77 |
| | | 716.14 | | | | 10/11/2010 | | 20.77 | 695.37 |
| | | | | | | 1/17/2011 | | 20.67 | 695.47 |
| | | | | | | 4/28/2011 | | 17.76 | 698.38 |
| | | | | | | 9/27/2011 | | 20.05 | 696.09 |
| | | | | | | 10/17/2011 | | 20.69 | 695.45 |
| | | | | | | 1/18/2012 | | 19.52 | 696.62 |
| | | | | | | 4/23/2012 | | 19.89 | 696.25 |
| | | | | | | 7/30/2012 | | 21.01 | 695.13 |
| | | | | | | 11/12/2012 | | 20.02 | 696.12 |
| | | | | | | 3/1/2013 | | 19.15 | 696.99 |
| | | | | | | 5/16/2013 | | 18.32 | 697.82 |
| | | | | | | 9/17/2013 | | 20.71 | 695.43 |
| MMW-P-07 | 1/11/2007 | 715.30 | 28 | 18.00 | 28.00 | 2/21/2007 | | 17.48 | 697.82 |
| | | | | | | 6/14/2007 | | 18.20 | 697.10 |
| | | | | | | 9/19/2007 | | 18.84 | 696.46 |
| | | | | | | 12/12/2007 | | 18.17 | 697.13 |
| | | | | | | 3/21/2008 | | 16.69 | 698.61 |
| | | | | | | 6/2/2008 | | 17.00 | 698.30 |
| | | | | | | 9/9/2008 | | 18.29 | 697.01 |
| | | | | | | 11/20/2008 | | 18.56 | 696.74 |
| | | | | | | 3/17/2009 | | 18.10 | 697.20 |
| | | | | | | 6/15/2009 | | 16.54 | 698.76 |
| | | 714.471 | | | | 8/5/2009 | | 17.40 | 697.07 |
| | | | | | | 11/2/2009 | | 18.19 | 696.28 |
| | | | | | | 2/3/2010 | | 18.46 | 696.01 |
| | | | | | | 4/20/2010 | | 18.07 | 696.40 |
| | | | | | | 7/20/2010 | | 17.35 | 697.12 |
| | | | | | | 10/11/2010 | | 19.16 | 695.31 |
| | | 714.9 | | | | 1/17/2011 | | 19.10 | 695.80 |
| | | | | | | 4/28/2011 | | 16.33 | 698.57 |
| | | | | | | 9/27/2011 | | 18.25 | 696.65 |
| | | | | | | 10/17/2011 | | 19.02 | 695.88 |
| | | | | | | 1/18/2012 | | 17.89 | 697.01 |
| | | | | | | 4/23/2012 | | 18.17 | 696.73 |
| | | | | | | 7/30/2012 | | 19.41 | 695.49 |
| | | | | | | 11/12/2012 | | 18.31 | 696.59 |
| | | | | | | 3/1/2013 | | 17.48 | 697.42 |
| | | | | | | 5/16/2013 | | 16.86 | 698.04 |
| | | | | | | 9/17/2013 | | 19.01 | 695.89 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-08 | 1/11/2007 | 715.22 | 28 | 18 | 28 | 2/21/2007 | | 17.33 | 697.89 |
| | | | | | | 6/14/2007 | | 18.09 | 697.13 |
| | | | | | | 9/19/2007 | | 18.61 | 696.61 |
| | | | | | | 12/12/2007 | | 18.03 | 697.19 |
| | | | | | | 3/21/2008 | | 16.44 | 698.78 |
| | | | | | | 6/2/2008 | | 16.85 | 698.37 |
| | | | | | | 9/9/2008 | | 18.18 | 697.04 |
| | | | | | | 11/20/2008 | | 18.42 | 696.80 |
| | | | | | | 3/17/2009 | | 17.99 | 697.23 |
| | | | | | | 6/15/2009 | | 16.50 | 698.72 |
| | | 714.142 | | | | 8/5/2009 | | 17.03 | 697.11 |
| | | | | | | 11/2/2009 | | 17.80 | 696.34 |
| | | | | | | 2/3/2010 | | 18.09 | 696.05 |
| | | | | | | 4/20/2010 | | 17.74 | 696.40 |
| | | | | | | 7/20/2010 | | 17.01 | 697.13 |
| | | | | | | 10/11/2010 | | 18.60 | 695.54 |
| | | 714.53 | | | | 1/17/2011 | | 18.48 | 696.05 |
| | | | | | | 4/28/2011 | | 15.90 | 698.63 |
| | | | | | | 9/27/2011 | | 17.79 | 696.74 |
| | | | | | | 10/17/2011 | | 18.45 | 696.08 |
| | | | | | | 1/18/2012 | | 17.51 | 697.02 |
| | | | | | | 4/23/2012 | | 17.80 | 696.73 |
| | | | | | | 7/30/2012 | | 18.86 | 695.67 |
| | | | | | | 11/12/2012 | | 17.93 | 696.60 |
| | | | | | | 3/1/2013 | | 17.14 | 697.39 |
| | | | | | | 5/16/2013 | | 16.61 | 697.92 |
| | | | | | | 9/17/2013 | | 18.53 | 696.00 |
| MMW-P-09S | 1/29/2007 | 715.36 | 28 | 18 | 28 | 2/21/2007 | | 18.94 | 696.42 |
| | | | | | | 6/14/2007 | | 19.59 | 695.77 |
| | | | | | | 9/19/2007 | | 20.17 | 695.19 |
| | | | | | | 12/12/2007 | | 19.98 | 695.38 |
| | | | | | | 3/21/2008 | | 18.60 | 696.76 |
| | | | | | | 6/2/2008 | | 18.65 | 696.71 |
| | | | | | | 9/9/2008 | | 20.05 | 695.31 |
| | | | | | | 11/20/2008 | | 20.44 | 694.92 |
| | | | | | | 3/17/2009 | | 18.02 | 697.34 |
| | | | | | | 6/15/2009 | | 18.20 | 697.16 |
| | | 714.477 | | | | 8/5/2009 | | 19.05 | 695.43 |
| | | | | | | 11/2/2009 | | 19.90 | 694.58 |
| | | | | | | 2/3/2010 | | 19.94 | 694.54 |
| | | | | | | 4/20/2010 | | 19.47 | 695.01 |
| | | | | | | 7/20/2010 | | 18.87 | 695.61 |
| | | | | | | 10/11/2010 | | 20.47 | 694.01 |
| | | 714.80 | | | | 1/17/2011 | | 20.37 | 694.43 |
| | | | | | | 4/28/2011 | | 17.67 | 697.13 |
| | | | | | | 9/27/2011 | | 19.99 | 694.81 |
| | | | | | | 10/17/2011 | | 20.43 | 694.37 |
| | | | | | | 1/18/2012 | | 19.36 | 695.44 |
| | | | | | | 4/23/2012 | | 20.35 | 694.45 |
| | | | | | | 7/30/2012 | | 20.67 | 694.13 |
| | | | | | | 11/12/2012 | | 19.90 | 694.90 |
| | | | | | | 3/1/2013 | | 19.04 | 695.76 |
| | | | | | | 5/16/2013 | | 18.28 | 696.52 |
| | | | | | | 9/17/2013 | | 20.44 | 694.36 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-10S | 6/1/2007 | 714.59 | 28 | 18.00 | 28.00 | 6/14/2007 | | 17.70 | 696.89 |
| | | | | | | 9/19/2007 | | 18.30 | 696.29 |
| | | | | | | 12/12/2007 | | 17.58 | 697.01 |
| | | | | | | 3/21/2008 | | 15.65 | 698.94 |
| | | | | | | 6/2/2008 | | 16.56 | 698.03 |
| | | | | | | 9/9/2008 | | 17.79 | 696.80 |
| | | | | | | 11/20/2008 | | 18.12 | 696.47 |
| | | | | | | 3/17/2009 | | 17.82 | 696.77 |
| | | | | | | 6/15/2009 | | 16.50 | 698.09 |
| | | 713.941 | | | | 8/5/2009 | | 16.65 | 697.29 |
| | | | | | | 11/2/2009 | | 17.76 | 696.18 |
| | | | | | | 2/3/2010 | | 18.28 | 695.66 |
| | | | | | | 4/20/2010 | | 17.69 | 696.25 |
| | | | | | | 7/20/2010 | | 16.86 | 697.08 |
| | | | | | | 10/11/2010 | | 18.58 | 695.36 |
| | | 714.35 | | | | 1/17/2011 | | 18.46 | 695.89 |
| | | | | | | 4/28/2011 | | 15.56 | 698.79 |
| | | | | | | 9/27/2011 | | 17.41 | 696.94 |
| | | | | | | 10/17/2011 | | 18.39 | 695.96 |
| | | | | | | 1/18/2012 | | 17.15 | 697.20 |
| | | | | | | 4/23/2012 | | 17.84 | 696.51 |
| | | | | | | 7/30/2012 | | 18.81 | 695.54 |
| | | | | | | 11/12/2012 | | 17.48 | 696.87 |
| | | | | | | 3/1/2013 | | 17.03 | 697.32 |
| | | | | | | 5/16/2013 | | 16.85 | 697.50 |
| | | | | | | 9/17/2013 | | 18.76 | 695.59 |
| MMW-P-12S | 9/1/2011 | 715.83 | 26 | 16 | 26 | 10/17/2011 | | 19.20 | 696.63 |
| | | | | | | 1/18/2012 | | 18.36 | 697.47 |
| | | | | | | 4/23/2012 | | 18.68 | 697.15 |
| | | | | | | 7/30/2012 | | 19.54 | 696.29 |
| | | | | | | 11/12/2012 | | 18.71 | 697.12 |
| | | | | | | 3/1/2013 | | 17.95 | 697.88 |
| | | | | | | 5/16/2013 | | 17.49 | 698.34 |
| | | | | | | 9/17/2013 | | 19.28 | 696.55 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| *Deep Wells* | | | | | | | | | |
| MMW-P-03D | 9/27/2005 | 716.45 | 35 | 25.00 | 35.00 | 11/7/2005 | | 20.49 | 695.96 |
| | | | | | | 2/21/2007 | | 18.93 | 697.52 |
| | | | | | | 6/14/2007 | | 19.70 | 696.75 |
| | | | | | | 9/19/2007 | | 20.63 | 695.82 |
| | | | | | | 12/12/2007 | | 20.10 | 696.35 |
| | | | | | | 3/21/2008 | | 18.28 | 698.17 |
| | | | | | | 6/2/2008 | | 18.77 | 697.68 |
| | | | | | | 9/9/2008 | | 20.13 | 696.32 |
| | | | | | | 11/20/2008 | | 20.61 | 695.84 |
| | | | | | | 3/17/2009 | | 19.94 | 696.51 |
| | | | | | | 6/15/2009 | | 18.15 | 698.30 |
| | | 715.582 | | | | 8/5/2009 | | 18.71 | 696.87 |
| | | | | | | 11/2/2009 | | 20.06 | 695.52 |
| | | | | | | 2/3/2010 | | 20.20 | 695.38 |
| | | | | | | 4/20/2010 | | 19.63 | 695.95 |
| | | | | | | 7/20/2010 | | 18.84 | 696.74 |
| | | | | | | 10/11/2010 | | 20.75 | 694.83 |
| | | 716.02 | | | | 1/17/2011 | | 20.66 | 695.36 |
| | | | | | | 4/28/2011 | | 17.70 | 698.32 |
| | | | | | | 9/27/2011 | | 20.07 | 695.95 |
| | | | | | | 10/17/2011 | | 20.70 | 695.32 |
| | | | | | | 1/18/2012 | | 19.47 | 696.55 |
| | | | | | | 4/23/2012 | | 19.84 | 696.18 |
| | | | | | | 7/30/2012 | | 21.01 | 695.01 |
| | | | | | | 11/12/2012 | | 19.99 | 696.03 |
| | | | | | | 3/1/2013 | | 19.11 | 696.91 |
| | | | | | | 5/16/2013 | | 18.18 | 697.84 |
| | | | | | | 9/17/2013 | 20.70 (CAP18) | 22.70 | 695.18* |
| MMW-P-09D | 5/31/2007 | 715.21 | 45 | 35.00 | 45.00 | 6/14/2007 | | 19.40 | 695.81 |
| | | | | | | 9/19/2007 | | 20.35 | 694.86 |
| | | | | | | 12/12/2007 | | 19.76 | 695.45 |
| | | | | | | 3/21/2008 | | 18.33 | 696.88 |
| | | | | | | 6/2/2008 | | 18.48 | 696.73 |
| | | | | | | 9/9/2008 | | 19.84 | 695.37 |
| | | | | | | 11/20/2008 | | 20.25 | 694.96 |
| | | | | | | 3/17/2009 | | 19.62 | 695.59 |
| | | | | | | 6/15/2009 | | 18.04 | 697.17 |
| | | 714.394 | | | | 8/5/2009 | | 18.95 | 695.44 |
| | | | | | | 11/2/2009 | | 19.82 | 694.57 |
| | | | | | | 2/3/2010 | | 19.92 | 694.47 |
| | | | | | | 4/20/2010 | | 19.44 | 694.95 |
| | | | | | | 7/20/2010 | | 18.85 | 695.54 |
| | | | | | | 10/11/2010 | | 20.42 | 693.97 |
| | | 714.82 | | | | 1/17/2011 | | 20.39 | 694.43 |
| | | | | | | 4/28/2011 | | 17.64 | 697.18 |
| | | | | | | 9/27/2011 | | 19.93 | 694.89 |
| | | | | | | 10/17/2011 | | 20.39 | 694.43 |
| | | | | | | 1/18/2012 | | 19.27 | 695.55 |
| | | | | | | 4/23/2012 | | 20.30 | 694.52 |
| | | | | | | 7/30/2012 | | 20.67 | 694.15 |
| | | | | | | 11/12/2012 | | 19.83 | 694.99 |
| | | | | | | 3/1/2013 | | 19.01 | 695.81 |
| | | | | | | 5/16/2013 | | 18.26 | 696.56 |
| | | | | | | 9/17/2013 | | 20.40 | 694.42 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-10D | 6/1/2007 | 714.98 | 38 | 28.00 | 38.00 | 6/14/2007 | | 18.09 | 696.89 |
| | | | | | | 9/19/2007 | | 18.69 | 696.29 |
| | | | | | | 12/12/2007 | | 17.95 | 697.03 |
| | | | | | | 3/21/2008 | | 16.39 | 698.59 |
| | | | | | | 6/2/2008 | | 17.01 | 697.97 |
| | | | | | | 9/9/2008 | | 18.24 | 696.74 |
| | | | | | | 11/20/2008 | | 18.67 | 696.31 |
| | | | | | | 3/17/2009 | | 18.21 | 696.77 |
| | | | | | | 6/15/2009 | | 16.74 | 698.24 |
| | | 714.05 | | | | 8/5/2009 | | 16.90 | 697.15 |
| | | | | | | 11/2/2009 | | 18.00 | 696.05 |
| | | | | | | 2/3/2010 | | 18.06 | 695.99 |
| | | | | | | 4/20/2010 | | 17.95 | 696.10 |
| | | | | | | 7/20/2010 | | 17.21 | 696.84 |
| | | | | | | 10/11/2010 | | 18.74 | 695.31 |
| | | 714.42 | | | | 1/17/2011 | | 18.63 | 695.79 |
| | | | | | | 4/28/2011 | | 16.00 | 698.42 |
| | | | | | | 9/27/2011 | | 17.91 | 696.51 |
| | | | | | | 10/17/2011 | | 18.62 | 695.80 |
| | | | | | | 1/18/2012 | | 17.52 | 696.90 |
| | | | | | | 4/23/2012 | | 17.99 | 696.43 |
| | | | | | | 7/30/2012 | | 19.00 | 695.42 |
| | | | | | | 11/12/2012 | | 17.86 | 696.56 |
| | | | | | | 3/1/2013 | | 17.31 | 697.11 |
| | | | | | | 5/16/2013 | | 16.48 | 697.94 |
| | | | | | | 9/17/2013 | | 18.52 | 695.90 |
| MMW-P-12D | 9/1/2011 | 715.33 | 36.5 | 31.5 | 36.5 | 10/17/2011 | | 18.65 | 696.68 |
| | | | | | | 1/18/2012 | | 17.77 | 697.56 |
| | | | | | | 4/23/2012 | | 18.09 | 697.24 |
| | | | | | | 7/30/2012 | | 19.02 | 696.31 |
| | | | | | | 11/12/2012 | | 18.11 | 697.22 |
| | | | | | | 3/1/2013 | | 17.38 | 697.95 |
| | | | | | | 5/16/2013 | | 16.97 | 698.36 |
| | | | | | | 9/17/2013 | | 18.73 | 696.60 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| **Monitoring Wells (Apartments)** | | | | | | | | | |
| *Shallow Wells* | | | | | | | | | |
| MMW-1S | 8/20/2004 | 713.66 | 20 | 10.00 | 20.00 | 9/10/2004 | | 16.21 | 697.45 |
| | | | | | | 2/21/2007 | | 15.39 | 698.27 |
| | | | | | | 6/14/2007 | | 15.97 | 697.69 |
| | | | | | | 9/19/2007 | | 16.36 | 697.30 |
| | | | | | | 12/12/2007 | | 15.68 | 697.98 |
| | | | | | | 3/21/2008 | | 14.15 | 699.51 |
| | | | | | | 6/2/2008 | | 14.80 | 698.86 |
| | | | | | | 9/9/2008 | | 16.09 | 697.57 |
| | | | | | | 11/20/2008 | | 16.38 | 697.28 |
| | | | | | | 3/17/2009 | | 16.17 | 697.49 |
| | | | | | | 6/15/2009 | | 14.76 | 698.90 |
| | | 712.54 | | | | 8/5/2009 | | 14.99 | 697.55 |
| | | | | | | 11/2/2009 | | 15.73 | 696.81 |
| | | | | | | 2/3/2010 | | 16.13 | 696.41 |
| | | | | | | 4/20/2010 | | 15.91 | 696.63 |
| | | | | | | 7/20/2010 | | 15.36 | 697.18 |
| | | | | | | 10/11/2010 | | 16.55 | 695.99 |
| | | 712.92 | | | | 1/17/2011 | | 16.41 | 696.51 |
| | | | | | | 4/28/2011 | | 14.02 | 698.90 |
| | | | | | | 9/27/2011 | | 15.70 | 697.22 |
| | | | | | | 10/17/2011 | | 16.41 | 696.51 |
| | | | | | | 1/18/2012 | | 15.58 | 697.34 |
| | | | | | | 4/23/2012 | | 16.00 | 696.92 |
| | | | | | | 7/30/2012 | | 16.80 | 696.12 |
| | | | | | | 11/12/2012 | | 15.91 | 697.01 |
| | | | | | | 3/1/2013 | | 15.26 | 697.66 |
| | | | | | | 5/16/2013 | | 15.19 | 697.73 |
| | | | | | | 9/17/2013 | | 16.55 | 696.37 |
| MMW-2S | 8/20/2004 | 713.43 | 20 | 10.00 | 20.00 | 9/10/2004 | | 15.56 | 697.87 |
| | | | | | | 2/21/2007 | | 14.79 | 698.64 |
| | | | | | | 6/2/2008 | | 14.20 | 699.23 |
| | | | | | | 6/15/2009 | | 14.19 | 699.24 |
| | | 712.588 | | | | 11/2/2009 | | DRY | |
| | | | | | | 2/3/2010 | | NG | |
| | | | | | | 4/20/2010 | | NG | |
| | | | | | | 7/20/2010 | | 14.91 | 697.68 |
| | | | | | | 10/11/2010 | | NG | |
| | | 712.95 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | 13.66 | 699.29 |
| | | | | | | 9/27/2011 | | 15.38 | 697.57 |
| | | | | | | 10/17/2011 | | 14.98 | 697.97 |
| | | | | | | 1/18/2012 | | 15.32 | 697.63 |
| | | | | | | 4/23/2012 | | 15.69 | 697.26 |
| | | | | | | 7/30/2012 | | NG | |
| | | | | | | 11/12/2012 | | NG | |
| | | | | | | 3/1/2013 | | 14.93 | 698.02 |
| | | | | | | 5/16/2013 | | 14.81 | 698.14 |
| | | | | | | 9/17/2013 | | 16.09 | 696.86 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-3S | 8/26/2004 | 711.58 | 30 | 20.00 | 30.00 | 9/10/2004 | | 12.21 | 699.37 |
| | | | | | | 2/21/2007 | | 11.63 | 699.95 |
| | | | | | | 6/2/2008 | | 11.60 | 699.98 |
| | | | | | | 6/15/2009 | | 11.80 | 699.78 |
| | | 709.763 | | | | 11/2/2009 | | 12.37 | 697.39 |
| | | | | | | 2/3/2010 | | 12.70 | 697.06 |
| | | | | | | 4/20/2010 | | 12.70 | 697.06 |
| | | | | | | 7/20/2010 | | 12.15 | 697.61 |
| | | | | | | 10/11/2010 | | 13.09 | 696.67 |
| | | 710.20 | | | | 1/17/2011 | | 12.89 | 697.31 |
| | | | | | | 4/28/2011 | | 10.74 | 699.46 |
| | | | | | | 9/27/2011 | | 12.18 | 698.02 |
| | | | | | | 10/17/2011 | | 12.93 | 697.27 |
| | | | | | | 1/18/2012 | | 11.34 | 698.86 |
| | | | | | | 4/23/2012 | | 12.78 | 697.42 |
| | | | | | | 7/30/2012 | | 13.24 | 696.96 |
| | | | | | | 11/12/2012 | | 11.71 | 698.49 |
| | | | | | | 3/1/2013 | | 12.09 | 698.11 |
| | | | | | | 5/16/2013 | | 12.43 | 697.77 |
| | | | | | | 9/17/2013 | | 13.01 | 697.19 |
| MMW-7S | 8/24/2004 | 712.35 | 26 | 16.00 | 26.00 | 9/10/2004 | | 13.99 | 698.36 |
| | | | | | | 2/21/2007 | | 13.37 | 698.98 |
| | | | | | | 6/2/2008 | | 13.02 | 699.33 |
| | | | | | | 6/15/2009 | | 13.08 | 699.27 |
| | | 711.64 | | | | 11/2/2009 | | 13.81 | 697.83 |
| | | | | | | 2/3/2010 | | 14.29 | 697.35 |
| | | | | | | 4/20/2010 | | 14.10 | 697.54 |
| | | | | | | 7/20/2010 | | 13.62 | 698.02 |
| | | | | | | 10/11/2010 | | 14.66 | 696.98 |
| | | 712.09 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | 12.25 | 699.84 |
| | | | | | | 9/27/2011 | | 13.86 | 698.23 |
| | | | | | | 10/17/2011 | | 14.53 | 697.56 |
| | | | | | | 1/18/2012 | | 13.31 | 698.78 |
| | | | | | | 4/23/2012 | | 14.31 | 697.78 |
| | | | | | | 7/30/2012 | | 14.88 | 697.21 |
| | | | | | | 11/12/2012 | | 13.63 | 698.46 |
| | | | | | | 3/1/2013 | | 13.68 | 698.41 |
| | | | | | | 5/16/2013 | | 13.72 | 698.37 |
| | | | | | | 9/17/2013 | | 14.67 | 697.42 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
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| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-8S | 1/11/2007 | 714.75 | 24 | 14.00 | 24.00 | 2/21/2007 | | 16.44 | 698.31 |
| | | | | | | 6/14/2007 | | 16.94 | 697.81 |
| | | | | | | 9/19/2007 | | 17.41 | 697.34 |
| | | | | | | 12/12/2007 | | 16.78 | 697.97 |
| | | | | | | 3/21/2008 | | 15.31 | 699.44 |
| | | | | | | 6/2/2008 | | 15.74 | 699.01 |
| | | | | | | 9/9/2008 | | 16.96 | 697.79 |
| | | | | | | 11/20/2008 | | 17.28 | 697.47 |
| | | | | | | 3/17/2009 | | 16.92 | 697.83 |
| | | | | | | 6/15/2009 | | 15.61 | 699.14 |
| | | 713.81 | | | | 8/5/2009 | | 15.97 | 697.84 |
| | | | | | | 11/2/2009 | | 16.80 | 697.01 |
| | | | | | | 2/3/2010 | | 17.15 | 696.66 |
| | | | | | | 4/20/2010 | | 16.88 | 696.93 |
| | | | | | | 7/20/2010 | | 16.27 | 697.54 |
| | | | | | | 10/11/2010 | | 17.60 | 696.21 |
| | | 714.24 | | | | 1/17/2011 | | 17.46 | 696.78 |
| | | | | | | 4/28/2011 | | 15.10 | 699.14 |
| | | | | | | 9/27/2011 | | 16.82 | 697.42 |
| | | | | | | 10/17/2011 | | 17.46 | 696.78 |
| | | | | | | 1/18/2012 | | 16.60 | 697.64 |
| | | | | | | 4/23/2012 | | 17.01 | 697.23 |
| | | | | | | 7/30/2012 | | 17.25 | 696.99 |
| | | | | | | 11/12/2012 | | 16.92 | 697.32 |
| | | | | | | 3/1/2013 | | 16.29 | 697.95 |
| | | | | | | 5/16/2013 | | 16.04 | 698.20 |
| | | | | | | 9/17/2013 | | 17.56 | 696.68 |
| MMW-9S | 1/12/2007 | 714.09 | 25 | 15.00 | 25.00 | 2/21/2007 | | 16.30 | 697.79 |
| | | | | | | 6/14/2007 | | 17.01 | 697.08 |
| | | | | | | 9/19/2007 | | 17.45 | 696.64 |
| | | | | | | 12/12/2007 | | 16.45 | 697.64 |
| | | | | | | 3/21/2008 | | 15.19 | 698.90 |
| | | | | | | 6/2/2008 | | 15.50 | 698.59 |
| | | | | | | 9/9/2008 | | 16.97 | 697.12 |
| | | | | | | 11/20/2008 | | 17.43 | 696.66 |
| | | | | | | 3/17/2009 | | 17.06 | 697.03 |
| | | | | | | 6/15/2009 | | 15.85 | 698.24 |
| | | 713.249 | | | | 8/5/2009 | | 15.98 | 697.27 |
| | | | | | | 11/2/2009 | | 17.04 | 696.21 |
| | | | | | | 2/3/2010 | | 17.33 | 695.92 |
| | | | | | | 4/20/2010 | | 17.16 | 696.09 |
| | | | | | | 7/20/2010 | | 16.51 | 696.74 |
| | | | | | | 10/11/2010 | | 17.79 | 695.46 |
| | | 713.71 | | | | 1/17/2011 | | 17.67 | 696.04 |
| | | | | | | 4/28/2011 | | 15.20 | 698.51 |
| | | | | | | 9/27/2011 | | 16.91 | 696.80 |
| | | | | | | 10/17/2011 | | 17.67 | 696.04 |
| | | | | | | 1/18/2012 | | 16.46 | 697.25 |
| | | | | | | 4/23/2012 | | 17.13 | 696.58 |
| | | | | | | 7/30/2012 | | 18.02 | 695.69 |
| | | | | | | 11/12/2012 | | 16.79 | 696.92 |
| | | | | | | 3/1/2013 | | 16.50 | 697.21 |
| | | | | | | 5/16/2013 | | 16.36 | 697.35 |
| | | | | | | 9/17/2013 | | 17.79 | 695.92 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
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| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-10S | 1/12/2007 | 713.23 | 25 | 15 | 25 | 2/21/2007 | | 16.45 | 696.78 |
| | | | | | | 6/14/2007 | | 15.87 | 697.36 |
| | | | | | | 9/19/2007 | | 16.17 | 697.06 |
| | | | | | | 12/12/2007 | | 15.58 | 697.65 |
| | | | | | | 3/21/2008 | | 14.08 | 699.15 |
| | | | | | | 6/2/2008 | | 14.90 | 698.33 |
| | | | | | | 9/9/2008 | | 16.05 | 697.18 |
| | | | | | | 11/20/2008 | | 16.53 | 696.70 |
| | | | | | | 3/17/2009 | | 16.17 | 697.06 |
| | | | | | | 6/15/2009 | | 15.01 | 698.22 |
| | | 712.302 | | | | 8/5/2009 | | 15.50 | 696.80 |
| | | | | | | 11/2/2009 | | 15.98 | 696.32 |
| | | | | | | 2/3/2010 | | 16.29 | 696.01 |
| | | | | | | 4/20/2010 | | 16.06 | 696.24 |
| | | | | | | 7/20/2010 | | 15.46 | 696.84 |
| | | | | | | 10/11/2010 | | 16.82 | 695.48 |
| | | 712.69 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | NG | |
| | | | | | | 9/27/2011 | | 15.92 | 696.77 |
| | | | | | | 10/17/2011 | | 16.70 | 695.99 |
| | | | | | | 1/18/2012 | | 15.47 | 697.22 |
| | | | | | | 4/23/2012 | | 16.17 | 696.52 |
| | | | | | | 7/30/2012 | | 17.05 | 695.64 |
| | | | | | | 11/12/2012 | | 15.78 | 696.91 |
| | | | | | | 3/1/2013 | | 15.51 | 697.18 |
| | | | | | | 5/16/2013 | | 15.46 | 697.23 |
| | | | | | | 9/17/2013 | | 16.84 | 695.85 |
| MMW-11S | 5/31/2007 | 713.69 | 24 | 14 | 24 | 6/14/2007 | | 15.98 | 697.71 |
| | | | | | | 9/19/2007 | | 16.43 | 697.26 |
| | | | | | | 12/12/2007 | | 15.77 | 697.92 |
| | | | | | | 3/21/2008 | | 14.18 | 699.51 |
| | | | | | | 6/2/2008 | | 13.84 | 699.85 |
| | | | | | | 9/9/2008 | | 16.02 | 697.67 |
| | | | | | | 11/20/2008 | | 16.36 | 697.33 |
| | | | | | | 3/17/2009 | | 15.95 | 697.74 |
| | | | | | | 6/15/2009 | | 14.64 | 699.05 |
| | | 712.818 | | | | 8/5/2009 | | 15.09 | 697.73 |
| | | | | | | 11/2/2009 | | 15.95 | 696.87 |
| | | | | | | 2/3/2010 | | 16.12 | 696.70 |
| | | | | | | 4/20/2010 | | 15.86 | 696.96 |
| | | | | | | 7/20/2010 | | 15.25 | 697.57 |
| | | | | | | 10/11/2010 | | 16.73 | 696.09 |
| | | 713.17 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | NG | |
| | | | | | | 9/27/2011 | | 15.76 | 697.41 |
| | | | | | | 10/17/2011 | | 16.40 | 696.77 |
| | | | | | | 1/18/2012 | | 15.73 | 697.44 |
| | | | | | | 4/23/2012 | | 16.15 | 697.02 |
| | | | | | | 7/30/2012 | | 16.98 | 696.19 |
| | | | | | | 11/12/2012 | | 16.04 | 697.13 |
| | | | | | | 3/1/2013 | | 15.44 | 697.73 |
| | | | | | | 5/16/2013 | | 15.23 | 697.94 |
| | | | | | | 9/17/2013 | | 16.72 | 696.45 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
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| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-12S | 11/26/2008 | 718.82 | 24 | 14 | 24 | 3/17/2009 | | 15.18 | 703.64 |
| | | | | | | 6/15/2009 | | 13.98 | 704.84 |
| | | 711.988 | | | | 8/5/2009 | | 14.19 | 697.80 |
| | | 712.82 | | | | 11/2/2009 | | 15.08 | 697.74 |
| | | | | | | 2/3/2010 | | 15.41 | 697.41 |
| | | | | | | 4/20/2010 | | 15.25 | 697.57 |
| | | | | | | 7/20/2010 | | 14.67 | 698.15 |
| | | | | | | 10/11/2010 | | 15.83 | 696.74 |
| | | 712.15 | | | | 1/17/2011 | | 15.73 | 696.42 |
| | | | | | | 4/28/2011 | | NG | |
| | | | | | | 9/27/2011 | | 15.02 | 697.13 |
| | | | | | | 10/17/2011 | | 15.70 | 696.45 |
| | | | | | | 1/18/2012 | | 14.73 | 697.42 |
| | | | | | | 4/23/2012 | | 15.31 | 696.84 |
| | | | | | | 7/30/2012 | | 16.10 | 696.05 |
| | | | | | | 11/12/2012 | | 15.06 | 697.09 |
| | | | | | | 3/1/2013 | | 14.60 | 697.55 |
| | | | | | | 5/16/2013 | | 14.51 | 697.64 |
| | | | | | | 9/17/2013 | | 15.78 | 696.37 |
| MMW-15S | 12/15/2011 | 713.36 | 32 | 22 | 32 | 1/18/2012 | | 15.60 | 697.76 |
| | | | | | | 4/23/2012 | | 16.02 | 697.34 |
| | | | | | | 7/30/2012 | | 16.89 | 696.47 |
| | | | | | | 11/12/2012 | | 15.93 | 697.43 |
| | | | | | | 3/1/2013 | | 15.39 | 697.97 |
| | | | | | | 5/16/2013 | | 14.97 | 698.39 |
| | | | | | | 9/17/2013 | | 16.58 | 696.78 |
| *Deep Wells* | | | | | | | | | |
| MMW-4D | 8/25/2004 | 711.64 | 66 | 56.00 | 66.00 | 9/10/2004 | | 13.58 | 698.06 |
| | | | | | | 2/21/2007 | | 12.88 | 698.76 |
| | | | | | | 6/2/2008 | | 12.52 | 699.12 |
| | | | | | | 6/15/2009 | | 12.63 | 699.01 |
| | | 710.877 | | | | 11/2/2009 | | 13.39 | 697.49 |
| | | | | | | 2/3/2010 | | 13.85 | 697.03 |
| | | | | | | 4/20/2010 | | 13.69 | 697.19 |
| | | | | | | 7/20/2010 | | 13.12 | 697.76 |
| | | | | | | 10/11/2010 | | 14.25 | 696.63 |
| | | 711.29 | | | | 1/17/2011 | | 14.15 | 697.14 |
| | | | | | | 4/28/2011 | | 11.74 | 699.55 |
| | | | | | | 9/27/2011 | | 13.36 | 697.93 |
| | | | | | | 10/17/2011 | | 14.09 | 697.20 |
| | | | | | | 1/18/2012 | | 12.52 | 698.77 |
| | | | | | | 4/23/2012 | | 13.80 | 697.49 |
| | | | | | | 7/30/2012 | | 14.47 | 696.82 |
| | | | | | | 11/12/2012 | | 13.43 | 697.86 |
| | | | | | | 3/1/2013 | | 13.11 | 698.18 |
| | | | | | | 5/16/2013 | | 13.15 | 698.14 |
| | | | | | | 9/17/2013 | | 14.21 | 697.08 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-5D | 8/24/2004 | 711.75 | 51 | 41.00 | 51.00 | 9/10/2004 | | 13.50 | 698.25 |
| | | | | | | 2/21/2007 | | 12.85 | 698.90 |
| | | | | | | 6/2/2008 | | 12.59 | 699.16 |
| | | | | | | 6/15/2009 | | 12.73 | 699.02 |
| | | 710.852 | | | | 11/2/2009 | | 13.17 | 697.68 |
| | | | | | | 2/3/2010 | | 13.62 | 697.23 |
| | | | | | | 4/20/2010 | | 13.48 | 697.37 |
| | | | | | | 7/20/2010 | | 12.99 | 697.86 |
| | | | | | | 10/11/2010 | | 13.98 | 696.87 |
| | | 711.27 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | 11.62 | 699.65 |
| | | | | | | 9/27/2011 | | 13.18 | 698.09 |
| | | | | | | 10/17/2011 | | 13.85 | 697.42 |
| | | | | | | 1/18/2012 | | 12.46 | 698.81 |
| | | | | | | 4/23/2012 | | 13.63 | 697.64 |
| | | | | | | 7/30/2012 | | 14.20 | 697.07 |
| | | | | | | 11/12/2012 | | 12.84 | 698.43 |
| | | | | | | 3/1/2013 | | 12.98 | 698.29 |
| | | | | | | 5/16/2013 | | 13.10 | 698.17 |
| | | | | | | 9/17/2013 | | 14.01 | 697.26 |
| MMW-6D | 8/23/2004 | 712.68 | 51 | 41.00 | 51.00 | 9/10/2004 | | 14.41 | 698.27 |
| | | | | | | 2/21/2007 | | 13.72 | 698.96 |
| | | | | | | 6/2/2008 | | 13.38 | 699.30 |
| | | | | | | 6/15/2009 | | 13.44 | 699.24 |
| | | 711.971 | | | | 11/2/2009 | | 14.21 | 697.76 |
| | | | | | | 2/3/2010 | | 14.71 | 697.26 |
| | | | | | | 4/20/2010 | | 14.51 | 697.46 |
| | | | | | | 7/20/2010 | | 13.99 | 697.98 |
| | | | | | | 10/11/2010 | | 15.05 | 696.92 |
| | | 712.40 | | | | 1/17/2011 | | 14.61 | 697.79 |
| | | | | | | 4/28/2011 | | 12.66 | 699.74 |
| | | | | | | 9/27/2011 | | 14.24 | 698.16 |
| | | | | | | 10/17/2011 | | 14.94 | 697.46 |
| | | | | | | 1/18/2012 | | 13.69 | 698.71 |
| | | | | | | 4/23/2012 | | 14.70 | 697.70 |
| | | | | | | 7/30/2012 | | 15.29 | 697.11 |
| | | | | | | 11/12/2012 | | 14.05 | 698.35 |
| | | | | | | 3/1/2013 | | 14.16 | 698.24 |
| | | | | | | 5/16/2013 | | 14.07 | 698.33 |
| | | | | | | 9/17/2013 | | 15.07 | 697.33 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-11D | 11/26/2008 | 713.64 | 33 | 23 | 33 | 3/17/2009 | | 16.02 | 697.62 |
| | | | | | | 6/15/2009 | | 14.73 | 698.91 |
| | | 712.988 | | | | 8/5/2009 | | 14.89 | 698.10 |
| | | 713.64 | | | | 11/2/2009 | | 15.78 | 697.86 |
| | | | | | | 2/3/2010 | | 16.29 | 697.35 |
| | | | | | | 4/20/2010 | | 16.03 | 697.61 |
| | | | | | | 7/20/2010 | | 15.41 | 698.23 |
| | | | | | | 10/11/2010 | | 16.61 | 697.03 |
| | | 713.33 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | NG | |
| | | | | | | 9/27/2011 | | 15.93 | 697.40 |
| | | | | | | 10/17/2011 | | 16.43 | 696.90 |
| | | | | | | 1/18/2012 | | 15.55 | 697.78 |
| | | | | | | 4/23/2012 | | 16.00 | 697.33 |
| | | | | | | 7/30/2012 | | 16.81 | 696.52 |
| | | | | | | 11/12/2012 | | 15.87 | 697.46 |
| | | | | | | 3/1/2013 | | 15.28 | 698.05 |
| | | | | | | 5/16/2013 | | 15.06 | 698.27 |
| | | | | | | 9/17/2013 | | 16.51 | 696.82 |
| MMW-13D | 11/21/2008 | 713.53 | 50 | 35 | 50 | 6/15/2009 | | 13.45 | 700.08 |
| | | 712.884 | | | | 8/5/2009 | | 14.85 | 698.03 |
| | | | | | | 11/2/2009 | | 15.76 | 697.12 |
| | | | | | | 2/3/2010 | | 16.10 | 696.78 |
| | | | | | | 4/20/2010 | | 15.81 | 697.07 |
| | | | | | | 7/20/2010 | | 15.21 | 697.67 |
| | | | | | | 10/11/2010 | | 16.55 | 696.33 |
| | | 713.28 | | | | 1/17/2011 | | 16.43 | 696.85 |
| | | | | | | 4/28/2011 | | 13.95 | 699.33 |
| | | | | | | 9/27/2011 | | 15.76 | 697.52 |
| | | | | | | 10/17/2011 | | 16.43 | 696.85 |
| | | | | | | 1/18/2012 | | 15.56 | 697.72 |
| | | | | | | 4/23/2012 | | 15.97 | 697.31 |
| | | | | | | 7/30/2012 | | 16.82 | 696.46 |
| | | | | | | 11/12/2012 | | 15.88 | 697.40 |
| | | | | | | 3/1/2013 | | 15.26 | 698.02 |
| | | | | | | 5/16/2013 | | 15.02 | 698.26 |
| | | | | | | 9/17/2013 | | 16.52 | 696.76 |
| MMW-14D | 12/10/2008 | 712.61 | 50 | 40 | 50 | 3/17/2009 | | 14.95 | 697.66 |
| | | | | | | 6/15/2009 | | 13.81 | 698.80 |
| | | 711.77 | | | | 8/5/2009 | | 13.92 | 697.85 |
| | | | | | | 11/2/2009 | | 14.90 | 696.87 |
| | | | | | | 2/3/2010 | | 15.20 | 696.57 |
| | | | | | | 4/20/2010 | | 15.02 | 696.75 |
| | | | | | | 7/20/2010 | | 14.45 | 697.32 |
| | | | | | | 10/11/2010 | | 15.62 | 696.15 |
| | | 712.41 | | | | 1/17/2011 | | 15.51 | 696.90 |
| | | | | | | 4/28/2011 | | 13.16 | 699.25 |
| | | | | | | 9/27/2011 | | 14.80 | 697.61 |
| | | | | | | 10/17/2011 | | 15.48 | 696.93 |
| | | | | | | 1/18/2012 | | 14.41 | 698.00 |
| | | | | | | 4/23/2012 | | 15.11 | 697.30 |
| | | | | | | 7/30/2012 | | 15.87 | 696.54 |
| | | | | | | 11/12/2012 | | 14.75 | 697.66 |
| | | | | | | 3/1/2013 | | 14.43 | 697.98 |
| | | | | | | 5/16/2013 | | 14.33 | 698.08 |
| | | | | | | 9/17/2013 | | 15.56 | 696.85 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-15D | 12/15/2011 | 713.08 | 39 | 34 | 39 | 1/18/2012 | | 15.32 | 697.76 |
| | | | | | | 4/23/2012 | | 15.74 | 697.34 |
| | | | | | | 7/30/2012 | | 16.60 | 696.48 |
| | | | | | | 11/12/2012 | | 15.65 | 697.43 |
| | | | | | | 3/1/2013 | | 15.01 | 698.07 |
| | | | | | | 5/16/2013 | | 14.70 | 698.38 |
| | | | | | | 9/17/2013 | | 16.30 | 696.78 |
| **Floral Park Cemetery Monitoring Wells (Off-Site)** | | | | | | | | | |
| *Shallow Wells* | | | | | | | | | |
| MMW-C-01 | 8/1/2008 | 715.36 | 28 | 18 | 28 | 9/9/2008 | | 19.70 | 695.66 |
| | | | | | | 11/20/2008 | | 20.25 | 695.11 |
| | | | | | | 3/17/2009 | | 19.47 | 695.89 |
| | | | | | | 6/15/2009 | | 17.24 | 698.12 |
| | | 715.272 | | | | 8/5/2009 | | 18.53 | 696.74 |
| | | | | | | 11/2/2009 | | 19.85 | 695.42 |
| | | | | | | 2/3/2010 | | 19.98 | 695.29 |
| | | | | | | 4/20/2010 | | 19.40 | 695.87 |
| | | | | | | 7/20/2010 | | 18.61 | 696.66 |
| | | | | | | 10/11/2010 | | 20.53 | 694.74 |
| | | 715.73 | | | | 1/19/2011 | | 20.43 | 695.30 |
| | | | | | | 4/28/2011 | | 17.01 | 698.72 |
| | | | | | | 9/27/2011 | | 19.81 | 695.92 |
| | | | | | | 10/17/2011 | | 20.48 | 695.25 |
| | | | | | | 1/18/2012 | | 19.12 | 696.61 |
| | | | | | | 4/23/2012 | | 19.58 | 696.15 |
| | | | | | | 7/30/2012 | | 20.76 | 694.97 |
| | | | | | | 11/12/2012 | | 19.71 | 696.02 |
| | | | | | | 3/1/2013 | | 18.86 | 696.87 |
| | | | | | | 5/16/2013 | | 17.91 | 697.82 |
| | | | | | | 9/17/2013 | | 20.45 | 695.28 |
| MMW-C-02S | 8/1/2008 | 715.21 | 28 | 18 | 28 | 9/9/2008 | | 19.16 | 696.05 |
| | | | | | | 11/20/2008 | | 19.60 | 695.61 |
| | | | | | | 3/17/2009 | | 18.89 | 696.32 |
| | | | | | | 6/15/2009 | | 17.70 | 697.51 |
| | | 714.22 | | | | 8/5/2009 | | 18.14 | 696.08 |
| | | | | | | 11/2/2009 | | 19.25 | 694.97 |
| | | | | | | 2/3/2010 | | 19.33 | 694.89 |
| | | | | | | 4/20/2010 | | 18.80 | 695.42 |
| | | | | | | 7/20/2010 | | 18.12 | 696.10 |
| | | | | | | 10/11/2010 | | 19.86 | 694.36 |
| | | 714.64 | | | | 1/19/2011 | | 19.80 | 694.84 |
| | | | | | | 4/28/2011 | | 17.35 | 697.29 |
| | | | | | | 9/27/2011 | | 19.34 | 695.30 |
| | | | | | | 10/17/2011 | | 19.86 | 694.78 |
| | | | | | | 1/18/2012 | | 18.66 | 695.98 |
| | | | | | | 4/23/2012 | | 19.05 | 695.59 |
| | | | | | | 7/30/2012 | | 20.10 | 694.54 |
| | | | | | | 11/12/2012 | | 19.21 | 695.43 |
| | | | | | | 3/1/2013 | | 18.39 | 696.25 |
| | | | | | | 5/16/2013 | | 17.52 | 697.12 |
| | | | | | | 9/17/2013 | | 19.86 | 694.78 |
| MMW-C-16S | 6/5/2012 | 717.32 | 25.9 | 15.9 | 25.9 | 7/30/2012 | | 22.70 | 694.62 |
| | | | | | | 11/12/2012 | | 21.65 | 695.67 |
| | | | | | | 3/1/2013 | | 20.81 | 696.51 |
| | | | | | | 5/16/2013 | | 19.66 | 697.66 |
| | | | | | | 9/17/2013 | | 22.40 | 694.92 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-11S | 8/31/2011 | 716.42 | 26 | 16 | 26 | 10/17/2011 | | 21.26 | 695.16 |
| | | | | | | 1/18/2012 | | 19.89 | 696.53 |
| | | | | | | 4/23/2012 | | 20.31 | 696.11 |
| | | | | | | 7/30/2012 | | 21.51 | 694.91 |
| | | | | | | 11/12/2012 | | 20.51 | 695.91 |
| | | | | | | 3/1/2013 | | 19.57 | 696.85 |
| | | | | | | 5/16/2013 | | 18.44 | 697.98 |
| | | | | | | 9/17/2013 | | 21.20 | 695.22 |
| MMW-P-13S | 8/31/2011 | 713.83 | 26 | 16 | 26 | 10/17/2011 | | 18.67 | 695.16 |
| | | | | | | 1/18/2012 | | 17.26 | 696.57 |
| | | | | | | 4/23/2012 | | 17.66 | 696.17 |
| | | | | | | 7/30/2012 | | 18.92 | 694.91 |
| | | | | | | 11/12/2012 | | 17.94 | 695.89 |
| | | | | | | 3/1/2013 | | 16.91 | 696.92 |
| | | | | | | 5/16/2013 | | 15.53 | 698.30 |
| | | | | | | 9/17/2013 | | 18.60 | 695.23 |
| MMW-P-14S | 12/6/2011 | 714.5 | 28 | 18 | 28 | 1/18/2012 | | 18.16 | 696.34 |
| | | | | | | 4/23/2012 | | 18.62 | 695.88 |
| | | | | | | 7/30/2012 | | 19.96 | 694.54 |
| | | | | | | 11/12/2012 | | 18.93 | 695.57 |
| | | | | | | 3/1/2013 | | 17.25 | 697.25 |
| | | | | | | 5/16/2013 | | 16.21 | 698.29 |
| | | | | | | 9/17/2013 | | 19.64 | 694.86 |
| *Deep Wells* | | | | | | | | | |
| MMW-C-02D | 12/6/2011 | 713.9 | 36 | 31 | 36 | 1/18/2012 | | 17.86 | 696.04 |
| | | | | | | 4/23/2012 | | 18.30 | 695.60 |
| | | | | | | 7/30/2012 | | 19.34 | 694.56 |
| | | | | | | 11/12/2012 | | 18.42 | 695.48 |
| | | | | | | 3/1/2013 | | 17.63 | 696.27 |
| | | | | | | 5/16/2013 | | 16.79 | 697.11 |
| | | | | | | 9/17/2013 | | 19.10 | 694.80 |
| MMW-C-16D | 6/4/2012 | 717.27 | 40 | 35 | 40 | 7/30/2012 | | 22.67 | 694.60 |
| | | | | | | 11/12/2012 | | 21.64 | 695.63 |
| | | | | | | 3/1/2013 | | 20.75 | 696.52 |
| | | | | | | 5/16/2013 | | 19.60 | 697.67 |
| | | | | | | 9/17/2013 | | 22.38 | 694.89 |
| MMW-C-17D | 6/5/2012 | 714.57 | 38.7 | 33.7 | 38.7 | 7/30/2012 | | 21.15 | 693.42 |
| | | | | | | 11/12/2012 | | 20.43 | 694.14 |
| | | | | | | 3/1/2013 | | 19.55 | 695.02 |
| | | | | | | 5/16/2013 | | 18.76 | 695.81 |
| | | | | | | 9/17/2013 | | 20.95 | 693.62 |
| MMW-P-11DR | 12/6/2011 | 715.63 | 33 | 28 | 33 | 1/18/2012 | | 19.08 | 696.55 |
| | | | | | | 4/23/2012 | | 19.51 | 696.12 |
| | | | | | | 7/30/2012 | | 20.73 | 694.90 |
| | | | | | | 11/12/2012 | | 19.73 | 695.90 |
| | | | | | | 3/1/2013 | | 18.77 | 696.86 |
| | | | | | | 5/16/2013 | | 17.62 | 698.01 |
| | | | | | | 9/17/2013 | | 20.42 | 695.21 |
| MMW-P-13D | 8/31/2011 | 713.57 | 33 | 28 | 33 | 10/17/2011 | | 18.45 | 695.12 |
| | | | | | | 1/18/2012 | | 17.02 | 696.55 |
| | | | | | | 4/23/2012 | | 17.43 | 696.14 |
| | | | | | | 7/30/2012 | | 18.68 | 694.89 |
| | | | | | | 11/12/2012 | | 17.70 | 695.87 |
| | | | | | | 3/1/2013 | | 16.66 | 696.91 |
| | | | | | | 5/16/2013 | | 15.29 | 698.28 |
| | | | | | | 9/17/2013 | | 18.35 | 695.22 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MMW-P-14D | 12/6/2011 | 714.76 | 34 | 29 | 34 | 1/18/2012 | | 18.43 | 696.33 |
| | | | | | | 4/23/2012 | | 18.92 | 695.84 |
| | | | | | | 7/30/2012 | | 20.24 | 694.52 |
| | | | | | | 11/12/2012 | | 19.19 | 695.57 |
| | | | | | | 3/1/2013 | | 18.13 | 696.63 |
| | | | | | | 5/16/2013 | | 16.50 | 698.26 |
| | | | | | | 9/17/2013 | | 19.94 | 694.82 |
| **ENVIRON Monitoring Wells (Off-Site)** | | | | | | | | | |
| MW-166S | 5/21/2001 | 712.70 | 20.00 | 10.00 | 20.00 | 1/18/2012 | | 14.75 | 697.95 |
| | | | | | | 4/23/2012 | | 15.15 | 697.55 |
| | | | | | | 7/30/2012 | | 15.95 | 696.75 |
| | | | | | | 11/12/2012 | | 14.89 | 697.81 |
| | | | | | | 3/1/2013 | | 14.47 | 698.23 |
| | | | | | | 5/16/2013 | | 14.35 | 698.35 |
| | | | | | | 9/17/2013 | | 15.56 | 697.14 |
| MW-167S | 5/21/2001 | 716.25 | 22 | 12 | 22 | 11/7/2005 | | 18.78 | 697.47 |
| | | | | | | 2/21/2007 | | 17.74 | 698.51 |
| | | | | | | 6/2/2008 | | 17.33 | 698.92 |
| | | | | | | 9/9/2008 | | 18.65 | 697.60 |
| | | | | | | 11/20/2008 | | 19.92 | 696.33 |
| | | | | | | 3/17/2009 | | 18.49 | 697.76 |
| | | | | | | 6/15/2009 | | 17.02 | 699.23 |
| | | | | | | 8/5/2009 | | 17.70 | 698.55 |
| | | | | | | 11/2/2009 | | 18.50 | 697.75 |
| | | | | | | 2/3/2010 | | 18.78 | 697.47 |
| | | | | | | 4/20/2010 | | 19.43 | 696.82 |
| | | | | | | 7/20/2010 | | NG | |
| | | 715.363 | | | | 10/11/2010 | | 19.27 | 696.09 |
| | | 716.07 | | | | 1/17/2011 | | 19.15 | 696.92 |
| | | | | | | 4/28/2011 | | 16.30 | 699.77 |
| | | | | | | 9/27/2011 | | 18.61 | 697.46 |
| | | | | | | 1/18/2012 | | NG | |
| | | | | | | 4/23/2012 | | 18.21 | 697.86 |
| | | | | | | 7/30/2012 | | 19.55 | 696.52 |
| | | | | | | 11/12/2012 | | 18.70 | 697.37 |
| | | | | | | 3/1/2013 | | 17.92 | 698.15 |
| | | | | | | 5/16/2013 | | 17.43 | 698.64 |
| | | | | | | 9/17/2013 | | 19.24 | 696.83 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-168S | 1/18/2002 | 714.79 | 22 | 12 | 22 | 11/7/2005 | | 18.09 | 696.70 |
| | | | | | | 2/21/2007 | | 17.19 | 697.60 |
| | | | | | | 6/14/2007 | | 17.97 | 696.82 |
| | | | | | | 9/19/2007 | | 15.73 | 699.06 |
| | | | | | | 12/12/2007 | | 17.32 | 697.47 |
| | | | | | | 3/21/2008 | | 15.83 | 698.96 |
| | | | | | | 6/2/2008 | | 16.72 | 698.07 |
| | | | | | | 9/9/2008 | | 17.90 | 696.89 |
| | | | | | | 11/20/2008 | | 18.29 | 696.50 |
| | | | | | | 3/17/2009 | | 17.97 | 696.82 |
| | | | | | | 6/15/2009 | | 16.80 | 697.99 |
| | | | | | | 8/5/2009 | | 16.74 | 698.05 |
| | | | | | | 11/2/2009 | | 17.80 | 696.99 |
| | | | | | | 2/3/2010 | | 18.08 | 696.71 |
| | | | | | | 4/20/2010 | | 17.91 | 696.88 |
| | | | | | | 7/20/2010 | | 17.31 | 697.48 |
| | | 713.823 | | | | 10/11/2010 | | 18.45 | 695.37 |
| | | 714.58 | | | | 1/17/2011 | | 18.42 | 696.16 |
| | | | | | | 4/28/2011 | | 16.00 | 698.58 |
| | | | | | | 9/27/2011 | | 17.59 | 696.99 |
| | | | | | | 10/17/2011 | | 18.42 | 696.16 |
| | | | | | | 1/18/2012 | | 17.30 | 697.28 |
| | | | | | | 4/23/2012 | | 17.90 | 696.68 |
| | | | | | | 7/30/2012 | | 18.76 | 695.82 |
| | | | | | | 11/12/2012 | | 17.61 | 696.97 |
| | | | | | | 3/1/2013 | | 17.24 | 697.34 |
| | | | | | | 5/16/2013 | | 16.83 | 697.75 |
| | | | | | | 9/17/2013 | | 18.55 | 696.03 |
| MW-169S | 1/16/2002 | 715.95 | 25 | 15 | 25 | 11/7/2005 | | 20.80 | 695.15 |
| | | | | | | 2/21/2007 | | 18.92 | 697.03 |
| | | | | | | 3/21/2008 | | 18.51 | 697.44 |
| | | | | | | 6/2/2008 | | 18.97 | 696.98 |
| | | | | | | 9/9/2008 | | 20.29 | 695.66 |
| | | | | | | 11/20/2008 | | 20.89 | 695.06 |
| | | | | | | 3/17/2009 | | 19.99 | 695.96 |
| | | | | | | 6/15/2009 | | 18.12 | 697.83 |
| | | | | | | 8/5/2009 | | 19.13 | 696.82 |
| | | | | | | 11/2/2009 | | 20.41 | 695.54 |
| | | | | | | 2/3/2010 | | 20.41 | 695.54 |
| | | | | | | 4/20/2010 | | 19.70 | 696.25 |
| | | | | | | 7/20/2010 | | 18.90 | 697.05 |
| | | 715.92 | | | | 1/17/2011 | | 21.09 | 694.83 |
| | | | | | | 4/28/2011 | | 18.09 | 697.83 |
| | | | | | | 9/27/2011 | | 20.80 | 695.12 |
| | | | | | | 10/17/2011 | | 21.43 | 694.49 |
| | | | | | | 1/18/2012 | | 20.75 | 695.17 |
| | | | | | | 4/23/2012 | | 20.28 | 695.64 |
| | | | | | | 7/30/2012 | | 21.42 | 694.50 |
| | | | | | | 11/12/2012 | | 20.40 | 695.52 |
| | | | | | | 3/1/2013 | | 19.50 | 696.42 |
| | | | | | | 5/16/2013 | | 18.29 | 697.63 |
| | | | | | | 9/17/2013 | | 21.16 | 694.76 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-170S | 1/16/2002 | 717.40 | 27 | 17 | 27 | 2/21/2007 | | 19.41 | 697.99 |
| | | | | | | 6/2/2008 | | 19.69 | 697.71 |
| | | | | | | 9/9/2008 | | 21.01 | 696.39 |
| | | | | | | 11/20/2008 | | 21.62 | 695.78 |
| | | | | | | 3/17/2009 | | 20.66 | 696.74 |
| | | | | | | 6/15/2009 | | 18.63 | 698.77 |
| | | | | | | 8/5/2009 | | 20.05 | 697.35 |
| | | | | | | 11/2/2009 | | 21.22 | 696.18 |
| | | | | | | 2/3/2010 | | 21.70 | 695.70 |
| | | | | | | 4/20/2010 | | 20.41 | 696.99 |
| | | | | | | 7/20/2010 | | 19.47 | 697.93 |
| | | 716.51 | | | | 10/11/2010 | | 21.81 | 694.70 |
| | | 717.14 | | | | 1/17/2011 | | 21.70 | 695.44 |
| | | | | | | 4/28/2011 | | 18.71 | 698.43 |
| | | | | | | 9/27/2011 | | 21.66 | 695.48 |
| | | | | | | 10/17/2011 | | 21.85 | 695.29 |
| | | | | | | 1/18/2012 | | 20.34 | 696.80 |
| | | | | | | 4/23/2012 | | 20.71 | 696.43 |
| | | | | | | 7/30/2012 | | 22.07 | 695.07 |
| | | | | | | 11/12/2012 | | 21.08 | 696.06 |
| | | | | | | 3/1/2013 | | 20.01 | 697.13 |
| | | | | | | 5/16/2013 | | 18.46 | 698.68 |
| | | | | | | 9/17/2013 | | 21.74 | 695.40 |
| MW-171S | 1/22/2002 | 711.83 | 22 | 12 | 22 | 2/21/2007 | | 15.04 | 696.79 |
| | | | | | | 3/21/2008 | | 13.81 | 698.02 |
| | | | | | | 6/2/2008 | | 14.37 | 697.46 |
| | | | | | | 9/9/2008 | | 15.75 | 696.08 |
| | | | | | | 11/20/2008 | | 16.05 | 695.78 |
| | | | | | | 3/17/2009 | | 15.71 | 696.12 |
| | | | | | | 6/15/2009 | | 14.52 | 697.31 |
| | | | | | | 8/5/2009 | | 14.79 | 697.04 |
| | | | | | | 11/2/2009 | | 15.68 | 696.15 |
| | | | | | | 2/3/2010 | | 15.82 | 696.01 |
| | | | | | | 4/20/2010 | | 15.59 | 696.24 |
| | | | | | | 7/20/2010 | | 15.18 | 696.65 |
| | | 711.58 | | | | 1/17/2011 | | 16.20 | 695.38 |
| | | | | | | 4/28/2011 | | 13.92 | 697.66 |
| | | | | | | 9/27/2011 | | 15.64 | 695.94 |
| | | | | | | 10/17/2011 | | NG | |
| | | | | | | 1/18/2012 | | 15.16 | 696.42 |
| | | | | | | 4/23/2012 | | 15.75 | 695.83 |
| | | | | | | 7/30/2012 | | 15.59 | 695.99 |
| | | | | | | 11/12/2012 | | 15.59 | 695.99 |
| | | | | | | 3/1/2013 | | 15.20 | 696.38 |
| | | | | | | 5/16/2013 | | 14.93 | 696.65 |
| | | | | | | 9/17/2013 | | NG | |
| MW-174S | 7/13/2011 | 717.78 | 24 | 14 | 24 | 1/18/2012 | | 21.14 | 696.64 |
| | | | | | | 4/23/2012 | | 21.52 | 696.26 |
| | | | | | | 7/30/2012 | | 22.40 | 695.38 |
| | | | | | | 11/12/2012 | | 20.80 | 696.98 |
| | | | | | | 3/1/2013 | | 19.97 | 697.81 |
| | | | | | | 5/16/2013 | | 19.37 | 698.41 |
| | | | | | | 9/17/2013 | | 21.32 | 696.46 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-175S | 7/13/2011 | 718.66 | 25 | 15 | 25 | 4/23/2012 | | 20.70 | 697.96 |
| | | | | | | 1/18/2012 | | 20.38 | 698.28 |
| | | | | | | 7/30/2012 | | 21.68 | 696.98 |
| | | | | | | 11/12/2012 | | 21.33 | 697.33 |
| | | | | | | 3/1/2013 | | 20.81 | 697.85 |
| | | | | | | 5/16/2013 | | 20.41 | 698.25 |
| | | | | | | 9/17/2013 | | 22.11 | 696.55 |
| MW-166D | 1/14/2002 | 712.49 | 51 | 46 | 51 | 1/18/2012 | | 14.45 | 698.04 |
| | | | | | | 4/23/2012 | | 14.92 | 697.57 |
| | | | | | | 7/30/2012 | | 15.71 | 696.78 |
| | | | | | | 11/12/2012 | | 14.64 | 697.85 |
| | | | | | | 3/1/2013 | | 14.25 | 698.24 |
| | | | | | | 5/16/2013 | | 14.11 | 698.38 |
| | | | | | | 9/17/2013 | | 15.42 | 697.07 |
| MW-167D | 1/11/2002 | 716.25 | 33 | 28 | 33 | 11/7/2005 | | 18.80 | 697.45 |
| | | | | | | 2/21/2007 | | 17.81 | 698.44 |
| | | | | | | 6/2/2008 | | 17.44 | 698.81 |
| | | | | | | 9/9/2008 | | 18.76 | 697.49 |
| | | | | | | 11/20/2008 | | 19.07 | 697.18 |
| | | | | | | 3/17/2009 | | 18.64 | 697.61 |
| | | | | | | 6/15/2009 | | 17.20 | 699.05 |
| | | | | | | 8/5/2009 | | 17.83 | 698.42 |
| | | | | | | 11/2/2009 | | 18.65 | 697.60 |
| | | | | | | 2/3/2010 | | 18.98 | 697.27 |
| | | | | | | 4/20/2010 | | 18.61 | 697.64 |
| | | | | | | 7/20/2010 | | 17.79 | 698.46 |
| | | 715.61 | | | | 1/17/2011 | | 18.73 | 696.88 |
| | | | | | | 4/28/2011 | | 16.23 | 699.38 |
| | | | | | | 9/27/2011 | | 18.19 | 697.42 |
| | | | | | | 1/18/2012 | | 17.85 | 697.76 |
| | | | | | | 4/23/2012 | | 18.61 | 697.00 |
| | | | | | | 7/30/2012 | | 19.12 | 696.49 |
| | | | | | | 11/12/2012 | | 18.27 | 697.34 |
| | | | | | | 3/1/2013 | | 17.51 | 698.10 |
| | | | | | | 5/16/2013 | | 17.03 | 698.58 |
| | | | | | | 9/17/2013 | | 18.85 | 696.76 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-168D | 1/15/2002 | 714.71 | 31 | 21 | 31 | 11/7/2005 | | 18.00 | 696.71 |
| | | | | | | 2/21/2007 | | 17.07 | 697.64 |
| | | | | | | 6/14/2007 | | 17.87 | 696.84 |
| | | | | | | 9/19/2007 | | 53.11 | 661.60 |
| | | | | | | 12/12/2007 | | 17.22 | 697.49 |
| | | | | | | 3/21/2008 | | 15.65 | 699.06 |
| | | | | | | 6/2/2008 | | 16.70 | 698.01 |
| | | | | | | 9/9/2008 | | 17.81 | 696.90 |
| | | | | | | 11/20/2008 | | 18.23 | 696.48 |
| | | | | | | 3/17/2009 | | 17.89 | 696.82 |
| | | | | | | 6/15/2009 | | 16.71 | 698.00 |
| | | | | | | 8/5/2009 | | 16.69 | 698.02 |
| | | | | | | 11/2/2009 | | 17.75 | 696.96 |
| | | | | | | 2/3/2010 | | 18.03 | 696.68 |
| | | | | | | 4/20/2010 | | 17.81 | 696.90 |
| | | | | | | 7/20/2010 | | 17.22 | 697.49 |
| | | 713.823 | | | | 10/11/2010 | | 18.54 | 695.28 |
| | | 714.46 | | | | 1/17/2011 | | 18.35 | 696.11 |
| | | | | | | 4/28/2011 | | 15.90 | 698.56 |
| | | | | | | 9/27/2011 | | 17.56 | 696.90 |
| | | | | | | 10/17/2011 | | 18.33 | 696.13 |
| | | | | | | 1/18/2012 | | 17.14 | 697.32 |
| | | | | | | 4/23/2012 | | 17.85 | 696.61 |
| | | | | | | 7/30/2012 | | 18.68 | 695.78 |
| | | | | | | 11/12/2012 | | 17.45 | 697.01 |
| | | | | | | 3/1/2013 | | 17.20 | 697.26 |
| | | | | | | 5/16/2013 | | 17.05 | 697.41 |
| | | | | | | 9/17/2013 | | 18.41 | 696.05 |
| MW-169D | 1/16/2002 | 715.23 | 37 | 32 | 37 | 11/7/2005 | | 20.77 | 694.46 |
| | | | | | | 2/21/2007 | | 18.87 | 696.36 |
| | | | | | | 3/21/2008 | | 18.48 | 696.75 |
| | | | | | | 6/2/2008 | | 18.97 | 696.26 |
| | | | | | | 9/9/2008 | | 20.27 | 694.96 |
| | | | | | | 11/20/2008 | | 20.92 | 694.31 |
| | | | | | | 3/17/2009 | | 20.01 | 695.22 |
| | | | | | | 6/15/2009 | | 18.13 | 697.10 |
| | | | | | | 8/5/2009 | | 19.15 | 696.08 |
| | | | | | | 11/2/2009 | | 20.45 | 694.78 |
| | | | | | | 2/3/2010 | | 20.47 | 694.76 |
| | | | | | | 4/20/2010 | | 19.78 | 695.45 |
| | | | | | | 7/20/2010 | | 18.98 | 696.25 |
| | | 715.69 | | | | 1/17/2011 | | NG | |
| | | | | | | 4/28/2011 | | 17.83 | 697.86 |
| | | | | | | 9/27/2011 | | NG | |
| | | | | | | 1/18/2012 | | 19.53 | 696.16 |
| | | | | | | 4/23/2012 | | 20.03 | 695.66 |
| | | | | | | 7/30/2012 | | 21.21 | 694.48 |
| | | | | | | 11/12/2012 | | 20.19 | 695.50 |
| | | | | | | 3/1/2013 | | 19.29 | 696.40 |
| | | | | | | 5/16/2013 | | 18.03 | 697.66 |
| | | | | | | 9/17/2013 | | 20.97 | 694.72 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-170D | 1/16/2002 | 717.34<br>716.45<br>717.07 | 39 | 34 | 39 | 2/21/2007 | | 19.35 | 697.99 |
| | | | | | | 6/2/2008 | | 19.61 | 697.73 |
| | | | | | | 9/9/2008 | | 20.95 | 696.39 |
| | | | | | | 11/20/2008 | | 21.69 | 695.65 |
| | | | | | | 3/17/2009 | | 20.62 | 696.72 |
| | | | | | | 6/15/2009 | | 18.54 | 698.80 |
| | | | | | | 8/5/2009 | | 19.95 | 697.39 |
| | | | | | | 11/2/2009 | | 21.12 | 696.22 |
| | | | | | | 2/3/2010 | | 21.12 | 696.22 |
| | | | | | | 4/20/2010 | | 20.34 | 697.00 |
| | | | | | | 7/20/2010 | | 19.39 | 697.95 |
| | | | | | | 10/11/2010 | | 21.81 | 694.64 |
| | | | | | | 1/17/2011 | | 21.63 | 695.44 |
| | | | | | | 4/28/2011 | | 18.65 | 698.42 |
| | | | | | | 9/27/2011 | | 21.60 | 695.47 |
| | | | | | | 10/17/2011 | | 21.76 | 695.31 |
| | | | | | | 1/18/2012 | | 20.27 | 696.80 |
| | | | | | | 4/23/2012 | | 20.68 | 696.39 |
| | | | | | | 7/30/2012 | | 22.00 | 695.07 |
| | | | | | | 11/12/2012 | | 21.01 | 696.06 |
| | | | | | | 3/1/2013 | | 19.94 | 697.13 |
| | | | | | | 5/16/2013 | | 18.39 | 698.68 |
| | | | | | | 9/17/2013 | | 21.68 | 695.39 |
| MW-171D | 1/22/2002 | 711.88<br>710.993<br>711.62 | 49 | 44 | 49 | 2/21/2007 | | 15.23 | 696.65 |
| | | | | | | 3/21/2008 | | 14.41 | 697.47 |
| | | | | | | 6/2/2008 | | 14.95 | 696.93 |
| | | | | | | 9/9/2008 | | 16.16 | 695.72 |
| | | | | | | 11/20/2008 | | 16.59 | 695.29 |
| | | | | | | 3/17/2009 | | 16.09 | 695.79 |
| | | | | | | 6/15/2009 | | 14.68 | 697.20 |
| | | | | | | 8/5/2009 | | 15.22 | 696.66 |
| | | | | | | 11/2/2009 | | 16.13 | 695.75 |
| | | | | | | 2/3/2010 | | 16.31 | 695.57 |
| | | | | | | 4/20/2010 | | 15.95 | 695.93 |
| | | | | | | 7/20/2010 | | 19.35 | 692.53 |
| | | | | | | 10/11/2010 | | 16.76 | 694.23 |
| | | | | | | 1/17/2011 | | 16.70 | 694.92 |
| | | | | | | 4/28/2011 | | 14.10 | 697.52 |
| | | | | | | 9/27/2011 | | 16.16 | 695.46 |
| | | | | | | 10/17/2011 | | 16.70 | 694.92 |
| | | | | | | 1/18/2012 | | 15.61 | 696.01 |
| | | | | | | 4/23/2012 | | 16.10 | 695.52 |
| | | | | | | 7/30/2012 | | 17.00 | 694.62 |
| | | | | | | 11/12/2012 | | 16.11 | 695.51 |
| | | | | | | 3/1/2013 | | 15.47 | 696.15 |
| | | | | | | 5/16/2013 | | 14.97 | 696.65 |
| | | | | | | 9/17/2013 | | 16.76 | 694.86 |
| MW-174D | 7/13/2011 | 717.72 | 48 | 43 | 48 | 1/18/2012 | | 21.03 | 696.69 |
| | | | | | | 4/23/2012 | | 21.41 | 696.31 |
| | | | | | | 7/30/2012 | | 22.27 | 695.45 |
| | | | | | | 11/12/2012 | | 20.74 | 696.98 |
| | | | | | | 3/1/2013 | | 19.92 | 697.80 |
| | | | | | | 5/16/2013 | | 19.30 | 698.42 |
| | | | | | | 9/17/2013 | | 21.32 | 696.40 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-175D | 7/13/2011 | 718.75 | 42 | 37 | 42 | 1/18/2012 | | 20.32 | 698.43 |
| | | | | | | 4/23/2012 | | 20.63 | 698.12 |
| | | | | | | 7/30/2012 | | 21.63 | 697.12 |
| | | | | | | 11/12/2012 | | 21.46 | 697.29 |
| | | | | | | 3/1/2013 | | 20.71 | 698.04 |
| | | | | | | 5/16/2013 | | 20.31 | 698.44 |
| | | | | | | 9/17/2013 | | 22.00 | 696.75 |
| **U.S. EPA Monitoring Wells (Off-Site)** | | | | | | | | | |
| MW-WES-01a | | 716.13 | 37.5 | 32.5 | 37.5 | 1/18/2012 | | NG | |
| | | | | | | 4/23/2012 | | 6.35 | 709.78 |
| | | | | | | 7/30/2012 | | 21.03 | 695.10 |
| | | | | | | 11/12/2012 | | 13.79 | 702.34 |
| | | | | | | 3/1/2013 | | 18.51 | 697.62 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.74 | 695.39 |
| MW-WES-01b | | 716.05 | 46 | 41 | 46 | 1/18/2012 | | 19.39 | 696.66 |
| | | | | | | 4/23/2012 | | 19.88 | 696.17 |
| | | | | | | 7/30/2012 | | 21.21 | 694.84 |
| | | | | | | 11/12/2012 | | 20.16 | 695.89 |
| | | | | | | 3/1/2013 | | 19.16 | 696.89 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.93 | 695.12 |
| MW-WES-01c | | 715.96 | 55 | 50 | 55 | 1/18/2012 | | 19.35 | 696.61 |
| | | | | | | 4/23/2012 | | 19.85 | 696.11 |
| | | | | | | 7/30/2012 | | 21.17 | 694.79 |
| | | | | | | 11/12/2012 | | 20.15 | 695.81 |
| | | | | | | 3/1/2013 | | 19.10 | 696.86 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.86 | 695.10 |
| MW-WES-02a | | 716.24 | 29 | 24 | 29 | 1/18/2012 | | 18.76 | 697.48 |
| | | | | | | 4/23/2012 | | 19.44 | 696.80 |
| | | | | | | 7/30/2012 | | 20.62 | 695.62 |
| | | | | | | 11/12/2012 | | 19.75 | 696.49 |
| | | | | | | 3/1/2013 | | 18.75 | 697.49 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.75 | 695.49 |
| MW-WES-02b | | 716.28 | 40 | 35 | 40 | 1/18/2012 | | 19.40 | 696.88 |
| | | | | | | 4/23/2012 | | 19.87 | 696.41 |
| | | | | | | 7/30/2012 | | 21.16 | 695.12 |
| | | | | | | 11/12/2012 | | 20.17 | 696.11 |
| | | | | | | 3/1/2013 | | 19.12 | 697.16 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.84 | 695.44 |
| MW-WES-02c | | 716.23 | 50 | 40 | 50 | 1/18/2012 | | 19.30 | 696.93 |
| | | | | | | 4/23/2012 | | 19.79 | 696.44 |
| | | | | | | 7/30/2012 | | 21.07 | 695.16 |
| | | | | | | 11/12/2012 | | 20.07 | 696.16 |
| | | | | | | 3/1/2013 | | 19.03 | 697.20 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.34 | 695.89 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
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Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| MW-WES-03a | | 717.42 | 35 | 30 | 35 | 1/18/2012 | | 21.34 | 696.08 |
| | | | | | | 4/23/2012 | | 21.94 | 695.48 |
| | | | | | | 7/30/2012 | | 23.23 | 694.19 |
| | | | | | | 11/12/2012 | | 22.09 | 695.33 |
| | | | | | | 3/1/2013 | | 21.12 | 696.30 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 23.02 | 694.40 |
| MW-WES-03b | | 717.41 | 45 | 40 | 45 | 1/18/2012 | | 21.35 | 696.06 |
| | | | | | | 4/23/2012 | | 21.91 | 695.50 |
| | | | | | | 7/30/2012 | | 23.28 | 694.13 |
| | | | | | | 11/12/2012 | | 22.25 | 695.16 |
| | | | | | | 3/1/2013 | | 21.18 | 696.23 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 23.05 | 694.36 |
| MW-WES-04a | | 717.85 | 35 | 30 | 35 | 1/18/2012 | | 20.33 | 697.52 |
| | | | | | | 4/23/2012 | | 20.75 | 697.10 |
| | | | | | | 7/30/2012 | | 21.95 | 695.90 |
| | | | | | | 11/12/2012 | | 21.03 | 696.82 |
| | | | | | | 3/1/2013 | | 20.07 | 697.78 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 21.67 | 696.18 |
| MW-WES-04b | | 717.85 | 45 | 40 | 45 | 1/18/2012 | | 20.29 | 697.56 |
| | | | | | | 4/23/2012 | | 20.78 | 697.07 |
| | | | | | | 7/30/2012 | | 21.98 | 695.87 |
| | | | | | | 11/12/2012 | | 20.99 | 696.86 |
| | | | | | | 3/1/2013 | | 19.91 | 697.94 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 21.62 | 696.23 |
| MW-WES-05a | | 717.04 | 25 | 20 | 25 | 1/18/2012 | | 18.30 | 698.74 |
| | | | | | | 4/23/2012 | | 19.27 | 697.77 |
| | | | | | | 7/30/2012 | | 19.67 | 697.37 |
| | | | | | | 11/12/2012 | | 18.75 | 698.29 |
| | | | | | | 3/1/2013 | | 17.98 | 699.06 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 19.41 | 697.63 |
| MW-WES-05b | | 716.60 | 37.5 | 32.5 | 37.5 | 1/18/2012 | | 19.85 | 696.75 |
| | | | | | | 4/23/2012 | | 19.82 | 696.78 |
| | | | | | | 7/30/2012 | | 20.25 | 696.35 |
| | | | | | | 11/12/2012 | | 19.39 | 697.21 |
| | | | | | | 3/1/2013 | | 18.50 | 698.10 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 19.94 | 696.66 |
| MW-WES-05c | | 715.95 | 50 | 45 | 50 | 1/18/2012 | | 19.26 | 696.69 |
| | | | | | | 4/23/2012 | | 20.22 | 695.73 |
| | | | | | | 7/30/2012 | | 20.65 | 695.30 |
| | | | | | | 11/12/2012 | | 19.81 | 696.14 |
| | | | | | | 3/1/2013 | | 18.90 | 697.05 |
| | | | | | | 5/16/2013 | | NG | |
| | | | | | | 9/17/2013 | | 20.34 | 695.61 |

Table 2
Cumulative Water Level Measurements
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| | Date of Installation | TOC Elevation | TD | Screened Elevation | | Date | DTP | DTW | Elevation |
|---|---|---|---|---|---|---|---|---|---|
| | | | (ft) | (ft-bgs) | | | | (ft below TOC) | (ft-MSL) |
| **Little Eagle Creek Stream Gauge Locations** | | | | | | | | | |
| SG-1 | | 701.78 | | | | 10/17/2011 | | 0.40 | 701.38 |
| | | | | | | 1/18/2012 | | 2.35 | 699.43 |
| | | | | | | 4/23/2012 | | 1.34 | 700.44 |
| | | | | | | 7/30/2012 | | 0.26 | 701.52 |
| | | | | | | 3/1/2013 | | 0.76 | 698.54 |
| | | | | | | 5/16/2013 | | NG | |
| | | 719.82 | | | | 9/17/2013 | | 22.75 | 697.07 |
| SG-2 | | 698.85 | | | | 10/17/2011 | | 0.52 | 698.33 |
| | | | | | | 1/18/2012 | | NG | |
| | | | | | | 1/18/2012 | | NG | |
| | | | | | | 4/23/2012 | | NG | |
| | | | | | | 7/30/2012 | | NG | |
| | | | | | | 3/1/2013 | | NG | |
| | | | | | | 5/16/2013 | | NG | |
| | | 718.36 | | | | 9/17/2013 | | 23.30 | 695.06 |

Notes:
TOC = Top of Casing
TD = Total Depth
DTW = Depth to Water
DTP = Depth to Product

# Table 3

Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **Monitoring Wells (Apts)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| **MMW-1S** | 9/24/2013 | **219** | **96.5** | **74.9** | <5.0 | <5.0 | **45.1** |
| **MMW-8S** | 9/24/2013 | **22.5** | **7.3** | 54.5 | <5.0 | <5.0 | **163** |
| **MMW-9S** | 9/25/2013 | <5.0 | <5.0 | **1,000** | 33.2 | <5.0 | **1,370** |
| **MMW-10S** | 9/25/2013 | **6.6** | **5.2** | **126** | <5.0 | <5.0 | **463** |
| **MMW-11S** | 9/20/2013 | <5.0 | <5.0 | 43.9 | 5.2 | <5.0 | <2.0 |
| **MMW-12S** | 9/20/2013 | <5.0 | <5.0 | **129** | <5.0 | <5.0 | **9.2** |
| **MMW-15S** | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| *Deep Wells* | | | | | | | |
| **MMW-4D** | 9/20/2013 | <5.0 | <5.0 | **260** | <5.0 | <5.0 | **124** |
| **MMW-6D** | 9/20/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **49.4** |
| **MMW-11D** | 9/24/2013 | <5.0 | <5.0 | **524** | 25.3 | <5.0 | **7.7** |
| **MMW-13D** | 9/20/2013 | <5.0 | <5.0 | **664** | <5.0 | <5.0 | **139** |
| **MMW-14D** | 9/20/2013 | <5.0 | <5.0 | **949** | 10.2 | <5.0 | **150** |
| **MMW-15D** | 9/18/2013 | <5.0 | <5.0 | 10.6 | <5.0 | <5.0 | **2.7** |

# Table 3

Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **Monitoring Wells (Plaza)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| **MMW-P-01** | 9/26/2013 | **28.1** | **13.3** | **302** | <5.0 | <5.0 | **1,070** |
| **MMW-P-02** | 9/25/2013 | **11.2** | <5.0 | 22.7 | <5.0 | <5.0 | **165** |
| **MMW-P-03S** | 9/26/2013 | <5.0 | <5.0 | 29.8 | <5.0 | <5.0 | **2,500** |
| **MMW-P-04** | 9/26/2013 | <5.0 | <5.0 | 15.5 | <5.0 | <5.0 | **8.1** |
| **MMW-P-05** | 9/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **248** |
| **MMW-P-06** | 9/26/2013 | <5.0 | <5.0 | **2,280** | 26.4 | <5.0 | **2,590** |
| **MMW-P-07** | 9/25/2013 | <5.0 | <5.0 | 25.1 | <5.0 | <5.0 | **239** |
| **MMW-P-08** | 9/25/2013 | <5.0 | <5.0 | 37.2 | <5.0 | <5.0 | **197** |
| **MMW-P-09S** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| **MMW-P-10S** | 9/25/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| **MMW-P-12S** | 9/24/2013 | <5.0 | <5.0 | **538** | 15.0 | <5.0 | **19.4** |
| *Deep Wells* | | | | | | | |
| **MMW-P-03D** | 9/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **664** |
| **MMW-P-09D** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **67.5** |
| **MMW-P-10D** | 9/25/2013 | <5.0 | <5.0 | **152** | <5.0 | <5.0 | **2,020** |
| **MMW-P-12D** | 9/24/2013 | <5.0 | <5.0 | **813** | 20.0 | <5.0 | **37.8** |

# Table 3

Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **Floral Park Monitoring Wells (Off-site)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| **MMW-C-01** | 9/26/2013 | **12.2** | <5.0 | 11.4 | <5.0 | <5.0 | **19.6** |
| **MMW-C-02S** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| **MMW-C-16S** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| **MMW-P-11S** | 9/24/2013 | **215** | <5.0 | 7.7 | <5.0 | <5.0 | **8.7** |
| **MMW-P-13S** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| **MMW-P-14S** | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| *Deep Wells* | | | | | | | |
| **MMW-C-02D** | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **275** |
| **MMW-C-16D** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **165** |
| **MMW-C-17D** | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **5.6** |
| **MMW-P-11DR** | 9/24/2013 | <5.0 | <5.0 | 8.5 | <5.0 | <5.0 | **101** |
| **MMW-P-13D** | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **120** |
| **MMW-P-14D** | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **94.4** |

# Table 3

Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **Keramida/ENVIRON Monitoring Wells (Off-Site)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| **MW-167S** | 9/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| **MW-168S** | 9/27/2013 | <5.0 | <5.0 | 10.9 | <5.0 | <5.0 | **19.4** |
| **MW-170S** | 9/27/2013 | <5.0 | <5.0 | 12.6 | <5.0 | <5.0 | <2.0 |
| *Deep Wells* | | | | | | | |
| **MW-167D** | 9/27/2013 | <5.0 | <5.0 | **371** | 18.5 | <5.0 | **9.6** |
| **MW-168D** | 9/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **100** |
| **MW-170D** | 9/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **48.0** |

Notes:

Exceedances of IDEM RISC Industrial Default Cleanup Level in **RED**
Exceedances of IDEM RISC Residential Default Cleanup Level in **BLUE**
PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene
NS = Not Sampled
NA = Not Analyzed
All analytical results presented in micrograms per liter (ug/L).

# Table 4

Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **Monitoring Wells (Apts)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| MMW-1S | 9/10/2004 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | <5.0 | **4.1** |
| | 3/15/2005 | **150** | **10.0** | < 5.0 | < 5.0 | < 5.0 | < 2.0 |
| | 11/9/2005 | **130** | **8.3** | <5.0 | <5.0 | <5.0 | **8.9** |
| | 9/5/2006 | **200** | **13.0** | <5.0 | <5.0 | <5.0 | **4.6** |
| | 2/22/2007 | **220** | **14.9** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/14/2007 | **240** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/19/2007 | **362** | **10.5** | <5.0 | <5.0 | 31.6 | <2.0 |
| | 12/13/2007 | **330** | **8.1** | <5.0 | <5.0 | 27.0 | <2.0 |
| | 3/21/2008 | **280** | **14.0** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/6/2008 | **277** | **13.2** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/11/2008 | **288** | **14.7** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/20/2008 | **223** | **45.5** | **169** | <5.0 | <5.0 | **14.5** |
| | 3/16/2009 | **199** | **11.3** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/16/2009 | **237** | **13.4** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/5/2009 | **195** | **22.9** | **71.3** | <5.0 | <5.0 | **9.3** |
| | 11/2/2009 | **189** | **39.0** | **119** | <5.0 | <5.0 | **26.6** |
| | 2/3/2010 | **160** | **49.7** | 59.1 | <5.0 | <5.0 | **35.4** |
| | 4/22/2010 | **206** | **14.7** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/21/2010 | **310** | **21.8** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 10/12/2010 | **89.4** | **21.3** | **208** | <5.0 | <5.0 | **32.2** |
| | 1/19/2011 | **217** | **46.2** | 35.4 | <5.0 | <5.0 | **21.8** |
| | 5/4/2011 | **449** | **22.7** | 12.1 | <5.0 | <5.0 | <2.0 |
| | 7/28/2011 | **334** | **20.3** | 8.1 | <5.0 | <5.0 | **2.1** |
| | 10/19/2011 | **136** | **66.0** | **75.3** | <5.0 | <5.0 | **14.3** |
| | 2/14/2012 | **219** | **9.7** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/25/2012 | **270** | **11.2** | 34.2 | <5.0 | <5.0 | **39.0** |
| | 8/2/2012 | **292** | **27.9** | <5.0 | <5.0 | <5.0 | **28.5** |
| | 11/15/2012 | **413** | **20.0** | 5.1 | <5.0 | <5.0 | <2.0 |
| | 2/28/2013 | **477** | **20.5** | 6.6 | <5.0 | <5.0 | <2.0 |
| | 5/14/2013 | **378** | **17.1** | 8.1 | <5.0 | <5.0 | <2.0 |
| | 9/24/2013 | **219** | **96.5** | 74.9 | <5.0 | <5.0 | **45.1** |
| MMW-2S | 9/10/2004 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/9/2005 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **5.2** |
| | 9/5/2006 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **5.2** |
| | 2/22/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/2/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/15/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/30/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/23/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/10/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MMW-3S | 8/26/2004 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/10/2004 | <5.0 | **5.2** | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/9/2005 | <5.0 | **28.0** | 5.4 | <5.0 | <5.0 | <2.0 |
| | 9/5/2006 | <5.0 | **23.0** | 7.4 | <5.0 | <5.0 | <2.0 |
| | 2/22/2007 | <5.0 | **20.6** | 8.5 | <5.0 | <5.0 | <2.0 |
| | 6/2/2008 | <5.0 | **20.2** | 7.9 | <5.0 | <5.0 | **2.8** |
| | 6/15/2009 | <5.0 | **15.3** | 11.7 | <5.0 | <5.0 | **3.0** |
| | 4/20/2010 | <5.0 | **15.9** | 8.0 | <5.0 | <5.0 | <2.0 |
| | 5/4/2011 | <5.0 | **12.4** | 12.4 | <5.0 | <5.0 | **4.4** |
| | 4/23/2012 | <5.0 | **9.9** | 5.8 | <5.0 | <5.0 | <2.0 |
| | 5/10/2013 | <5.0 | **12.1** | 8.8 | <5.0 | <5.0 | <2.0 |
| MMW-7S | 8/24/2004 | <5.0 | <5.0 | 28.0 | <5.0 | <5.0 | <2.0 |
| | 9/10/2004 | <5.0 | <5.0 | 8.5 | <5.0 | <5.0 | <2.0 |
| | 11/9/2005 | <5.0 | <5.0 | 9.5 | <5.0 | <5.0 | <2.0 |
| | 9/5/2006 | <5.0 | <5.0 | 5.8 | <5.0 | <5.0 | **4.5** |
| | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/2/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/15/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/20/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/4/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/9/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| MMW-8S | 2/22/2007 | 114 | <5.0 | 289 | 13.8 | <5.0 | 40.6 |
| | 6/14/2007 | 15.9 | <5.0 | 364 | 9.5 | <5.0 | 82.1 |
| | 9/19/2007 | <5.0 | <5.0 | 778 | 24.6 | <5.0 | 145 |
| | 12/13/2007 | 7.7 | <5.0 | 1,000 | 7.4 | <5.0 | 586 |
| | 3/20/2008 | <5.0 | <5.0 | 470 | <5.0 | <5.0 | 330 |
| | 6/6/2008 | <5.0 | <5.0 | 336 | <5.0 | <5.0 | 509 |
| | 9/10/2008 | <5.0 | <5.0 | 275 | <5.0 | <5.0 | 322 |
| | 11/20/2008 | <5.0 | <5.0 | 123 | <5.0 | <5.0 | 584 |
| | 3/16/2009 | <5.0 | <5.0 | 95.0 | <5.0 | <5.0 | 348 |
| | 6/16/2009 | <5.0 | <5.0 | 94.3 | 6.1 | <5.0 | 280 |
| | 8/5/2009 | <5.0 | <5.0 | 83.8 | <5.0 | <5.0 | 261 |
| | 11/2/2009 | <5.0 | <5.0 | 58.3 | <5.0 | <5.0 | 277 |
| | 2/3/2010 | 7.9 | <5.0 | 15.3 | <5.0 | <5.0 | 236 |
| | 4/22/2010 | <5.0 | <5.0 | 9.0 | <5.0 | <5.0 | 151 |
| | 7/21/2010 | 6.2 | <5.0 | 14.9 | <5.0 | 5.0 | 230 |
| | 10/12/2010 | 8.4 | <5.0 | 5.4 | <5.0 | <5.0 | 158 |
| | 1/19/2011 | 14.1 | <5.0 | <5.0 | <5.0 | <5.0 | 172 |
| | 4/30/2011 | 677 | 19.5 | 37.2 | <5.0 | <5.0 | 108 |
| | 7/28/2011 | 19.4 | <5.0 | 29.0 | <5.0 | <5.0 | 130 |
| | 10/24/2011 | 7.9 | <5.0 | 9.9 | <5.0 | <5.0 | 200 |
| | 2/14/2012 | <5.0 | <5.0 | 12.6 | <5.0 | <5.0 | 148 |
| | 4/25/2012 | <5.0 | <5.0 | 15.6 | <5.0 | <5.0 | 90.6 |
| | 8/2/2012 | 5.1 | <5.0 | 8.5 | <5.0 | <5.0 | 139 |
| | 11/15/2012 | 6.8 | <5.0 | 10.0 | <5.0 | <5.0 | 127 |
| | 2/28/2013 | 6.2 | <5.0 | 9.4 | <5.0 | <5.0 | 152 |
| | 5/14/2013 | 469 | 17.1 | 37.6 | <5.0 | <5.0 | 55.8 |
| | 9/24/2013 | 22.5 | 7.3 | 54.5 | <5.0 | <5.0 | 163 |
| MMW-9S | 2/22/2007 | 782 | 88.6 | 78.9 | <5.0 | <5.0 | <2.0 |
| | 6/14/2007 | 858 | 85.7 | 65.3 | <5.0 | <5.0 | <2.0 |
| | 9/20/2007 | 1,430 | 112 | 70.3 | 8.2 | <5.0 | <2.0 |
| | 12/12/2007 | <50.0 | <50.0 | 1,700 | <50.0 | <50.0 | <20.0 |
| | 3/21/2008 | 57.0 | 20.0 | 2,900 | 39.0 | <5.0 | 16.0 |
| | 6/6/2008 | 52.9 | 28.0 | 1,540 | 38.2 | <5.0 | 295 |
| | 9/10/2008 | 52.6 | 22.7 | 4,920 | 94.5 | <5.0 | 167 |
| | 11/20/2008 | <5.0 | <5.0 | 5,820 | 90.2 | <5.0 | 1,010 |
| | 3/16/2009 | <50.0 | <50.0 | 7,490 | 73.8 | <50.0 | 1,800 |
| | 6/16/2009 | 44.5 | 24.9 | 4,810 | 64.0 | <5.0 | 876 |
| | 8/5/2009 | <5.0 | <5.0 | 5,010 | 64.2 | <5.0 | 1,110 |
| | 11/2/2009 | <5.0 | <5.0 | 5,410 | 120 | <5.0 | 1,050 |
| | 2/3/2010 | <50.0 | <50.0 | 5,090 | 98.4 | <50.0 | 1,700 |
| | 4/22/2010 | <5.0 | <5.0 | 4,300 | 77.1 | <5.0 | 1,710 |
| | 7/21/2010 | <50.0 | <50.0 | 2,910 | 73.2 | <50.0 | 2,020 |
| | 10/12/2010 | <50.0 | <50.0 | 2,430 | <50.0 | <50.0 | 1,270 |
| | 1/19/2011 | <50.0 | <50.0 | 1,580 | 136 | <50.0 | 1,490 |
| | 5/4/2011 | 11.1 | 13.4 | 2,900 | 71.7 | <5.0 | 1,350 |
| | 7/27/2011 | <5.0 | <5.0 | 933 | 32.0 | <5.0 | 747 |
| | 10/24/2011 | <5.0 | <5.0 | 2,330 | 92.8 | <5.0 | 694 |
| | 2/14/2012 | <25.0 | <25.0 | 2,040 | 60.8 | <25.0 | 1,140 |
| | 4/25/2012 | <5.0 | <5.0 | 1,180 | 30.1 | <5.0 | 753 |
| | 8/2/2012 | <5.0 | <5.0 | 667 | 30.2 | <5.0 | 667 |
| | 11/14/2012 | 9.8 | 5.0 | 2,000 | 58.0 | <5.0 | 893 |
| | 2/28/2013 | 11.5 | 9.2 | 1,990 | 48.6 | <5.0 | 843 |
| | 5/14/2013 | 21.5 | 15.4 | 1,650 | 48.6 | <5.0 | 420 |
| | 9/25/2013 | <5.0 | <5.0 | 1,000 | 33.2 | <5.0 | 1,370 |

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| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| MMW-10S | 2/22/2007 | 49.6 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/14/2007 | 77.6 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/19/2007 | 66.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 12/12/2007 | 124 | 56.0 | 149 | <5.0 | <5.0 | <2.0 |
| | 3/21/2008 | 440 | 12.0 | 8.1 | <5.0 | <5.0 | 12.0 |
| | 6/6/2008 | 541 | 62.1 | 218 | <5.0 | <5.0 | 30.4 |
| | 9/10/2008 | 6.9 | <5.0 | 353 | 8.2 | <5.0 | <2.0 |
| | 11/20/2008 | <5.0 | <5.0 | 212 | <5.0 | <5.0 | 15.9 |
| | 3/16/2009 | <5.0 | <5.0 | 302 | <5.0 | <5.0 | 114 |
| | 6/16/2009 | 22.8 | 15.4 | 415 | 12.0 | <5.0 | 81.4 |
| | 8/5/2009 | <5.0 | <5.0 | 224 | 5.5 | <5.0 | 156 |
| | 11/2/2009 | 12.8 | 10.1 | 239 | 5.6 | <5.0 | 119 |
| | 2/3/2010 | 8.3 | 7.5 | 180 | 5.1 | <5.0 | 148 |
| | 4/22/2010 | <5.0 | 7.9 | 165 | <5.0 | <5.0 | 143 |
| | 7/21/2010 | 15.6 | 9.7 | 267 | 8.3 | <5.0 | 239 |
| | 10/12/2010 | <5.0 | <5.0 | 100 | <5.0 | <5.0 | 96.1 |
| | 1/19/2011 | <5.0 | 14.4 | 80.9 | 12.7 | <5.0 | 88.0 |
| | 5/4/2011 | 429 | 76.6 | 464 | 16.9 | <5.0 | 130 |
| | 7/27/2011 | 24.5 | 14.3 | 206 | 7.2 | <5.0 | 295 |
| | 10/19/2011 | 5.2 | <5.0 | 134 | <5.0 | <5.0 | 198 |
| | 2/14/2012 | 35.0 | 21.6 | 357 | 6.7 | <5.0 | 265 |
| | 4/24/2012 | 54.0 | 23.8 | 194 | 6.1 | <5.0 | 196 |
| | 8/2/2012 | <5.0 | <5.0 | 111 | <5.0 | <5.0 | 256 |
| | 11/15/2012 | 23.0 | 21.7 | 309 | 13.2 | <5.0 | 286 |
| | 2/28/2013 | 41.8 | 25.5 | 294 | 9.2 | <5.0 | 273 |
| | 5/14/2013 | 13.2 | 11.3 | 164 | <5.0 | <5.0 | 347 |
| | 9/25/2013 | 6.6 | 5.2 | 126 | <5.0 | <5.0 | 463 |
| MMW-11S | 6/14/2007 | <5.0 | <5.0 | 225 | 6.8 | <5.0 | 18.6 |
| | 9/19/2007 | <5.0 | <5.0 | 442 | 21.1 | <5.0 | 30.1 |
| | 12/13/2007 | 7.2 | <5.0 | 920 | 27.0 | <5.0 | 49.0 |
| | 3/20/2008 | <5.0 | <5.0 | 420 | 17.0 | <5.0 | 4.9 |
| | 6/5/2008 | <5.0 | <5.0 | 623 | 23.1 | <5.0 | 26.7 |
| | 9/10/2008 | <5.0 | <5.0 | 327 | 18.3 | <5.0 | 9.9 |
| | 11/20/2008 | <5.0 | <5.0 | 554 | 23.9 | <5.0 | 18.5 |
| | 3/16/2009 | <5.0 | <5.0 | 37.6 | <5.0 | <5.0 | <2.0 |
| | 6/16/2009 | <5.0 | <5.0 | 253 | 17.9 | <5.0 | 2.8 |
| | 8/5/2009 | <5.0 | <5.0 | 80.7 | 5.5 | <5.0 | 3.1 |
| | 11/2/2009 | <5.0 | <5.0 | 59.9 | <5.0 | <5.0 | <2.0 |
| | 2/3/2010 | <5.0 | <5.0 | 29.4 | <5.0 | <5.0 | <2.0 |
| | 4/22/2010 | <5.0 | <5.0 | 17.7 | <5.0 | <5.0 | <2.0 |
| | 7/21/2010 | <5.0 | <5.0 | 120 | 7.4 | <5.0 | 4.3 |
| | 10/12/2010 | <5.0 | <5.0 | 85.1 | 5.6 | <5.0 | <2.0 |
| | 1/19/2011 | <5.0 | <5.0 | 46.3 | 12.9 | <5.0 | <2.0 |
| | 4/30/2011 | <5.0 | <5.0 | 8.3 | <5.0 | <5.0 | <2.0 |
| | 7/26/2011 | <5.0 | <5.0 | 15.1 | <5.0 | <5.0 | <2.0 |
| | 10/21/2011 | <5.0 | <5.0 | 33.9 | <5.0 | <5.0 | <2.0 |
| | 2/14/2012 | <5.0 | <5.0 | 5.4 | <5.0 | <5.0 | <2.0 |
| | 4/24/2012 | <5.0 | <5.0 | 42.5 | 5.1 | <5.0 | <2.0 |
| | 7/31/2012 | <5.0 | <5.0 | 62.7 | 5.4 | <5.0 | <2.0 |
| | 11/13/2012 | <5.0 | <5.0 | 27.6 | <5.0 | <5.0 | <2.0 |
| | 3/4/2013 | <5.0 | <5.0 | 5.2 | <5.0 | <5.0 | <2.0 |
| | 5/13/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/20/2013 | <5.0 | <5.0 | 43.9 | 5.2 | <5.0 | <2.0 |

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| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-12S | 6/16/2009 | <5.0 | <5.0 | 9.7 | <5.0 | <5.0 | **6.5** |
| | 8/5/2009 | <5.0 | <5.0 | 47.3 | <5.0 | <5.0 | **15.2** |
| | 11/2/2009 | <5.0 | <5.0 | 28.8 | <5.0 | <5.0 | **7.1** |
| | 2/3/2010 | <5.0 | <5.0 | 11.4 | <5.0 | <5.0 | **2.1** |
| | 4/20/2010 | <5.0 | <5.0 | 5.3 | <5.0 | <5.0 | <2.0 |
| | 7/21/2010 | <5.0 | <5.0 | 25.4 | <5.0 | <5.0 | **7.3** |
| | 10/12/2010 | <5.0 | <5.0 | 16.8 | <5.0 | <5.0 | <2.0 |
| | 1/18/2011 | <5.0 | <5.0 | 19.7 | <5.0 | <5.0 | <2.0 |
| | 4/30/2011 | <5.0 | <5.0 | 30.6 | <5.0 | <5.0 | **2.7** |
| | 7/26/2011 | <5.0 | <5.0 | 24.3 | <5.0 | <5.0 | <2.0 |
| | 10/18/2011 | <5.0 | <5.0 | 39.4 | <5.0 | <5.0 | <2.0 |
| | 2/14/2012 | <5.0 | <5.0 | 24.0 | <5.0 | <5.0 | <2.0 |
| | 4/23/2012 | <5.0 | <5.0 | 45.2 | <5.0 | <5.0 | **2.6** |
| | 7/31/2012 | <5.0 | <5.0 | 46.9 | <5.0 | <5.0 | **3.0** |
| | 11/13/2012 | <5.0 | <5.0 | **84.3** | <5.0 | <5.0 | **5.3** |
| | 3/4/2013 | <5.0 | <5.0 | 42.8 | <5.0 | <5.0 | **2.3** |
| | 5/10/2013 | <5.0 | <5.0 | **71.1** | <5.0 | <5.0 | <2.0 |
| | 9/20/2013 | <5.0 | <5.0 | **129** | <5.0 | <5.0 | **9.2** |
| MMW-15S | 2/15/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/26/2012 | <5.0 | <5.0 | 11.2 | <5.0 | <5.0 | <2.0 |
| | 8/6/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/21/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/6/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/17/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| *Deep Wells* | | | | | | | |
| MMW-4D | 8/25/2004 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/10/2004 | <5.0 | <5.0 | **980** | <5.0 | <5.0 | **200** |
| | 11/10/2005 | <5.0 | <5.0 | **850** | <5.0 | <5.0 | **240** |
| | 9/5/2006 | <5.0 | <5.0 | **1,100** | <5.0 | <5.0 | **220** |
| | 2/22/2007 | <5.0 | <5.0 | **1,460** | <5.0 | <5.0 | **248** |
| | 6/2/2008 | <5.0 | <5.0 | **515** | <5.0 | <5.0 | **32.2** |
| | 6/15/2009 | <5.0 | <5.0 | **892** | 7.0 | <5.0 | **142** |
| | 4/20/2010 | <5.0 | <5.0 | **719** | <5.0 | <5.0 | **237** |
| | 4/29/2011 | <5.0 | <5.0 | **1,050** | <5.0 | <5.0 | **164** |
| | 2/14/2012 | <5.0 | <5.0 | **639** | <5.0 | <5.0 | **237** |
| | 4/23/2012 | <5.0 | <5.0 | **338** | <5.0 | <5.0 | **176** |
| | 7/31/2012 | <5.0 | <5.0 | **347** | <5.0 | <5.0 | **129** |
| | 11/13/2012 | <5.0 | <5.0 | **463** | <5.0 | <5.0 | **164** |
| | 3/5/2013 | <5.0 | <5.0 | **396** | <5.0 | <5.0 | **202** |
| | 5/9/2013 | <5.0 | <5.0 | **418** | <5.0 | <5.0 | **125** |
| | 9/20/2013 | <5.0 | <5.0 | **260** | <5.0 | <5.0 | **124** |
| MMW-5D | 8/24/2004 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/10/2004 | <5.0 | <5.0 | **3,400** | 13.0 | <5.0 | **270** |
| | 11/10/2005 | <5.0 | <5.0 | **3,900** | 19.0 | <5.0 | **140** |
| | 9/5/2006 | <50.0 | <50 | **2,500** | <50 | <5.0 | **170** |
| | 2/22/2007 | <50.0 | <50 | **3,970** | <50 | <5.0 | **359** |
| | 6/2/2008 | <5.0 | <5.0 | **1,360** | 19.9 | <5.0 | **207** |
| | 6/15/2009 | <5.0 | <5.0 | **1,110** | 14.5 | <5.0 | **242** |
| | 4/20/2010 | <5.0 | <5.0 | **943** | <5.0 | <5.0 | **204** |
| | 4/29/2011 | <5.0 | <5.0 | **659** | <5.0 | <5.0 | **166** |
| | 4/23/2012 | <5.0 | <5.0 | **228** | <5.0 | <5.0 | **126** |
| | 5/9/2013 | <5.0 | <5.0 | **467** | <5.0 | <5.0 | **168** |

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| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-6D | 9/10/2004 | <5.0 | <5.0 | **540** | <5.0 | <5.0 | **400** |
| | 11/10/2005 | <5.0 | <5.0 | **750** | <5.0 | <5.0 | **700** |
| | 9/5/2006 | <5.0 | <5.0 | **300** | <5.0 | <5.0 | **440** |
| | 2/21/2007 | <5.0 | <5.0 | **171** | <5.0 | <5.0 | **282** |
| | 6/2/2008 | <5.0 | <5.0 | 65.5 | <5.0 | <5.0 | **242** |
| | 6/15/2009 | <5.0 | <5.0 | 8.6 | <5.0 | <5.0 | **111** |
| | 4/20/2010 | <5.0 | <5.0 | 8.2 | <5.0 | <5.0 | **63.6** |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **51.1** |
| | 2/14/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **43.9** |
| | 4/23/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **38.5** |
| | 7/31/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **38.1** |
| | 11/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **57.5** |
| | 3/5/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **61.1** |
| | 5/9/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **37.4** |
| | 9/20/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **49.4** |

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| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-11D | 6/16/2009 | <5.0 | <5.0 | **25.3** | 6.7 | <5.0 | <2.0 |
| | 8/5/2009 | <5.0 | <5.0 | **485** | 22.6 | <5.0 | **15.3** |
| | 11/2/2009 | <5.0 | <5.0 | **771** | 31.8 | <5.0 | **18.8** |
| | 2/3/2010 | <5.0 | <5.0 | **301** | 28.2 | <5.0 | **5.2** |
| | 4/22/2010 | <5.0 | <5.0 | **307** | 21.8 | <5.0 | **2.6** |
| | 7/21/2010 | <5.0 | <5.0 | **396** | 21.8 | <5.0 | **10.9** |
| | 10/12/2010 | <5.0 | <5.0 | **162** | <5.0 | <5.0 | <2.0 |
| | 1/19/2011 | <5.0 | <5.0 | **570** | 26.7 | <5.0 | **5.9** |
| | 4/30/2011 | <5.0 | <5.0 | **356** | 17.2 | <5.0 | **3.6** |
| | 7/26/2011 | <5.0 | <5.0 | **304** | 18.3 | <5.0 | **3.6** |
| | 10/21/2011 | <5.0 | <5.0 | **751** | 22.7 | <5.0 | **11.8** |
| | 2/14/2012 | <5.0 | <5.0 | **240** | 19.0 | <5.0 | <2.0 |
| | 4/24/2012 | <5.0 | <5.0 | **186** | 13.0 | <5.0 | <2.0 |
| | 7/31/2012 | <5.0 | <5.0 | **310** | 20.3 | <5.0 | **3.2** |
| | 11/13/2012 | <5.0 | <5.0 | **309** | 14.6 | <5.0 | **2.9** |
| | 3/4/2013 | <5.0 | <5.0 | **221** | 18.9 | <5.0 | <2.0 |
| | 5/13/2013 | <5.0 | <5.0 | **170** | 10.8 | <5.0 | <2.0 |
| | 9/24/2013 | <5.0 | <5.0 | **524** | 25.3 | <5.0 | **7.7** |
| MMW-13D | 8/5/2009 | <5.0 | <5.0 | **672** | <5.0 | <5.0 | **59.2** |
| | 11/2/2009 | <5.0 | <5.0 | **949** | <5.0 | <5.0 | **182** |
| | 2/3/2010 | <5.0 | <5.0 | **819** | 6.2 | <5.0 | **260** |
| | 4/22/2010 | <5.0 | <5.0 | **469** | <5.0 | <5.0 | **4.6** |
| | 7/21/2010 | <5.0 | <5.0 | **432** | <5.0 | <5.0 | **16.6** |
| | 10/12/2010 | <5.0 | <5.0 | **1,200** | <5.0 | <5.0 | **187** |
| | 1/19/2011 | <5.0 | <5.0 | **920** | 12.3 | <5.0 | **179** |
| | 4/30/2011 | <5.0 | <5.0 | **527** | <5.0 | <5.0 | **15.4** |
| | 7/26/2011 | <5.0 | <5.0 | **328** | <5.0 | <5.0 | **11.9** |
| | 10/18/2011 | <5.0 | <5.0 | **771** | 5.2 | <5.0 | **140** |
| | 2/14/2012 | <5.0 | <5.0 | **331** | <5.0 | <5.0 | **9.9** |
| | 4/24/2012 | <5.0 | <5.0 | **422** | <5.0 | <5.0 | **46.7** |
| | 7/31/2012 | <5.0 | <5.0 | **684** | <5.0 | <5.0 | **147** |
| | 11/13/2012 | <5.0 | <5.0 | **765** | <5.0 | <5.0 | **135** |
| | 3/4/2013 | <5.0 | <5.0 | **374** | <5.0 | <5.0 | **21.7** |
| | 5/10/2013 | <5.0 | <5.0 | **196** | <5.0 | <5.0 | **7.5** |
| | 9/20/2013 | <5.0 | <5.0 | **664** | <5.0 | <5.0 | **139** |
| MMW-13D Low | 6/16/2009 | <5.0 | <5.0 | **613** | 10.4 | <5.0 | **17.3** |
| MMW-13D Medium (29') | 6/16/2009 | <5.0 | <5.0 | **578** | 12.1 | <5.0 | **14.9** |
| MMW-13D High (17') | 6/16/2009 | <5.0 | <5.0 | **597** | 9.7 | <5.0 | **21.1** |
| MMW-14D | 6/16/2009 | <5.0 | <5.0 | **648** | 15.6 | <5.0 | **57.6** |
| | 8/5/2009 | <5.0 | <5.0 | **589** | 10.9 | <5.0 | **79.1** |
| | 11/2/2009 | <5.0 | <5.0 | **541** | 9.2 | <5.0 | **83.8** |
| | 2/3/2010 | <5.0 | <5.0 | **871** | 13.9 | <5.0 | **84.9** |
| | 4/20/2010 | <5.0 | <5.0 | **763** | 14.1 | <5.0 | **72.8** |
| | 7/21/2010 | <5.0 | <5.0 | **805** | 14.6 | <5.0 | **60.8** |
| | 10/12/2010 | <5.0 | <5.0 | **775** | 8.4 | <5.0 | **83.3** |
| | 1/18/2011 | <5.0 | <5.0 | **785** | 24.0 | <5.0 | **109** |
| | 4/30/2011 | <5.0 | <5.0 | **1,070** | 14.7 | <5.0 | **68.3** |
| | 7/26/2011 | <5.0 | <5.0 | **875** | 15.3 | <5.0 | **81.0** |
| | 10/19/2011 | <5.0 | <5.0 | **898** | 11.1 | <5.0 | **92.6** |
| | 2/14/2012 | <5.0 | <5.0 | **1080** | 17.4 | <5.0 | **89.7** |
| | 4/23/2012 | <5.0 | <5.0 | **996** | 11.0 | <5.0 | **79.6** |
| | 7/31/2012 | <5.0 | <5.0 | **795** | 13.5 | <5.0 | **95.1** |
| | 11/13/2012 | <5.0 | <5.0 | **1010** | 10.0 | <5.0 | **105** |
| | 3/4/2013 | <5.0 | <5.0 | **983** | 16.2 | <5.0 | **96.4** |
| | 5/10/2013 | <5.0 | <5.0 | **830** | 12.8 | <5.0 | **57.9** |
| | 9/20/2013 | <5.0 | <5.0 | **949** | 10.2 | <5.0 | **150** |
| MMW-15D | 2/15/2012 | <5.0 | <5.0 | 7.3 | <5.0 | <5.0 | <2.0 |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/6/2012 | <5.0 | <5.0 | 11.6 | <5.0 | <5.0 | **3.1** |
| | 11/21/2012 | <5.0 | <5.0 | 10.6 | <5.0 | <5.0 | <2.0 |
| | 3/6/2013 | <5.0 | <5.0 | 10 | <5.0 | <5.0 | **2.7** |
| | 5/17/2013 | <5.0 | <5.0 | 9.8 | <5.0 | <5.0 | <2.0 |
| | 9/18/2013 | <5.0 | <5.0 | 10.6 | <5.0 | <5.0 | **2.7** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| **Monitoring Wells (Plaza)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| MMW-P-01 | 11/9/2005 | 33 | 210 | 160 | 9.6 | <5.0 | 76.0 |
| | 2/22/2007 | 85.2 | 356 | 274 | 16.7 | <5.0 | 28.7 |
| | 6/14/2007 | 111 | 368 | 350 | 10.0 | <5.0 | 79.6 |
| | 9/20/2007 | 206 | 322 | 300 | 11.5 | <5.0 | 127 |
| | 12/14/2007 | 230 | 320 | 240 | 7.1 | <5.0 | 87.0 |
| | 3/21/2008 | 120 | 170 | 3,100 | 25.0 | <5.0 | 42.0 |
| | 6/5/2008 | 22.0 | 31.5 | 3,660 | 68.6 | <5.0 | 123 |
| | 9/11/2008 | 14.2 | 15.1 | 1,690 | <5.0 | <5.0 | 87.7 |
| | 11/19/2008 | <5.0 | <5.0 | 4,320 | <5.0 | <5.0 | 116 |
| | 3/17/2009 | 17.5 | 22.6 | 12,300 | 143 | <5.0 | 3,290 |
| | 6/17/2009 | <50.0 | <50.0 | 4,020 | 63.9 | <50.0 | 1,840 |
| | 8/6/2009 | 97.4 | <50.0 | 12,200 | <50.0 | <50.0 | 3,730 |
| | 11/3/2009 | 103 | 58.3 | 9,330 | <50.0 | <50.0 | 4,770 |
| | 2/4/2010 | 104 | 60.6 | 9,190 | 130 | <50.0 | 13,600 |
| | 4/22/2010 | 90.5 | 79.0 | 9,400 | 94.7 | <50.0 | 12,600 |
| | 7/7/2010 | <50.0 | <50.0 | 1,880 | <50.0 | <50.0 | 2,960 |
| | 10/14/2010 | <125 | <125 | 4,760 | <125 | <125 | 5,440 |
| | 1/20/2011 | 153 | 140 | 1,960 | <50.0 | <50.0 | 11,100 |
| | 5/5/2011 | 8.4 | 26.8 | 281 | <5.0 | <5.0 | 232 |
| | 7/28/2011 | 5.7 | 6.0 | 734 | <5.0 | <5.0 | 1,070 |
| | 10/24/2011 | 23.4 | 10.0 | 839 | 9.10 | <5.0 | 1,410 |
| | 2/13/2012 | 15.0 | <5.0 | 438 | <5.0 | <5.0 | 2,270 |
| | 4/25/2012 | 21.8 | 11.0 | 459 | 8.1 | <5.0 | 1,720 |
| | 8/2/2012 | 12.0 | 8.0 | 377 | <5.0 | <5.0 | 1,680 |
| | 11/14/2012 | 24.5 | 13.1 | 619 | 14.1 | <5.0 | 3,060 |
| | 3/4/2013 | 24.4 | 12.4 | 527 | 12.9 | <5.0 | 2,810 |
| | 5/15/2013 | 8.5 | 15.4 | 173 | <5.0 | <5.0 | 785 |
| | 9/26/2013 | 28.1 | 13.3 | 302 | 8.1 | <5.0 | 1,070 |
| MMW-P-02 | 11/8/2005 | 24.0 | <5.0 | 87.0 | 7.3 | <5.0 | 49.0 |
| | 2/22/2007 | 184 | <5.0 | 39.4 | <5.0 | <5.0 | 27.4 |
| | 6/14/2007 | 17.1 | <5.0 | 35.0 | <5.0 | <5.0 | 27.5 |
| | 9/19/2007 | 13.3 | <5.0 | 66.3 | 5.6 | <5.0 | 50.1 |
| | 12/13/2007 | 7.8 | <5.0 | 69.0 | <5.0 | <5.0 | 53.0 |
| | 3/20/2008 | 19.0 | <5.0 | 67.0 | <5.0 | <5.0 | 42.0 |
| | 6/5/2008 | 94.9 | <5.0 | 44.0 | <5.0 | <5.0 | 46.4 |
| | 9/11/2008 | 17.5 | <5.0 | 46.6 | <5.0 | <5.0 | 42.0 |
| | 11/19/2008 | 10.7 | <5.0 | 75.4 | <5.0 | <5.0 | 69.5 |
| | 3/17/2009 | 23.4 | <5.0 | 65.4 | 5.3 | <5.0 | 68.4 |
| | 6/17/2009 | 5.1 | <5.0 | 54.2 | 9.2 | <5.0 | 80.6 |
| | 8/6/2009 | 5.1 | <5.0 | 55.8 | <5.0 | <5.0 | 56.2 |
| | 11/3/2009 | 11.1 | <5.0 | 60.1 | <5.0 | <5.0 | 73.9 |
| | 2/4/2010 | 7.4 | <5.0 | 75.8 | 5.8 | <5.0 | 104 |
| | 4/22/2010 | 9.9 | 6.8 | 56.0 | 8.0 | <5.0 | 110 |
| | 7/21/2010 | 24.0 | <5.0 | 72.4 | <5.0 | <5.0 | 161 |
| | 10/13/2010 | 9.3 | <5.0 | 61.0 | <5.0 | <5.0 | 95.0 |
| | 1/19/2011 | 15.9 | <5.0 | 64.3 | 14.0 | <5.0 | 396 |
| | 5/4/2011 | 9.2 | <5.0 | 56.5 | <5.0 | <5.0 | 386 |
| | 7/27/2011 | <5.0 | <5.0 | 42.9 | <5.0 | <5.0 | 218 |
| | 10/19/2011 | 9.1 | <5.0 | 36.9 | <5.0 | <5.0 | 304 |
| | 2/13/2012 | <5.0 | <5.0 | 120.0 | <5.0 | <5.0 | 479 |
| | 4/25/2012 | <5.0 | <5.0 | 53.4 | <5.0 | <5.0 | 274 |
| | 8/1/2012 | 6.4 | <5.0 | 34.2 | <5.0 | <5.0 | 257 |
| | 11/14/2012 | 6.7 | <5.0 | 54.0 | <5.0 | <5.0 | 803 |
| | 3/4/2013 | <5.0 | <5.0 | 52.5 | <5.0 | <5.0 | 347 |
| | 5/14/2013 | <5.0 | <5.0 | 27.9 | <5.0 | <5.0 | 142 |
| | 9/25/2013 | 11.2 | <5.0 | 22.7 | <5.0 | <5.0 | 165 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-P-03S | 11/9/2005 | **110** | <5.0 | **97.0** | 9.6 | <5.0 | <2.0 |
| | 2/22/2007 | **397** | <5.0 | **105** | 10.0 | <5.0 | <2.0 |
| | 6/14/2007 | **256** | <5.0 | **96.4** | 9.2 | <5.0 | **9.3** |
| | 9/20/2007 | **144** | <5.0 | **131** | 15.8 | <5.0 | **16.0** |
| | 12/13/2007 | **67.0** | <5.0 | **88.0** | 5.3 | <5.0 | **15.0** |
| | 3/20/2008 | **130** | <5.0 | **84.0** | 7.3 | <5.0 | **10.0** |
| | 6/5/2008 | **19.4** | <5.0 | **380** | 14.9 | <5.0 | **10.6** |
| | 9/11/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **72.6** |
| | 11/19/2008 | <5.0 | **6.0** | **494** | <5.0 | <5.0 | **40.8** |
| | 3/17/2009 | **7.5** | <5.0 | **904** | 38.7 | <5.0 | **283** |
| | 6/17/2009 | <5.0 | <5.0 | **332** | 22.3 | <5.0 | **759** |
| | 8/6/2009 | **30.6** | **8.2** | **573** | 25.0 | <5.0 | **843** |
| | 11/3/2009 | <5.0 | <5.0 | **141** | 16.1 | <5.0 | **379** |
| | 2/4/2010 | <5.0 | <5.0 | **155** | 19.4 | <5.0 | **382** |
| | 4/22/2010 | **14.2** | **8.9** | **156** | 13.4 | <5.0 | **377** |
| | 7/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **141** |
| | 10/13/2010 | <5.0 | <5.0 | **70.9** | 9.2 | <5.0 | **542** |
| | 1/19/2011 | <5.0 | <5.0 | **79.7** | 19.4 | <5.0 | **338** |
| | 5/4/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/27/2011 | <5.0 | <5.0 | 29.3 | <5.0 | <5.0 | **245** |
| | 10/19/2011 | <5.0 | <5.0 | 33.5 | 6.6 | <5.0 | **446** |
| | 2/13/2012 | <5.0 | <5.0 | 48.0 | <5.0 | <5.0 | **221** |
| | 4/25/2012 | <5.0 | <5.0 | 18.4 | <5.0 | <5.0 | **257** |
| | 8/1/2012 | <5.0 | <5.0 | 16.1 | <5.0 | <5.0 | **294** |
| | 11/14/2012 | <5.0 | <5.0 | 12.3 | <5.0 | <5.0 | **113** |
| | 3/4/2013 | <5.0 | <5.0 | 49.4 | <5.0 | <5.0 | **124** |
| | 5/14/2013 | <5.0 | <5.0 | 31.6 | <5.0 | <5.0 | **176** |
| | 9/26/2013 | <5.0 | <5.0 | 29.8 | <5.0 | <5.0 | **2,500** |
| MMW-P-04 | 11/9/2005 | **180** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/22/2007 | **315** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/14/2007 | **268** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/20/2007 | **214** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 12/13/2007 | **62.0** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/20/2008 | **120** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/6/2008 | **154** | **6.0** | 59.7 | <5.0 | <5.0 | <2.0 |
| | 9/11/2008 | **31.9** | <5.0 | **360** | 7.1 | <5.0 | <2.0 |
| | 11/19/2008 | **45.0** | <5.0 | **248** | <5.0 | <5.0 | <2.0 |
| | 3/18/2009 | **19.4** | **5.4** | **304** | 10.8 | <5.0 | <2.0 |
| | 6/17/2009 | **35.3** | **5.4** | **827** | 22.0 | <5.0 | **2.0** |
| | 8/6/2009 | <5.0 | <5.0 | 15.1 | <5.0 | <5.0 | <2.0 |
| | 11/5/2009 | <5.0 | <5.0 | **1,190** | 36.9 | <5.0 | **90.9** |
| | 2/12/2010 | <5.0 | <5.0 | **144** | 8.3 | <5.0 | **224** |
| | 4/21/2010 | <5.0 | <5.0 | **268** | 15.8 | <5.0 | **364** |
| | 7/22/2010 | <5.0 | <5.0 | **189** | 12.9 | <5.0 | **402** |
| | 10/13/2010 | <5.0 | <5.0 | 10.3 | <5.0 | <5.0 | **16.8** |
| | 2/18/2011 | <5.0 | <5.0 | 6.4 | <5.0 | <5.0 | **36.3** |
| | 5/5/2011 | **144** | <5.0 | **76.2** | <5.0 | <5.0 | **124** |
| | 7/28/2011 | <5.0 | <5.0 | 30.6 | <5.0 | <5.0 | **78.8** |
| | 10/24/2011 | <5.0 | <5.0 | 14.8 | <5.0 | <5.0 | **68.7** |
| | 2/16/2012 | <5.0 | <5.0 | 6.9 | <5.0 | <5.0 | **16.1** |
| | 5/1/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **5.7** |
| | 8/10/2012 | <5.0 | <5.0 | 5.8 | <5.0 | <5.0 | **2.7** |
| | 11/21/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/9/2013 | **28.2** | <5.0 | 50.1 | <5.0 | <5.0 | **6.1** |
| | 5/20/2013 | **45.7** | **11.3** | **102** | <5.0 | <5.0 | **10.3** |
| | 9/26/2013 | <5.0 | <5.0 | 15.5 | <5.0 | <5.0 | **8.1** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-P-05 | 11/8/2005 | <5.0 | <5.0 | 6.2 | <5.0 | <5.0 | <2.0 |
| | 2/22/2007 | **23.7** | <5.0 | 9.1 | <5.0 | <5.0 | <2.0 |
| | 6/14/2007 | <5.0 | <5.0 | 18.8 | <5.0 | <5.0 | <2.0 |
| | 9/19/2007 | <5.0 | <5.0 | 18.8 | <5.0 | <5.0 | <2.0 |
| | 12/14/2007 | <5.0 | <5.0 | 14.8 | <5.0 | <5.0 | <2.0 |
| | 3/20/2008 | <5.0 | <5.0 | 8.1 | <5.0 | <5.0 | <2.0 |
| | 6/5/2008 | <5.0 | <5.0 | 15.6 | <5.0 | <5.0 | <2.0 |
| | 9/11/2008 | <5.0 | <5.0 | 16.7 | <5.0 | <5.0 | <2.0 |
| | 11/19/2008 | <5.0 | <5.0 | 22.1 | <5.0 | <5.0 | <2.0 |
| | 3/17/2009 | <5.0 | <5.0 | 13.7 | <5.0 | <5.0 | <2.0 |
| | 6/17/2009 | <5.0 | <5.0 | 10.9 | 6.6 | <5.0 | <2.0 |
| | 8/6/2009 | <5.0 | <5.0 | 15.1 | <5.0 | <5.0 | <2.0 |
| | 11/3/2009 | <5.0 | <5.0 | 7.6 | <5.0 | <5.0 | **2.7** |
| | 2/4/2010 | <5.0 | <5.0 | 6.8 | <5.0 | <5.0 | <2.0 |
| | 4/22/2010 | <5.0 | <5.0 | 8.6 | <5.0 | <5.0 | <2.0 |
| | 7/21/2010 | <5.0 | <5.0 | 10.4 | <5.0 | <5.0 | **5.3** |
| | 10/13/2010 | <5.0 | <5.0 | 13.6 | <5.0 | <5.0 | **3.9** |
| | 1/20/2011 | <5.0 | <5.0 | 14.1 | <5.0 | <5.0 | <2.0 |
| | 4/30/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **9.2** |
| | 7/27/2011 | <5.0 | <5.0 | 10.3 | <5.0 | <5.0 | **307** |
| | 10/19/2011 | <5.0 | <5.0 | 8.3 | <5.0 | <5.0 | **48.3** |
| | 2/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **79.4** |
| | 4/25/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **80.9** |
| | 8/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **157** |
| | 11/14/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **151** |
| | 3/4/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **173** |
| | 5/14/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **249** |
| | 9/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **248** |
| MMW-P-06 | 11/8/2005 | <5.0 | <5.0 | **200** | 24.0 | <5.0 | **21.0** |
| | 2/22/2007 | <5.0 | <5.0 | **158** | 19.2 | <5.0 | <2.0 |
| | 6/14/2007 | <5.0 | <5.0 | **214** | 22.7 | <5.0 | **13.3** |
| | 9/19/2007 | <5.0 | <5.0 | **283** | 38.2 | <5.0 | **26.1** |
| | 12/14/2007 | <5.0 | <5.0 | **260** | 40.0 | <5.0 | **31.0** |
| | 3/20/2008 | <5.0 | <5.0 | **250** | 31.0 | <5.0 | **26.0** |
| | 6/5/2008 | <5.0 | <5.0 | **265** | 30.9 | <5.0 | **40.1** |
| | 9/11/2008 | <5.0 | <5.0 | **271** | 33.3 | <5.0 | <2.0 |
| | 11/19/2008 | <5.0 | <5.0 | **292** | <5.0 | <5.0 | **61.4** |
| | 3/17/2009 | <5.0 | <5.0 | **292** | 35.3 | <5.0 | <2.0 |
| | 6/17/2009 | <5.0 | <5.0 | **145** | 22.2 | <5.0 | **90.6** |
| | 8/6/2009 | <5.0 | <5.0 | **136** | 14.3 | <5.0 | **301** |
| | 11/3/2009 | <5.0 | <5.0 | **107** | 15.2 | <5.0 | **292** |
| | 2/4/2010 | <5.0 | <5.0 | **79.1** | 11.2 | <5.0 | **1,870** |
| | 4/22/2010 | <5.0 | <5.0 | 23.7 | 8.0 | <5.0 | **2,470** |
| | 7/21/2010 | <50.0 | <50.0 | <50.0 | <50.0 | <50.0 | **5,870** |
| | 10/14/2010 | <100 | <100 | <100 | <100 | <100 | **12,900** |
| | 1/20/2011 | <100 | <100 | **2,700** | <100 | <100 | **15,000** |
| | 5/4/2011 | <50.0 | <50.0 | **2,850** | <50.0 | <50.0 | **14,400** |
| | 7/28/2011 | <50.0 | <50.0 | **1,670** | <50.0 | <50.0 | **15,600** |
| | 10/24/2011 | <50.0 | <50.0 | **10,100** | <50.0 | <50.0 | **11,300** |
| | 2/13/2012 | <50.0 | <50.0 | **2,800** | <50.0 | <50.0 | **10,100** |
| | 4/26/2012 | <5.0 | <5.0 | **3,220** | 29.2 | <5.0 | **7,090** |
| | 8/2/2012 | <5.0 | <5.0 | **6,420** | 47.0 | <5.0 | **6,510** |
| | 11/14/2012 | <5.0 | <5.0 | **4,640** | <5.0 | <5.0 | **6,170** |
| | 3/4/2013 | <50.0 | <50.0 | **2,230** | <50.0 | <50.0 | **5,010** |
| | 5/15/2013 | <50.0 | <50.0 | **1,260** | <50.0 | <50.0 | **1,320** |
| | 9/26/2013 | <5.0 | <5.0 | **2,280** | <5.0 | <5.0 | **2,590** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| MMW-P-07 | 2/22/2007 | 3,060 | 81.5 | 82.0 | 8.8 | <5.0 | <2.0 |
| | 6/14/2007 | 2,850 | 90.0 | 82.5 | <50.0 | <50.0 | <20.0 |
| | 9/20/2007 | 5,200 | 109 | 121 | 16.1 | <5.0 | 2.0 |
| | 12/13/2007 | 1,440 | 157 | 930 | 8.8 | 7.4 | 80.0 |
| | 3/21/2008 | 31.0 | 7.6 | 1,700 | 27.0 | <5.0 | 110 |
| | 6/5/2008 | <5.0 | <5.0 | 938 | 15.6 | <5.0 | 466 |
| | 9/11/2008 | <5.0 | <5.0 | 1,870 | 55.2 | <5.0 | 1,620 |
| | 11/19/2008 | <5.0 | <5.0 | 797 | <5.0 | <5.0 | 749 |
| | 3/17/2009 | <5.0 | <5.0 | 361 | 17.7 | <5.0 | 1,830 |
| | 6/17/2009 | <5.0 | <5.0 | 87.1 | 9.4 | <5.0 | 1,130 |
| | 8/6/2009 | <5.0 | <5.0 | 48.7 | <5.0 | <5.0 | 787 |
| | 11/3/2009 | <5.0 | <5.0 | 809 | 14.1 | <5.0 | 1,510 |
| | 2/4/2010 | <5.0 | <5.0 | 555 | 12.4 | <5.0 | 1,880 |
| | 4/22/2010 | <5.0 | 7.0 | 1,050 | 23.7 | <5.0 | 2,080 |
| | 7/22/2010 | <5.0 | <5.0 | 247 | 7.8 | <5.0 | 1,680 |
| | 10/14/2010 | <25.0 | <25.0 | 665 | <25.0 | <25.0 | 2,310 |
| | 1/20/2011 | <5.0 | <5.0 | 295 | 13.9 | <5.0 | 562 |
| | 5/4/2011 | <5.0 | <5.0 | 72.0 | <5.0 | <5.0 | 2,170 |
| | 7/28/2011 | <5.0 | <5.0 | 73.6 | <5.0 | <5.0 | 978 |
| | 10/24/2011 | <5.0 | <5.0 | 37.3 | <5.0 | <5.0 | 388 |
| | 2/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 330 |
| | 4/25/2012 | <5.0 | <5.0 | 11.6 | <5.0 | <5.0 | 266 |
| | 8/2/2012 | <5.0 | <5.0 | 33.7 | <5.0 | <5.0 | 405 |
| | 11/14/2012 | <5.0 | <5.0 | 42.2 | <5.0 | <5.0 | 607 |
| | 3/4/2013 | <5.0 | <5.0 | 23.9 | <5.0 | <5.0 | 386 |
| | 5/14/2013 | <5.0 | <5.0 | 46.2 | <5.0 | <5.0 | 283 |
| | 9/25/2013 | <5.0 | <5.0 | 25.1 | <5.0 | <5.0 | 239 |
| MMW-P-08 | 2/22/2007 | 6,280 | 281 | 240 | 26.7 | <5.0 | <2.0 |
| | 6/14/2007 | 6,440 | 310 | 169 | <50.0 | <50.0 | <20.0 |
| | 9/20/2007 | 9,780 | 494 | 201 | 25.3 | <5.0 | 6.5 |
| | 12/14/2007 | 390 | 210 | 5,800 | <50.0 | <50.0 | <20.0 |
| | 3/21/2008 | 6.7 | 11.0 | 6,500 | 130 | <5.0 | 55.0 |
| | 6/5/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 562 |
| | 9/11/2008 | 5.8 | 5.0 | 18,300 | 686 | <50.0 | 4,740 |
| | 11/19/2008 | <50.0 | <50.0 | 5,690 | 91.4 | <50.0 | 13,000 |
| | 3/17/2009 | <5.0 | <5.0 | 1,130 | 47.1 | <5.0 | 5,680 |
| | 6/17/2009 | <125 | <125 | 356 | 145 | <5.0 | 7,200 |
| | 8/6/2009 | <125 | <125 | 601 | <50.0 | <50.0 | 8,960 |
| | 11/3/2009 | <50.0 | <50.0 | 86.7 | <50.0 | <50.0 | 2,860 |
| | 2/4/2010 | <50.0 | <50.0 | 1,140 | <50.0 | <50.0 | 4,860 |
| | 4/22/2010 | <5.0 | <5.0 | 45.7 | 8.1 | <5.0 | 2,180 |
| | 7/22/2010 | <5.0 | <5.0 | 97.8 | <5.0 | <5.0 | 1,320 |
| | 10/14/2010 | <25.0 | <25.0 | 39.5 | <25.0 | <25.0 | 676 |
| | 1/20/2011 | <5.0 | <5.0 | 590 | 14.8 | <25.0 | 1,770 |
| | 5/4/2011 | <5.0 | <5.0 | 288 | <5.0 | <5.0 | 2,030 |
| | 7/27/2011 | <5.0 | <5.0 | 35.9 | <5.0 | <5.0 | 274 |
| | 10/24/2011 | <5.0 | <5.0 | 32.5 | <5.0 | <5.0 | 136 |
| | 2/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 52.5 |
| | 4/25/2012 | <5.0 | <5.0 | 5.0 | <5.0 | <5.0 | 85.2 |
| | 8/2/2012 | <5.0 | <5.0 | 879 | 13.9 | <5.0 | 561 |
| | 11/14/2012 | <5.0 | <5.0 | 18.4 | <5.0 | <5.0 | 436 |
| | 3/4/2013 | <5.0 | <5.0 | 111 | <5.0 | <5.0 | 934 |
| | 5/14/2013 | <5.0 | <5.0 | 737 | 5.2 | <5.0 | 2,040 |
| | 9/25/2013 | <5.0 | <5.0 | 37.2 | <5.0 | <5.0 | 197 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-P-09S | 2/22/2007 | **10.0** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/14/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/19/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 12/12/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/20/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/5/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/11/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/19/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/16/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/6/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/3/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/3/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 10/13/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 1/19/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/30/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/26/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 10/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/15/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/24/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/1/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/5/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/13/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MMW-P-10S | 6/14/2007 | **36.1** | **36.3** | 61.6 | 6.9 | <5.0 | <2.0 |
| | 7/6/2007 | **87.9** | **54.9** | **92.1** | 10.2 | <5.0 | <2.0 |
| | 9/19/2007 | **192** | **82.6** | **126** | 14.4 | <5.0 | <2.0 |
| | 12/14/2007 | **71.0** | <5.0 | <5.0 | <5.0 | <5.0 | **2.4** |
| | 3/20/2008 | **26.8** | **19.2** | **250** | 12.2 | <5.0 | <2.0 |
| | 6/5/2008 | **15.0** | **9.7** | **537** | 16.0 | <5.0 | **114** |
| | 9/11/2008 | **74.8** | **36.5** | **1,650** | 74.0 | <5.0 | **27.7** |
| | 11/19/2008 | **78.6** | **28.0** | **1,510** | <5.0 | <5.0 | **22.3** |
| | 3/17/2009 | **11.9** | **8.6** | **1,160** | 71.5 | <5.0 | <2.0 |
| | 6/17/2009 | <5.0 | <5.0 | **331** | 20.5 | <5.0 | **63.9** |
| | 8/6/2009 | <5.0 | <5.0 | **158** | 16.1 | <5.0 | **395** |
| | 11/3/2009 | <5.0 | <5.0 | 29.6 | <5.0 | <5.0 | **288** |
| | 2/4/2010 | <5.0 | <5.0 | 45.4 | <5.0 | <5.0 | **419** |
| | 4/22/2010 | <5.0 | <5.0 | 16.2 | <5.0 | <5.0 | **118** |
| | 7/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **16.5** |
| | 10/14/2010 | <5.0 | <5.0 | 5.4 | <5.0 | <5.0 | **381** |
| | 1/20/2011 | <5.0 | <5.0 | 11.7 | <5.0 | <5.0 | **27.8** |
| | 5/5/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/27/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **12.5** |
| | 10/21/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/25/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **26.8** |
| | 11/14/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.3** |
| | 2/28/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/15/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.3** |
| | 9/25/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MMW-P-12S | 9/9/2011 | <5.0 | <5.0 | **741** | 14.1 | <5.0 | **50.8** |
| | 10/24/2011 | <5.0 | <5.0 | **642** | 19.2 | <5.0 | **60.7** |
| | 2/15/2012 | <5.0 | <5.0 | **777** | 14.5 | <5.0 | **61.4** |
| | 5/1/2012 | <5.0 | <5.0 | **454** | 12.4 | <5.0 | **50.9** |
| | 8/7/2012 | <5.0 | <5.0 | **679** | 20.3 | <5.0 | **51.8** |
| | 11/19/2012 | <5.0 | <5.0 | **763** | 15.8 | <5.0 | **76.1** |
| | 3/9/2013 | <5.0 | <5.0 | **505** | 18.0 | <5.0 | **63.0** |
| | 5/20/2013 | **7.4** | <5.0 | **480** | 17.6 | <5.0 | **29.9** |
| | 9/24/2013 | <5.0 | <5.0 | **538** | 15.0 | <5.0 | **19.4** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| *Deep Wells* | | | | | | | |
| MMW-P-03D | 11/9/2005 | **22.0** | <5.0 | 42.0 | <5.0 | <5.0 | **2.0** |
| | 2/22/2007 | **48.9** | <5.0 | 57.8 | <5.0 | 39.0 | **15.6** |
| | 6/14/2007 | **21.7** | <5.0 | **74.9** | <5.0 | <5.0 | **34.5** |
| | 9/19/2007 | **14.3** | <5.0 | **76.1** | 7.3 | <5.0 | **36.6** |
| | 12/13/2007 | **11.0** | <5.0 | 40.0 | <5.0 | <5.0 | **20.0** |
| | 39527 | <5.0 | <5.0 | **170** | 6.0 | <5.0 | **18.0** |
| | 39604 | <5.0 | <5.0 | **150** | 7.4 | <5.0 | **26.0** |
| | 39702 | <5.0 | <5.0 | **95.7** | 6.4 | <5.0 | <2.0 |
| | 11/19/2008 | <5.0 | <5.0 | **80.6** | <5.0 | <5.0 | **36.9** |
| | 3/17/2009 | <5.0 | <5.0 | 65.2 | <5.0 | <5.0 | **69.8** |
| | 6/17/2009 | <5.0 | <5.0 | 14.9 | 5.9 | <5.0 | **137** |
| | 8/6/2009 | <5.0 | <5.0 | 16.7 | <5.0 | <5.0 | **248** |
| | 11/3/2009 | <5.0 | <5.0 | 8.5 | <5.0 | <5.0 | **168** |
| | 2/4/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **287** |
| | 4/22/2010 | <5.0 | <5.0 | 7.2 | <5.0 | <5.0 | **211** |
| | 7/21/2010 | **6.6** | <5.0 | **271** | 8.1 | <5.0 | **305** |
| | 10/13/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **16.2** |
| | 1/19/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **46.2** |
| | 5/4/2011 | <5.0 | <5.0 | 64.3 | <5.0 | <5.0 | **118** |
| | 7/27/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **10.5** |
| | 10/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **61.5** |
| | 2/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **4.0** |
| | 4/25/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **16.6** |
| | 8/1/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **175** |
| | 11/14/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **17.3** |
| | 3/4/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **51.7** |
| | 5/14/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **418** |
| | 9/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **664** |
| MMW-P-09D | 6/14/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **46.2** |
| | 9/19/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **83.1** |
| | 12/12/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **71.0** |
| | 3/20/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **3.0** |
| | 6/5/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **100** |
| | 9/11/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **72.6** |
| | 11/19/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **97.2** |
| | 3/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **85.1** |
| | 6/16/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **73.5** |
| | 8/6/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **80.8** |
| | 11/3/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **87.1** |
| | 2/3/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **111** |
| | 4/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **76.9** |
| | 7/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **81.2** |
| | 10/13/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **70.6** |
| | 1/19/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **66.9** |
| | 4/30/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **74.5** |
| | 7/26/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **83.3** |
| | 10/21/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **71.9** |
| | 2/15/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **70.7** |
| | 4/24/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **56.6** |
| | 8/1/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **69.2** |
| | 11/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **61.6** |
| | 3/5/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **96.4** |
| | 5/13/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **27.8** |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **67.5** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| MMW-P-10D | 6/14/2007 | <5.0 | 10.6 | 481 | 7.7 | <5.0 | 98.7 |
| | 7/6/2007 | <5.0 | <5.0 | 498 | 9.0 | <5.0 | 118 |
| | 9/19/2007 | <5.0 | <5.0 | 350 | <5.0 | <5.0 | 76.1 |
| | 12/14/2007 | <5.0 | <5.0 | 270 | <5.0 | <5.0 | 77.0 |
| | 3/20/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 3.0 |
| | 6/5/2008 | <5.0 | <5.0 | 508 | <5.0 | <5.0 | 267 |
| | 9/11/2008 | <5.0 | <5.0 | 435 | <5.0 | <5.0 | 288 |
| | 11/19/2008 | <5.0 | <5.0 | 3,390 | <5.0 | <5.0 | 5,030 |
| | 3/17/2009 | <5.0 | <5.0 | 4,860 | 12.9 | <5.0 | 2,500 |
| | 6/17/2009 | <5.0 | <5.0 | 3,710 | 9.6 | <5.0 | 9,070 |
| | 8/6/2009 | <5.0 | <5.0 | 2,520 | 5.1 | <5.0 | 3,400 |
| | 11/3/2009 | <5.0 | <5.0 | 2,740 | <5.0 | <5.0 | 3,500 |
| | 2/4/2010 | <5.0 | <5.0 | 406 | <5.0 | <5.0 | 2,130 |
| | 4/22/2010 | <5.0 | <5.0 | 30.5 | <5.0 | <5.0 | 364 |
| | 7/22/2010 | <5.0 | <5.0 | 120 | <5.0 | <5.0 | 865 |
| | 10/14/2010 | <25.0 | <25.0 | <25.0 | <25.0 | <25.0 | 707 |
| | 1/20/2011 | <5.0 | <5.0 | 21.4 | <5.0 | <5.0 | 1,210 |
| | 5/5/2011 | <5.0 | <5.0 | 8.1 | <5.0 | <5.0 | 272 |
| | 7/27/2011 | <5.0 | <5.0 | 46.5 | <5.0 | <5.0 | 825 |
| | 10/21/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 444 |
| | 2/13/2012 | <5.0 | <5.0 | 28.7 | <5.0 | <5.0 | 1,790 |
| | 4/25/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 289 |
| | 8/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 475 |
| | 11/14/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 964 |
| | 2/28/2013 | <5.0 | <5.0 | 8.9 | <5.0 | <5.0 | 181 |
| | 5/15/2013 | <5.0 | <5.0 | 15.4 | <5.0 | <5.0 | 450 |
| | 9/25/2013 | <5.0 | <5.0 | 152 | <5.0 | <5.0 | 2,020 |
| MMW-P-12D | 9/9/2011 | <5.0 | <5.0 | 678 | 15.9 | <5.0 | 63.0 |
| | 10/24/2011 | <5.0 | <5.0 | 644 | 14.2 | <5.0 | 71.3 |
| | 2/15/2012 | <5.0 | <5.0 | 727 | 15.0 | <5.0 | 65.1 |
| | 5/1/2012 | <5.0 | <5.0 | 591 | 15.2 | <5.0 | 69.4 |
| | 8/7/2012 | <5.0 | <5.0 | 750 | 18.8 | <5.0 | 67.6 |
| | 11/20/2012 | <5.0 | <5.0 | 793 | 17.4 | <5.0 | 91.8 |
| | 3/9/2013 | <5.0 | <5.0 | 619 | 20.6 | <5.0 | 71.4 |
| | 5/20/2013 | <5.0 | <5.0 | 739 | 22.2 | <5.0 | 33.7 |
| | 9/24/2013 | <5.0 | <5.0 | 813 | 20.0 | <5.0 | 37.8 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **ENVIRON Monitoring Wells (Off-site)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| MW-165S | 6/1/2001 | NA | <5.0 | 23.8 | <5.0 | NA | <2.0 |
| | 7/18/2002 | NA | <1.0 | 66.6 | <1.0 | NA | **36.6** |
| | 12/5/2003 | NA | <5.0 | 25 | <5.0 | NA | **10** |
| | 3/11/2004 | NA | <5.0 | 23 | <5.0 | NA | **13** |
| | 6/3/2004 | NA | <5.0 | 19 | <5.0 | NA | **6.5** |
| | 9/14/2004 | NA | <1.0 | 22 | <1.0 | NA | **6.4** |
| | 12/20/2004 | NA | <1.0 | 27 | <1.0 | NA | **13** |
| | 3/15/2005 | NA | <1.0 | 44 | <1.0 | NA | **26** |
| | 6/13/2005 | NA | <1.0 | 11 | <1.0 | NA | **4.2** |
| | 9/21/2005 | NA | <1.0 | 19.5 | <1.0 | NA | **13.6** |
| | 12/6/2003 | NA | <1.0 | 14 | <1.0 | NA | **16** |
| | 3/14/2006 | NA | <1.0 | 3.6 | <1.0 | NA | 1.1 |
| | 6/13/2006 | NA | <1.0 | 5.4 | <1.0 | NA | **6.3** |
| | 9/27/2006 | NA | <1.0 | 9.1 | <1.0 | NA | **15** |
| | 12/21/2006 | NA | <1.0 | 7.5 | <1.0 | NA | **14** |
| | 3/21/2007 | NA | <1.0 | 7 | <1.0 | NA | **33** |
| | 7/2/2007 | NA | <1.0 | 4.6 | <1.0 | NA | **17** |
| | 9/7/2007 | NA | <1.0 | 4.3 | <1.0 | NA | **10** |
| | 11/28/2007 | NA | <1.0 | 4.1 | <1.0 | NA | **4.0** |
| | 3/19/2008 | NA | <1.0 | 2.2 | <1.0 | NA | **2.2** |
| | 5/28/2008 | NA | <1.0 | 2.4 | <1.0 | NA | **7.4** |
| | 9/23/2008 | NA | <1.0 | 3.6 | <1.0 | NA | **2.6** |
| | 12/2/2008 | NA | <1.0 | 2.8 | <1.0 | NA | **2.9** |
| | 3/12/2009 | NA | <1.0 | 1.7 | <1.0 | NA | 1.1 |
| | 6/18/2009 | NA | <1.0 | 1.9 | <1.0 | NA | **4.7** |
| | 9/15/2009 | NA | <1.0 | 2.8 | <1.0 | NA | **3.2** |
| | 11/3/2009 | NA | <1.0 | 2.9 | <1.0 | NA | **2.4** |
| | 2/3/2010 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 5/19/2010 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/17/2010 | NA | <5.0 | <5.0 | <5 | NA | **3.6** |
| | 12/8/2010 | NA | <5.0 | <5.0 | <5 | NA | <2.0 |
| | 2/15/2011 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/16/2011 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 3/8/2012 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 10/3/2012 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 4/9/2013 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-166S | 6/1/2001 | NA | <5.0 | **553** | <5.0 | NA | **63** |
| | 7/18/2002 | NA | <1.0 | **222** | 1.5 | NA | **15.8** |
| | 12/19/2003 | NA | <5.0 | **130** | 8.3 | NA | **7.7** |
| | 3/11/2004 | NA | <5.0 | **140** | <5.0 | NA | <2.0 |
| | 6/3/2004 | NA | <5.0 | **270** | 5.2 | NA | **17** |
| | 9/14/2004 | NA | <10 | **290** | 11 | NA | **18** |
| | 12/20/2004 | NA | <10 | **350** | 37 | NA | **19** |
| | 3/15/2005 | NA | <10 | **290** | 66 | NA | **61** |
| | 6/13/2005 | NA | <1.0 | **310** | 7.1 | NA | **11** |
| | 9/21/2005 | NA | <1.0 | **298** | 3.77 | NA | **10** |
| | 12/6/2005 | NA | <1.0 | **280** | 16 | NA | **11** |
| | 3/14/2006 | NA | <1.0 | **89** | 1.6 | NA | **4.1** |
| | 6/13/2006 | NA | <1.0 | **340** | 9.8 | NA | **10** |
| | 9/27/2006 | NA | <1.0 | **360** | 17 | NA | **17** |
| | 12/21/2006 | NA | <1.0 | **340** | 12 | NA | **11** |
| | 3/21/2007 | NA | <1.0 | 44 | 1.8 | NA | 1.3 |
| | 7/2/2007 | NA | <1.0 | **340** | 12 | NA | **11** |
| | 9/7/2007 | NA | <1.0 | **280** | 12 | NA | **15** |
| | 11/28/2007 | NA | <1.0 | **350** | 6.9 | NA | **14** |
| | 3/19/2008 | NA | <1.0 | **270** | 7.9 | NA | **16** |
| | 5/28/2008 | NA | <1.0 | **230** | 7 | NA | **6.7** |
| | 9/23/2008 | NA | <1.0 | **250** | 18 | NA | **7.7** |
| | 12/2/2008 | NA | <1.0 | **250** | 7.3 | NA | **11** |
| | 3/12/2009 | NA | <1.0 | **190** | 5.6 | NA | **5.6** |
| | 6/18/2009 | NA | <1.0 | 17 | <1.0 | NA | <1.0 |
| | 9/15/2009 | NA | <1.0 | **230** | 8.1 | NA | **7.2** |
| | 11/3/2009 | NA | <1.0 | **170** | 9.7 | NA | **6.5** |
| | 2/3/2010 | NA | <5.0 | **159** | 5 | NA | **2.8** |
| | 5/19/2010 | NA | <5.0 | **145** | 6.1 | NA | **6.6** |
| | 9/17/2010 | NA | <5.0 | **217** | 6.4 | NA | **4.8** |
| | 12/8/2010 | NA | <5 | **194** | <5 | NA | **6.8** |
| | 2/15/2011 | NA | <5.0 | **170** | <5.0 | NA | <2.0 |
| | 9/16/2011 | NA | <5.0 | **150** | 5 | NA | <2.0 |
| | 3/7/2012 | NA | <5.0 | **116** | <5.0 | NA | <2.0 |
| | 10/3/2012 | NA | <5.0 | **130** | <5.0 | NA | **2.4** |
| | 4/9/2013 | NA | <5.0 | **85.4** | <5.0 | NA | <2.0 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-167S | 6/1/2001 | NA | <5.0 | <5.0 | <5.0 | NA | **11** |
| | 7/17/2002 | NA | <1.0 | <1.0 | <1.0 | NA | 1.7 |
| | 12/4/2003 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 3/11/2004 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 6/3/2004 | NA | <5.0 | 7.7 | <5.0 | NA | **3.3** |
| | 9/14/2004 | NA | <1.0 | <1.0 | <1.0 | NA | **5.9** |
| | 12/21/2004 | NA | <1.0 | <1.0 | <1.0 | NA | **20** |
| | 3/15/2005 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 6/13/2005 | NA | <1.0 | <1.0 | <1.0 | NA | **1.1** |
| | 9/23/2005 | NA | <1.0 | <1.0 | <1.0 | NA | **6.0** |
| | 11/7/2005 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **14.0** |
| | 12/6/2005 | NA | <1.0 | <1.0 | <1.0 | NA | **26** |
| | 3/13/2006 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 6/12/2006 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 9/27/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 12/21/2006 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/21/2007 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 7/2/2007 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 9/7/2007 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 11/28/2007 | NA | <1.0 | <1.0 | <1.0 | NA | **4.0** |
| | 3/19/2008 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 5/28/2008 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 6/5/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/23/2008 | NA | **9.5** | <1.0 | <1.0 | NA | <1.0 |
| | 12/1/2008 | NA | <1.0 | <1.0 | <1.0 | NA | **2.3** |
| | 3/12/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 6/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/16/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 11/3/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 2/3/2010 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/19/2010 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/16/2010 | NA | <5 | <5 | <5 | NA | <2 |
| | 12/8/2010 | NA | <5 | <5 | <5 | NA | <2 |
| | 2/16/2011 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/8/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/16/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-168S | 6/1/2001 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 7/18/2002 | NA | **11.3** | 46 | <1.0 | NA | **4.1** |
| | 11/7/2005 | **280** | **16.0** | 53.0 | <5.0 | <5.0 | **3.0** |
| | 2/21/2007 | **30.1** | **8.8** | **155** | <5.0 | <5.0 | **29.6** |
| | 6/14/2007 | <5.0 | <5.0 | 40.8 | <5.0 | <5.0 | **34.0** |
| | 9/19/2007 | **32.6** | **8.0** | **82.4** | <5.0 | <5.0 | **3.5** |
| | 12/13/2007 | **52.0** | **14.0** | **78.0** | <5.0 | <5.0 | **4.1** |
| | 3/20/2008 | **92.0** | **12.0** | 46.0 | <5.0 | <5.0 | **4.2** |
| | 6/5/2008 | **80.4** | **10.1** | 41.1 | <5.0 | <5.0 | **3.6** |
| | 9/11/2008 | **68.5** | **10.8** | 66.9 | <5.0 | <5.0 | **5.5** |
| | 8/7/2009 | **62.6** | **10.2** | **118** | <5.0 | NS | **9.9** |
| | 4/21/2010 | **14.0** | **7.0** | 21.9 | <5.0 | <5.0 | <2.0 |
| | 3/8/2013 | **76.0** | **11.7** | **75.7** | <5.0 | <5.0 | **57.1** |
| | 9/27/2013 | <5.0 | <5.0 | 10.9 | <5.0 | <5.0 | **19.4** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-169S | 1/30/2002 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 7/17/2002 | NA | <1.0 | <1.0 | <1.0 | NA | 1.3 |
| | 12/4/2003 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 3/11/2004 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 6/3/2004 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/14/2004 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 12/21/2004 | NA | <1.0 | <1.0 | <1.0 | NA | **3.1** |
| | 3/15/2005 | NA | <1.0 | <1.0 | <1.0 | NA | 1.1 |
| | 6/13/2005 | NA | <1.0 | <1.0 | <1.0 | NA | 1.7 |
| | 9/22/2005 | NA | <1.0 | <1.0 | <1.0 | NA | 1.05 |
| | 11/7/2005 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 12/6/2005 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 3/13/2006 | NA | <1.0 | <1.0 | <1.0 | NA | 1.0 |
| | 6/12/2006 | NA | <1.0 | <1.0 | <1.0 | NA | **2.2** |
| | 9/27/2006 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 12/21/2006 | NA | <1.0 | <1.0 | <1.0 | NA | **3.5** |
| | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/21/2007 | NA | <1.0 | <1.0 | <1.0 | NA | **2.1** |
| | 7/3/2007 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 9/7/2007 | NA | <1.0 | <1.0 | <1.0 | NA | 1.2 |
| | 11/28/2007 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 3/19/2008 | NA | <1.0 | <1.0 | <1.0 | NA | 2.3 |
| | 6/5/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/23/2008 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 12/1/2008 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 3/12/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 6/19/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 9/16/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 11/3/2009 | NA | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 2/3/2010 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/19/2010 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/14/2010 | NA | <5 | <5 | <5 | NA | <2 |
| | 12/8/2010 | NA | <5 | <5 | <5 | NA | <2 |
| | 2/17/2011 | NA | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/16/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-170S | 1/31/2002 | NA | <5.0 | <5.0 | <5.0 | NA | **6.4** |
| | 7/17/2002 | NA | <1.0 | <1.0 | <1.0 | NA | **2.2** |
| | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **21.2** |
| | 6/3/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **5.5** |
| | 6/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/3/2009 | NA | <1.0 | 2.0 | <1.0 | NA | **5.3** |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/16/2012 | <5.0 | <5.0 | 6.3 | <5.0 | <5.0 | <2.0 |
| | 5/2/2012 | <5.0 | <5.0 | 6.0 | <5.0 | <5.0 | <2.0 |
| | 8/3/2012 | <5.0 | <5.0 | 7.9 | <5.0 | <5.0 | <2.0 |
| | 11/16/2012 | <5.0 | <5.0 | 6.1 | <5.0 | <5.0 | <2.0 |
| | 3/8/2013 | <5.0 | <5.0 | 7.9 | <5.0 | <5.0 | <2.0 |
| | 5/16/2013 | <5.0 | <5.0 | 8.1 | <5.0 | <5.0 | <2.0 |
| | 9/27/2013 | <5.0 | <5.0 | 12.6 | <5.0 | <5.0 | <2.0 |
| MW-171S | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/3/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-174S | 7/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/13/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| MW-175S | 7/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/13/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| *Deep Wells* | | | | | | | |
| MW-165D | 1/30/2002 | NA | <5.0 | 3,300 | 11 | NA | 1500 |
| | 7/18/2002 | NA | <1.0 | 2,820 | 9.36 | NA | 973 |
| | 12/5/2003 | NA | <5.0 | 2,700 | 12 | NA | 980 |
| | 3/11/2004 | NA | <5.0 | 2,300 | 16 | NA | 840 |
| | 6/3/2004 | NA | <5.0 | 2,000 | 8.8 | NA | 400 |
| | 9/14/2004 | NA | <25 | 1,800 | <25 | NA | 740 |
| | 12/20/2004 | NA | <1.0 | 3,300 | 15 | NA | 1000 |
| | 3/15/2005 | NA | <1.0 | 1,900 | 12 | NA | 640 |
| | 6/13/2005 | NA | <1.0 | 1,400 | 6.2 | NA | 14 |
| | 9/21/2005 | NA | <1.0 | 2,270 | 7.41 | NA | 921 |
| | 12/6/2005 | NA | <1.0 | 2,200 | 34 | NA | 780 |
| | 3/14/2006 | NA | <1.0 | 1,600 | 6.2 | NA | 400 |
| | 6/13/2006 | NA | <1.0 | 1,100 | 11 | NA | 560 |
| | 9/27/2006 | NA | <1.0 | 1,800 | 20 | NA | 770 |
| | 12/21/2006 | NA | <1.0 | 1,600 | 16 | NA | 860 |
| | 3/21/2007 | NA | <1.0 | 1,200 | 13 | NA | 840 |
| | 7/2/2007 | NA | <1.0 | 810 | 7.2 | NA | <1.0 |
| | 9/7/2007 | NA | <1.0 | 4 | 1.9 | NA | <1.0 |
| | 11/28/2007 | NA | <1.0 | 1,200 | 5.2 | NA | 610 |
| | 3/19/2008 | NA | <1.0 | 310 | 5.1 | NA | 190 |
| | 5/28/2008 | NA | <10 | 470 | <10 | NA | 530 |
| | 9/23/2008 | NA | <10 | 300 | <10 | NA | 350 |
| | 12/2/2008 | NA | <1.0 | 650 | 5.4 | NA | 550 |
| | 3/12/2009 | NA | <1.0 | 300 | 3.2 | NA | 340 |
| | 6/18/2009 | NA | <1.0 | 240 | 2.2 | NA | 500 |
| | 9/15/2009 | NA | <1.0 | 98 | <1.0 | NA | 160 |
| | 11/3/2009 | NA | <1.0 | 280 | 2.4 | NA | 400 |
| | 2/3/2010 | NA | <5.0 | 255 | <5.0 | NA | 286 |
| | 5/19/2010 | NA | <5.0 | 161 | <5.0 | NA | 164 |
| | 7/7/2010 | <5.0 | <5.0 | 122 | <5.0 | <5.0 | 202 |
| | 9/17/2010 | NA | <5 | 149 | <5 | NA | 271 |
| | 12/8/2010 | NA | <5 | 178 | <5 | NA | 249 |
| | 2/16/2011 | NA | <5.0 | 99 | <5.0 | NA | 203 |
| | 9/16/2011 | NA | <5.0 | 89.6 | <5.0 | NA | 221 |
| | 3/8/2012 | NA | <5.0 | 63.6 | <5.0 | NA | 167 |
| | 10/3/2012 | NA | <5.0 | 63.8 | <5.0 | NA | 162 |
| | 4/9/2013 | NA | <5.0 | 29.9 | <5.0 | NA | 166 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | 55 | 31 | 1,000 | 2,000 | 1,000 | 4 |
| **IDEM RISC Residential Default Cleanup Level** | | 5 | 5 | 70 | 100 | 80 | 2 |
| MW-166D | 1/31/2002 | NA | <5.0 | 2,000 | <5.0 | NA | 730 |
| | 7/18/2002 | NA | <1.0 | 2,130 | 3.3 | NA | 563 |
| | 1/6/2004 | NA | <5.0 | 1,700 | 7.9 | NA | 150 |
| | 3/11/2004 | NA | <5.0 | 2,100 | <5.0 | NA | 410 |
| | 6/3/2004 | NA | <5.0 | 1,900 | <5.0 | NA | 340 |
| | 9/14/2004 | NA | <1.0 | 1,900 | 4.7 | NA | 450 |
| | 12/20/2004 | NA | <1.0 | 2,400 | 5.6 | NA | 470 |
| | 3/15/2005 | NA | <1.0 | 1,900 | 5.3 | NA | 230 |
| | 6/13/2005 | NA | <1.0 | 3,700 | 5 | NA | <1.0 |
| | 9/21/2005 | NA | <1.0 | 1,650 | 2.12 | NA | 303 |
| | 12/6/2005 | NA | <1.0 | 1,900 | 16 | NA | 430 |
| | 3/14/2006 | NA | <1.0 | 1,800 | 2.9 | NA | 310 |
| | 6/13/2006 | NA | <1.0 | 1,400 | 10 | NA | 240 |
| | 9/27/2006 | NA | <1.0 | 2,100 | 8.2 | NA | 350 |
| | 12/21/2006 | NA | <1.0 | 2,000 | 12 | NA | 420 |
| | 3/21/2007 | NA | <1.0 | 2,400 | 16 | NA | 410 |
| | 7/2/2007 | NA | <1.0 | 1,700 | 12 | NA | 240 |
| | 9/7/2007 | NA | <1.0 | 1,300 | 7.7 | NA | 24 |
| | 11/28/2007 | NA | <1.0 | 1,500 | 4 | NA | 270 |
| | 3/19/2008 | NA | <1.0 | 810 | 16 | NA | 200 |
| | 5/28/2008 | NA | <10 | 1,500 | <10 | NA | 310 |
| | 9/23/2008 | NA | <10 | 1,600 | <10 | NA | 300 |
| | 12/2/2008 | NA | <1.0 | 1,300 | 8.5 | NA | 300 |
| | 3/12/2009 | NA | <1.0 | 1,400 | 12 | NA | 330 |
| | 6/18/2009 | NA | <1.0 | 920 | 11 | NA | 150 |
| | 9/15/2009 | NA | <10 | 850 | <10 | NA | 210 |
| | 11/3/2009 | NA | <1.0 | 1,100 | 8.2 | NA | 240 |
| | 2/3/2010 | NA | <5.0 | 797 | <5.0 | NA | 233 |
| | 5/19/2010 | NA | <5.0 | 835 | 5.5 | NA | 235 |
| | 9/17/2010 | NA | <5 | 949 | 5.1 | NA | 253 |
| | 12/8/2010 | NA | <5 | 896 | <5 | NA | 234 |
| | 2/16/2011 | NA | <5.0 | 907 | <5.0 | NA | 251 |
| | 9/16/2011 | NA | <5.0 | 763 | 5.2 | NA | 269 |
| | 3/7/2012 | NA | <5.0 | 1,080 | <5.0 | NA | 469 |
| | 10/3/2012 | NA | <5.0 | 633 | <5.0 | NA | 282 |
| | 4/9/2013 | NA | <5.0 | 465 | <5.0 | NA | 250 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-167D | 1/31/2002 | NA | <5.0 | 530 | 11 | NA | **390** |
| | 7/17/2002 | NA | <1.0 | 274 | 12.2 | NA | **253** |
| | 12/4/2003 | NA | <5.0 | 390 | 14 | NA | **230** |
| | 3/11/2004 | NA | <5.0 | 410 | 14 | NA | **220** |
| | 6/3/2004 | NA | <5.0 | 510 | 12 | NA | **240** |
| | 9/14/2004 | NA | <1.0 | 480 | 14 | NA | **300** |
| | 12/21/2004 | NA | 1.0 | 680 | 22 | NA | **240** |
| | 3/15/2005 | NA | <1.0 | 530 | 18 | NA | **150** |
| | 6/13/2005 | NA | <1.0 | 510 | 14 | NA | **99** |
| | 9/23/2005 | NA | <1.0 | 640 | 20 | NA | **120** |
| | 11/7/2005 | <5.0 | <5.0 | **750** | <5.0 | <5.0 | **110** |
| | 12/6/2005 | NA | <1.0 | **640** | 21 | NA | **150** |
| | 3/13/2006 | NA | <1.0 | **670** | 17 | NA | **140** |
| | 6/12/2006 | NA | <1.0 | **460** | 17 | NA | **32** |
| | 9/27/2006 | NA | <1.0 | **570** | 20 | NA | **81** |
| | 12/21/2006 | NA | <1.0 | **640** | 21 | NA | **100** |
| | 2/21/2007 | <5.0 | <5.0 | **375** | 10.0 | <5.0 | **59.3** |
| | 3/21/2007 | NA | <1.0 | 20 | 1.1 | NA | **3.9** |
| | 7/2/2007 | NA | <1.0 | **290** | 17 | NA | **68** |
| | 9/7/2007 | NA | <1.0 | **520** | 22 | NA | **84** |
| | 11/28/2007 | NA | <1.0 | **710** | 24 | NA | **92** |
| | 3/19/2008 | NA | <1.0 | 38 | 1.4 | NA | **3.1** |
| | 6/5/2008 | <5.0 | <5.0 | **616** | 28.0 | <5.0 | **43.8** |
| | 9/23/2008 | NA | <5.0 | **510** | 24 | NA | **46** |
| | 12/1/2008 | NA | <1.0 | **700** | 26 | NA | **45** |
| | 3/12/2009 | NA | <1.0 | **570** | 26 | NA | **31** |
| | 6/17/2009 | <5.0 | <5.0 | **612** | 22.1 | <5.0 | **23.8** |
| | 9/16/2009 | NA | <1.0 | **580** | 19 | NA | **69** |
| | 11/3/2009 | NA | <1.0 | **740** | 25 | NA | **33** |
| | 2/3/2010 | NA | <5.0 | **443** | 22.8 | NA | **17** |
| | 4/21/2010 | <5.0 | <5.0 | **626** | 22.1 | <5.0 | **25.6** |
| | 5/19/2010 | NA | <5.0 | **532** | 24.9 | NA | **24.9** |
| | 9/16/2010 | NA | <5 | **438** | 16.6 | NA | **18.6** |
| | 12/8/2010 | NA | <5 | **635** | 25.6 | NA | **17.8** |
| | 2/18/2011 | NA | <5.0 | **727** | 28.8 | NA | **20.5** |
| | 4/29/2011 | <5.0 | <5.0 | **392** | 18.9 | <5.0 | **14.9** |
| | 9/16/2011 | NA | <5.0 | **462** | 19.8 | NA | **16** |
| | 2/16/2012 | <5.0 | <5.0 | **541** | <5.0 | <5.0 | **20.0** |
| | 3/7/2012 | NA | <5.0 | **707** | 18.9 | NA | **19.6** |
| | 5/2/2012 | <5.0 | <5.0 | **377** | 16.9 | <5.0 | **21.7** |
| | 8/3/2012 | <5.0 | <5.0 | **422** | 26.4 | <5.0 | **8.4** |
| | 10/25/2012 | NA | <5.0 | **407** | 21.1 | NA | **10.5** |
| | 11/16/2012 | <5.0 | <5.0 | **480** | 19.9 | <5.0 | **9.2** |
| | 3/8/2013 | <5.0 | <5.0 | **382** | 19.1 | <5.0 | **13.5** |
| | 4/9/2013 | NA | <5.0 | **408** | 23.5 | NA | **10.9** |
| | 5/16/2013 | <5.0 | <5.0 | **397** | 20.8 | <5.0 | **10.6** |
| | 9/27/2013 | <5.0 | <5.0 | **371** | 18.5 | <5.0 | **9.6** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-168D | 1/31/2002 | NA | <5.0 | 18 | <5.0 | NA | <2.0 |
| | 7/18/2002 | NA | <1.0 | 21 | <1.0 | NA | <1.0 |
| | 11/7/2005 | <5.0 | <5.0 | 6.8 | <5.0 | <5.0 | **49.0** |
| | 2/21/2007 | <5.0 | <5.0 | 8.4 | <5.0 | <5.0 | **58.1** |
| | 6/14/2007 | <5.0 | <5.0 | 5.2 | <5.0 | <5.0 | **47.5** |
| | 9/19/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **89.7** |
| | 12/12/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **74.0** |
| | 3/20/2008 | <5.0 | <5.0 | 8.0 | <5.0 | <5.0 | **39.0** |
| | 6/5/2008 | <5.0 | <5.0 | 13.4 | <5.0 | <5.0 | **65.9** |
| | 9/11/2008 | <5.0 | <5.0 | 5.5 | <5.0 | <5.0 | <2.0 |
| | 3/17/2009 | <5.0 | <5.0 | 16.5 | <5.0 | <5.0 | <2.0 |
| | 6/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **14.5** |
| | 8/7/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **36.2** |
| | 11/4/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **99.1** |
| | 2/4/2010 | <5.0 | <5.0 | 6.3 | <5.0 | <5.0 | **128** |
| | 4/21/2010 | <5.0 | <5.0 | 13.2 | <5.0 | <5.0 | **134** |
| | 7/22/2010 | <5.0 | <5.0 | 6.0 | <5.0 | <5.0 | **122** |
| | 10/13/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **134** |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | 10.0 | <5.0 | **96.4** |
| | 7/28/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **228** |
| | 10/24/2011 | <5.0 | <5.0 | 8.9 | <5.0 | <5.0 | **137** |
| | 2/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **108** |
| | 5/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **130** |
| | 8/3/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **104** |
| | 11/16/2012 | <5.0 | <5.0 | 6.9 | <5.0 | <5.0 | **81.3** |
| | 3/8/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **80.5** |
| | 9/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **100** |
| MW-169D | 1/30/2002 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **8.7** |
| | 7/17/2002 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **6.4** |
| | 12/4/2003 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **8.4** |
| | 3/11/2004 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **11.0** |
| | 6/3/2004 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **8.7** |
| | 9/14/2004 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **10.0** |
| | 12/21/2004 | <1.0 | <1.0 | 1.7 | <1.0 | NA | **14.0** |
| | 3/15/2005 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **9.6** |
| | 6/13/2005 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **6.8** |
| | 9/22/2005 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **7.97** |
| | 11/7/2005 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **5.1** |
| | 12/6/2005 | <1.0 | <1.0 | <1.0 | <1.0 | NA | 1.6 |
| | 3/13/2006 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **7.0** |
| | 6/12/2006 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **9.1** |
| | 9/27/2006 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **9.5** |
| | 12/21/2006 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **5.4** |
| | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **11.9** |
| | 3/21/2007 | <1.0 | <1.0 | <1.0 | <1.0 | NA | 1.0 |
| | 7/3/2007 | <1.0 | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 9/7/2007 | <1.0 | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 11/28/2007 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **14** |
| | 3/19/2008 | <1.0 | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 6/5/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **14.3** |
| | 9/23/2008 | <1.0 | **14** | <1.0 | <1.0 | NA | **14** |
| | 12/1/2008 | <1.0 | <1.0 | <1.0 | <1.0 | NA | <1.0 |
| | 3/12/2009 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **8.2** |
| | 6/19/2009 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **13** |
| | 9/16/2009 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **17** |
| | 11/3/2009 | <1.0 | <1.0 | <1.0 | <1.0 | NA | **14** |
| | 2/3/2010 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **6.1** |
| | 5/19/2010 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **9.4** |
| | 9/14/2010 | <5 | <5 | <5 | <5 | NA | 1.8 |
| | 12/8/2010 | <5 | <5 | <5 | <5 | NA | **6.6** |
| | 2/17/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | **6.9** |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **9.1** |
| | 5/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **27.1** |
| | 5/21/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **27.2** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
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| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-170D | 1/31/2002 | NA | <5.0 | <5.0 | <5.0 | NA | **80** |
| | 7/17/2002 | NA | <1.0 | <1.0 | <1.0 | NA | **66** |
| | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **105** |
| | 6/3/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **230** |
| | 6/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **174** |
| | 11/3/2009 | NA | <1.0 | <1.0 | <1.0 | NA | **200** |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **161** |
| | 7/7/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **233** |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **100** |
| | 2/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **88.8** |
| | 5/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **91.0** |
| | 8/3/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **77.2** |
| | 11/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **62.8** |
| | 3/8/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **76.9** |
| | 5/21/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **38.0** |
| | 9/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **48.0** |
| MW-171D | 2/21/2007 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/3/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **3.0** |
| | 6/16/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.2** |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **6.3** |
| | 7/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/29/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/2/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **9.5** |
| | 5/16/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **4.7** |
| MW-174D | 7/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/13/2011 | <5.0 | <5.0 | 8.2 | <5.0 | NA | <2.0 |
| MW-175D | 7/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |
| | 9/13/2011 | <5.0 | <5.0 | <5.0 | <5.0 | NA | <2.0 |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| **Floral Park Cemetery Wells (Off-site)** | | | | | | | |
| *Shallow Wells* | | | | | | | |
| MMW-C-01 | 11/20/2008 | **15.7** | **8.3** | **296** | <5.0 | <5.0 | <2.0 |
| | 3/17/2009 | <5.0 | <5.0 | **508** | 7.3 | <5.0 | <2.0 |
| | 6/18/2009 | **23.2** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/6/2009 | **84.8** | <5.0 | 66.9 | <5.0 | <5.0 | **35.2** |
| | 11/3/2009 | **12.6** | <5.0 | **211** | 8.9 | <5.0 | **2,720** |
| | 2/3/2010 | <5.0 | <5.0 | **176** | 10.1 | <5.0 | **1,790** |
| | 4/21/2010 | **15.3** | <5.0 | **165** | 7.1 | <5.0 | **1,660** |
| | 7/22/2010 | **40.9** | <5.0 | 22.4 | <5.0 | <5.0 | **8.1** |
| | 10/14/2010 | <5.0 | <5.0 | 69.1 | <5.0 | <5.0 | **1,100** |
| | 1/19/2011 | <5.0 | <5.0 | 14.7 | <5.0 | <5.0 | **215** |
| | 5/5/2011 | **22.2** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/27/2011 | **36.7** | <5.0 | 17.1 | <5.0 | <5.0 | **150** |
| | 10/21/2011 | **18.7** | <5.0 | 20.6 | <5.0 | <5.0 | **59** |
| | 2/15/2012 | **23.8** | <5.0 | 6.0 | <5.0 | <5.0 | **21** |
| | 4/24/2012 | **11.9** | <5.0 | 10.6 | <5.0 | <5.0 | **45.3** |
| | 8/1/2012 | <5.0 | <5.0 | 8.9 | <5.0 | <5.0 | **29.2** |
| | 11/15/2012 | **24.6** | <5.0 | 10.9 | <5.0 | <5.0 | **26.7** |
| | 3/5/2013 | **17.5** | <5.0 | <5.0 | <5.0 | <5.0 | **10.1** |
| | 5/15/2013 | **35.5** | <5.0 | <5.0 | <5.0 | <5.0 | **2.9** |
| | 9/26/2013 | **12.2** | <5.0 | 11.4 | <5.0 | <5.0 | **19.6** |
| MMW-C-02S | 11/20/2008 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/17/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/18/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/6/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/3/2009 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/3/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/21/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/22/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 10/13/2010 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 1/19/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/30/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 7/27/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 10/18/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 2/15/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/24/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/1/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/13/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/5/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/10/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MMW-C-16S | 8/6/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 11/19/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/6/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/15/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MMW-P-11S | 9/9/2011 | **76.1** | <5.0 | 5.9 | <5.0 | <5.0 | **9.1** |
| | 10/24/2011 | **592** | <5.0 | <5.0 | <5.0 | <5.0 | **2.5** |
| | 2/15/2012 | **658** | <5.0 | <5.0 | <5.0 | <5.0 | **2.3** |
| | 5/1/2012 | **351** | <5.0 | 9.1 | <5.0 | <5.0 | **8.5** |
| | 8/8/2012 | **88.1** | <5.0 | 14.7 | <5.0 | <5.0 | **11.4** |
| | 11/15/2012 | **538** | <5.0 | 6.5 | <5.0 | <5.0 | **18.7** |
| | 3/6/2013 | **703** | <5.0 | <5.0 | <5.0 | <5.0 | **18.8** |
| | 5/20/2013 | **254** | <5.0 | 5.0 | <5.0 | <5.0 | **7.3** |
| | 9/24/2013 | **215** | <5.0 | 7.7 | <5.0 | <5.0 | **8.7** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MMW-P-13S | 9/9/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **8.3** |
| | 10/24/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **19.8** |
| | 2/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/7/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **8.9** |
| | 11/19/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **3.6** |
| | 3/7/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/17/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MMW-P-14S | 2/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 8/7/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/7/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 5/17/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| *Deep Wells* | | | | | | | |
| MMW-C-02D | 2/15/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **30.7** |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **55.1** |
| | 8/8/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **95.1** |
| | 11/19/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **125** |
| | 3/7/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **162** |
| | 5/20/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **157** |
| | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **275** |
| MMW-C-16D | 8/6/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **224** |
| | 11/19/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **349** |
| | 3/6/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **316** |
| | 5/15/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **177** |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **165** |
| MMW-C-17D | 8/8/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.7** |
| | 11/20/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 3/7/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.1** |
| | 5/15/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **5.6** |
| MMW-P-11DR | 2/15/2012 | <5.0 | <5.0 | 8.4 | <5.0 | <5.0 | **95.1** |
| | 5/1/2012 | <5.0 | <5.0 | 8.5 | <5.0 | <5.0 | **102** |
| | 8/7/2012 | <5.0 | <5.0 | 11.7 | <5.0 | <5.0 | **102** |
| | 11/15/2012 | <5.0 | <5.0 | 10.4 | <5.0 | <5.0 | **117** |
| | 3/6/2013 | <5.0 | <5.0 | 10.6 | <5.0 | <5.0 | **201** |
| | 5/20/2013 | <5.0 | <5.0 | 13.7 | <5.0 | <5.0 | **77.6** |
| | 9/24/2013 | <5.0 | <5.0 | 8.5 | <5.0 | <5.0 | **101** |
| MMW-P-13D | 9/9/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **139** |
| | 10/24/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **116** |
| | 2/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **155** |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **132** |
| | 8/7/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **167** |
| | 11/19/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **154** |
| | 3/7/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **140** |
| | 5/17/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **96.3** |
| | 9/23/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **120** |
| MMW-P-14D | 2/16/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **49.6** |
| | 4/26/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **49.5** |
| | 8/7/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **58.1** |
| | 11/20/2012 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **58.3** |
| | 3/7/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **32.3** |
| | 5/17/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **36.1** |
| | 9/18/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **94.4** |

**Table 4**
Cumulative Monitoring Well Groundwater Analytical Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Chloroform | Vinyl chloride |
|---|---|---|---|---|---|---|---|
| | | ug/l | ug/l | ug/l | ug/l | ug/l | ug/l |
| **IDEM RISC Industrial Default Cleanup Level** | | **55** | **31** | **1,000** | **2,000** | **1,000** | **4** |
| **IDEM RISC Residential Default Cleanup Level** | | **5** | **5** | **70** | **100** | **80** | **2** |
| MW-WES-01A | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **6.3** |
| | 6/28/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-01B | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **65.2** |
| | 6/28/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **20.0** |
| MW-WES-01C | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **15.0** |
| | 6/28/2013 | **6.0** | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-02A | 12/12/2011 | <5.0 | <5.0 | 11.4 | <5.0 | <5.0 | <2.0 |
| | 6/27/2013 | <5.0 | <5.0 | 10.9 | <5.0 | <5.0 | <2.0 |
| MW-WES-02B | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **17.9** |
| | 6/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.0** |
| MW-WES-02C | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **2.1** |
| | 6/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-03A | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-03B | 12/8/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | **3.6** |
| MW-WES-04A | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-04B | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-05A | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-05B | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/26/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| MW-WES-05C | 12/12/2011 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |
| | 6/27/2013 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <2.0 |

Notes:

All Values Over IDEM RISC Default Industrial Cleanup Level in **RED**.

All Values Over IDEM RISC Default Residential Cleanup Level in **BLUE**.

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene.

NA = Not Analyzed

Grey shading indicates that sample was collected by ENVIRON / KERAMIDA. Values obtained from ENVIRON (2013) remedial progress report.

Green Shading indicates areas that appear to be undergoing reductive dechlorination due to CAP-18 Injections.

"J" desgination indicates concentration was estimated due to high concentration of one parameter requiring dilution on other parameter quantitations.

All analytical results presented in micrograms per liter (ug/L).

EPA data from MW-WES- prefix wells collected by others are summarized in Weston (2013) report

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-1S | 2/22/2007 | 8.00 | 4,800 | 290 | 920.0 | | | | | | | | | | | | | | | | | | |
| | 9/19/2007 | 7.20 | 3,100 | 240 | 1100.0 | | | | | | | | | | | | | | | | | | |
| | 12/13/2007 | | 6,400 | 430 | 910.0 | | | | | | | | | | | | | | | | | | |
| | 3/21/2008 | | 1,650 | 230 | 3752.6 | 8.3 | | | | 37.5 | | | | | | | | | | | | | |
| | 6/3 & 6/6/2008 | | 1,286 | | 3346.1 | 2.5 | | | | 36.6 | 9.0 | 0.14 | | 0.35 | <0.10 | <0.070 | 0.35 | <0.070 | 1.4 | <0.070 | <0.025 | <0.025 | 270 |
| | 9/11/2008 | | | | | 5.8 | | | | 95.0 | | | | | | | | | | | | | |
| | 11/20/2008 | 6.80 | 824 | 533 | 3044.0 | <0.10 | | | | 71.3 | | | | | | | | | | | | | |
| | 3/16/2009 | 6.70 | 4,879 | 484 | 2794.0 | 7.3 | | | | 67.6 | | | | | | | | | | | | | |
| | 6/16/2009 | | | | | 9.3 | | | | 42.8 | | | | | | | | | | | | | |
| | 8/5/2009 | | | | | <0.10 | | | | 150 | | | | | | | | | | | | | |
| | 11/2/2009 | 6.68 | 1,900 | -28 | 1235.4 | <0.10 | | | | 12.4 | | | | | | | | | | | 0.12 | 0.18 | 14,000 |
| | 2/3/2010 | 6.68 | 5,359 | -47 | 1163.7 | <0.10 | | | | 13.3 | | | | | | | | | | | 0.086 | 0.10 | 18,000 |
| | 4/22/2010 | 6.78 | 2,753 | -43 | 1309.1 | 9.6 | | | | 33.6 | | | | | | | | | | | | | |
| | 7/21 & 7/22/2010 | 6.56 | 2,413 | 18 | 1543.3 | 5.6 | | | | 51.4 | | | | | | | | | | | | | |
| | 10/12/2010 | 6.61 | 5,576 | -229 | 1518.3 | <0.10 | | | | 60.0 | | | | | | | | | | | | | |
| | 1/19/2011 | 6.84 | 2,245 | | 1190.3 | <0.10 | | | | 76.4 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 5/4/2011 | 6.77 | 2,771 | -79 | 1258.1 | 19.3 | <0.10 | 0.0 | 1.8 | 35.0 | 0.12 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.38 | <0.070 | 0.072 | <0.15 | <0.025 | 0.048 | 12.0 |
| | 7/28/2011 | 6.56 | 730 | -179 | 1474.0 | <0.10 | <0.10 | 0.0 | 3.1 | 96.0 | 0.25 | 0.092 | | <0.050 | <0.050 | <0.15 | 0.87 | <0.070 | 0.068 | <0.15 | <0.025 | 0.160 | 9,000 |
| | 10/19/2011 | 6.76 | 170 | -60 | 1172.0 | <0.10 | <0.10 | 2.3 | 1.7 | 56.2 | 0.083 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 0.064 | <0.15 | 0.029 | 0.280 | 13,000 |
| | 2/14/2012 | 6.78 | 2,024 | 71 | 1066.0 | 45.0 | <0.80 | 0.0 | 2.6 | 40.8 | 0.010 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.067 J | <0.070 | <0.050 | <0.15 | 0.039 | 0.099 | 200 |
| | 4/25/2012 | 6.62 | 341 | 30 | 1198.0 | 19.9 | <0.40 | 0.0 | 2.6 | 51.0 | 0.042 J | <0.050 | | <0.050 | 0.910 | <0.15 | 0.14 | <0.070 | <0.050 | <0.15 | 0.011J | 2.5 | 9,000 |
| | 8/2/2012 | 6.73 | 113 | 9 | 1054.0 | <0.10 | | 0.2 | 2.3 | 122 | 0.013J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.071J | <0.070 | <0.050 | <0.15 | 0.024J | 1.9 | 15,000 |
| | 11/15/2012 | 6.53 | 343 | 72 | 1314.0 | 3.4 | <0.10 | 0.0 | 3.1 | 62 | 0.040J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.032J | <0.070 | <0.050 | <0.15 | 0.034 | 0.11 | 390 |
| | 2/28/2013 | 6.78 | 2,960 | 88 | 957.6 | 25.1 | <0.40 | 0.0 | 2.8 | 44.1 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.071 J | <0.070 | <0.050 | <0.15 | <0.025 | 0.018 J | 54 |
| | 5/14/2013 | 6.71 | 1,740 | 71.13 | 1618.54 | 17.8 | <0.40 | 0.0 | 3.4 | 54.0 | 0.028 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.088 J | <0.070 | <0.050 | <0.15 | <0.025 | 0.013 J | 75 |
| | 9/24/2013 | 6.50 | 80 | -23.53 | 1222.79 | <0.10 | <0.10 | 2.25 | 3.4 | 22.7 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | <10.0 | 24,700 |
| *MMW-2S | 6/2/2008 | 7.03 | | | 867.7 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 7.16 | 7,865 | 107 | 786.4 | | | | | | | | | | | | | | | | | | |
| | 4/30/2011 | 7.29 | 9,482 | 21 | 619.5 | | | | | | | | | | | | | | | | | | |
| | 4/23/2012 | 7.19 | 5,290 | 61 | 694.0 | | | | | | | | | | | | | | | | | | |
| | 5/10/2013 | 7.12 | 1,800 | 58.76 | 1133.49 | | | | | | | | | | | | | | | | | | |
| *MMW-3S | 6/6/2008 | 7.02 | 505 | | 2673.1 | | | | | | | | | | | | | | | | | | |
| | 4/20/2010 | 7.21 | 454 | 75 | 932.6 | | | | | | | | | | | | | | | | | | |
| | 5/4/2011 | 7.17 | 587 | -228 | 892.3 | | | | | | | | | | | | | | | | | | |
| | 4/23/2012 | 7.15 | 1,018 | -54 | 893.3 | | | | | | | | | | | | | | | | | | |
| | 5/10/2013 | 6.97 | 290 | -22.96 | 1453.18 | | | | | | | | | | | | | | | | | | |
| MMW-4D | 6/2/2008 | 6.95 | 153 | | 1541.2 | | | | | | | | | | | | | | | | | | |
| | 4/20/2010 | 7.06 | 379 | 0 | 1209.8 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 7.07 | 764 | -104 | 1227.6 | | | | | | | | | | | | | | | | | | |
| | 2/14/2012 | 7.08 | 595 | -71 | 1117.0 | | | | | | | | | | | | | | | | | | |
| | 4/23/2012 | 7.15 | 242 | -110 | 1290.0 | | | | | | | | | | | | | | | | | | |
| | 7/31/2012 | 7.06 | 181 | -90 | 1530.0 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 6.87 | 625 | -96 | 1693.0 | | | | | | | | | | | | | | | | | | |
| | 3/5/2013 | 7.01 | 200 | -86 | 1491 | | | | | | | | | | | | | | | | | | |
| | 5/9/2013 | 7.05 | 240 | -95.14 | 1835.06 | | | | | | | | | | | | | | | | | | |
| | 9/20/2013 | 6.44 | 360 | -62.44 | 1451.95 | | | | | | | | | | | | | | | | | | |
| *MMW-5D | 6/2/2008 | 7.14 | | | 1090.6 | | | | | | | | | | | | | | | | | | |
| | 4/20/2010 | 7.13 | 304 | 126 | 1064.0 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 7.31 | 266 | -233 | 1472.3 | | | | | | | | | | | | | | | | | | |
| | 4/23/2012 | 7.53 | 243 | -116 | 667.8 | | | | | | | | | | | | | | | | | | |
| | 5/9/2013 | 7.05 | 140 | -92.71 | 1370.68 | | | | | | | | | | | | | | | | | | |
| MMW-6D | 6/6/2008 | 7.42 | 514 | | 2907.3 | | | | | | | | | | | | | | | | | | |
| | 4/20/2010 | 7.41 | 362 | 51 | 1060.9 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 7.32 | 142 | -251 | 1238.8 | | | | | | | | | | | | | | | | | | |
| | 2/14/2012 | 7.19 | 671 | -34 | 697.9 | | | | | | | | | | | | | | | | | | |
| | 4/23/2012 | 7.45 | 95 | -100 | 733.1 | | | | | | | | | | | | | | | | | | |
| | 7/31/2012 | 7.32 | 153 | -136 | 767.3 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 7.11 | 455 | -134 | 819.5 | | | | | | | | | | | | | | | | | | |
| | 3/5/2013 | 7.11 | 160 | -99 | 834.6 | | | | | | | | | | | | | | | | | | |
| | 5/9/2013 | 7.07 | 190 | -77.32 | 1194.68 | | | | | | | | | | | | | | | | | | |
| | 9/20/2013 | 7.29 | 180 | -116.23 | 771.54 | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| *MMW-7S | 6/6/2008 | 6.38 | 441 | | 3119.3 | | | | | | | | | | | | | | | | | | |
| | 4/20/2010 | 6.84 | 637 | 200 | 1013.2 | | | | | | | | | | | | | | | | | | |
| | 5/4/2011 | 6.85 | 1,321 | -205 | 1080.1 | | | | | | | | | | | | | | | | | | |
| | 4/26/2012 | 7.14 | 36.00 | -114 | 632.9 | | | | | | | | | | | | | | | | | | |
| | 5/9/2013 | 6.76 | 250 | 133.81 | 1272.77 | | | | | | | | | | | | | | | | | | |
| MMW-8S | 9/19/2007 | 7.70 | 2,300 | -43 | 780.0 | | | | | | | | | | | | | | | | | | |
| | 12/13/2007 | 6.00 | | 220 | 1.5 | | | | | | | | | | | | | | | | | | |
| | 3/20/2008 | | 180 | | 0.3 | | | | | | | | | | | | | | | | | | |
| | 6/6/2008 | | 1,271 | | 3385.2 | | | | | | | | | | | | | | | | | | |
| | 11/20/2008 | 7.05 | 487 | 515 | 2761.4 | | | | | | | | | | | | | | | | | | |
| | 3/16/2009 | 6.58 | 2,188 | 698 | 2647.0 | | | | | | | | | | | | | | | | | | |
| | 8/5/2009 | 7.08 | 2,439 | -160 | 1024.3 | | | | | | | | | | | | | | | | | | |
| | 11/2/2009 | 7.02 | 1,805 | -71 | 955.4 | | | | | | | | | | | | | | | | | | |
| | 2/3/2010 | 7.00 | 4,638 | -49 | 840.9 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 7.06 | 1,303 | -47 | 891.8 | | | | | | | | | | | | | | | | | | |
| | 7/21/2010 | 6.95 | 1,709 | -32 | 995.1 | | | | | | | | | | | | | | | | | | |
| | 10/12/2010 | 7.06 | 124 | -274 | 879.8 | | | | | | | | | | | | | | | | | | |
| | 1/19/2011 | 6.71 | 969 | | 1002.3 | | | | | | | | | | | | | | | | | | |
| | 4/30/2011 | 6.83 | 200 | -164 | 1905.7 | 16.3 | <0.40 | 2.5 | 2.2 | 108 | 0.10 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.22 | <0.070 | 0.065 | <0.15 | 0.07 | 33.0 | 7,600 |
| | 7/28/2011 | 6.58 | 2,202 | -47 | 2259.3 | <0.10 | <0.10 | 3.5 | 1.1 | 227 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.20 | <0.070 | <0.050 | <0.15 | 0.16 | 26.0 | 8,500 |
| | 10/24/2011 | 7.01 | 190 | -90 | 1016.0 | <0.10 | <0.10 | 3.8 | 1.4 | 250 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.45 | <0.070 | <0.050 | <0.15 | 0.18 | 78.0 | 20,000 |
| | 2/14/2012 | 7.00 | 140 | -106 | 970.1 | <0.10 | <0.10 | 5.1 | 1.6 | 213 | 0.017 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.030 J | <0.070 | <0.050 | <0.15 | 0.10 | 27 | 14,000 |
| | 4/25/2012 | 6.93 | 90 | -200 | 986.5 | <0.10 | <0.10 | 5.0 | 1.6 | 152 | 0.037 J | 0.054 | | <0.050 | <0.050 | <0.15 | 0.096 J | <0.070 | <0.050 | <0.15 | 0.094 | 28 | 12,000 |
| | 8/2/2012 | 6.97 | 74 | -97 | 1099.0 | <0.10 | | 3.4 | 1.9 | 160 | 0.0075J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.093 | 19 | 14,000 |
| | 11/15/2012 | 6.79 | 284 | -80 | 1145.0 | <0.10 | <0.10 | 1.75 | 1.7 | 192 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.040J | <0.070 | <0.050 | <0.15 | 0.017J | 10 | 13,000 |
| | 2/28/2013 | 6.96 | 270 | -82 | 977.1 | <0.10 | <0.10 | 3.75 | 1.8 | 138 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.061 J | <0.070 | <0.50 | <0.15 | 0.054 | 11 | 12,000 |
| | 5/14/2013 | 6.83 | 100 | -31.08 | 1848.00 | 0.20 | <0.10 | 2.9 | 2.2 | 172 | 0.027 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.085 J | <0.070 | <0.50 | <0.15 | 0.044 | 13 | 8,600 |
| | 9/24/2013 | 6.75 | 100 | -85.84 | 1300.87 | <0.10 | <0.10 | 1.75 | 33.5 | 13.5 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | <10.0 | 25,000 |
| MMW-9S | 9/20/2007 | 7.70 | 3,000 | 260 | 1500.0 | | | | | | | | | | | | | | | | | | |
| | 12/12/2007 | | 9,300 | 180 | 1300.0 | | | | | | | | | | | | | | | | | | |
| | 3/21/2008 | | 44 | 918 | 5173.4 | | | | | 230 | | | | | | | | | | | | | |
| | 6/6/2008 | 6.86 | | | 1223.7 | <0.10 | | | | 154 | 3.0 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.28 | <0.070 | 1.1 | 0.22 | 0.10 | 0.48 | 4,400 |
| | 9/11/2008 | | | | | <0.10 | | | | 152 | | | | | | | | | | | | | |
| | 11/20/2008 | 6.49 | 419 | 558 | 4141.3 | <0.10 | | | | 98.5 | | | | | | | | | | | | | |
| | 3/16/2009 | 6.77 | 4,601 | 222 | 3678.1 | <0.10 | | | | 74.2 | | | | | | | | | | | | | |
| | 6/16/2009 | | | | 12.0 | <0.10 | | | | 237 | | | | | | | | | | | | | |
| | 8/5/2009 | | | | | <0.10 | | | | 208 | | | | | | | | | | | | | |
| | 11/2/2009 | 6.56 | 1,861 | 35 | 1396.4 | <0.10 | | | | 135 | | | | | | | | | | | 0.13 | 160 | 6,200 |
| | 2/3/2010 | 6.55 | 5,596 | 11 | 1372.2 | <0.10 | | | | 116 | | | | | | | | | | | 0.12 | 150 | 9,400 |
| | 2/4/2010 | | | | | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 6.57 | 1,456 | -61 | 2012.4 | <0.10 | | | | 94.0 | | | | | | | | | | | | | |
| | 7/21/2010 | 6.58 | 3,403 | -60 | 1485.9 | <0.10 | | | | 125 | | | | | | | | | | | | | |
| | 10/12/2010 | 6.56 | 564 | -308 | 1540.1 | <0.10 | | | | 122 | | | | | | | | | | | | | |
| | 1/19/2011 | 6.90 | 2,815 | | 1500.3 | 0.22 | | | | 83.2 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.21 B | <0.070 | <0.050 | <0.15 | | | |
| | 5/4/2011 | 6.69 | 235 | -255 | 1878.6 | <0.10 | <0.10 | 6.0 | 3.8 | 189 | 0.094 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.34 | <0.070 | 0.06 | <0.15 | 1.5 | 82.0 | 12,000 |
| | 7/27/2011 | 6.52 | 434 | -187 | 1835.3 | <0.10 | <0.10 | 3.2 | 1.7 | 217 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.27 | <0.070 | <0.050 | <0.15 | 1.6 | 48.0 | 16,000 |
| | 10/24/2011 | 6.62 | 180 | -40 | 2035.0 | <0.10 | <0.10 | 2.3 | 2.6 | 164 | 0.078 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.15 | <0.070 | 0.075 | <0.15 | 22.0 | 1.9 | 7,000 |
| | 2/13/2012 | 6.67 | 103 | -180 | 1671.0 | <0.10 | 0.14 | 3.8 | 4.4 | 125 | 0.013 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.034 J | <0.070 | <0.050 | <0.15 | 2.0 | 65.0 | 12,000 |
| | 4/25/2012 | 6.64 | 123 | -160 | 1864.0 | <0.10 | <0.10 | 3.0 | 3.8 | 176 | 0.052 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.13 | <0.070 | 0.016 J | <0.15 | 2.0 | 36 | 7,400 |
| | 8/2/2012 | 6.58 | 38 | -129 | 1448.0 | <0.10 | | | 4.0 | 90.5 | 0.036J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.070J | <0.070 | <0.050 | <0.15 | 0.8 | 28 | 17,000 |
| | 11/14/2012 | 6.66 | 1,504 | -81 | 1224.0 | <0.10 | <0.10 | 1.75 | 4.7 | 62.5 | 0.072 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.12 | <0.070 | <0.050 | <0.15 | 1.3 | 27 | 5,800 |
| | 2/28/2013 | 6.62 | 160 | -91 | 1570 | <0.10 | <0.10 | 3.75 | 5.0 | 116 | <0.070 | <0.050 | | <0.10 | <0.10 | <0.15 | 0.071 J | <0.070 | <0.050 | <0.15 | 2.4 | 36 | 9,800 |
| | 5/14/2013 | 6.63 | 110 | -44.53 | 1978.02 | 0.12 | <0.10 | 1.3 | 6.5 | 214 | 0.032 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.12 | <0.070 | 0.16 | <0.15 | 2.4 | 27 | 8,100 |
| | 9/25/2013 | 6.46 | 380 | -66.87 | 1339.39 | <0.10 | <0.10 | 2.5 | 4.9 | 99.6 | 0.051 J | <0.050 | 0.15 | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | <10.0 | <10.0 | 7,580 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-10S | 9/19/2007 | 7.40 | 1,900 | 260 | 1400.0 | | | | | | | | | | | | | | | | | | |
| | 12/12/2007 | | 6,000 | 250 | 1300.0 | | | | | | | | | | | | | | | | | | |
| | 3/21/2008 | | 109 | | 5514.0 | | | | | | | | | | | | | | | | | | |
| | 6/6/2008 | 6.70 | 230 | | 1604.6 | | | | | | | | | | | | | | | | | | |
| | 9/10/2008 | 6.46 | 308 | | 4517.3 | | | | | | | | | | | | | | | | | | |
| | 11/20/2008 | 6.61 | 545 | 585 | 4320.5 | | | | | | | | | | | | | | | | | | |
| | 3/16/2009 | 6.93 | 5,003 | 159 | 3510.4 | | | | | | | | | | | | | | | | | | |
| | 11/2/2009 | 6.64 | 1,970 | -15 | 1683.6 | | | | | | | | | | | | | | | | | | |
| | 2/3/2010 | 6.63 | 5,474 | -43 | 1547.1 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 6.61 | 1,396 | -91 | 1835.1 | | | | | | | | | | | | | | | | | | |
| | 7/20/2010 | 6.62 | 2,423 | -56 | 1806.6 | | | | | | | | | | | | | | | | | | |
| | 10/12/2010 | 6.64 | 951 | -261 | 1852.2 | | | | | | | | | | | | | | | | | | |
| | 1/19/2011 | 6.91 | 2,654 | | 1523.3 | | | | | | | | | | | | | | | | | | |
| | 5/4/2011 | 6.67 | 243 | -247 | 1630.2 | <0.10 | <0.10 | 4.5 | 3.0 | 368 | 0.083 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.40 | <0.070 | 0.063 | <0.15 | 0.028 | 14.0 | 9,700 |
| | 7/27/2011 | 6.58 | 513 | -158 | 1,734.6 | <0.10 | <0.10 | 3.0 | 3.4 | 414 | <0.070 | <0.070 | | <0.10 | <0.10 | 0.150 | 0.28 | <0.070 | 0.049 | <0.15 | 0.15 | 29.0 | 13,000 |
| | 10/19/2011 | 6.73 | 200 | -70 | 1,646.0 | <0.10 | <0.10 | 2.9 | 2.6 | 130 | <0.070 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.12 | <0.070 | 0.069 | <0.15 | 0.084 | 12.0 | 10,000 |
| | 2/14/2012 | 6.71 | 169 | -81 | 1,730.0 | <0.10 | <0.10 | 4.9 | 4.3 | 285 | 0.016 J | <0.070 | | <0.050 | <0.050 | <0.15 | 0.034 J | <0.070 | <0.050 | <0.15 | 0.11 | 21 | 12,000 |
| | 4/24/2012 | 6.77 | 238 | -118 | 1,884.0 | <0.10 | <0.10 | 4.5 | 4.7 | 408 | 0.50 | <0.05 | | <0.050 | <0.050 | <0.15 | 0.090 J | <0.070 | 0.082 | <0.15 | 0.15 | 32 | 12,000 |
| | 8/2/2012 | 6.65 | 76 | -95 | 1,765.0 | <0.10 | | 3.5 | 4.6 | 260 | 0.018J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.11 | 11 | 7,300 |
| | 11/15/2012 | 6.54 | 223 | -67 | 1,652.0 | <0.10 | <0.10 | 2.2 | 3.8 | 139 | 0.051J | <0.050 | | 0.12 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.084 | 9.4 | 9,800 |
| | 2/28/2013 | 6.69 | 160 | -74 | 1,608 | <0.10 | 0.14 | 4.75 | 5.2 | 257 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.065 J | <0.070 | <0.050 | <0.15 | 0.091 | 11 | 12,000 |
| | 5/14/2013 | 6.62 | 100 | -75.88 | 2,139.72 | <0.10 | <0.10 | 4.8 | 5.8 | 379 | 0.034 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.082 J | <0.070 | <0.050 | <0.15 | 0.260 | 33 | 13,000 |
| | 9/25/2013 | 6.39 | 140 | -55.52 | 1,638.09 | <0.10 | <0.10 | 1.25 | 5.0 | 137 | 0.056 J | <0.050 | 0.14 | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | <10.0 | 279 | 9,890 |
| MMW-11S | 9/19/2007 | 7.60 | 2,300 | 220 | 880.0 | | | | | | | | | | | | | | | | | | |
| | 12/13/2007 | | | 390 | 720.0 | | | | | | | | | | | | | | | | | | |
| | 3/20/2008 | | 200 | | 3617.6 | | | | | 93.6 | | | | | | | | | | | | | |
| | 6/5 & 6/6/2008 | 7.13 | | | 723.8 | <0.10 | | | | 87.5 | 0.19 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.23 | <0.070 | <0.070 | <0.070 | 0.26 | 0.21 | 18.0 |
| | 9/10 & 9/11/2008 | 6.83 | 338 | | 0.3 | <0.10 | | | | 147 | | | | | | | | | | | | | |
| | 11/20/2008 | 6.99 | 782 | 518 | 2954.9 | <0.10 | | | | 138 | | | | | | | | | | | | | |
| | 3/16/2009 | 6.57 | 2,540 | 738 | 2887.2 | 5.6 | | | | 187 | | | | | | | | | | | | | |
| | 6/16/2009 | | | | | <0.10 | | | | 202 | | | | | | | | | | | | | |
| | 8/5/2009 | 6.95 | 2,457 | 127 | 951.5 | <0.10 | | | | 176 | | | | | | | | | | | | | |
| | 11/2/2009 | 6.89 | 1,847 | 40 | 981.8 | 1.2 | | | | 159 | | | | | | | | | | | 0.035 | 0.044 | 2.9 |
| | 2/3/2010 | 6.91 | 4,936 | -24 | 1043.2 | 3.6 | | | | 159 | | | | | | | | | | | 0.013 | 0.026 | 0.26 |
| | 4/22/2010 | 7.03 | 1,807 | 103 | 959.6 | 4.1 | | | | 192 | | | | | | | | | | | | | |
| | 7/21 & 7/22/2010 | 6.97 | 1,751 | 50 | 1037.3 | 0.20 | | | | 216 | | | | | | | | | | | | | |
| | 10/12/2010 | 6.95 | 301 | -217 | 954.2 | 0.48 | | | | 108 | | | | | | | | | | | | | |
| | 1/19/2011 | 6.70 | 305 | | 975.5 | 5.1 | | | | 173 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 4/30/2011 | 7.16 | 4,373 | -30 | 850.1 | | | | | | | | | | | | | | | | | | |
| | 7/26/2011 | 6.87 | 250 | -169 | 764.5 | | | | | | | | | | | | | | | | | | |
| | 10/21/2011 | 7.00 | 260 | 140 | 1108.0 | | | | | | | | | | | | | | | | | | |
| | 2/14/2012 | 7.03 | 1,601 | 70 | 997.1 | | | | | | | | | | | | | | | | | | |
| | 4/24/2012 | 7.11 | 567 | 66 | 858.0 | | | | | | | | | | | | | | | | | | |
| | 7/31/2012 | 7.03 | 92 | 232 | 992.0 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 6.90 | 237 | 107 | 1174.0 | | | | | | | | | | | | | | | | | | |
| | 3/1/2013 | 7.01 | 3,720 | 75 | 893.4 | | | | | | | | | | | | | | | | | | |
| | 5/13/2013 | 7.11 | 627 | 91.20 | 1345.67 | | | | | | | | | | | | | | | | | | |
| | 9/20/2013 | 7.01 | 770 | 77.35 | 971.83 | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-11D | **3/16/2009** | 6.61 | 2,969 | 715 | 2745.4 | | | | | | | | | | | | | | | | | | |
| | **8/5/2009** | 7.06 | 2,358 | 41 | 830.1 | | | | | | | | | | | | | | | | | | |
| | **11/2/2009** | 7.01 | 2,495 | -23 | 889.3 | | | | | | | | | | | | | | | | | | |
| | **2/3/2010** | 6.94 | 4,812 | -1 | 939.2 | | | | | | | | | | | | | | | | | | |
| | **4/22/2010** | 7.02 | 1,325 | 96 | 945.6 | | | | | | | | | | | | | | | | | | |
| | **7/21/2010** | 7.00 | 1,820 | 36 | 960.9 | | | | | | | | | | | | | | | | | | |
| | **10/12/2010** | 7.02 | 209 | -221 | 954.0 | | | | | | | | | | | | | | | | | | |
| | **1/19/2011** | 6.69 | 292 | | 885.7 | | | | | | | | | | | | | | | | | | |
| | **4/30/2011** | 7.04 | 349 | -123 | 906.1 | | | | | | | | | | | | | | | | | | |
| | **7/26/2011** | 6.82 | 394 | -156 | 689.5 | | | | | | | | | | | | | | | | | | |
| | **10/21/2011** | 7.10 | 200 | 0 | 917.0 | | | | | | | | | | | | | | | | | | |
| | **2/14/2012** | 7.03 | 266 | 40 | 997.5 | | | | | | | | | | | | | | | | | | |
| | **4/24/2012** | 7.11 | 2,467 | 84 | 959.7 | | | | | | | | | | | | | | | | | | |
| | **7/31/2012** | 7.00 | 112 | 23 | 1140.0 | | | | | | | | | | | | | | | | | | |
| | **11/13/2012** | 6.99 | 377 | 11 | 1003.0 | | | | | | | | | | | | | | | | | | |
| | **3/4/2013** | 6.98 | 200 | 49 | 1058 | | | | | | | | | | | | | | | | | | |
| | **5/13/2013** | 7.01 | 270 | 64.00 | 1312.70 | | | | | | | | | | | | | | | | | | |
| | **9/24/2013** | 7.04 | 140 | 26.85 | 974.30 | | | | | | | | | | | | | | | | | | |
| MMW-12S | **3/16/2009** | 6.62 | 4,079 | 606 | 2817.7 | | | | | | | | | | | | | | | | | | |
| | **11/2/2009** | 6.93 | 1,885 | 116 | 948.2 | | | | | | | | | | | | | | | | | | |
| | **2/3/2010** | 6.80 | 5,624 | 251 | 1038.5 | | | | | | | | | | | | | | | | | | |
| | **4/20/2010** | 6.99 | 234 | 170 | 1046.2 | | | | | | | | | | | | | | | | | | |
| | **7/20/2010** | 7.00 | 10,359 | 160 | 932.5 | | | | | | | | | | | | | | | | | | |
| | **10/12/2010** | 6.92 | 349 | -155 | 1026.0 | | | | | | | | | | | | | | | | | | |
| | **1/18/2011** | 6.57 | 640 | | 1050.5 | | | | | | | | | | | | | | | | | | |
| | **4/30/2011** | 6.92 | 296 | -118 | 1075.0 | | | | | | | | | | | | | | | | | | |
| | **7/26/2011** | 6.76 | 400 | -114 | 1006.6 | | | | | | | | | | | | | | | | | | |
| | **10/18/2011** | 6.50 | 180 | 220 | 1063.0 | | | | | | | | | | | | | | | | | | |
| | **2/14/2012** | 6.95 | 352 | 57 | 1089.0 | | | | | | | | | | | | | | | | | | |
| | **4/23/2012** | 7.02 | 74 | 76 | 1105.0 | | | | | | | | | | | | | | | | | | |
| | **7/31/2012** | 6.53 | 40 | 142 | 1060.0 | | | | | | | | | | | | | | | | | | |
| | **11/13/2012** | 6.32 | 255 | 59 | 1032.0 | | | | | | | | | | | | | | | | | | |
| | **3/4/2013** | 6.90 | 280 | 101 | 1066 | | | | | | | | | | | | | | | | | | |
| | **5/10/2013** | 7.00 | 180 | 50.14 | 1474.90 | | | | | | | | | | | | | | | | | | |
| | **9/20/2013** | 6.23 | 220 | 18.05 | 1050.56 | | | | | | | | | | | | | | | | | | |
| MMW-13D | **3/16/2009** | 6.58 | 3,463 | 662 | 2420.6 | | | | | | | | | | | | | | | | | | |
| | **8/5/2009** | 7.20 | 2,502 | -49 | 867.0 | | | | | | | | | | | | | | | | | | |
| | **11/2/2009** | 7.24 | 1,790 | -61 | 664.9 | | | | | | | | | | | | | | | | | | |
| | **2/3/2010** | 7.21 | 5,090 | -75 | 700.2 | | | | | | | | | | | | | | | | | | |
| | **4/22/2010** | 7.08 | 1,743 | -55 | 828.3 | | | | | | | | | | | | | | | | | | |
| | **7/20/2010** | 7.17 | 1,906 | -38 | 823.8 | | | | | | | | | | | | | | | | | | |
| | **10/12/2010** | 7.27 | 116 | -255 | 759.8 | | | | | | | | | | | | | | | | | | |
| | **1/19/2011** | 6.64 | 230 | | 697.0 | | | | | | | | | | | | | | | | | | |
| | **4/30/2011** | 7.18 | 340 | -128 | 877.9 | | | | | | | | | | | | | | | | | | |
| | **7/26/2011** | 7.03 | 1,428 | -204 | 913.7 | | | | | | | | | | | | | | | | | | |
| | **10/18/2011** | 7.28 | 180 | -100 | 789.9 | | | | | | | | | | | | | | | | | | |
| | **2/14/2012** | 7.23 | 135 | -82 | 814.1 | | | | | | | | | | | | | | | | | | |
| | **4/24/2012** | 7.25 | 169 | -60 | 904.3 | | | | | | | | | | | | | | | | | | |
| | **7/31/2012** | 7.27 | 136 | -112 | 942.2 | | | | | | | | | | | | | | | | | | |
| | **11/13/2012** | 7.23 | 486 | -118 | 903.2 | | | | | | | | | | | | | | | | | | |
| | **3/4/2013** | 7.21 | 210 | -56 | 749.6 | | | | | | | | | | | | | | | | | | |
| | **5/10/2013** | 7.22 | 410 | -38.15 | 776.08 | | | | | | | | | | | | | | | | | | |
| | **9/20/2013** | 7.26 | 180 | -105.00 | 883.03 | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-14D | 3/21/2008 | | 78 | 895 | 5197.5 | | | | | | | | | | | | | | | | | | |
| | 6/5/2008 | 7.08 | | | 1003.5 | | | | | | | | | | | | | | | | | | |
| | 9/11/2008 | 6.95 | 14 | | 0.4 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.90 | 1,070 | | | | | | | | | | | | | | | | | | | | |
| | 3/18/2009 | 6.71 | 850 | 780 | 2190.7 | | | | | | | | | | | | | | | | | | |
| | 8/5/2009 | 7.14 | 2,440 | -83 | 763.8 | | | | | | | | | | | | | | | | | | |
| | 11/2/2009 | 7.10 | 1,820 | 1 | 782.7 | | | | | | | | | | | | | | | | | | |
| | 2/3/2010 | 7.01 | 5,793 | 303 | 779.2 | | | | | | | | | | | | | | | | | | |
| | 4/20/2010 | 7.14 | 231 | 111 | 750.8 | | | | | | | | | | | | | | | | | | |
| | 7/20/2010 | 7.13 | 4,430 | -55 | 803.6 | | | | | | | | | | | | | | | | | | |
| | 10/12/2010 | 7.13 | 221 | -224 | 820.2 | | | | | | | | | | | | | | | | | | |
| | 1/18/2011 | 6.67 | 247 | | 812.7 | | | | | | | | | | | | | | | | | | |
| | 4/30/2011 | 7.16 | 397 | -150 | 738.4 | | | | | | | | | | | | | | | | | | |
| | 7/26/2011 | 6.96 | 262 | -183 | 827.0 | | | | | | | | | | | | | | | | | | |
| | 10/19/2011 | 6.78 | 240 | -50 | 844.7 | | | | | | | | | | | | | | | | | | |
| | 2/14/2012 | 7.16 | 793 | -62 | 815.2 | | | | | | | | | | | | | | | | | | |
| | 4/23/2012 | 7.24 | 437 | -93 | 8.0 | | | | | | | | | | | | | | | | | | |
| | 7/31/2012 | 6.74 | 536 | -41 | 851.8 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 6.25 | 228 | -38 | 960.7 | | | | | | | | | | | | | | | | | | |
| | 3/4/2013 | 6.82 | 220 | -61 | 972.6 | | | | | | | | | | | | | | | | | | |
| | 5/10/2013 | 7.08 | 300 | -74.09 | 1405.61 | | | | | | | | | | | | | | | | | | |
| | 9/20/2013 | 6.34 | 170 | -47.14 | 872.99 | | | | | | | | | | | | | | | | | | |
| MMW-15S | 2/15/2012 | 7.09 | 426 | 38 | 935.4 | | | | | | | | | | | | | | | | | | |
| | 4/26/2012 | 7.33 | 126 | -13 | 804.3 | | | | | | | | | | | | | | | | | | |
| | 8/6/2012 | 7.02 | 167 | 119 | 878.8 | | | | | | | | | | | | | | | | | | |
| | 11/21/2012 | 6.96 | 395 | 105 | 859.0 | | | | | | | | | | | | | | | | | | |
| | 3/6/2013 | 7.05 | 460 | 68 | 832.8 | | | | | | | | | | | | | | | | | | |
| | 5/17/2013 | 7.00 | 300 | 196.90 | 1798.71 | | | | | | | | | | | | | | | | | | |
| | 9/18/2013 | 6.98 | 680 | 173.21 | 1038.87 | | | | | | | | | | | | | | | | | | |
| MMW-15D | 2/15/2012 | 7.33 | 422 | -94 | 998.1 | | | | | | | | | | | | | | | | | | |
| | 4/26/2012 | 7.00 | 1,384 | -6 | 920.5 | | | | | | | | | | | | | | | | | | |
| | 8/6/2012 | 7.39 | 59 | -135 | 702.0 | | | | | | | | | | | | | | | | | | |
| | 11/21/2012 | 7.39 | 233 | -149 | 649.0 | | | | | | | | | | | | | | | | | | |
| | 3/6/2013 | 7.35 | 160 | -94 | 593.2 | | | | | | | | | | | | | | | | | | |
| | 5/17/2013 | 7.32 | 50 | -107.16 | 1237.51 | | | | | | | | | | | | | | | | | | |
| | 9/18/2013 | 7.32 | 170 | -106.00 | 604.22 | | | | | | | | | | | | | | | | | | |
| MMW-P-01 | 3/20/2008 | | 21 | | 5619.1 | | | | | | | | | | | | | | | | | | |
| | 6/7/2008 | | 1,252 | | 0.4 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.72 | 221 | | | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.79 | 929 | 468 | 3419.4 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 6.74 | 1,774 | -48 | 1824.2 | | | | | | | | | | | | | | | | | | |
| | 2/4/2010 | 6.87 | 697 | -132 | 1530.4 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 7.07 | 1,376 | -255 | 1493.8 | | | | | | | | | | | | | | | | | | |
| | 7/7/2010 | | | | | | | | | | 2.5 | <0.05 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 7/21/2010 | 6.78 | 2,113 | -130 | 1421.3 | | | | | | | | | | | | | | | | | | |
| | 10/14/2010 | 6.76 | 203 | -164 | 1382.5 | | | | | | | | | | | | | | | | | | |
| | 1/20/2011 | 6.79 | 1,354 | | 1609.8 | | | | | | | | | | | | | | | | | | |
| | 5/5/2011 | 6.68 | 1,003 | -176 | 1977.6 | 1.9 | 0.15 | 2.4 | 6.3 | 285 | 0.10 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.45 | <0.070 | 0.071 | <0.15 | 0.12 | 240 | 3,000 |
| | 7/28/2011 | 6.70 | 628 | -161 | 1508.8 | <0.10 | <0.10 | 3.2 | 3.4 | 145 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.28 | <0.070 | 0.050 | <0.15 | 0.76 | 670 | 13,000 |
| | 10/24/2011 | 6.76 | 120 | -90 | 1694.0 | <0.10 | <0.10 | 5.0 | 2.6 | 81.5 | 1.0 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.82 | <0.070 | 0.088 | <0.15 | 0.72 | 1,600 | 12,000 |
| | 2/13/2012 | 6.77 | 89 | -200 | 1737.0 | <0.10 | <0.10 | 2.9 | 3.8 | 56.0 | 0.021 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.047 J | <0.070 | <0.050 | <0.15 | 0.65 | 1,700 | 14,000 |
| | 4/25/2012 | 6.71 | 49 | -205 | 1698.0 | <0.10 | <0.10 | 4.25 | 3.3 | 80.0 | 0.044 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.086 J | <0.070 | <0.050 | <0.15 | 0.6 | 1,300 | 13,000 |
| | 8/2/2012 | 6.74 | 56 | -90 | 1901.0 | <0.10 | | 3.20 | 4.5 | 45.8 | 0.022J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.097J | <0.070 | <0.050 | <0.15 | 0.63 | 1,500 | 15,000 |
| | 11/14/2012 | 6.65 | 277 | -103 | 1869.0 | <0.10 | <0.10 | 2.25 | 3.2 | 106 | 0.058J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.050J | <0.070 | <0.050 | <0.15 | 0.43 | 540 | 10,000 |
| | 3/4/2013 | 6.67 | 140 | -83 | 1721 | <0.10 | <0.10 | 2.8 | 4.1 | 118 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.057 J | <0.070 | <0.050 | <0.15 | 0.35 | 540 | 12,000 |
| | 5/15/2013 | 6.67 | 350 | -12.99 | 3293.32 | 0.28 | <0.10 | 5.2 | 4.7 | 377 | 0.063 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.078 J | <0.070 | 0.036 J | <0.15 | 0.17 | 68 | 4,600 |
| | 9/26/2013 | 6.60 | 430 | -52.90 | 1877.00 | <0.10 | <0.10 | 4.5 | 3.2 | 122 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | 451 | 12,700 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-02 | 3/20/2008 | | 155 | | 4637.4 | | | | | | | | | | | | | | | | | | |
| | 6/7/2008 | | 1,180 | | 4112.8 | | | | | | | | | | | | | | | | | | |
| | 9/11/2008 | 6.88 | 101 | | 0.3 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.85 | 574 | | | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.70 | 852 | 858 | 3641.0 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 6.97 | 2,066 | 98 | 1006.2 | | | | | | | | | | | | | | | | | | |
| | 2/4/2010 | 6.82 | 693 | 272 | 1324.1 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 6.99 | 148 | 256 | 1346.3 | | | | | | | | | | | | | | | | | | |
| | 7/21/2010 | 6.92 | 1,806 | -10 | 1121.8 | | | | | | | | | | | | | | | | | | |
| | 10/13/2010 | 6.92 | 281 | -209 | 1089.7 | | | | | | | | | | | | | | | | | | |
| | 1/19/2011 | 6.74 | 1,617 | | 1256.8 | | | | | | | | | | | | | | | | | | |
| | 5/4/2011 | 6.92 | 321 | -245 | 1263.9 | <0.10 | <0.10 | 1.8 | 1.7 | 33.2 | 0.13 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.32 | <0.070 | 0.076 | <0.15 | 1.1 | 1,600 | 17,000 |
| | 7/27/2011 | 6.86 | 322 | -225 | 1083.8 | <0.10 | <0.10 | 2.5 | 1.0 | 190 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.28 | <0.070 | <0.050 | <0.15 | 1.2 | 240 | 4,300 |
| | 10/19/2011 | 6.93 | 210 | -50 | 1174.0 | <0.10 | <0.10 | 2.2 | 1.4 | 84.2 | 0.08 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.44 | <0.070 | 0.069 | <0.15 | 1.4 | 670 | 13,000 |
| | 2/13/2012 | 6.78 | 1055 | -5 | 1285.0 | 0.12 | <0.10 | 3.0 | 3.3 | 85.5 | 0.43 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.027 J | <0.070 | <0.050 | <0.15 | 1.4 | 140 | 12,000 |
| | 4/25/2012 | 6.84 | 75 | -179 | 1437.0 | <0.10 | <0.10 | 2.9 | 2.1 | 105 | 0.039 J | <0.050 | | <0.050 | <0.050 | <0.150 | 0.16 | <0.070 | <0.050 | <0.15 | 1.6 | 180 | 13,000 |
| | 8/1/2012 | 6.80 | -74 | -74 | 1415.0 | <0.10 | | 3.0 | 2.3 | 93.5 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.018J | <0.070 | <0.050 | <0.15 | 1.5 | 160 | 15,000 |
| | 11/14/2012 | 6.72 | 145 | -132 | 1579.0 | <0.10 | <0.10 | 2.75 | 2.9 | 144 | <0.070 | <0.050 | | 0.67J | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 1.2 | 570 | 12,000 |
| | 3/4/2013 | 6.83 | 150 | -88 | 1286 | <0.10 | <0.10 | 1.25 | 2.7 | 69.4 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.070 J | <0.070 | <0.050 | <0.15 | 1.2 | 74 | 15,000 |
| | 5/14/2013 | 6.87 | 550 | -69.20 | 1502.42 | <0.10 | <0.10 | 1.8 | 1.9 | 113 | 0.032 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.068 J | <0.070 | <0.050 | <0.15 | 1.1 | 99 | 10,000 |
| | 9/25/2013 | 6.64 | 710 | -55.87 | 1006.46 | <0.10 | <0.10 | 1.0 | 2.0 | 145 | 0.047 J | <0.050 | 0.048 J | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | <10.0 | 18.0 | 4,370 |
| MMW-P-03S | 3/20/2008 | | | | 5093.3 | | | | | 86.8 | | | | | | | | | | | | | |
| | 6/5, 6/6 & 6/7/2008 | | 1,176 | | 4004.7 | <0.10 | | | | 84.9 | 31.0 | 0.45 | | 0.14 | <0.10 | 0.12 | 1.400 | 1.200 | 31.0 | 0.37 | 5.3 | 0.82 | 59.0 |
| | 9/11/2008 | | | | | <0.10 | | | | 117 | | | | | | | | | | | | | |
| | 11/19/2008 | 6.84 | 127 | | | <0.10 | | | | 43.8 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.66 | 812 | 809 | 3372.1 | <0.10 | | | | 42.1 | | | | | | | | | | | | | |
| | 6/17/2009 | | | | | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 8/6/2009 | | | | | <0.10 | | | | 9.4 | | | | | | | | | | | | | |
| | 11/3/2009 | 6.91 | 1,783 | -81 | 1162.9 | <0.10 | | | | 8.1 | | | | | | | | | | | 2.1 | 7.1 | 17,000 |
| | 2/3 & 2/4/2010 | 6.85 | 751 | -63 | 1303.5 | <0.10 | | | | 38.4 | | | | | | | | | | | 0.63 | 11.0 | 18,000 |
| | 4/22/2010 | 6.92 | 170 | -63 | 970.5 | <0.10 | | | | 18.8 | | | | | | | | | | | | | |
| | 7/21/2010 | 6.75 | 2,016 | -72 | 1300.2 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 10/13/2010 | 6.88 | 270 | -274 | 1333.0 | <0.10 | | | | 21.4 | | | | | | | | | | | | | |
| | 1/19/2011 | 6.77 | 1,417 | | 905.3 | | | | | | | | | | | | | | | | | | |
| | 5/4/2011 | 6.83 | 234 | -287 | 1227.4 | <0.10 | <0.10 | 2.8 | 4.2 | <5.0 | 4.1 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.37 | <0.070 | 0.23 | <0.15 | 9.6 | 410 | 21,000 |
| | 7/27/2011 | 6.75 | 412 | -175 | 1290.2 | <0.10 | <0.10 | 5.0 | 2.3 | 51.4 | 0.06 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.31 | <0.070 | 0.051 | <0.15 | 0.8 | 1,200 | 14,000 |
| | 10/19/2011 | 6.84 | 190 | -90 | 1416.0 | <0.10 | <0.10 | 3.2 | 2.0 | 35.5 | 0.08 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.34 | <0.070 | 0.071 | <0.15 | 2.0 | 930 | 17,000 |
| | 2/13/2012 | 6.83 | 171 | -44 | 924.0 | <0.10 | <0.10 | 2.5 | 2.9 | 39.8 | 0.25 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.045 J | <0.070 | <0.050 | <0.15 | 0.5 | 170 | 14,000 |
| | 4/25/2012 | 6.85 | 89 | -226 | 971.7 | <0.10 | <0.10 | 2.0 | 2.4 | 46.8 | 0.078 | <0.050 | | <0.050 | <0.050 | <0.150 | 0.14 | <0.070 | <0.050 | <0.15 | 0.81 | 670 | 14,000 |
| | 8/1/2012 | 6.87 | 79 | -133 | 1151.0 | <0.10 | | 2.0 | 3.4 | 9.9 | 0.260 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.11 | <0.070 | 0.041J | <0.15 | 1.70 | 1,500 | 17,000 |
| | 11/14/2012 | 6.86 | 174 | -177 | 729.6 | <0.10 | <0.10 | 2.2 | 1.9 | 32.0 | 0.042J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.74 | 240 | 12,000 |
| | 3/4/2013 | 6.83 | 160 | -137 | 784.2 | <0.10 | <0.10 | 2.75 | 3.1 | 27.9 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.053 J | <0.070 | <0.050 | <0.15 | 1.1 | 80 | 12,000 |
| | 5/14/2013 | 6.40 | 140 | -95.67 | 1108.97 | <0.10 | <0.10 | 5.8 | 6.8 | 13.5 | 0.850 | 0.065 | | <0.50 | <0.10 | <0.15 | 0.072 J | <0.070 | 0.12 | <0.15 | 11 | 260 | 14,000 |
| | 9/26/2013 | 6.76 | 160 | -71.49 | 1314.80 | <0.10 | <0.10 | 4.5 | 3.1 | 61.6 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | 279 | 14,200 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-03D | 3/20/2008 | | 56 | | 1718.8 | | | | | | | | | | | | | | | | | | |
| | 6/5 & 6/6/2008 | | | | | <0.10 | | | | 46.0 | 53.0 | 0.43 | | <0.10 | <0.10 | 0.23 | 1.2 | 0.380 | 24.0 | 0.85 | 0.39 | 0.94 | 1,200 |
| | 9/11/2008 | | | | | <0.10 | | | | 22.3 | | | | | | | | | | | | | |
| | 11/19/2008 | | | | | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.65 | 806 | 757 | 3253.2 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 6/17/2009 | | | | | <0.10 | | | | 6.8 | | | | | | | | | | | | | |
| | 8/6/2009 | | | | | <0.10 | | | | 32.1 | | | | | | | | | | | | | |
| | 11/3/2009 | 6.83 | 1,791 | -48 | 1406.3 | <0.10 | | | | <5.0 | | | | | | | | | | | 2.2 | 4.8 | 17,000 |
| | 2/4/2010 | 6.67 | 661 | 64 | 1360.5 | <0.10 | | | | <5.0 | | | | | | | | | | | 2.7 | 8.3 | 25,000 |
| | 4/22/2010 | 6.88 | 143 | -16 | 1143.8 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 7/21/2010 | 6.81 | 2,235 | -125 | 1084.8 | <0.10 | | | | 6.8 | | | | | | | | | | | | | |
| | 10/13/2010 | 6.73 | 269 | -246 | 1358.0 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 1/19/2011 | 6.28 | 2,351 | | 1149.7 | <0.10 | | | | 25.8 | 0.60 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 5/4/2011 | 6.82 | 267 | -294 | 1194.9 | <0.10 | <0.10 | 2.9 | 3.8 | 35.5 | 0.22 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.48 | <0.070 | 0.084 | <0.15 | 0.40 | 110 | 14,000 |
| | 7/27/2011 | 6.81 | 367 | -192 | 1284.7 | <0.10 | <0.10 | 5.3 | 1.8 | 25.6 | 0.34 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.25 | <0.070 | 0.067 | <0.15 | 25.0 | 1,400 | 26,000 |
| | 10/18/2011 | 6.87 | 150 | -150 | 1377.0 | <0.10 | <0.10 | 2.9 | 9.5 | 10.7 | 18.0 | 0.13 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 1.0 | <0.15 | 5.8 | 2,200 | 20,000 |
| | 2/13/2012 | 6.90 | 200 | -26 | 1158.0 | <0.10 | <0.10 | 3.1 | 10.1 | <5.0 | 18 | 0.092 | | <0.050 | <0.050 | 0.084 J | 0.46 J | <0.070 | 0.50 | <0.15 | 5.0 | 2,400 | 24,000 |
| | 4/25/2012 | 6.81 | 51 | -229 | 1374.0 | <0.10 | <0.10 | 3.2 | 25.0 | <5.0 | 52 | 0.68 | | <0.050 | <0.050 | 0.22 | 1.2 | <0.070 | 1.0 | 0.055 J | 8.4 | 2,400 | 24,000 |
| | 8/1/2012 | 6.82 | 35 | -159 | 1415.0 | <0.10 | | 4.5 | 7.3 | <5.0 | 8.6 | 0.046J | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 0.38 | <0.15 | 18.0 | 3,200 | 21,000 |
| | 11/14/2012 | 6.75 | 157 | -189 | 1085.0 | <0.10 | <0.10 | 2.5 | 11.3 | 8.8 | 16.0 | 0.083 | | <0.050 | <0.050 | 0.055J | <0.10 | <0.070 | 0.43J | <0.15 | 47.0 | 820 | 20,000 |
| | 3/4/2013 | 6.82 | 110 | -134 | 1210 | <0.10 | <0.10 | 2.7 | 4.3 | 19.9 | 0.57 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.044 J | <0.070 | 0.014 J | <0.75 | 67 | 1,000 | 22,000 |
| | 5/14/2013 | 6.77 | 80 | -99.90 | 1975.54 | <0.10 | <0.10 | 5.4 | 3.4 | 83.5 | 0.056 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.10 | <0.070 | <0.050 | <0.15 | 30 | 1,000 | 21,000 |
| | 9/26/2013 | 6.06 | 2,100 | -17.46 | 1.36 | <0.10 | <0.10 | 3.75 | 3.7 | 35.4 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | 115 | 111 | 1,130 |
| MMW-P-04 | 3/20/2008 | | 233 | | 0.3 | | | | . | | | | | | | | | | | | | | |
| | 6/5/2008 | 6.87 | | | 1416.9 | | | | | | | | | | | | | | | | | | |
| | 9/11/2008 | 7.03 | | | 0.5 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.96 | 811 | | | | | | | | | | | | | | | | | | | | |
| | 2/12/2010 | 6.89 | 1,005 | 199 | 827.4 | | | | | | | | | | | | | | | | | | |
| | 4/21/2010 | 6.95 | 237 | -47 | 808.1 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 6.74 | 3,591 | -40 | 964.2 | | | | | | | | | | | | | | | | | | |
| | 10/13/2010 | 6.68 | 869 | -203 | 1025.3 | | | | | | | | | | | | | | | | | | |
| | 5/5/2011 | 7.07 | 1,389 | -185 | 1036.9 | 1.2 | 0.18 | 0.0 | 43.0 | 26.9 | 2.3 | 0.10 | | 0.64 | 0.24 | <0.070 | 1.4 | <0.070 | 0.46 | <0.15 | 0.044 | 11.0 | 10,000 |
| | 7/28/2011 | 6.67 | 1,011 | -174 | 1363.1 | <0.10 | <0.10 | 4.7 | 18.1 | <0.10 | 24 | 0.22 | | <0.050 | <0.050 | <0.15 | <1.0 | <0.070 | 1.7 | <0.15 | 0.44 | 570 | 18,000 |
| | 10/24/2011 | 6.87 | 520 | -150 | 874.0 | <0.10 | <0.10 | | 11.6 | 39.8 | 5.0 | 0.11 | | <0.050 | <0.050 | <0.15 | 0.3 | <0.070 | 0.31 | <0.15 | 1.7 | 26.0 | 18,000 |
| | 2/17/2012 | 6.81 | 990 | -200 | 694.8 | <0.10 | <0.10 | 2.5 | 5.5 | <5.0 | 1.6 | 0.072 | | <0.050 | <0.050 | <0.15 | 0.2 | <0.070 | 0.33 | <0.15 | 0.2 | 6.4 | 19,000 |
| | 5/1/2012 | 6.70 | 994 | -202 | 769.2 | <0.10 | <0.10 | 2.1 | 4.2 | 15.4 | 1.4 | 0.053 | | <0.050 | <0.050 | <0.15 | <1.0 | <0.070 | 0.029 J | <0.15 | 0.1 | 3.2 | 19,000 |
| | 8/8/2012 | Insufficient water to sample | | | | | | | | | | | | | | | | | | | | | |
| | 11/21/2012 | 6.82 | 973 | -227 | 726.5 | | | 3.1 | | | | | | | | | | | | | | | |
| | 3/9/2013 | Sampled with bailer | | | | <0.10 | <0.10 | | Container froze at lab, unable to analyze | 5.1 | 18 | 3.30 | | 2.2 | <0.05 | 0.42 | 0.13 | 1.3 | 16 | 0.42 | 0.47 | 5.4 | 18,000 |
| | 5/20/2013 | Sampled with bailer | | | | <0.10 | <0.10 | | 125 | 12.2 | 22 | 1.2 | | 1.5 | <0.10 | 0.14 J | 0.39 J | 0.79 | 12 | 0.27 | 0.36 | 6.6 | 14,000 |
| | 9/26/2013 | Sampled with bailer | | | | <0.10 | <0.10 | 3.75 | 30.0 | 42.8 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | 61.0 | 22,900 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-05 | 3/20/2008 | | | | 6086.2 | | | | | | | | | | | | | | | | | | |
| | 6/5/2008 | 6.86 | | | 1150.6 | | | | | | | | | | | | | | | | | | |
| | 9/11/2008 | 7.06 | | | 0.3 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.79 | 870 | 3,652 | | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.61 | 864 | 838 | 2669.5 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 6.98 | 1,842 | -70 | 1036.9 | | | | | | | | | | | | | | | | | | |
| | 2/4/2010 | 6.98 | 724 | -83 | 787.2 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 6.99 | 1,663 | -26 | 1003.1 | | | | | | | | | | | | | | | | | | |
| | 7/21/2010 | 6.88 | 2,067 | -80 | 1101.5 | | | | | | | | | | | | | | | | | | |
| | 10/13/2010 | 6.93 | 250 | -240 | 917.8 | | | | | | | | | | | | | | | | | | |
| | 1/20/2011 | 6.69 | 174 | | 987.9 | | | | | | | | | | | | | | | | | | |
| | 4/30/2011 | 6.99 | 209 | -257 | 1036.9 | | | | | | | | | | | | | | | | 0.025 | 58.0 | 9,900 |
| | 7/27/2011 | 6.80 | 607 | -184 | 1436.7 | | | | | | | | | | | | | | | | 0.23 | 1,300 | 15,000 |
| | 10/19/2011 | 7.11 | 230 | -120 | 559.7 | | | | | | | | | | | | | | | | 0.12 | 93.0 | 3,700 |
| | 2/13/2012 | 6.99 | 112 | -286 | 822.8 | <0.10 | <0.10 | 1.9 | 19.0 | 59.5 | 4.2 | 0.066 | | <0.050 | <0.050 | 0.055 J | <1.0 | <0.070 | 0.26 J | <0.15 | 0.20 | 63 | 11,000 |
| | 4/25/2012 | 7.00 | 65 | -251 | 734.1 | <0.10 | <0.10 | 3.0 | 3.8 | 46 | 0.3 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.15 | <0.070 | 0.034 J | <0.15 | 0.20 | 51 | 7,200 |
| | 8/2/2012 | 7.21 | 60 | -124 | 466.5 | <0.10 | | 1.2 | 1.5 | 39.1 | 0.013J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.11J | <0.070 | <0.050 | <0.15 | 0.21 | 15 | 1,800 |
| | 11/14/2012 | 6.94 | 237 | -215 | 907.0 | <0.10 | <0.10 | 1.2 | 4.2 | 86.8 | 0.24 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.19 | 4.8 | 6,300 |
| | 3/4/2013 | 6.98 | 140 | -152 | 759.4 | <0.10 | <0.10 | 3.0 | 27.1 | 44.3 | 10 | 0.38 | | <0.10 | <0.050 | 0.069 J | <0.10 | 0.029 J | 1.7 | 0.10 J | 0.47 | 17.0 | 6,400 |
| | 5/14/2013 | 6.85 | 60 | -189.42 | 1819.48 | <0.10 | <0.10 | 5.0 | 13.8 | 25.6 | 2.4 | <0.10 | | <1.0 | <0.20 | <0.30 | 0.32 | <0.14 | <0.10 | <0.30 | 0.51 | 58.0 | 12,000 |
| | 9/26/2013 | 6.52 | 240 | -69.14 | 1177.60 | <0.10 | <0.10 | 3.5 | 4.9 | 60.7 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | 448.0 | 8,600 |
| MMW-P-06 | 3/20 & 3/21/2008 | | 29 | 900 | 4293.5 | | | | | 62.6 | | | | | | | | | | | | | |
| | 6/5 & 6/6/2008 | 7.07 | | | 980.4 | <0.10 | | | | 30.5 | 60.0 | 1.7 | | <0.10 | <0.10 | 0.21 | 1.4 | 1.2 | 29.0 | 0.44 | 0.47 | 0.54 | 290 |
| | 9/11/2008 | 6.82 | | | 0.7 | <0.10 | | | | 39.1 | | | | | | | | | | | | | |
| | 11/19/2008 | 6.85 | 715 | | | <0.10 | | | | 130 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.69 | 1,063 | 710 | 3884.4 | <0.10 | | | | 9.4 | | | | | | | | | | | | | |
| | 6/17/2009 | | | | | <0.10 | | | | 61.7 | | | | | | | | | | | | | |
| | 8/6/2009 | | | | | <0.10 | | | | 29.7 | | | | | | | | | | | | | |
| | 11/3/2009 | 6.89 | 1,631 | -105 | 1276.4 | <0.10 | | | | 73.2 | | | | | | | | | | | 1.9 | 200 | 18,000 |
| | 2/4/2010 | 7.04 | 725 | -86 | 927.1 | <0.10 | | | | 10.3 | | | | | | | | | | | 0.66 | 300 | 15,000 |
| | 4/22/2010 | 6.93 | 1,405 | -106 | 1129.2 | 0.10 | | | | 15.3 | | | | | | | | | | | | | |
| | 7/21/2010 | 6.96 | 2,001 | -112 | 1448.3 | <0.10 | | | | 38.7 | | | | | | | | | | | | | |
| | 10/14/2010 | 6.94 | 162 | -121 | 1194.9 | | | | | | | | | | | | | | | | | | |
| | 1/20/2011 | 6.80 | 1,062 | | 1263.5 | <0.10 | | | | 65.8 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 5/4/2011 | 6.89 | 225 | -296 | 1338.1 | | | | | | | | | | | | | | | | 0.51 | 2,400 | 17,000 |
| | 7/28/2011 | 6.85 | 812 | -198 | 1302.6 | | | | | | | | | | | | | | | | 0.92 | 3,700 | 20,000 |
| | 10/24/2011 | 6.92 | 160 | -90 | 1169.0 | | | | | | | | | | | | | | | | 0.78 | 2,500 | 14,000 |
| | 2/13/2012 | 6.90 | 141 | -213 | 1132.0 | <0.10 | <0.10 | 2.0 | 3.9 | 38.0 | 0.370 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.048 J | <0.070 | <0.050 | <0.15 | 0.87 | 1,800 | 17,000 |
| | 4/26/2012 | 6.64 | 71 | -231 | 172.0 | <0.10 | <0.10 | 3.25 | 4.4 | 65.5 | 1.200 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.240 | <0.070 | 0.031 | <0.15 | 1.0 | 1,300 | 17,000 |
| | 8/2/2012 | 6.85 | 74 | -96 | 1283.0 | <0.10 | | 2.8 | 3.7 | 54.5 | 0.069J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.010 | <0.050 | <0.15 | 0.92 | 1,100 | 15,000 |
| | 11/14/2012 | 6.82 | 204 | -191 | 1237.0 | <0.10 | <0.10 | 3.1 | 2.3 | 82.5 | 0.063J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.010 | <0.050 | <0.15 | 0.74 | 500 | 16,000 |
| | 3/4/2013 | 6.78 | 110 | -125 | 1242 | <0.10 | <0.10 | 2.25 | 4.4 | 44.1 | 0.98 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.045 J | <0.010 | <0.050 | <0.15 | 0.75 | 620 | 17,000 |
| | 5/15/2013 | 6.76 | 90 | -110.39 | 2919.16 | <0.10 | <0.10 | 5.2 | 5.6 | 87.3 | 0.048 J | <0.050 | | <0.50 | <0.10 | <0.10 | 0.084 J | <0.070 | 0.037 J | <0.15 | 0.39 | 270 | 11,000 |
| | 9/26/2013 | 6.71 | 130 | -59.54 | 1483.16 | <0.10 | <0.10 | 5.0 | 3.1 | 124 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | 393 | 18,800 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-07 | 3/21/2008 | | 9 | 937 | 6055.8 | | | | | | | | | | | | | | | | | | |
| | 6/7/2008 | | 1,200 | | 5032.7 | | | | | | | | | | | | | | | | | | |
| | 9/11/2008 | 6.74 | | | 0.7 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.53 | 846 | | | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.83 | 880 | 745 | 4022.3 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 6.62 | 1,745 | -72 | 2224.1 | | | | | | | | | | | | | | | | | | |
| | 2/4/2010 | 6.72 | 721 | -92 | 1800.3 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 6.68 | 1,400 | -154 | 1924.8 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 6.60 | 3,369 | -55 | 1605.5 | | | | | | | | | | | | | | | | | | |
| | 10/14/2010 | 6.59 | 359 | -148 | 2187.6 | | | | | | | | | | | | | | | | | | |
| | 1/20/2011 | 6.74 | 1,377 | | 1347.0 | | | | | | | | | | | | | | | | | | |
| | 5/4/2011 | 6.67 | 349 | -242 | 1632.1 | <0.10 | <0.10 | 3.0 | 3.9 | 97.5 | 2.0 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.50 | <0.070 | 0.15 | <0.15 | 0.049 | 520 | 6,000 |
| | 7/28/2011 | 8.33 | 765 | -161 | 2098.5 | <0.10 | <0.10 | 3.8 | 4.0 | 33.1 | 3.9 | 0.14 | | <0.050 | <0.050 | <0.15 | 0.98 | <0.070 | 0.23 | <0.15 | 0.12 | 480 | 8,100 |
| | 10/24/2011 | 6.66 | 110 | -60 | 1492.0 | <0.10 | <0.10 | 3.8 | 2.1 | 31.6 | 0.078 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.46 | <0.070 | 0.071 | <0.15 | 0.31 | 330 | 12,000 |
| | 2/13/2012 | 6.79 | 541 | -167 | 1754.0 | <0.10 | <0.10 | 2.9 | 3.3 | 82.5 | 0.52 | 0.041 J | | <0.050 | <0.050 | <0.15 | 0.023 J | <0.070 | <0.050 | <0.15 | 0.26 | 190 | 12,000 |
| | 4/25/2012 | 6.69 | 77 | -209 | 1841.0 | <0.10 | <0.10 | 4.25 | 3.3 | 73.5 | 0.020 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.051 J | <0.070 | <0.050 | <0.15 | 0.28 | 360 | 8,900 |
| | 8/2/2012 | 6.71 | 84 | -96 | 1747.0 | <0.10 | | 4.6 | 3.5 | 30.5 | 0.033J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.037J | <0.070 | <0.050 | <0.15 | 0.46 | 95 | 16,000 |
| | 11/12/2012 | 6.63 | 275 | -120 | 2295.0 | <0.10 | <0.10 | 2.5 | 4.0 | 81.0 | 0.051J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.055J | <0.070 | <0.050 | <0.15 | 0.13 | 180 | 6,200 |
| | 3/4/2013 | 6.72 | 150 | -106 | 1945 | <0.10 | <0.10 | 2.25 | 7.0 | 81.4 | 0.13 | 0.023 J | | <0.10 | <0.050 | <0.15 | 0.050 J | <0.070 | <0.050 | <0.15 | 0.16 | 250 | 5,700 |
| | 5/14/2013 | 6.70 | 60 | -112.33 | 2740.76 | <0.10 | <0.10 | 4.2 | 4.4 | 165 | 0.060 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.059 J | <0.070 | <0.050 | <0.15 | 0.20 | 210 | 8,100 |
| | 9/25/2013 | 6.33 | 180 | -60.71 | 1878.59 | <0.10 | <0.10 | 0.5 | 4.3 | 77.3 | 0.057 J | <0.050 | 0.11 | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | <10.0 | 83.7 | 16,500 |
| MMW-P-08 | 3/20 & 3/21/2008 | 2.29 | 245 | | 3645.7 | | | | | 129 | | | | | | | | | | | | | |
| | 6/5 & 6/6/2008 | 7.00 | | | 1118.2 | 0.12 | | | | <5.0 | 0.12 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.22 | <0.070 | <0.070 | <0.070 | 0.30 | 2.0 | 2,800 |
| | 9/10 & 9/11/2008 | 7.29 | 467 | | 0.3 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 11/19/2008 | 7.00 | 1,129 | | | <0.10 | | | | 7.2 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.77 | 876 | 674 | 4083.5 | <0.10 | | | | 5.1 | | | | | | | | | | | | | |
| | 6/17/2009 | | | | | <0.10 | | | | 5.0 | | | | | | | | | | | | | |
| | 8/6/2009 | | | | | <0.10 | | | | 38.3 | | | | | | | | | | | | | |
| | 11/3/2009 | 6.52 | 1,676 | -74 | 1547.6 | <0.10 | | | | 23.6 | | | | | | | | | | | 0.081 | 320 | 8,000 |
| | 2/4/2010 | 6.63 | 631 | -86 | 1629.4 | | | | | <5.0 | | | | | | | | | | | 0.075 | 640 | 17,000 |
| | 4/22/2010 | 6.74 | 1,408 | -202 | 1804.3 | <0.10 | | | | 8.5 | | | | | | | | | | | | | |
| | 7/22/2010 | 6.79 | 3,994 | -70 | 939.3 | <0.10 | | | | 34.0 | | | | | | | | | | | | | |
| | 10/14/2010 | 6.65 | 395 | -175 | 1923.7 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 1/20/2011 | 6.79 | 1,907 | | 1965.5 | <0.10 | | | | 21.0 | 19.0 | 0.27 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 2.1 | <0.15 | | | |
| | 5/4/2011 | 6.81 | 221 | -272 | 920.7 | <0.10 | <0.10 | 3.0 | 6.2 | 44.5 | 0.16 | 0.10 | | <0.050 | <0.050 | <0.15 | 0.26 | <0.070 | 0.077 | <0.15 | 0.34 | 430 | 6,800 |
| | 7/27/2011 | 6.54 | 597 | -146 | 2323.7 | <0.10 | <0.10 | 3.8 | 3.0 | 185 | 0.096 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.27 | <0.070 | <0.050 | <0.15 | 0.098 | 500 | 8,400 |
| | 10/24/2011 | 6.68 | 110 | -90 | 1308.0 | <0.10 | <0.10 | 2.8 | 2.9 | 59.0 | 0.10 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.16 | <0.070 | 0.074 | <0.15 | 0.28 | 210 | 3,200 |
| | 2/13/2012 | 6.68 | 81 | -220 | 1663.0 | <0.10 | <0.10 | 2.9 | 5.5 | 52.0 | 0.040 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.020 J | <0.070 | <0.050 | <0.15 | 3.4 | 220 | 8,000 |
| | 4/25/2012 | 6.62 | 27 | -224 | 1709.0 | <0.10 | <0.10 | 3.2 | 4.6 | 87.0 | 0.056 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.12 | <0.070 | <0.050 | <0.15 | 11 | 170 | 12,000 |
| | 8/2/2012 | 6.69 | 19 | -111 | 1623.0 | <0.10 | | 4.2 | 3.9 | 48.2 | 0.034J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.15 | <0.070 | <0.050 | <0.15 | 4.5 | 390 | 9,200 |
| | 11/14/2012 | 6.61 | 127 | -162 | 1868.0 | <0.10 | <0.10 | 3.10 | 4.2 | 36.3 | 0.030J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.044J | <0.070 | <0.050 | <0.15 | 9.30 | 230 | 7,000 |
| | 3/4/2013 | 6.64 | 100 | -107 | 1625 | <0.10 | <0.10 | 2.50 | 5.0 | 162 | 0.074 | 0.035 J | | <0.10 | <0.050 | <0.15 | 0.058 J | <0.070 | <0.050 | <0.15 | 12 | 320 | 9,200 |
| | 5/14/2013 | 6.61 | 190 | -110.61 | 2765.24 | <0.10 | <0.10 | 5.2 | 11.3 | 372 | 0.062 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.068 J | <0.070 | <0.050 | <0.15 | 5.1 | 300 | 9,400 |
| | 9/25/2013 | 6.70 | 110 | -81.56 | 1091.61 | <0.10 | <0.10 | 2.0 | 6.7 | 34.7 | 0.11 | <0.050 | 0.081 J | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | 0.046 J | <0.15 | 11.9 | 164 | 7,340 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-09S | 3/20/2008 | 2.49 | 230 | | 3920.3 | 1.5 | | | | 78.7 | | | | | | | | | | | | | |
| | 6/5 & 6/6/2008 | 6.97 | | | 963.6 | 5.1 | | | | 161 | 3.5 | <0.070 | | 0.26 | <0.10 | <0.070 | 0.29 | 0.14 | 5.3 | <0.070 | 0.033 | <0.025 | 8.0 |
| | 9/10 & 9/11/2008 | 7.13 | 200 | | 0.3 | <0.10 | | | | 114 | | | | | | | | | | | | | |
| | 11/19/2008 | 7.09 | 1,108 | | | <0.10 | | | | 133 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.52 | 1,019 | 858 | 2249.3 | 0.72 | | | | 82.4 | | | | | | | | | | | | | |
| | 6/16/2009 | | | | | 1.1 | | | | 64.0 | | | | | | | | | | | | | |
| | 8/7/2009 | | | | | 0.60 | | | | 45.7 | | | | | | | | | | | | | |
| | 11/3/2009 | 6.92 | 2,892 | 174 | 810.2 | 0.78 | | | | 87.2 | | | | | | | | | | | <0.025 | 0.037 | 6.5 |
| | 2/3 & 2/4/2010 | 6.94 | 3,997 | -51 | 701.4 | 0.58 | | | | 85.8 | | | | | | | | | | | <0.025 | <0.025 | 4.7 |
| | 4/22/2010 | 7.05 | 2,699 | 69 | 640.1 | 0.62 | | | | 44.8 | | | | | | | | | | | | | |
| | 7/22/2010 | 7.00 | 5,477 | 27 | 1077.9 | 0.80 | | | | 92.4 | | | | | | | | | | | | | |
| | 10/13/2010 | 6.89 | 1,026 | -105 | 725.6 | 0.10 | | | | 57.4 | | | | | | | | | | | | | |
| | 1/19/2011 | 6.56 | 1,732 | | 711.5 | 0.10 | | | | 106 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 4/30/2011 | 7.12 | 5,228 | 0 | 587.1 | | | | | | | | | | | | | | | | | | |
| | 7/26/2011 | 6.78 | 1,473 | -85 | 882.4 | | | | | | | | | | | | | | | | | | |
| | 10/18/2011 | 6.90 | 760 | 160 | 850.9 | | | | | | | | | | | | | | | | | | |
| | 2/15/2012 | 6.95 | 2,621 | 164 | 786.3 | | | | | | | | | | | | | | | | | | |
| | 4/24/2012 | 7.08 | 1,364 | 30 | 708.7 | | | | | | | | | | | | | | | | | | |
| | 8/1/2012 | 6.94 | 537 | 88 | 866.6 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 6.93 | 803 | 196 | 678.9 | | | | | | | | | | | | | | | | | | |
| | 3/5/2013 | 6.96 | 1,840 | 87 | 650.2 | | | | | | | | | | | | | | | | | | |
| | 5/13/2013 | 6.95 | 4,410 | 225.05 | 1154.58 | | | | | | | | | | | | | | | | | | |
| | 9/23/2013 | 6.65 | 950 | 80.23 | 789.87 | | | | | | | | | | | | | | | | | | |
| MMW-P-09D | 3/20/2008 | 1.40 | 107 | | 8894.3 | | | | | | | | | | | | | | | | | | |
| | 6/7/2008 | | 443 | | 3784.4 | | | | | | | | | | | | | | | | | | |
| | 11/19/2008 | 6.85 | 1,106 | | NS | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.57 | 819 | 834 | 2616.0 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 7.11 | 1,717 | -59 | 897.8 | | | | | | | | | | | | | | | | | | |
| | 2/3/2010 | 7.10 | 4,243 | -78 | 862.0 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 7.12 | 1,360 | -64 | 884.7 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 7.18 | 3,702 | -59 | 929.0 | | | | | | | | | | | | | | | | | | |
| | 10/13/2010 | 7.08 | 694 | -282 | 903.0 | | | | | | | | | | | | | | | | | | |
| | 1/19/2011 | 6.12 | 1,079 | | 788.7 | | | | | | | | | | | | | | | | | | |
| | 4/30/2011 | 7.17 | 347 | -184 | 851.5 | | | | | | | | | | | | | | | | | | |
| | 7/26/2011 | 6.98 | 567 | -198 | 919.1 | | | | | | | | | | | | | | | | | | |
| | 10/21/2011 | 7.17 | 200 | -90 | 855.0 | | | | | | | | | | | | | | | | | | |
| | 2/15/2012 | 7.15 | 283 | -103 | 830.4 | | | | | | | | | | | | | | | | | | |
| | 4/24/2012 | 7.24 | 254 | -128 | 879.9 | | | | | | | | | | | | | | | | | | |
| | 8/1/2012 | 7.16 | 318 | -95 | 920.5 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 7.13 | 170 | -102 | 861.4 | | | | | | | | | | | | | | | | | | |
| | 3/5/2013 | 7.10 | 260 | -87 | 856.5 | | | | | | | | | | | | | | | | | | |
| | 5/13/2013 | 6.91 | 250 | -76.26 | 1372.28 | | | | | | | | | | | | | | | | | | |
| | 9/23/2013 | 7.07 | 210 | -82.61 | 879.05 | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-10S | 3/20/2008 | 1.73 | | | 4589.7 | 0.52 | | | | 50.8 | | | | | | | | | | | | | |
| | 6/5, 6/6 & 6/7/2008 | | 1,078 | | 3508.2 | <0.10 | | | | 71.8 | 0.11 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.21 | <0.070 | <0.070 | <0.070 | 0.16 | 1.3 | 50.0 |
| | 9/11/2008 | 7.04 | 45 | | 0.4 | <0.10 | | | | 111 | | | | | | | | | | | | | |
| | 11/19/2008 | 6.85 | 1,034 | | | <0.10 | | | | 34.4 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.77 | 863 | 653 | 3958.2 | <0.10 | | | | 54.6 | | | | | | | | | | | | | |
| | 6/17/2009 | | | | | <0.10 | | | | 9.4 | | | | | | | | | | | | | |
| | 8/6/2009 | | | | | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 11/3/2009 | 6.83 | 1,566 | -112 | 705.5 | <0.10 | | | | 9.5 | | | | | | | | | | | 0.77 | 27.0 | 2,300 |
| | 2/4/2010 | 6.65 | 614 | -93 | 1663.5 | <0.10 | | | | 69.2 | | | | | | | | | | | 1.7 | 230 | 14,000 |
| | 4/22/2010 | 6.97 | 1,564 | -200 | 971.3 | <0.10 | | | | 15.8 | | | | | | | | | | | | | |
| | 7/21/2010 | 6.91 | 1,868 | -105 | 900.8 | <0.10 | | | | <5.0 | | | | | | | | | | | | | |
| | 10/14/2010 | 6.63 | 404 | -154 | 1681.7 | <0.10 | | | | 85.8 | | | | | | | | | | | | | |
| | 1/20/2011 | 6.74 | 1,102 | | 1009.0 | 0.12 | | | | 29.2 | 4.7 | 0.15 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 0.26 | <0.15 | | | |
| | 5/5/2011 | 7.51 | 101 | -341 | 329.6 | <0.10 | <0.10 | 1.8 | 2.7 | 17.6 | 0.16 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.37 | <0.070 | <0.050 | <0.15 | 2.2 | 6.1 | 5,800 |
| | 7/27/2011 | 6.69 | 543 | -170 | 1583.3 | <0.10 | <0.10 | 3.2 | 3.7 | 87.9 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.21 | <0.070 | 0.052 | <0.15 | 1.4 | 120 | 13,000 |
| | 10/21/2011 | 6.90 | 110 | -90 | 592.0 | <0.10 | <0.10 | 2.1 | 1.7 | 13.9 | 0.078 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 0.070 | <0.15 | 1.8 | 22.0 | 4,300 |
| | 2/13/2012 | 6.90 | 112 | -221 | 653.0 | <0.10 | <0.10 | 3.1 | 2.3 | 17.1 | 0.18 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.13 | <0.070 | <0.050 | <0.15 | 2.8 | 15 | 9,000 |
| | 4/25/2012 | 6.86 | 45 | -233 | 672.6 | <0.10 | <0.10 | 2.5 | 1.9 | 15.4 | 0.075 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.092 J | <0.070 | <0.050 | <0.15 | 4.0 | 30 | 10,000 |
| | 8/2/2012 | 6.69 | 50 | -115 | 1721.0 | <0.10 | | 3.8 | 3.6 | 116 | 0.014J | <0.050 | | 0.17 | <0.050 | <0.15 | 0.031J | <0.070 | <0.050 | <0.15 | 4.6 | 75 | 12,000 |
| | 11/14/2012 | 6.67 | 171 | -163 | 1107.0 | <0.10 | <0.10 | 2.0 | 3.1 | 26.6 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 2.2 | 10 | 7,400 |
| | 2/28/2013 | 6.67 | 150 | -103 | 1271 | <0.10 | <0.10 | 2.75 | 4.4 | 35.5 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.046 J | <0.070 | <0.050 | <0.15 | 3.2 | 11 | 11,000 |
| | 5/15/2013 | 6.68 | 230 | -102.10 | 1989.30 | <0.10 | <0.10 | 5.2 | 16.7 | 15.5 | 0.059 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.082 J | <0.070 | 0.031 J | <0.15 | 3.8 | 5.8 | 11,000 |
| | 9/25/2013 | 6.63 | 220 | -74.45 | 1200.84 | <0.10 | <0.10 | 2.5 | 4.6 | 30.6 | 0.047 J | <0.050 | 0.12 | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | <10.0 | <10.0 | 11,800 |
| MMW-P-10D | 6/7/2008 | 1.71 | 1,134 | | 4183.6 | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.64 | 838 | 574 | 2733.7 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 6.80 | 1,699 | -98 | 1104.1 | | | | | | | | | | | | | | | | | | |
| | 2/4/2010 | 6.78 | 619 | -101 | 992.6 | | | | | | | | | | | | | | | | | | |
| | 4/22/2010 | 7.05 | 1,371 | -192 | 857.0 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 6.83 | 2,694 | -27 | 913.1 | | | | | | | | | | | | | | | | | | |
| | 10/14/2010 | 6.68 | 351 | -165 | 1341.4 | | | | | | | | | | | | | | | | | | |
| | 1/20/2011 | 6.74 | 1,155 | | 1338.7 | | | | | | 0.072 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 5/5/2011 | 7.08 | 160 | -300 | 597.7 | <0.10 | <0.10 | 1.8 | 2.8 | 43.0 | 0.10 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.19 | <0.070 | 0.071 | <0.15 | 1.2 | 200 | 18,000 |
| | 7/27/2011 | 6.82 | 539 | -162 | 1073.2 | <0.10 | <0.10 | 5.0 | 2.1 | 64.1 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.26 | <0.070 | <0.050 | <0.15 | 1.8 | 530 | 23,000 |
| | 10/21/2011 | 6.86 | 160 | -80 | 1039.0 | <0.10 | <0.10 | 2.3 | 1.7 | 55.0 | 0.10 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 0.078 | <0.15 | 1.3 | 580 | 20,000 |
| | 2/13/2012 | 6.75 | 210 | -184 | 1233.0 | <0.10 | <0.10 | 3.75 | 3.7 | 112 | 0.014 J | 0.036 J | | <0.050 | <0.050 | <0.15 | 0.025 J | <0.070 | 0.011 J | <0.15 | 2.6 | 260 | 16,000 |
| | 4/25/2012 | 6.79 | 85 | -221 | 1225.0 | <0.10 | <0.10 | 3.5 | 2.5 | 76.5 | 0.036 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.17 | <0.070 | <0.050 | <0.15 | 1.7 | 190 | 23,000 |
| | 8/2/2012 | 6.83 | 26 | -109 | 1123.0 | <0.10 | | 2.7 | 2.9 | 87.5 | 0.011J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 1.3 | 140 | 20,000 |
| | 11/14/2012 | 6.76 | 159 | -159 | 1359.0 | <0.10 | <0.10 | 2.7 | 5.0 | 84.5 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 2 | 160 | 22,000 |
| | 2/28/2013 | 6.83 | 130 | -104 | 1070 | <0.10 | <0.10 | 2.75 | 2.9 | 82.1 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.058 J | <0.070 | <0.050 | <0.15 | 0.68 | 43 | 17,000 |
| | 5/15/2013 | 6.66 | 230 | -79.40 | 2242.17 | <0.10 | <0.10 | 5.1 | 4.4 | 37.4 | 0.065 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.068 J | <0.070 | <0.050 | <0.15 | 0.91 | 200 | 19,000 |
| | 9/25/2013 | 6.62 | 70 | -62.12 | 1560.22 | <0.10 | <0.10 | 2.5 | 4.9 | 50.2 | 0.053 J | <0.050 | 0.11 | <0.50 | <0.10 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | <10.0 | 358 | 29,800 E |
| MWW-P-11S | 10/24/2011 | 6.97 | 490 | -100 | 802.3 | <0.10 | <0.10 | 0.2 | 1.7 | 166 | 0.082 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.21 | <0.070 | 0.070 | <0.15 | 6.2 | 0.097 | 690 |
| | 2/15/2012 | 6.96 | 578 | -58 | 913.2 | 0.60 | <0.10 | 1.7 | 1.9 | 132 | 0.013 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.072 J | <0.070 | <0.070 | <0.15 | 0.15 | 2.8 | 1,600 |
| | 5/1/2012 | 6.94 | 353 | -108 | 860.7 | <0.10 | <0.10 | 2.75 | 1.6 | 203 | 0.026 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.084 J | <0.070 | 0.014 J | <0.15 | 0.19 | 5.9 | 1,300 |
| | 8/7/2012 | 7.00 | 31 | -61 | 777.0 | <0.10 | | 3.2 | 1.7 | 189 | 0.017 J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.22 | 5.6 | 960 |
| | 11/15/2012 | 6.77 | 315 | -27 | 1154.0 | <0.10 | <0.10 | 1.2 | 1.8 | 148 | 0.046J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.035J | <0.070 | <0.050 | <0.15 | 0.18 | 3.8 | 5,200 |
| | 3/6/2013 | 6.95 | 1,270 | -4 | 953.2 | 0.32 | <0.10 | | 2.0 | 183 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.057 J | <0.070 | <0.050 | <0.15 | 0.16 | 1.2 | 1,300 |
| | 5/20/2013 | 6.94 | 236 | 59.29 | 1697.03 | 0.16 | <0.10 | 0.0 | 1.6 | 192 | 0.048 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.091 J | <0.070 | 0.024 J | <0.015 | 0.081 | 0.11 | 120 |
| | 9/24/2013 | 6.88 | 540 | -35.01 | 968.57 | <0.10 | <0.10 | 1.2 | 2.1 | 299 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | <10.0 | 297 |
| MMW-P-11DR | 2/15/2012 | 7.02 | 134 | -104 | 1244.0 | <0.10 | <0.10 | 3.8 | 2.0 | 275 | 0.031 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.040 J | <0.070 | <0.070 | <0.15 | 1.4 | 6.8 | 3,800 |
| | 5/1/2012 | 6.96 | 233 | -97 | 1269.0 | <0.10 | <0.10 | | 1.9 | 275 | 0.024 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.079 J | <0.070 | <0.050 | <0.15 | 1.1 | 7.4 | 1,000 |
| | 8/7/2012 | 6.98 | 28 | -81 | 1401.0 | <0.10 | | 3.1 | 2.1 | 219 | 0.034 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.042 J | <0.070 | <0.050 | <0.15 | 1.3 | 7.7 | 590 |
| | 11/15/2012 | 6.87 | 140 | -72 | 1291.0 | <0.10 | <0.10 | | 1.8 | 147 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 1.2 | 19 | 6,200 |
| | 3/6/2013 | 7.02 | 100 | -75 | 1155 | <0.10 | <0.10 | 2.75 | 2.0 | 165 | <0.07 | <0.050 | | <0.10 | <0.05 | <0.15 | 0.050 J | <0.070 | <0.050 | <0.15 | 1.3 | 12 | 1,400 |
| | 5/20/2013 | 6.97 | 110 | -71.88 | 1803.22 | 0.13 | <0.10 | 4.75 | 1.9 | 242 | 0.055 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.085 J | <0.070 | 0.021 J | <0.15 | 1.1 | 2.5 | 360 |
| | 9/24/2013 | 6.82 | 80 | -63.78 | 1193.80 | <0.10 | <0.10 | 1.75 | 3.6 | 155 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | <10.0 | 290 |
| MMW-P-12S | 10/24/2011 | 7.05 | 240 | -80 | 1106.0 | <0.10 | <0.10 | 2.1 | 1.4 | 156 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | 0.070 | <0.15 | 1.3 | 0.83 | 24 |
| | 2/15/2012 | 7.07 | 267 | -76 | 1092.0 | <0.10 | <0.10 | 3.0 | 1.7 | 162 | 0.010 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.27 | <0.070 | <0.070 | <0.15 | 0.92 | 0.65 | 94 |
| | 5/1/2012 | 6.97 | 76 | -121 | 1173.0 | <0.10 | <0.10 | | 1.6 | 176 | 0.026 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.093 J | <0.070 | <0.050 | <0.15 | 0.66 | 0.26 | 28 |
| | 8/7/2012 | 7.01 | 59 | -102 | 1058.0 | <0.10 | | 2.7 | 1.9 | 135 | 0.019 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.040 J | <0.070 | <0.050 | <0.15 | 0.85 | 0.32 | 17 |
| | 11/19/2012 | 6.97 | 726 | -101 | 1164.0 | <0.10 | <0.10 | 1.2 | 1.7 | 146 | 0.052J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.88 | 0.67 | 33 |
| | 3/9/2013 | 6.99 | 290 | -78 | 1068 | <0.10 | <0.10 | 2.1 | 2.0 | 148 | <0.07 | <0.05 | | <0.10 | <0.05 | <0.15 | 0.08 J | <0.07 | <0.05 | <0.15 | 0.69 | 0.27 | 19 |
| | 5/20/2013 | 6.98 | 40 | -75.66 | 1990.17 | | | | | | | | | | | | | | | | | | |
| | 9/24/2013 | 6.82 | 150 | -73.89 | 1469.46 | <0.10 | <0.10 | 1.75 | 2.8 | 137 | | | | | | | | | | | <10.0 | <10.0 | 72.7 |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-P-12D | **10/24/2011** | 7.17 | 210 | -100 | 1070.0 | <0.10 | <0.10 | 2.1 | 1.9 | 124 | 0.22 | <0.050 | | <0.050 | <0.050 | <0.15 | 1.2 | <0.070 | 0.13 | <0.15 | 1.5 | 0.77 | 26 |
| | **2/15/2012** | 7.11 | 216 | -94 | 1227.0 | <0.10 | <0.10 | 2.0 | 1.9 | 164 | 0.0075 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.040 J | <0.070 | <0.070 | <0.15 | 1.2 | 0.7 | 18 |
| | **5/1/2012** | 7.03 | 106 | -214 | 1323.0 | <0.10 | <0.10 | 2.5 | 1.8 | 135 | 0.022 J | 0.041 J | | <0.050 | <0.050 | <0.15 | 0.089 J | <0.070 | 0.014 J | <0.15 | 1.1 | 0.66 | 24 |
| | **8/7/2012** | 7.05 | 30 | -118 | 1320.0 | <0.10 | | 3.0 | 2.0 | 262 | 0.017 J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 1.1 | 0.4 | 19 |
| | **11/19/2012** | 7.00 | 531 | -116 | 1437.0 | <0.10 | 0.67 | 0.75 | 1.9 | 165 | 0.052J | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 1.2 | 0.65 | 20 |
| | **3/9/2013** | 7.04 | 120 | -83 | 1266.0 | <0.10 | <0.10 | 2.0 | 2.1 | 181 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.064 J | <0.070 | <0.050 | <0.15 | 0.91 | 0.33 | 23 |
| | **5/20/2013** | 7.07 | 40 | -93.36 | 1882.36 | | | | | | | | | | | | | | | | | | |
| | **9/24/2013** | 6.88 | 80 | -75.48 | 1489.40 | <0.10 | <0.10 | 2.0 | 2.3 | 157 | | | | | | | | | | | <10.0 | <10.0 | 15.4 |
| MMW-P-13S | **10/24/2011** | 7.03 | 1,350 | 70 | 925.3 | 0.75 | <0.10 | 0.0 | 1.4 | 195 | 0.09 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.34 | <0.070 | 0.070 | <0.15 | 0.18 | 0.18 | 3.8 |
| | **2/16/2012** | 7.02 | 8,885 | 171 | 550.3 | | | | | | | | | | | | | | | | | | |
| | **4/26/2012** | 7.06 | 8,078 | 80 | 566.0 | | | | | | | | | | | | | | | | | | |
| | **8/7/2012** | 8.78 | 619 | 280 | 1109.0 | | | | | | | | | | | | | | | | | | |
| | **11/19/2012** | 6.95 | 4,503 | 105 | 1114.0 | | | | | | | | | | | | | | | | | | |
| | **3/7/2013** | 7.04 | 8,360 | 111 | 555.0 | | | | | | | | | | | | | | | | | | |
| | **5/17/2013** | 7.12 | 9,930 | 89.71 | 583.11 | | | | | | | | | | | | | | | | | | |
| | **9/23/2013** | 6.77 | 1,140 | 91.34 | 849.83 | | | | | | | | | | | | | | | | | | |
| MMW-P-13D | **10/24/2011** | 7.20 | 190 | -110 | 909.0 | <0.10 | <0.10 | 3.5 | 1.8 | 131 | 0.08 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.26 | <0.070 | <0.050 | <0.15 | 2.0 | 1.3 | 20.0 |
| | **2/16/2012** | 7.17 | 176 | -95 | 8450.7 | | | | | | | | | | | | | | | | | | |
| | **4/26/2012** | 7.13 | 105 | -83 | 871.0 | | | | | | | | | | | | | | | | | | |
| | **8/7/2012** | 8.99 | 9 | -102 | 998.0 | | | | | | | | | | | | | | | | | | |
| | **11/19/2012** | 7.11 | 340 | -98 | 1294.0 | | | | | | | | | | | | | | | | | | |
| | **3/7/2013** | 7.12 | 220 | -81 | 944.0 | | | | | | | | | | | | | | | | | | |
| | **5/17/2013** | 7.12 | 100 | -87.41 | 989.49 | | | | | | | | | | | | | | | | | | |
| | **9/23/2013** | 6.86 | 140 | -77.94 | 1003.83 | | | | | | | | | | | | | | | | | | |
| MMW-P-14S | **2/16/2012** | 6.91 | 2,166 | 85 | 822.1 | | | | | | | | | | | | | | | | | | |
| | **4/26/2012** | 6.87 | 1,885 | 83 | 1242.0 | | | | | | | | | | | | | | | | | | |
| | **8/7/2012** | 6.92 | 364 | 221 | 1172.0 | | | | | | | | | | | | | | | | | | |
| | **11/20/2012** | 6.83 | 891 | 80 | 1213.0 | | | | | | | | | | | | | | | | | | |
| | **3/7/2013** | 6.91 | 2,520 | 74 | 1037 | | | | | | | | | | | | | | | | | | |
| | **5/17/2013** | 7.03 | 4,150 | 91.91 | 1866.02 | | | | | | | | | | | | | | | | | | |
| | **9/18/2013** | 6.75 | 770 | 96.59 | 1102.01 | | | | | | | | | | | | | | | | | | |
| MMW-P-14D | **2/16/2012** | 7.07 | 384 | -49 | 1074.0 | | | | | | | | | | | | | | | | | | |
| | **4/26/2012** | 7.02 | 88 | -50 | 1114.0 | | | | | | | | | | | | | | | | | | |
| | **8/7/2012** | 7.10 | 21 | -75 | 1080.0 | | | | | | | | | | | | | | | | | | |
| | **11/20/2012** | 7.02 | 308 | -89 | 1376.0 | | | | | | | | | | | | | | | | | | |
| | **3/7/2013** | 7.06 | 500 | -29 | 1045 | | | | | | | | | | | | | | | | | | |
| | **5/17/2013** | 7.03 | 120 | -56.11 | 2003.24 | | | | | | | | | | | | | | | | | | |
| | **9/18/2013** | 6.81 | 90 | -73.78 | 1377.40 | | | | | | | | | | | | | | | | | | |
| MW-165D | **7/7/2010** | | | | | | | | | | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| MW-167S | **4/21/2010** | 6.93 | 173 | 102 | 1212.3 | | | | | | | | | | | | | | | | | | |
| | **4/29/2011** | 7.10 | 7,894 | 75 | 916.5 | | | | | | | | | | | | | | | | | | |
| | **5/2/2012** | 6.82 | 168 | -106 | 1626.0 | | | | | | | | | | | | | | | | | | |
| | **8/3/2012** | Insufficient water to sample | | | | | | | | | | | | | | | | | | | | | |
| | **3/8/2013** | Sampled with bailer | | | | | | | | | | | | | | | | | | | | | |
| | **5/16/2013** | 6.84 | 240 | 53.85 | 3580.24 | | | | | | | | | | | | | | | | | | |
| | **9/27/2013** | Sampled with bailer | | | | | | | | | | | | | | | | | | | | | |
| MW-167D | **6/7/2008** | 0.08 | 454 | | 2800.6 | | | | | | | | | | | | | | | | | | |
| | **4/21/2010** | 7.22 | 163 | 64 | 803.3 | | | | | | | | | | | | | | | | | | |
| | **4/29/2011** | 7.14 | 251 | -116 | 910.1 | | | | | | | | | | | | | | | | | | |
| | **2/16/2012** | 7.14 | 142 | -88 | 995.8 | | | | | | | | | | | | | | | | | | |
| | **5/2/2012** | 7.14 | 45 | -78 | 855.8 | | | | | | | | | | | | | | | | | | |
| | **8/3/2012** | 7.11 | 147 | -88 | 994.2 | | | | | | | | | | | | | | | | | | |
| | **11/16/2012** | 7.15 | 316 | -94 | 852.1 | | | | | | | | | | | | | | | | | | |
| | **3/8/2013** | 7.08 | 430 | -34 | 1242 | | | | | | | | | | | | | | | | | | |
| | **5/16/2013** | 7.10 | 120 | -68.15 | 2013.41 | | | | | | | | | | | | | | | | | | |
| | **9/27/2013** | 7.09 | 200 | -74.79 | 811.36 | | | | | | | | | | | | | | | | | | |
| MW-168S | **3/20/2008** | | | | | 2.2 | | | | 251 | | | | | | | | | | | | | |
| | **6/5 & 6/6/2008** | 6.76 | | | 1395.0 | 5.8 | | | | 190 | 0.12 | <0.070 | | <0.10 | <0.10 | <0.070 | 0.21 | <0.070 | <0.070 | <0.070 | 0.052 | <0.025 | 17.0 |
| | **9/11/2008** | | | | | 1.1 | | | | 6.8 | | | | | | | | | | | | | |
| | **4/22/2010** | | | | | <0.10 | | | | 140 | | | | | | | | | | | | | |
| | **4/25/2012** | Insufficient water to sample | | | | | | | | | | | | | | | | | | | | | |
| | **3/8/2013** | Sampled with bailer | | | | | | | | | | | | | | | | | | | | | |
| | **9/27/2013** | Sampled with bailer | | | | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MW-168D | 3/20/2008 | | | | | | | | | 109 | | | | | | | | | | | | | |
| | 6/5/2008 | 6.92 | | | 1283.4 | <0.10 | | | | 31.0 | | | | | | | | | | | | | |
| | 9/11/2008 | | | | | | | | | 114 | | | | | | | | | | | | | |
| | 11/20/2008 | 6.88 | 530 | 504 | 3318.8 | <0.10 | | | | 39.3 | | | | | | | | | | | | | |
| | 3/17/2009 | 6.64 | 871 | 795 | 2948.1 | <0.10 | | | | 43.0 | | | | | | | | | | | | | |
| | 6/18/2009 | | | | | <0.10 | | | | 50.5 | | | | | | | | | | | | | |
| | 8/7/2009 | | | | | <0.10 | | | | | | | | | | | | | | | | | |
| | 11/3 & 11/4/2009 | 6.77 | 7,162 | -107 | 1070.8 | <0.10 | | | | 59.4 | | | | | | | | | | | 0.55 | 22.0 | 16,000 |
| | 2/4/2010 | 6.87 | 469 | -74 | 941.8 | <0.10 | | | | 50.8 | | | | | | | | | | | 0.41 | 11.0 | 15,000 |
| | 4/21/2010 | 6.86 | 190 | 53 | 1128.5 | <0.10 | | | | 79.7 | | | | | | | | | | | | | |
| | 7/22/2010 | 6.94 | 4,678 | -53 | 1194.6 | <0.10 | | | | 82.2 | | | | | | | | | | | | | |
| | 10/13/2010 | 6.77 | 350 | -230 | 1184.4 | <0.10 | | | | 60.8 | | | | | | | | | | | | | |
| | 4/29/2011 | 6.93 | 206 | -199 | 1056.7 | | | | | | | | | | | | | | | | | | |
| | 7/28/2011 | 6.75 | 528 | -163 | 1476.1 | | | | | | | | | | | | | | | | | | |
| | 10/24/2011 | 6.87 | 200 | -100 | 1209.0 | | | | | | | | | | | | | | | | | | |
| | 2/17/2012 | 6.89 | 136 | -174 | 1131.0 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | 6.79 | 27 | -179 | 1383.0 | | | | | | | | | | | | | | | | | | |
| | 8/3/2012 | 6.87 | 35 | -92 | 1243.0 | | | | | | | | | | | | | | | | | | |
| | 11/16/2012 | 6.90 | 211 | -104 | 1186.0 | | | | | | | | | | | | | | | | | | |
| | 3/8/2013 | 6.94 | 180 | -84 | 1018 | | | | | | | | | | | | | | | | | | |
| | 9/27/2013 | 6.75 | 100 | -73.81 | 1394.49 | | | | | | | | | | | | | | | | | | |
| *MW-169S | 4/21/2010 | 7.05 | 228 | -49 | 848.4 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 6.91 | 3,567 | 19 | 975.4 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | Insufficient water to sample | | | | | | | | | | | | | | | | | | | | | |
| | 5/16/2013 | 6.91 | 5,280 | 33.69 | 1891.56 | | | | | | | | | | | | | | | | | | |
| *MW-169D | 6/7/2008 | | 636 | | 3354.6 | | | | | | | | | | | | | | | | | | |
| | 4/21/2010 | 7.13 | 207 | -53 | 783.5 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 7.04 | 232 | -177 | 880.0 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | 7.00 | 87 | -148 | 1062.0 | | | | | | | | | | | | | | | | | | |
| | 5/21/2013 | 6.47 | 100 | -71.64 | 2524.27 | | | | | | | | | | | | | | | | | | |
| MW-170S | 6/3/2008 | 7.09 | 187 | | 1437.8 | | | | | | | | | | | | | | | | | | |
| | 4/21/2010 | 7.02 | 162 | 90 | 1489.9 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 6.99 | 486 | -44 | 1241.0 | | | | | | | | | | | | | | | | | | |
| | 2/16/2012 | 6.93 | 483 | 79 | 1718.0 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | 6.93 | 768 | 118 | 1488.0 | | | | | | | | | | | | | | | | | | |
| | 8/3/2012 | 6.89 | 379 | 300 | 1554.0 | | | | | | | | | | | | | | | | | | |
| | 11/16/2012 | 6.93 | 2,316 | 171 | 1484.0 | | | | | | | | | | | | | | | | | | |
| | 3/8/2013 | 6.90 | 310 | 161 | 1377 | | | | | | | | | | | | | | | | | | |
| | 5/16/2013 | 6.88 | 2,210 | 108.28 | 2783.03 | | | | | | | | | | | | | | | | | | |
| | 9/27/2013 | 6.85 | 260 | 173.78 | 1505.68 | | | | | | | | | | | | | | | | | | |
| MW-170D | 6/3/2008 | | 7 | | 969.5 | | | | | | | | | | | | | | | | | | |
| | 7/7/2010 | | | | | | | | | | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 4/21/2010 | 7.11 | 190 | 87 | 1148.6 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 7.12 | 282 | -142 | 1039.7 | | | | | | | | | | | | | | | | | | |
| | 2/16/2012 | 7.02 | 243 | -74 | 1898.0 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | 7.00 | 82 | -82 | 1587.0 | | | | | | | | | | | | | | | | | | |
| | 8/3/2012 | 7.04 | 68 | -82 | 1690.0 | | | | | | | | | | | | | | | | | | |
| | 11/16/2012 | 7.04 | 200 | -119 | 1224.0 | | | | | | | | | | | | | | | | | | |
| | 3/8/2013 | 7.03 | 130 | -84 | 1234.0 | | | | | | | | | | | | | | | | | | |
| | 5/21/2013 | 7.07 | 180 | -77.42 | 2191.38 | | | | | | | | | | | | | | | | | | |
| | 9/27/2013 | 6.85 | 100 | -68.59 | 1350.83 | | | | | | | | | | | | | | | | | | |
| *MW-171S | 6/7/2008 | 7.21 | 626 | | 2714.6 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 6.98 | 4,282 | 70 | 798.8 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | 6.80 | 72 | 211 | 791.5 | | | | | | | | | | | | | | | | | | |
| | 5/16/2013 | Insufficient water to sample | | | | | | | | | | | | | | | | | | | | | |
| *MW-171D | 6/7/2008 | 7.32 | 415 | | 3178.5 | | | | | | | | | | | | | | | | | | |
| | 4/21/2010 | 7.07 | 171 | 16 | 846.3 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 7.05 | 4,607 | -47 | 1001.9 | | | | | | | | | | | | | | | | | | |
| | 4/29/2011 | 7.01 | 377 | -164 | 887.8 | | | | | | | | | | | | | | | | | | |
| | 5/2/2012 | 6.96 | 46 | -174 | 891.3 | | | | | | | | | | | | | | | | | | |
| | 5/16/2013 | 7.02 | 40 | -79.69 | 962.15 | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-C-01 | 9/10/2008 | 7.51 | 477 | | 0.3 | | | | | | | | | | | | | | | | | | |
| | 11/20/2008 | 6.79 | 491 | 480 | 2907.9 | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.57 | 770 | 693 | 2702.0 | | | | | | | | | | | | | | | | | | |
| | 11/3/2009 | 6.92 | 1,765 | -100 | 983.5 | | | | | | | | | | | | | | | | | | |
| | 2/3/2010 | 6.94 | 3,818 | -59 | 758.5 | | | | | | | | | | | | | | | | | | |
| | 4/21/2010 | 7.10 | 174 | 57 | 723.4 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 6.96 | 5,588 | 47 | 792.0 | | | | | | | | | | | | | | | | | | |
| | 10/13/2010 | 6.93 | 3,883 | -29 | 834.6 | | | | | | | | | | | | | | | | | | |
| | 1/19/2011 | 6.77 | 1,522 | | 741.5 | | | | | | | | | | | | | | | | | | |
| | 5/5/2011 | 7.41 | 9,253 | -75 | 463.2 | 14.7 | <0.40 | 0.0 | <1.0 | 31.2 | 0.110 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.28 | <0.070 | <0.050 | <0.15 | <0.025 | <0.025 | 0.14 |
| | 7/27/2011 | 6.80 | 707 | -190 | 1156.7 | 0.79 | <0.10 | 0.0 | 1.8 | 113 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.26 | <0.070 | <0.050 | <0.15 | 0.12 | 170 | 12,000 |
| | 10/21/2011 | 6.92 | 340 | -30 | 756.5 | 0.79 | <0.10 | 1.2 | 2.4 | 89.0 | 0.10 | <0.050 | | <0.050 | <0.050 | <0.15 | 0.37 | <0.070 | 0.066 | <0.15 | 0.081 | 94 | 12,000 |
| | 2/15/2012 | 6.98 | 1,682 | -31 | 780.0 | 7.7 | <0.10 | 2.0 | 1.9 | 73.5 | 0.0073 J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.034 J | <0.070 | <0.050 | <0.15 | 0.22 | 5.6 | 10,000 |
| | 4/24/2012 | 7.05 | 178 | -54 | 791.4 | <0.10 | <0.10 | 2.75 | 2.2 | 71.0 | 0.034 J | <0.050 | | 0.27 | <0.050 | <0.15 | 0.11 | <0.070 | <0.050 | <0.15 | 0.20 | 24 | 12,000 |
| | 8/1/2012 | 6.97 | 190 | -96 | 828.6 | <0.10 | | 2.2 | 2.5 | 36.2 | 0.0086J | <0.050 | | <0.050 | <0.050 | <0.15 | 0.094J | <0.070 | <0.050 | <0.15 | 0.13 | 3.7 | 14,000 |
| | 11/15/2012 | 6.50 | 510 | -31 | 757.3 | 0.43 | <0.10 | 1.2 | 2.2 | 68.0 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | 0.026 | 2.3 | 11,000 |
| | 3/5/2013 | 6.91 | 840 | -1 | 847.6 | 4.5 | <0.10 | 0.75 | 2.1 | 114.0 | <0.070 | <0.050 | | <0.10 | <0.050 | <0.15 | 0.062 | <0.070 | <0.050 | <0.15 | 0.15 | 0.56 | 8,100 |
| | 5/15/2013 | 7.12 | 4,120 | 36.55 | 1531.57 | 4.0 | <0.10 | 0.0 | 0.87 | 62.1 | 0.044 J | <0.050 | | <0.50 | <0.10 | <0.15 | 0.10 | <0.070 | 0.020 J | <0.15 | 0.11 | 1.4 | 2,000 |
| | 9/26/2013 | 6.72 | 310 | -53.60 | 1097.89 | <0.10 | <0.10 | 4.5 | 2.8 | 62.0 | Due to a technical issue at the laboratory, analytcal results were delayed and will be reported in the 4th quarter 2013 | | | | | | | | | | <10.0 | 117 | 16,300 |
| MMW-C-02S | 11/20/2008 | 6.97 | 931 | 476 | 2806.7 | | | | | | | | | | | | | | | | | | |
| | 3/17/2009 | 6.55 | 811 | 867 | 2506.9 | | | | | | | | | | | | | | | | | | |
| | 11/38/09 | 6.80 | 1,811 | 24 | 784.9 | | | | | | | | | | | | | | | | | | |
| | 2/3/2010 | 6.77 | 3,782 | 76 | 778.9 | | | | | | | | | | | | | | | | | | |
| | 4/21/2010 | 6.92 | 177 | 202 | 786.3 | | | | | | | | | | | | | | | | | | |
| | 7/22/2010 | 6.88 | 2,670 | 30 | 755.8 | | | | | | | | | | | | | | | | | | |
| | 10/13/2010 | 6.80 | 212 | -175 | 717.4 | | | | | | | | | | | | | | | | | | |
| | 1/19/2011 | 6.58 | 1,651 | | 705.0 | 0.14 | | | | 76.8 | <0.070 | <0.050 | | <0.050 | <0.050 | <0.15 | <0.10 | <0.070 | <0.050 | <0.15 | | | |
| | 4/30/2011 | 6.89 | 3,184 | -17 | 689.2 | | | | | | | | | | | | | | | | | | |
| | 7/27/2011 | 6.72 | 694 | -146 | 811.9 | | | | | | | | | | | | | | | | | | |
| | 10/18/2011 | 6.82 | 180 | 80 | 779.9 | | | | | | | | | | | | | | | | | | |
| | 2/15/2012 | 6.83 | 156 | 27 | 747.9 | | | | | | | | | | | | | | | | | | |
| | 4/24/2012 | 6.92 | 212 | 17 | 738.5 | | | | | | | | | | | | | | | | | | |
| | 8/1/2012 | 6.94 | 202 | -8 | 657.5 | | | | | | | | | | | | | | | | | | |
| | 11/13/2012 | 6.27 | 166 | 11 | 665.5 | | | | | | | | | | | | | | | | | | |
| | 3/5/2013 | 6.82 | 270 | 33 | 707.4 | | | | | | | | | | | | | | | | | | |
| | 5/13/2013 | 6.79 | 728 | 83.72 | 1232.48 | | | | | | | | | | | | | | | | | | |
| | 9/23/2013 | 6.76 | 230 | 36.84 | 810.51 | | | | | | | | | | | | | | | | | | |

# Table 5

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Sample Date | pH | Dissolved Oxygen | Oxidation Reduction Potential | Conductivity | Nitrogen, Nitrate | Nitrogen, Nitrite | Iron | Total Organic Carbon | Sulfate | Acetic Acid | Butyric Acid | Formic Acid | Hexanoic Acid | i-Hexanoic Acid | i-Pentanoic Acid | Lactic Acid and HIBA | Pentanoic Acid | Propionic Acid | Pyruvic Acid | Ethane | Ethene | Methane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - | ug/L | mV | uS/cm | mg/L | | | | | | | | | | | | | | | ug/l | | |
| | | FIELD MEASUREMENTS | | | | LAB RESULTS | | | | | | | | | | | | | | | | | |
| MMW-C-02D | **2/15/2012** | 7.03 | 165 | -105 | 902.3 | | | | | | | | | | | | | | | | | | |
| | **4/26/2012** | 7.03 | 57 | -158 | 809.9 | | | | | | | | | | | | | | | | | | |
| | **8/8/2012** | 8.03 | 40 | -139 | 918.0 | | | | | | | | | | | | | | | | | | |
| | **11/19/2012** | 6.93 | 488 | -102 | 1226.0 | | | | | | | | | | | | | | | | | | |
| | **3/7/2013** | 6.98 | 120 | -78 | 855.9 | | | | | | | | | | | | | | | | | | |
| | **5/20/2013** | 7.03 | 60 | -105.03 | 685.91 | | | | | | | | | | | | | | | | | | |
| | **9/18/2013** | 6.76 | 90 | -87.12 | 793.86 | | | | | | | | | | | | | | | | | | |
| MMW-C-16S | **8/6/2012** | 6.69 | 108 | 4 | 1141.0 | | | | | | | | | | | | | | | | | | |
| | **11/19/2012** | 6.59 | 807 | 5 | 1373.0 | | | | | | | | | | | | | | | | | | |
| | **3/6/2013** | 6.68 | 340 | 25 | 1106 | | | | | | | | | | | | | | | | | | |
| | **5/15/2013** | 6.70 | 460 | 55.53 | 2374.38 | | | | | | | | | | | | | | | | | | |
| | **9/23/2013** | 6.71 | 220 | 3.00 | 1020.23 | | | | | | | | | | | | | | | | | | |
| MMW-C-16D | **8/6/2012** | 6.96 | 42 | -101 | 1241.0 | | | | | | | | | | | | | | | | | | |
| | **11/19/2012** | 6.92 | 472 | -93 | 1368.0 | | | | | | | | | | | | | | | | | | |
| | **3/6/2013** | 6.89 | 130 | -84 | 1246 | | | | | | | | | | | | | | | | | | |
| | **5/15/2013** | 6.90 | 60 | -92.87 | 2600.62 | | | | | | | | | | | | | | | | | | |
| | **9/23/2013** | 6.89 | 60 | -76.71 | 1283.42 | | | | | | | | | | | | | | | | | | |
| MMW-C-17D | **8/6/2012** | 7.17 | 78 | -114 | 910.0 | | | | | | | | | | | | | | | | | | |
| | **11/20/2012** | 7.06 | 293 | -140 | 1183.0 | | | | | | | | | | | | | | | | | | |
| | **3/7/2013** | 7.12 | 100 | -118 | 857.0 | | | | | | | | | | | | | | | | | | |
| | **5/15/2013** | 7.13 | 100 | -106.36 | 2089.05 | | | | | | | | | | | | | | | | | | |
| | **9/18/2013** | 6.91 | 120 | -102.66 | 883.21 | | | | | | | | | | | | | | | | | | |

Notes:

Sampling locations outlined in **GREEN** have been identified as 'Indicator Compound Locations.' These locations will be sampled quarterly for VOCs, Nitrate/Nitrite, Sulfate, Methane, Ethane, Ethene, Volatile Fatty Acids and Ferrous Iron, beginning 2nd Quarter 2011.

Gray shading indicates that no data is available. Lack of data is generally due to equipment malfunction in the field or absence of the parameter from the quarterly sampling plan.

* Indicates sampling locations at the Site sampled on an **ANNUAL** basis. All other sampling locations are sampled quarterly.

J Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (RDL).

Table 6
Post-Injection Subsurface Methane Monitoring Results
Quarter 3 - 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

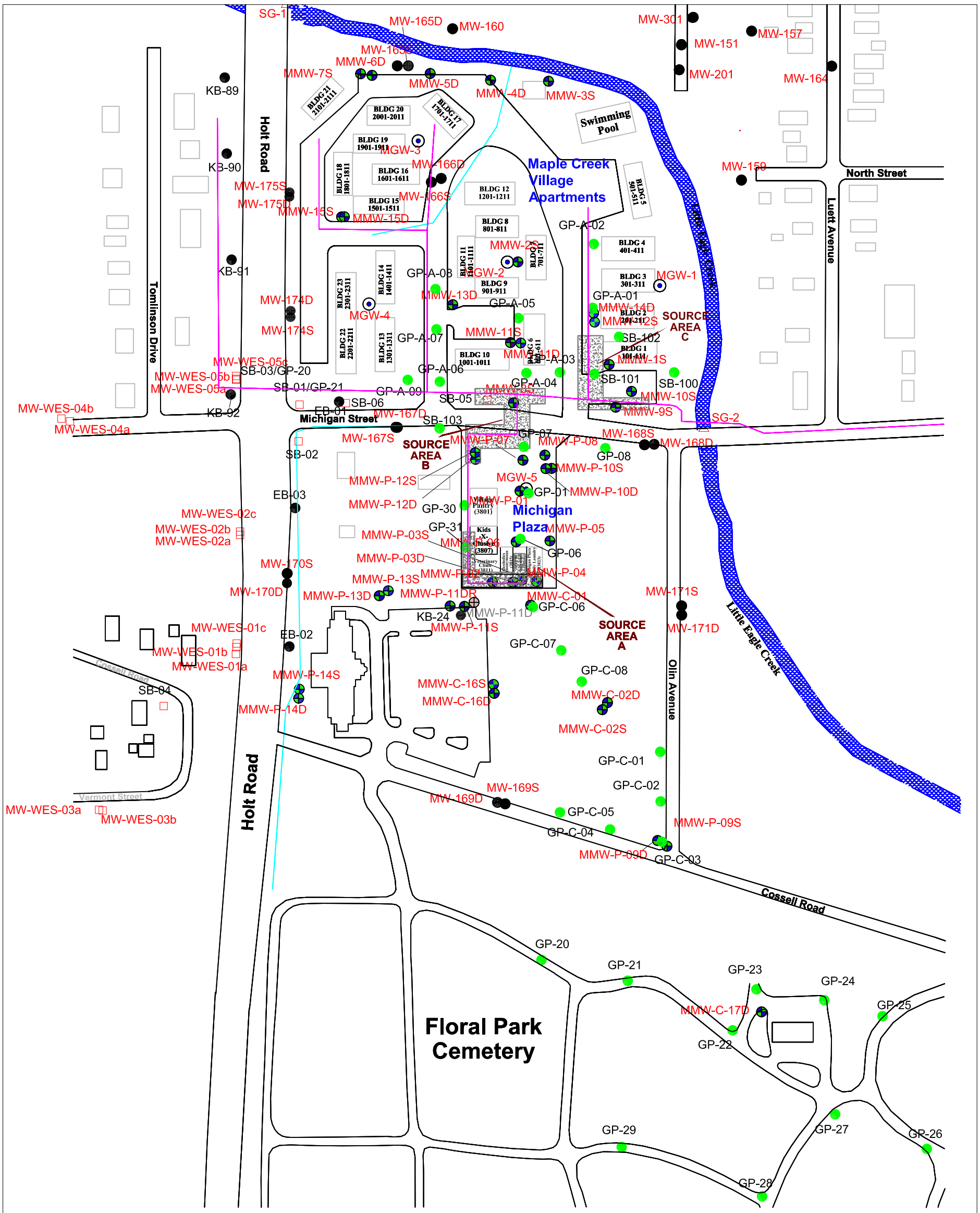
| Sample ID | Date | Methane Concentration [ppmv] |
|---|---|---|
| MMW-P-11S | 8/29/2013 | <1.7 |
| MMW-P-11DR | 8/29/2013 | 2.4 |
| MMW-P-12S | 8/29/2013 | 3.4 |
| MMW-P-12D | 8/29/2013 | 3.2 |
| MMW-11S | 8/29/2013 | <1.8 |
| MMW-12S | 8/29/2013 | 29,100 |
| B-1 | 9/17/2013 | 2.4 |
| B-2 | 9/17/2013 | 2.3 |
| B-3 | 9/17/2013 | 3.2 |
| B-4 | 9/17/2013 | 8.8 |
| B-5 | 9/17/2013 | 2.3 |
| B-6 | 9/17/2013 | 2.2 |
| B-7 | 9/17/2013 | 2.3 |

Methane lower explosive limit (LEL) = 50,000 ppmv

# FIGURES


| | |
|---|---|
| Figure 1 | Site Plan |
| Figure 2A | Shallow Potentiometric Surface Map – September 17, 2013 (Excludes Suspect Water Level Data) |
| Figure 2B | Shallow Potentiometric Surface Map – September 17, 2013 (Includes Suspect Water Level Data) |
| Figure 3A | Deep Potentiometric Surface Map – September 17, 2013 (Excludes Suspect Water Level Data) |
| Figure 3B | Deep Potentiometric Surface Map – September 17, 2013 (Includes Suspect Water Level Data) |
| Figure 4A | Groundwater Analytical Results – Shallow (Third Quarter 2013) with 2009 RISC RDCL Exceedance Contours |
| Figure 4B | Groundwater Analytical Results – Shallow (Third Quarter 2013) with 2009 RISC IDCL Exceedance Contours |
| Figure 5 | Groundwater Analytical Results – Deep (Third Quarter 2013) |
| Figure 6 | Indicator Compound Trends in Groundwater |
| Figure 7 | Parent and Daughter Products Distribution in Groundwater |
| Figure 8 | Vapor Mitigation System Locations |
| Figure 9 | PCE Concentration Trends & Cumulative Pounds Removed (B1) |
| Figure 10 | PCE Concentration Trends & Cumulative Pounds Removed (B2) |
| Figure 11 | PCE Concentration Trends & Cumulative Pounds Removed (B3) |
| Figure 12 | PCE Concentration Trends & Cumulative Pounds Removed (B4) |
| Figure 13 | PCE Concentration Trends & Cumulative Pounds Removed (B5) |
| Figure 14 | PCE Concentration Trends & Cumulative Pounds Removed (B6) |
| Figure 15 | PCE Concentration Trends & Cumulative Pounds Removed (B7) |
| Figure 16 | PCE Concentration Trends & Cumulative Pounds Removed (B1 through B4) |
| Figure 17 | PCE Concentration Trends & Cumulative Pounds Removed (B5 through B7) |
| Figure 18 | Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B1) |
| Figure 19 | Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B2) |
| Figure 20 | Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B3) |

Figure 21 Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B4)
Figure 22 Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B5)
Figure 23 Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B6)
Figure 24 Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B7)
Figure 25 Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B1 through B4)
Figure 26 Vinyl Chloride Concentration Trends & Cumulative Pounds Removed (B5 through B7)
Figure 27 Holt Road Area Long Term Monitoring




# LEGEND

| | |
|---|---|
| ——— | Fence |
| MMW-P-06 ⊕ | MUNDELL Monitoring Well |
| MW-160/ KB-90 ● | ENVIRON Monitoring Well/Soil Boring |
| MW-WES-O1A/ SB-02 □ | U.S. EPA Monitoring Well/Soil Boring |
| SG-1 △ | Stream Gauge Location |
| MGW-O1 ⊙ | MUNDELL Soil Gas Well |
| GP-29 ● | Soil Boring |
| ——— | Sanitary Sewer |
| ——— | Storm Sewer |

**Note that soil borings were advanced adjacent to monitoring wells MMW-8S, MMW-9S, MMW-10S, MMW-11D, MMW-13D, MMW-14D, MMW-P-02, MMW-P-03D, MMW-P-04, MMW-P-07, and MMW-P-10D, in March of 2013.

N

0 SCALE 200

feet

ENVIRON/Keramida/EPA Monitoring Well Locations Referenced from December, 2011 EPA Survey.

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Consulting Professionals for the Earth and the Environment

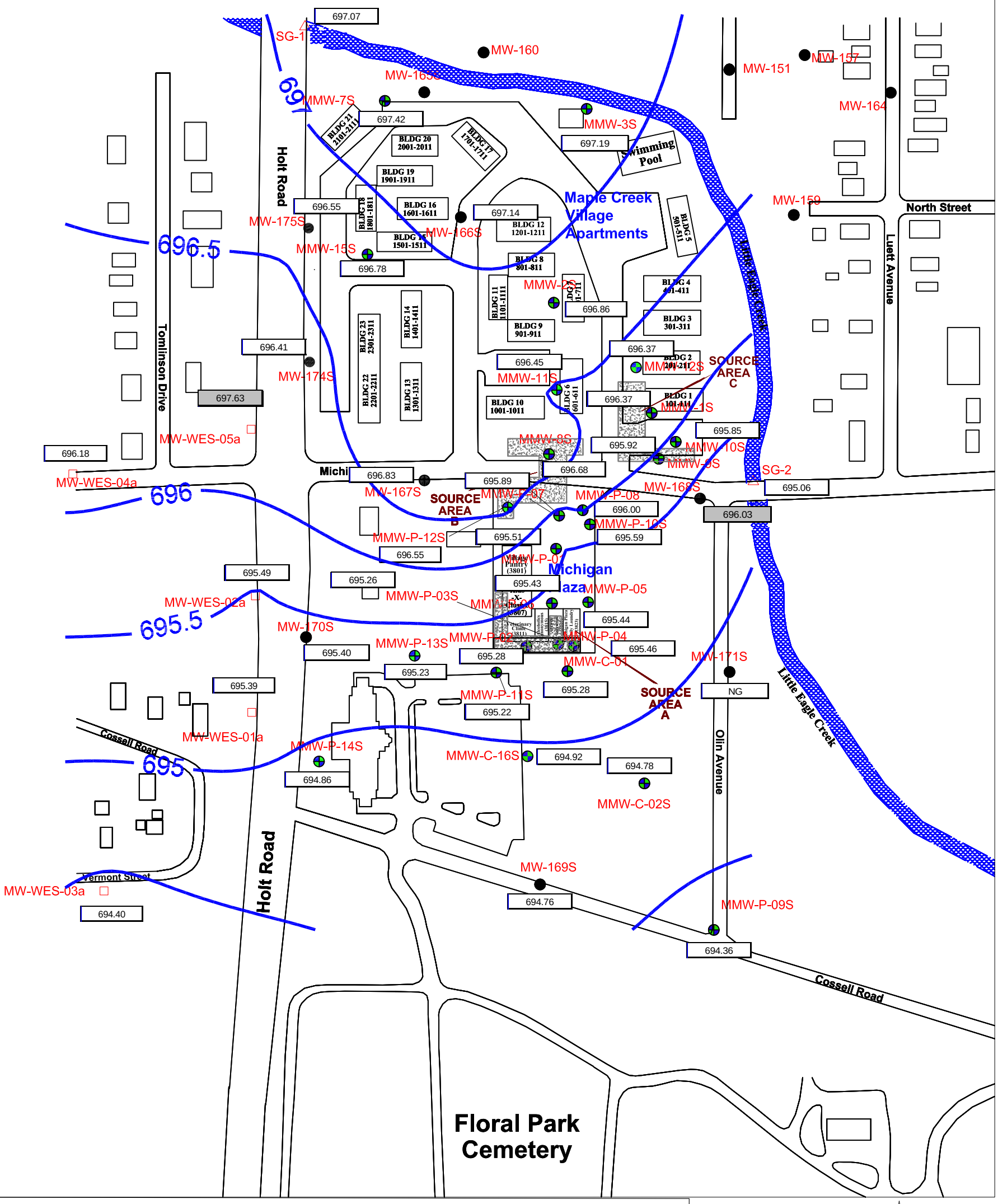
110 South Downey Avenue
Indianapolis, Indiana 46219
317-630-9060, fax
317-630-9065
www.MundellAssociates.com

| | |
|---|---|
| **Project Number:** | M01046 |
| **Drawing File:** | 3Q13 QMR |
| **Date Prepared:** | 6-7-13 |
| **Scale:** | 1"=200' |

# SITE PLAN

**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE**
**1**




# LEGEND

| | |
|---|---|
| MMW-P-06 | MUNDELL Monitoring Well |
| MW-160 | ENVIRON Monitoring Well |
| MW-WES-O1A | U.S. EPA Monitoring Well |
| SG-1 | Stream Gauge Location |
| 697.5 | Potentiometric Surface Equipotential Lines Contour Interval = 0.5 feet |

NG = Not Gauged

696.68 — Static water elevation (ft-MSL)

695.64 — Static water elevation not used to contour potentiometric surface map.

N

0 SCALE 200 feet

**ENVIRON/Keramida Monitoring Well Locations Referenced from Keramida Environmental, Inc. Project No. 2829 March 13, 2002**


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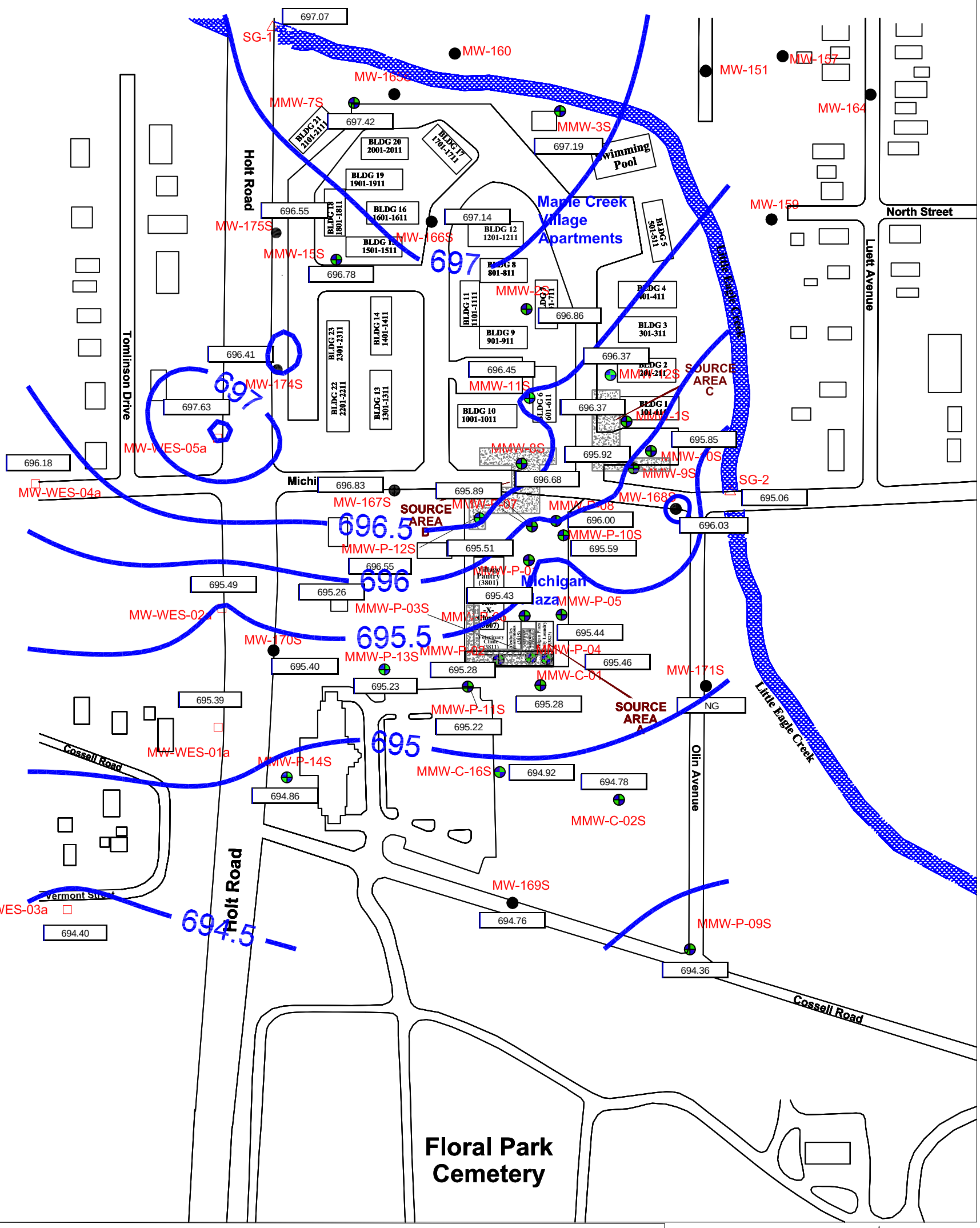
110 South Downey Avenue
Indianapolis, Indiana 46219
317-630-9060, fax
317-630-9065
www.MundellAssociates.com


| | |
|---|---|
| **Project Number:** | M01046 |
| **Drawing File:** | 3Q13 QMR |
| **Date Prepared:** | 9-30-13 |
| **Scale:** | 1"=200' |

**SHALLOW POTENTIOMETRIC SURFACE - 3RD QUARTER 2013**

**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE 2A**




# LEGEND

| | | |
|---|---|---|
| MMW-P-06 | MUNDELL Monitoring Well | NG = Not Gauged |
| MW-160 | ENVIRON Monitoring Well | 696.68 — Static water elevation (ft-MSL) |
| MW-WES-O1A | U.S. EPA Monitoring Well | 695.64 — Static water elevation not used to contour potentiometric surface map. |
| SG-1 | Stream Gauge Location | |
| 697.5 | Potentiometric Surface Equipotential Lines Contour Interval = 0.5 feet | |

N

0 SCALE 200 feet

**ENVIRON/Keramida Monitoring Well Locations Referenced from Keramida Environmental, Inc. Project No. 2829 March 13, 2002**

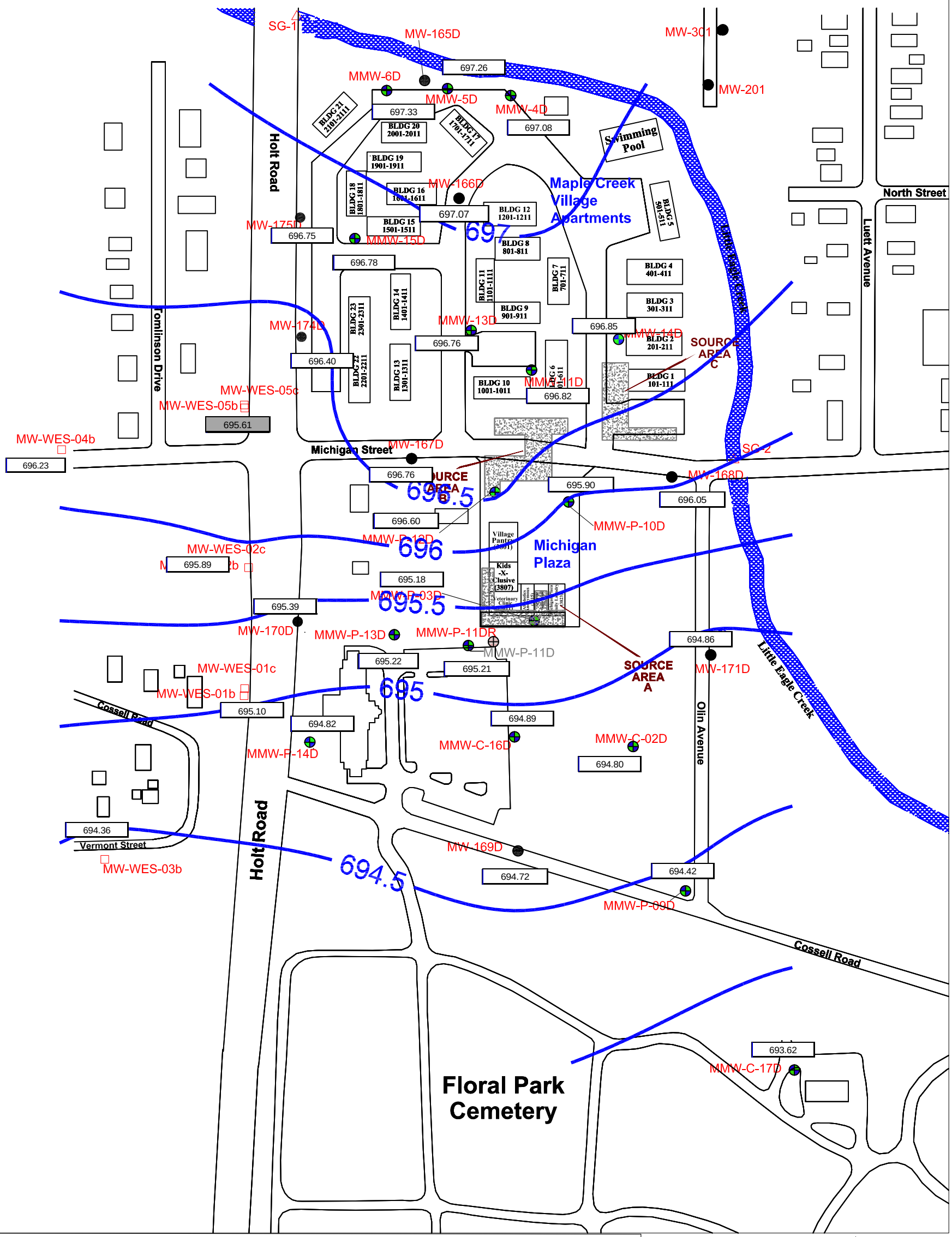

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| | |
|---|---|
| **Project Number:** | M01046 |
| **Drawing File:** | 3Q13 QMR |
| **Date Prepared:** | 9-27-13 |
| **Scale:** | 1"=200' |

**SHALLOW POTENTIOMETRIC SURFACE - 3RD QUARTER 2013**
**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE 2B**




# LEGEND

| | | | |
|---|---|---|---|
| MMW-P-06 | MUNDELL Monitoring Well | 696.68 | Static water elevation (ft-MSL) |
| MW-160 | ENVIRON Monitoring Well | 695.64 | Static water elevation not used to contour potentiometric surface map. |
| MW-WES-O1A | U.S. EPA Monitoring Well | | |
| 697.5 | Potentiometric Surface Equipotential Lines Contour Interval = 0.5 feet | | |

N

0 SCALE 200 feet

**ENVIRON/Keramida Monitoring Well Locations Referenced from Keramida Environmental, Inc. Project No. 2829 March 13, 2002**

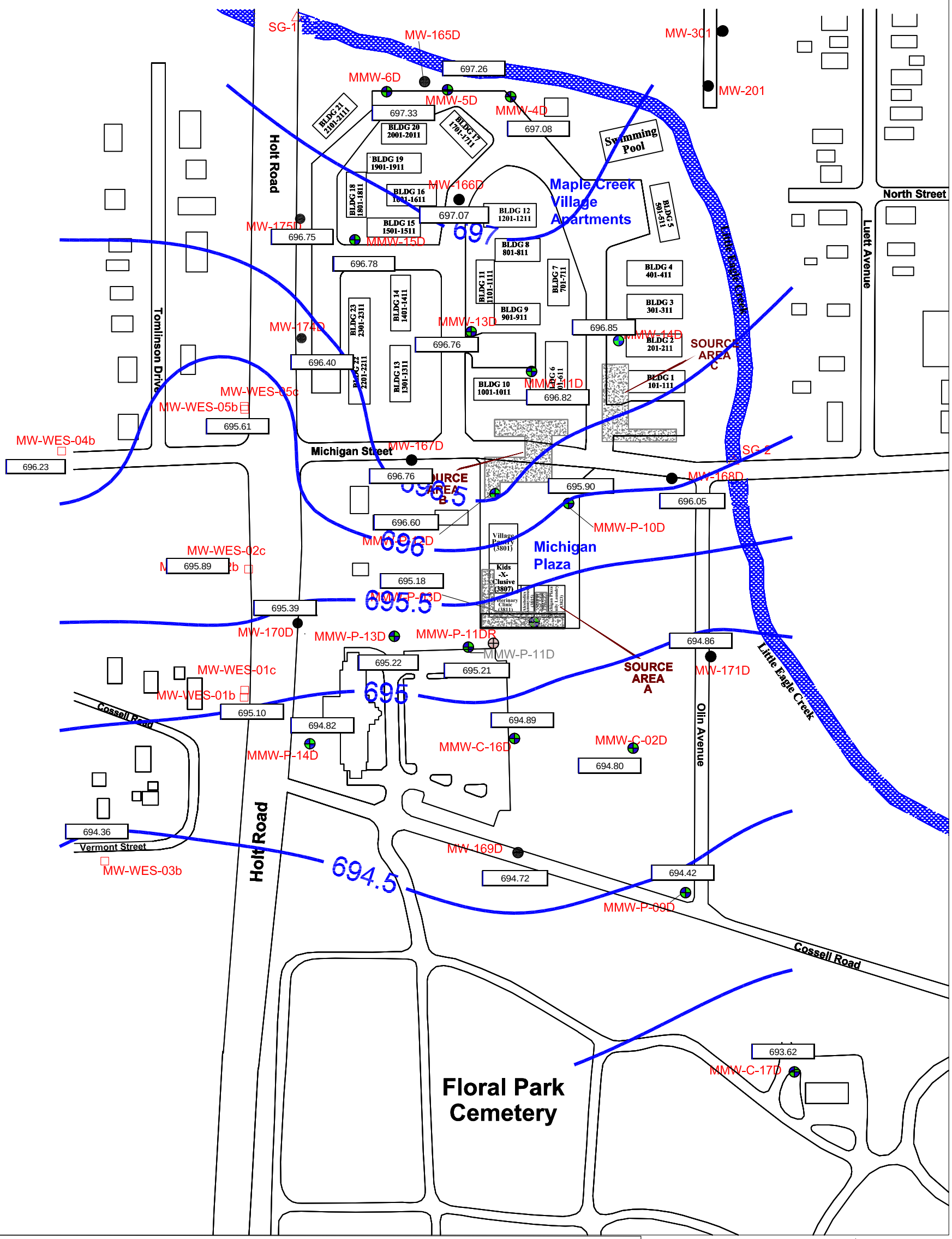
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317-630-9060, fax 317-630-9065
www.MundellAssociates.com

| | |
|---|---|
| **Project Number:** | M01046 |
| **Drawing File:** | 3Q13 QMR |
| **Date Prepared:** | 9-27-13 |
| **Scale:** | 1"=200' |

**DEEP POTENTIOMETRIC SURFACE - 3RD QUARTER 2013**

**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE 3A**




# LEGEND

| | | | |
|---|---|---|---|
| MMW-P-06 | MUNDELL Monitoring Well | 696.68 | Static water elevation (ft-MSL) |
| MW-160 | ENVIRON Monitoring Well | 695.64 | Static water elevation not used to contour potentiometric surface map. |
| MW-WES-O1A | U.S. EPA Monitoring Well | | |
| 697.5 | Potentiometric Surface Equipotential Lines Contour Interval = 0.5 feet | | |

N

0 SCALE 200
feet

**ENVIRON/Keramida Monitoring Well Locations Referenced from Keramida Environmental, Inc. Project No. 2829 March 13, 2002**

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317-630-9060, fax 317-630-9065
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| | |
|---|---|
| **Project Number:** | M01046 |
| **Drawing File:** | 3Q13 QMR |
| **Date Prepared:** | 9-30-13 |
| **Scale:** | 1"=200' |

**DEEP POTENTIOMETRIC SURFACE - 3RD QUARTER 2013**
**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE 3B**

| 9/18/2013 | MMW-15S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| NS | MMW-7S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/24/2013 | MMW-8S |
|---|---|
| PCE | 22.5 |
| TCE | 7.3 |
| cis-1,2-DCE | 54.5 |
| trans-1,2-DCE | <5.0 |
| VC | 163 |

| 9/20/2013 | MMW-11S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 43.9 |
| trans-1,2-DCE | 5.2 |
| VC | <2.0 |

| NS | MMW-3S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| NS | MMW-2S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/25/2013 | MMW-P-08 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 37.2 |
| trans-1,2-DCE | <5.0 |
| VC | 197 |

| 9/20/2013 | MMW-12S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 129 |
| trans-1,2-DCE | <5.0 |
| VC | 9.2 |

| 9/25/2013 | MMW-P-07 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 25.1 |
| trans-1,2-DCE | <5.0 |
| VC | 239 |

| 9/24/2013 | MMW-1S |
|---|---|
| PCE | 219 |
| TCE | 96.5 |
| cis-1,2-DCE | 74.9 |
| trans-1,2-DCE | <5.0 |
| VC | 45.1 |

| 9/24/2013 | MMW-P-12S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 538 |
| trans-1,2-DCE | 15.0 |
| VC | 19.4 |

| 9/25/2013 | MMW-10S |
|---|---|
| PCE | 6.6 |
| TCE | 5.2 |
| cis-1,2-DCE | 126 |
| trans-1,2-DCE | <5.0 |
| VC | 463 |

| 9/27/2013 | MW-167S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/25/2013 | MMW-9S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 1,000 |
| trans-1,2-DCE | 33.2 |
| VC | 1,370 |

| 9/26/2013 | MMW-P-01 |
|---|---|
| PCE | 28.1 |
| TCE | 13.3 |
| cis-1,2-DCE | 302 |
| trans-1,2-DCE | <5.0 |
| VC | 1,070 |

| 9/27/2013 | MW-168S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 10.9 |
| trans-1,2-DCE | <5.0 |
| VC | 19.4 |

| 9/26/2013 | MMW-P-06 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 2,280 |
| trans-1,2-DCE | 26.4 |
| VC | 2,590 |

| 9/25/2013 | MMW-P-10S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/27/2013 | MW-170S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 12.6 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| NS | MW-171S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/23/2013 | MMW-P-13S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/26/2013 | MMW-P-05 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 248 |

| 9/18/2013 | MMW-P-14S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/26/2013 | MMW-P-04 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 15.5 |
| trans-1,2-DCE | <5.0 |
| VC | 8.1 |

| 9/24/2013 | MMW-P-11S |
|---|---|
| PCE | 215 |
| TCE | <5.0 |
| cis-1,2-DCE | 7.7 |
| trans-1,2-DCE | <5.0 |
| VC | 8.7 |

| 9/23/2013 | MMW-C-02S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/25/2013 | MMW-P-02 |
|---|---|
| PCE | 11.2 |
| TCE | <5.0 |
| cis-1,2-DCE | 22.7 |
| trans-1,2-DCE | <5.0 |
| VC | 165 |

| 9/26/2013 | MMW-P-03S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 29.8 |
| trans-1,2-DCE | <5.0 |
| VC | 2500 |

| 9/23/2013 | MMW-C-16S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| NS | MW-169S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/26/2013 | MMW-C-01 |
|---|---|
| PCE | 12.2 |
| TCE | <5.0 |
| cis-1,2-DCE | 11.4 |
| trans-1,2-DCE | <5.0 |
| VC | 19.6 |

| 9/23/2013 | MMW-P-09S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

# LEGEND

MMW-P-06 — MUNDELL Monitoring Well

MW-160 — ENVIRON Monitoring Well

MW-WES-01A — U.S. EPA Monitoring Well

Inferred Extent of PCE > 5 ug/L

Inferred Extent of TCE > 5 ug/L

Inferred Extent of Cis-1,2 - DCE > 70 ug/L

Inferred Extent of VC > 2 ug/L

NS = Not Sampled

| | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Vinyl chloride |
|---|---|---|---|---|---|
| | ug/l | | | | |
| IDEM RISC Default Industrial Cleanup Level | 55 | 31 | 1,000 | 2,000 | 4 |
| IDEM RISC Default Residential Cleanup Level; IDEM 2012 RCG Tap Residential | 5 | 5 | 70 | 100 | 2 |

| 9/24/2013 | MMW-1S |
|---|---|
| PCE | 219 |
| TCE | 96.5 |
| cis-1,2-DCE | 74.9 |
| trans-1,2-DCE | <5.0 |
| VC | 45.1 |

All Values Over IDEM RISC Industrial Default Cleanup Levels In Red

All Values Over IDEM RISC Residential Default Cleanup Levels/2012 RCG Tap - Residential Screening Level In Blue

PCE = Tetrachloroethene

TCE = Trichloroethene

cis-1,2-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE = trans-1,2-Dichloroethene

ug/l = micrograms per liter

NS = Not Sampled

All analytical results presented in micrograms per liter (ug/l)

N

SCALE 0 200 feet

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**Project Number:** M01046

**Drawing File:** 3Q13 QMR

**Date Prepared:** 10-15-2013

**Scale:** 1"=200'

# GROUNDWATER ANALYTICAL MAP - SHALLOW 3RD QUARTER 2013 (RDCL-RCG TAP RESIDENTIAL EXCEEDANCES)

**Michigan Plaza**

**3801 - 3823 West Michigan Street**

**Indianapolis, INDIANA**

**FIGURE 4A**

| 9/18/2013 | MMW-15S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| NS | MMW-7S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/24/2013 | MMW-8S |
|---|---|
| PCE | 22.5 |
| TCE | 7.3 |
| cis-1,2-DCE | 54.5 |
| trans-1,2-DCE | <5.0 |
| VC | 163 |

| 9/20/2013 | MMW-11S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 43.9 |
| trans-1,2-DCE | 5.2 |
| VC | <2.0 |

| NS | MMW-3S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| NS | MMW-2S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/25/2013 | MMW-P-08 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 37.2 |
| trans-1,2-DCE | <5.0 |
| VC | 197 |

| 9/20/2013 | MMW-12S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 129 |
| trans-1,2-DCE | <5.0 |
| VC | 9.2 |

| 9/25/2013 | MMW-P-07 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 25.1 |
| trans-1,2-DCE | <5.0 |
| VC | 239 |

| 9/24/2013 | MMW-1S |
|---|---|
| PCE | 219 |
| TCE | 96.5 |
| cis-1,2-DCE | 74.9 |
| trans-1,2-DCE | <5.0 |
| VC | 45.1 |

| 9/24/2013 | MMW-P-12S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 538 |
| trans-1,2-DCE | 15.0 |
| VC | 19.4 |

| 9/25/2013 | MMW-10S |
|---|---|
| PCE | 6.6 |
| TCE | 5.2 |
| cis-1,2-DCE | 126 |
| trans-1,2-DCE | <5.0 |
| VC | 463 |

| 9/27/2013 | MW-167S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/25/2013 | MMW-9S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 1,000 |
| trans-1,2-DCE | 33.2 |
| VC | 1,370 |

| 9/26/2013 | MMW-P-01 |
|---|---|
| PCE | 28.1 |
| TCE | 13.3 |
| cis-1,2-DCE | 302 |
| trans-1,2-DCE | <5.0 |
| VC | 1,070 |

| 9/27/2013 | MW-168S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 10.9 |
| trans-1,2-DCE | <5.0 |
| VC | 19.4 |

| 9/26/2013 | MMW-P-06 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 2,280 |
| trans-1,2-DCE | 26.4 |
| VC | 2,590 |

| 9/25/2013 | MMW-P-10S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/27/2013 | MW-170S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 12.6 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| NS | MW-171S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/23/2013 | MMW-P-13S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/26/2013 | MMW-P-05 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 248 |

| 9/18/2013 | MMW-P-14S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/26/2013 | MMW-P-04 |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 15.5 |
| trans-1,2-DCE | <5.0 |
| VC | 8.1 |

| 9/24/2013 | MMW-P-11S |
|---|---|
| PCE | 215 |
| TCE | <5.0 |
| cis-1,2-DCE | 7.7 |
| trans-1,2-DCE | <5.0 |
| VC | 8.7 |

| 9/23/2013 | MMW-C-02S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| 9/25/2013 | MMW-P-02 |
|---|---|
| PCE | 11.2 |
| TCE | <5.0 |
| cis-1,2-DCE | 22.7 |
| trans-1,2-DCE | <5.0 |
| VC | 165 |

| 9/26/2013 | MMW-P-03S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 29.8 |
| trans-1,2-DCE | <5.0 |
| VC | 2500 |

| 9/23/2013 | MMW-C-16S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

| NS | MW-169S |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/26/2013 | MMW-C-01 |
|---|---|
| PCE | 12.2 |
| TCE | <5.0 |
| cis-1,2-DCE | 11.4 |
| trans-1,2-DCE | <5.0 |
| VC | 19.6 |

| 9/23/2013 | MMW-P-09S |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | <2.0 |

# LEGEND

MMW-P-06 — MUNDELL Monitoring Well

MW-160 — ENVIRON Monitoring Well

MW-WES-01A — U.S. EPA Monitoring Well

Inferred Extent of PCE > 55 ug/L

Inferred Extent of TCE > 31 ug/L

Inferred Extent of Cis-1,2 - DCE > 1,000 ug/L

Inferred Extent of VC > 4 ug/L

NS = Not Sampled

| | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Vinyl chloride |
|---|---|---|---|---|---|
| | ug/l | | | | |
| IDEM RISC Default Industrial Cleanup Level | 55 | 31 | 1,000 | 2,000 | 4 |
| IDEM RISC Default Residential Cleanup Level; IDEM 2012 RCG Tap Residential | 5 | 5 | 70 | 100 | 2 |

| 9/24/2013 | MMW-1S |
|---|---|
| PCE | 219 |
| TCE | 96.5 |
| cis-1,2-DCE | 74.9 |
| trans-1,2-DCE | <5.0 |
| VC | 45.1 |

All Values Over IDEM RISC Industrial Default Cleanup Levels In Red

All Values Over IDEM RISC Residential Default Cleanup Levels/2012 RCG Tap - Residential Screening Level In Blue

PCE = Tetrachloroethene

TCE = Trichloroethene

cis-1,2-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE = trans-1,2-Dichloroethene

ug/l = micrograms per liter

NS = Not Sampled

All analytical results presented in micrograms per liter (ug/l)

N

SCALE 0 200 feet

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**Project Number:** M01046

**Drawing File:** 3Q13 QMR

**Date Prepared:** 10-15-13

**Scale:** 1"=200'

# GROUNDWATER ANALYTICAL MAP - SHALLOW 3RD QUARTER 2013 (IDCL EXCEEDANCES)

**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE 4B**

| 9/20/2013 | MMW-13D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 664 |
| trans-1,2-DCE | <5.0 |
| VC | 139 |

| 9/20/2013 | MMW-6D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 49.4 |

| NS | MMW-5D |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/20/2013 | MMW-4D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 260 |
| trans-1,2-DCE | <5.0 |
| VC | 124 |

| 9/18/2013 | MMW-15D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 10.6 |
| trans-1,2-DCE | <5.0 |
| VC | 2.7 |

| 9/20/2013 | MMW-11D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 524 |
| trans-1,2-DCE | 25.3 |
| VC | 7.7 |

| 9/27/2013 | MW-167D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 371 |
| trans-1,2-DCE | 18.5 |
| VC | 9.6 |

| 9/18/2013 | MMW-14D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 949 |
| trans-1,2-DCE | 10.2 |
| VC | 150 |

| 9/24/2013 | MMW-P-12D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 813 |
| trans-1,2-DCE | 20.0 |
| VC | 37.8 |

| 9/27/2013 | MW-168D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 100 |

| 9/24/2013 | MMW-P-11DR |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 8.5 |
| trans-1,2-DCE | <5.0 |
| VC | 101 |

| 9/25/2013 | MMW-P-10D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | 152 |
| trans-1,2-DCE | <5.0 |
| VC | 2,020 |

| 9/27/2013 | MW-170D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 48.0 |

| NS | MW-171D |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/18/2013 | MMW-P-14D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 94.4 |

| 9/18/2013 | MMW-C-02D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 275 |

| 9/23/2013 | MMW-P-13D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 120 |

| 9/23/2013 | MMW-P-09D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 67.5 |

| 9/26/2013 | MMW-P-03D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 664 |

| 9/23/2013 | MMW-C-16D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 165 |

| NS | MW-169D |
|---|---|
| PCE | NS |
| TCE | NS |
| cis-1,2-DCE | NS |
| trans-1,2-DCE | NS |
| VC | NS |

| 9/18/2013 | MMW-C-17D |
|---|---|
| PCE | <5.0 |
| TCE | <5.0 |
| cis-1,2-DCE | <5.0 |
| trans-1,2-DCE | <5.0 |
| VC | 5.6 |

MW-165D
MMW-6D
MMW-5D
MMW-4D
MW-301
MW-201
MW-166D
MW-175D
MMW-15D
MW-174D
MMW-13D
MMW-14D
MMW-11D
MW-167D
MW-168D
MMW-P-10D
MMW-P-12D
MW-WES-02c
MW-WES-02b
MMW-P-03D
MW-170D
MMW-P-13D
MMW-P-11DR
MMW-P-11D
MW-WES-01c
MW-WES-01b
MMW-P-14D
MMW-C-16D
MMW-C-02D
MW-169D
MMW-P-09D
MMW-C-17D
MW-171D
SOURCE AREA A
SOURCE AREA B
SOURCE AREA C
Holt Road
Michigan Street
Cossell Road
Olin Avenue
Little Eagle Creek
Swimming Pool
BLDG 21 2101-2111
BLDG 20 2001-2011
BLDG 17 1701-1711
BLDG 19 1901-1911
BLDG 18 1801-1811
BLDG 16 1601-1611
BLDG 15 1501-1511
BLDG 12 1201-1211
BLDG 8 801-811
BLDG 11 1101-1111
BLDG 9 901-911
BLDG 7 701-711
BLDG 5 501-511
BLDG 4 401-411
BLDG 3 301-311
BLDG 2 201-211
BLDG 1 101-111
BLDG 23 2301-2311
BLDG 22 2201-2211
BLDG 14 1401-1411
BLDG 13 1301-1311
BLDG 10 1001-1011
BLDG 6 601-611
Village Pantry (3801)
Kids -X- Clusive (3807)
Veterinary Clinic (3811)
Cosmetics (3819)
Michigan Plaza (3825)
Floral Park Cemetery

## LEGEND

MMW-P-09D — MUNDELL Monitoring Well

MW-169D — ENVIRON Monitoring Well

MW-WES-05C — U.S. EPA Monitoring Well

Inferred Extent of PCE > 5 ug/L

Inferred Extent of TCE > 5 ug/L

Inferred Extent of Cis-1,2 - DCE > 70 ug/L

Inferred Extent of VC > 2 ug/L

NS = Not Sampled

| | PCE | TCE | cis-1,2-DCE | trans-1,2-DCE | Vinyl chloride |
|---|---|---|---|---|---|
| | ug/l | | | | |
| IDEM RISC Default Industrial Cleanup Level | 55 | 31 | 1,000 | 2,000 | 4 |
| IDEM RISC Default Residential Cleanup Level; IDEM 2012 RCG Tap Residential | 5 | 5 | 70 | 100 | 2 |

| 4/25/2012 | MMW-1S |
|---|---|
| PCE | 270 |
| TCE | 11.2 |
| cis-1,2-DCE | 34.2 |
| trans-1,2-DCE | <5.0 |
| VC | 39 |

All Values Over IDEM RISC Industrial Default Cleanup Levels In Red
All Values Over IDEM RISC Residential Default Cleanup Levels/2012 RCG Tap - Residential Screening Level in Blue
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
ug/l = micrograms per liter
NS = Not Sampled
All analytical results presented in micrograms per liter (ug/l)

N

SCALE 0 200 feet

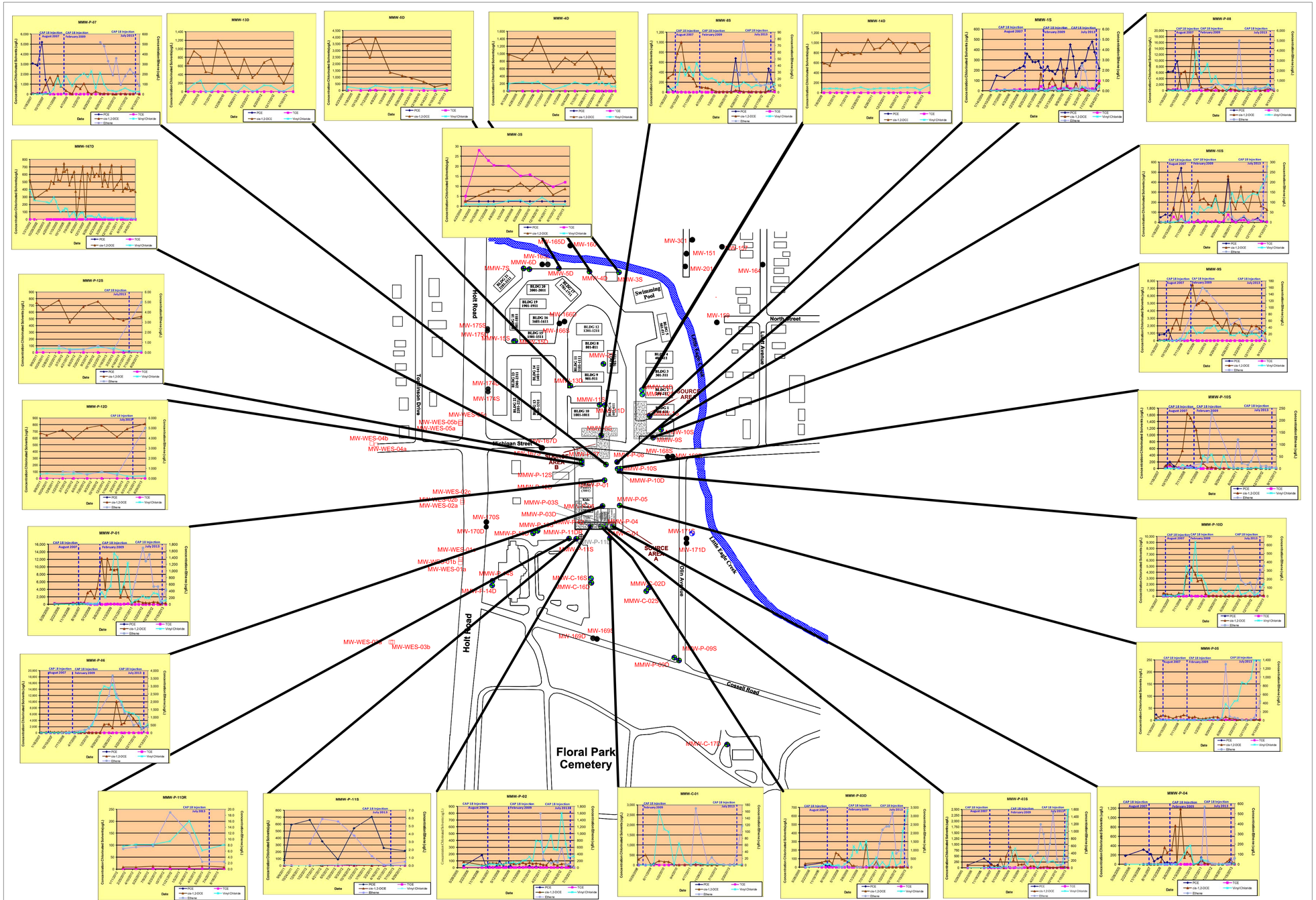
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**Project Number:** M01046
**Drawing File:** 3Q13 QMR
**Date Prepared:** 10-15-13
**Scale:** 1"=200'

# GROUNDWATER ANALYTICAL MAP - DEEP 3RD QUARTER 2013 (RDCL-RCG TAP RESIDENTIAL EXCEEDANCES)

**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE 5**




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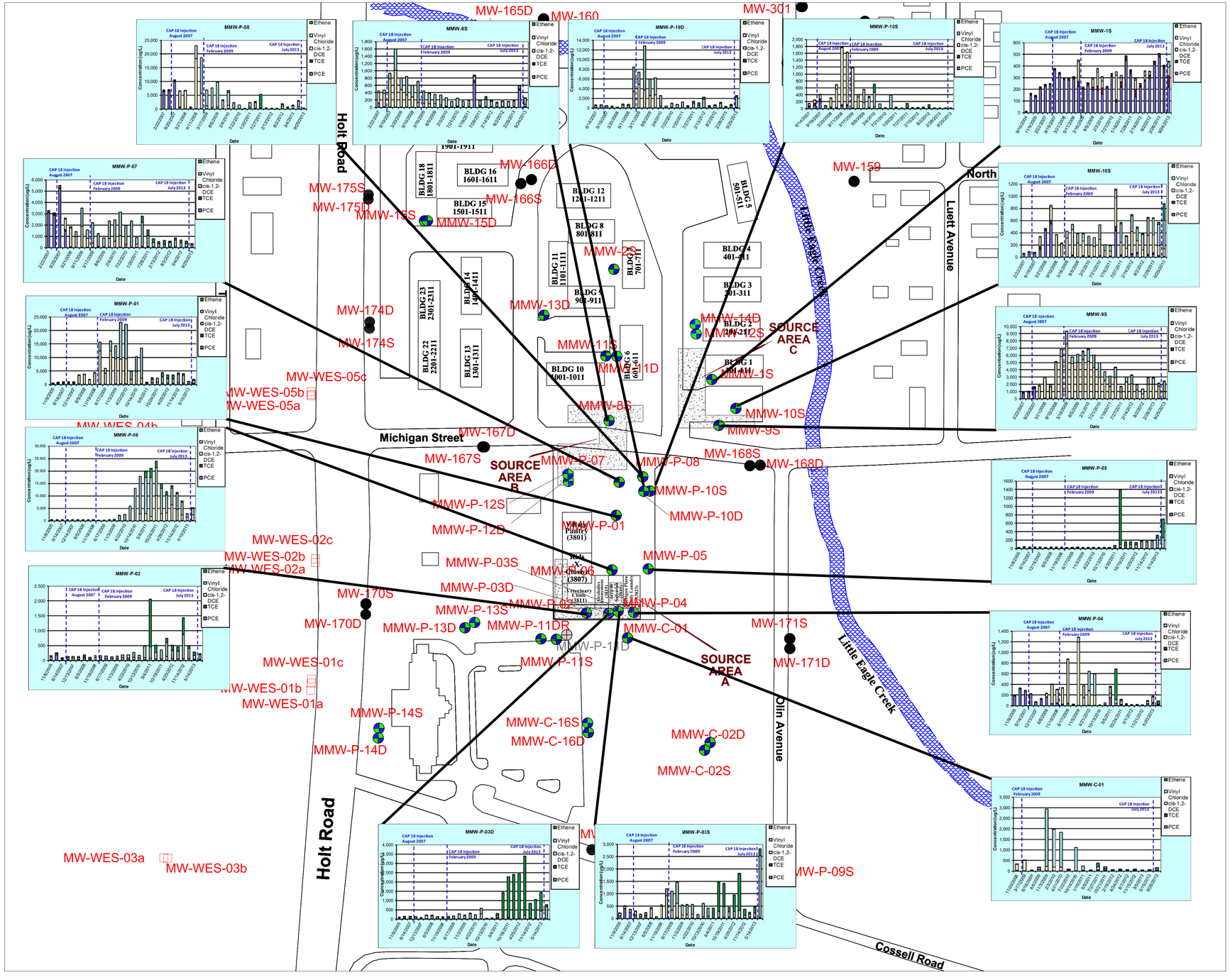
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|---|---|---|---|---|
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| | | | | |
| | | | | |

| | | | |
|---|---|---|---|
| PROJECT NO.: M01046 | | FILE NO.:GW Quarterly.DWG | |
| DRAWING: | 1"=200' | PLOT SIZE: | ANSI D |
| DRAFTED BY: | MTB | DATE: | 10/15/13 |
| CHECKED BY: | MEB | DATE: | 10/15/13 |
| APPROVED BY: | MEB | DATE: | 10/15/13 |

# Indicator Compound Trends in Groundwater

Michigan Plaza
3801 - 3823 Michigan Street
Indianapolis, Indiana

**FIGURE 6**




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| REV. | DATE | DESCRIPTION | BY | APPR. |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | |
|---|---|---|---|
| PROJECT NO.: | M01046 | FILE NO.:GW Quarterly.DWG | |
| DRAWING: | 1"=100' | PLOT SIZE: | ANSI D |
| DRAFTED BY: | MTB | DATE: | 10/15/13 |
| CHECKED BY: | MEB | DATE: | 10/15/13 |
| APPROVED BY: | MEB | DATE: | 10/15/13 |

# Parent and Daughter Compound Trends in Groundwater

Michigan Plaza
3801 - 3823 Michigan Street
Indianapolis, Indiana

**FIGURE 7**

901-911

BLDG 2
201-211

BLDG 6
601-611

B5

BLDG 1
101-111

BLDG 10
1001-1011

B7

B6

APARTMENT COMPLEX

WEST MICHIGAN STREET

MICHIGAN PLAZA

Village Pantry (3801)

B1

Kids -X- Clusive (3807)

B2

Veterinary Clinic (3811)

Alcoholics Anonymous (3815)

Arca de Salvacion (3819)

B3

Michigan Plaza Family Laundry (3823)

B4

## LEGEND

B1 Mitigation System Location

N

SCALE 0 50 feet

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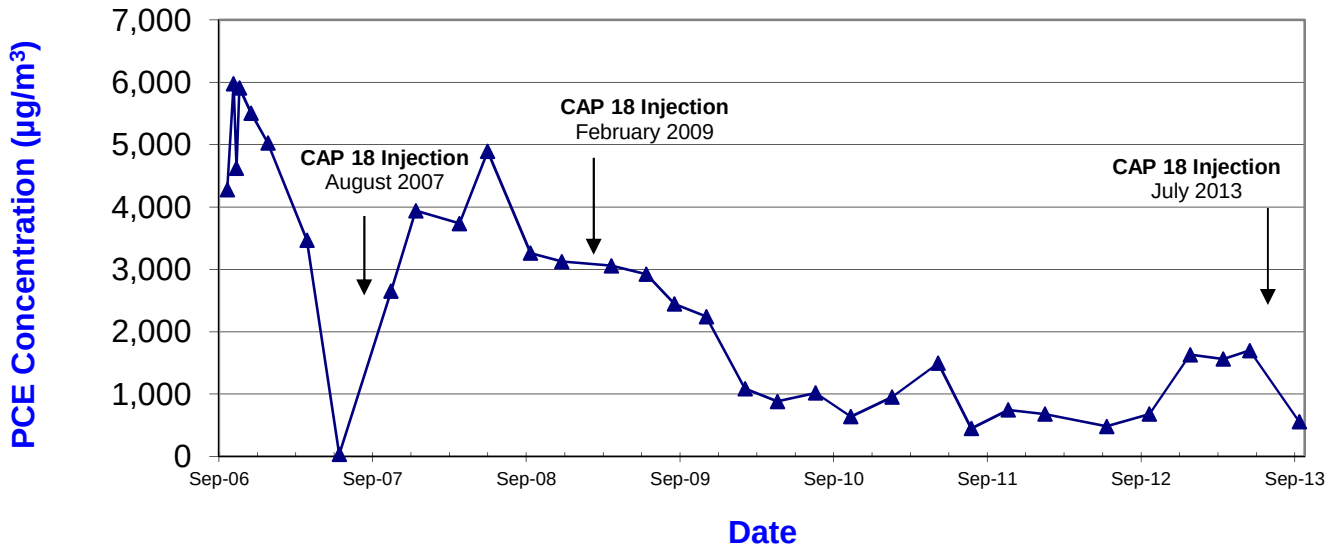
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| **Project Number:** | M01046 |
| **Drawing File:** | 3Q13 QMR |
| **Date Prepared:** | 6/7/13 |
| **Scale:** | 1"=50' |

**INDOOR AIR MITIGATION SYSTEM LOCATION MAP**

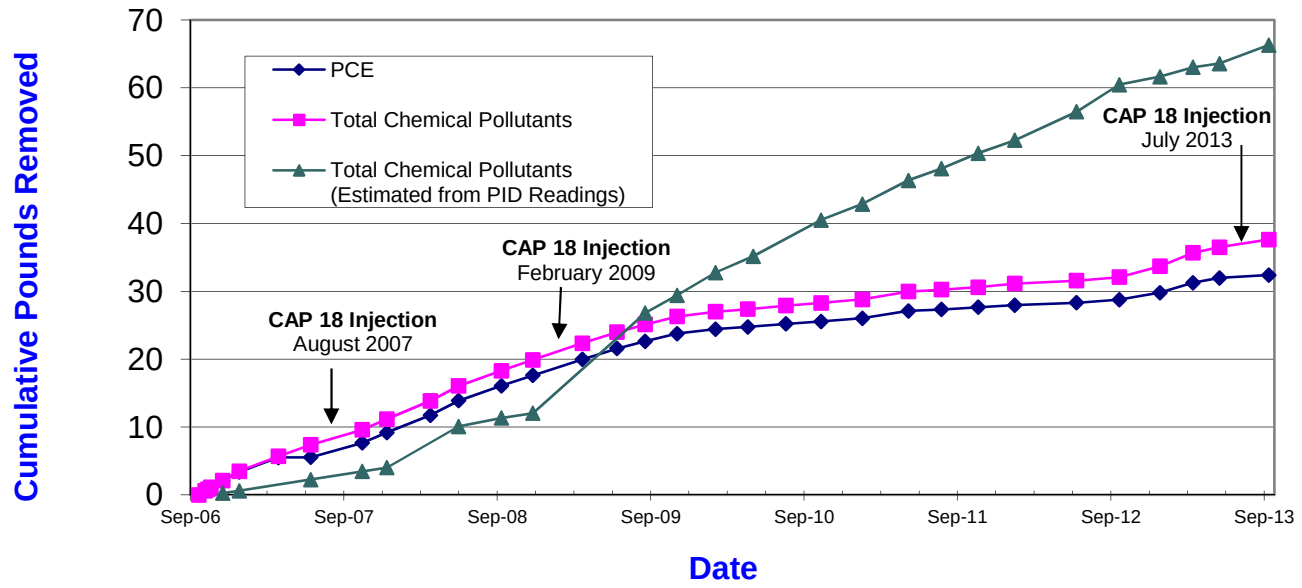
**Michigan Plaza**
**3801 - 3823 West Michigan Street**
**Indianapolis, INDIANA**

**FIGURE**
**8**

## *PCE Vapor Concentrations Trend - Village Pantry (Unit 3801) Vapor Mitigation System (B1)*




## *Chemical Pounds Removed - Villiage Pantry (Unit 3801) Vapor Mitigation System (B1)*





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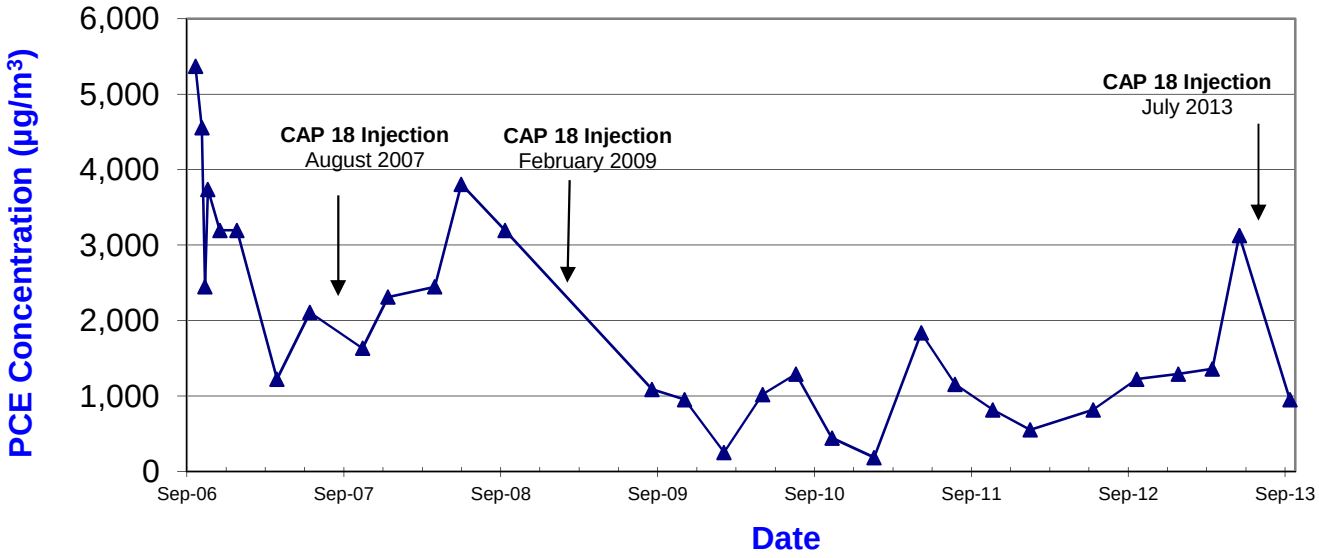

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-1 (Villiage Pantry - Unit 3801)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

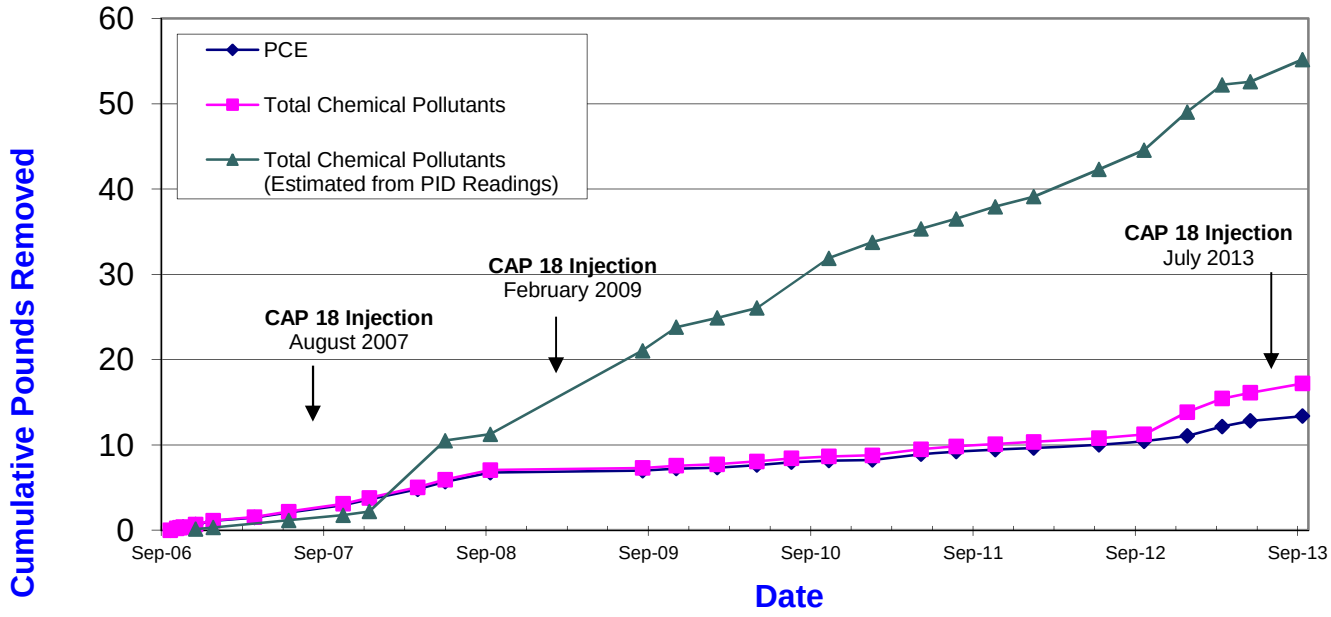
FIGURE

9

## *PCE Vapor Concentrations Trend - Unit 3811 Vapor Mitigation System (B2)*




## *Chemical Pounds Removed - Unit 3811 Vapor Mitigation System (B2)*





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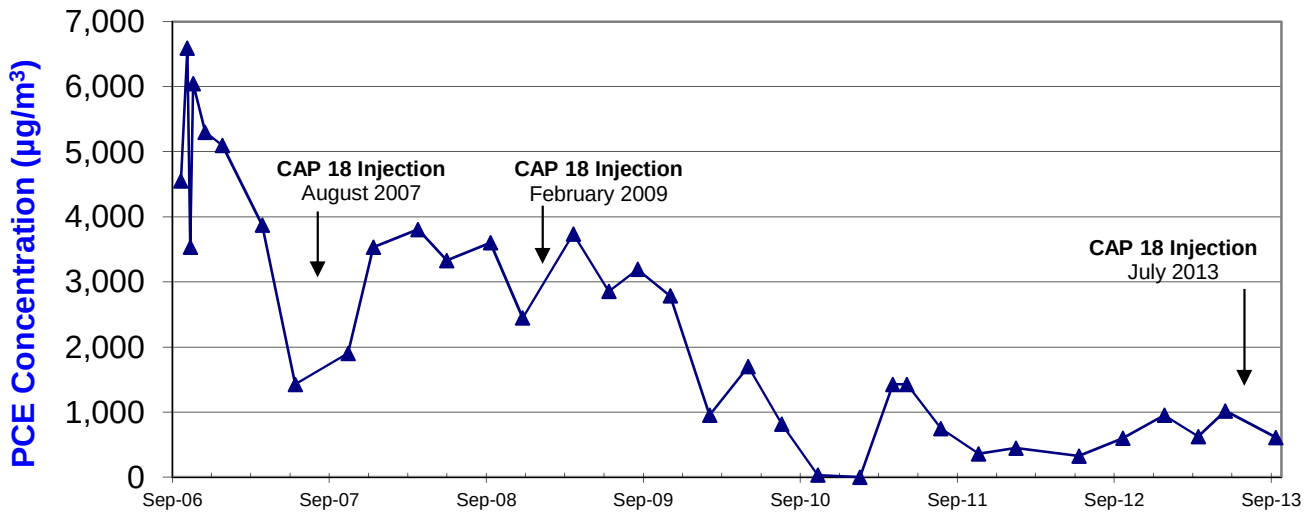

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-2 (Unit 3811)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

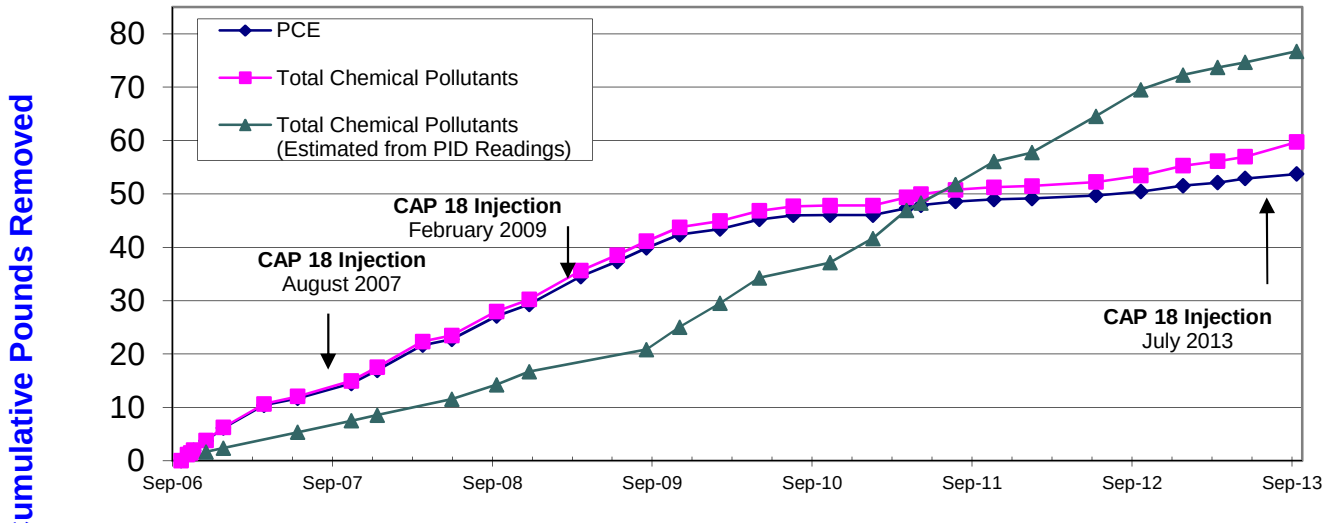
FIGURE

10

## *PCE Vapor Concentrations Trend - Unit 3819 Vapor Mitigation System (B3)*




## *Chemical Pounds Removed - Mexican Store Vapor Mitigation System (B3)*





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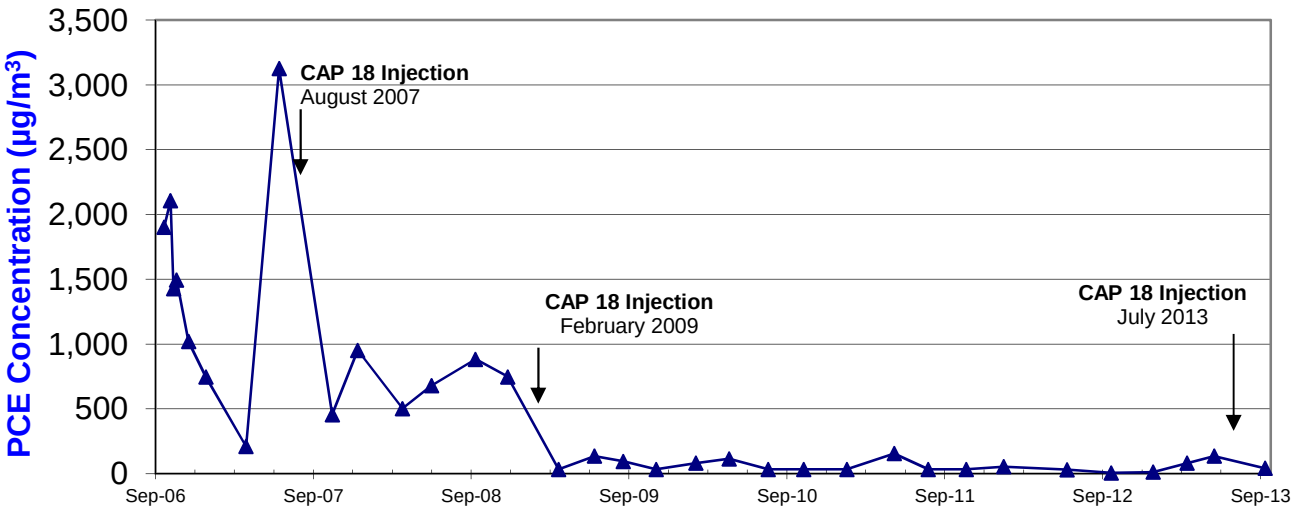

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-3 (Unit 3819)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

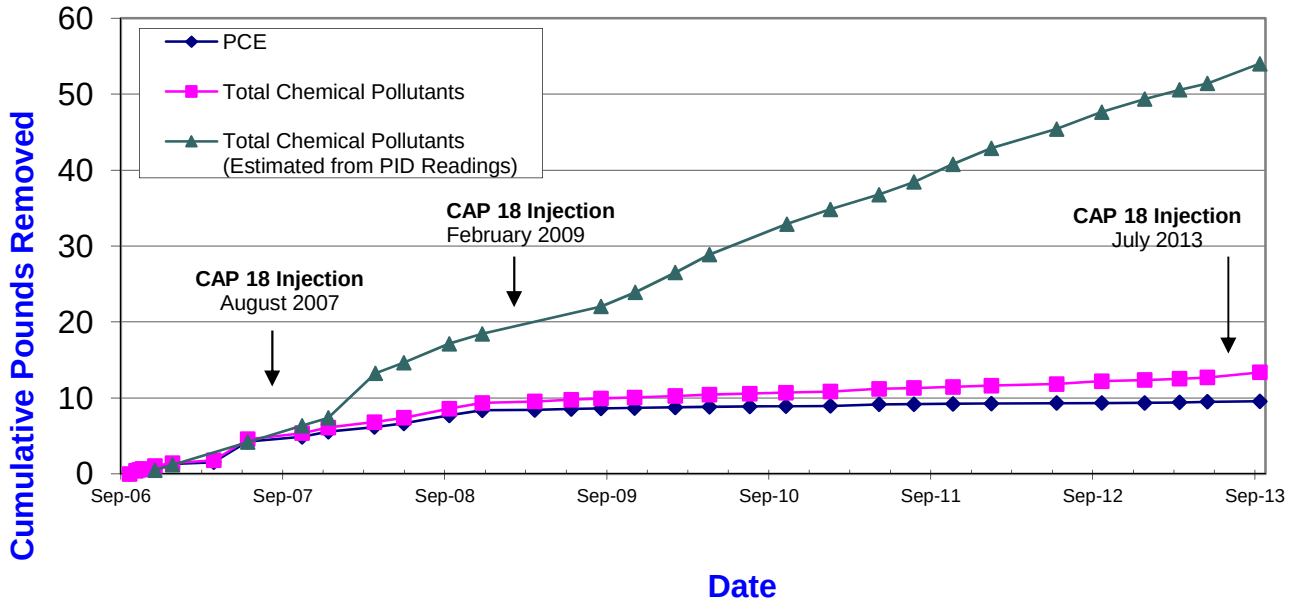
FIGURE

11

## *PCE Vapor Concentrations Trend - Laundromat Vapor Mitigation System (B4)*




## *Chemical Pounds Removed - Laundromat Vapor Mitigation System (B4)*




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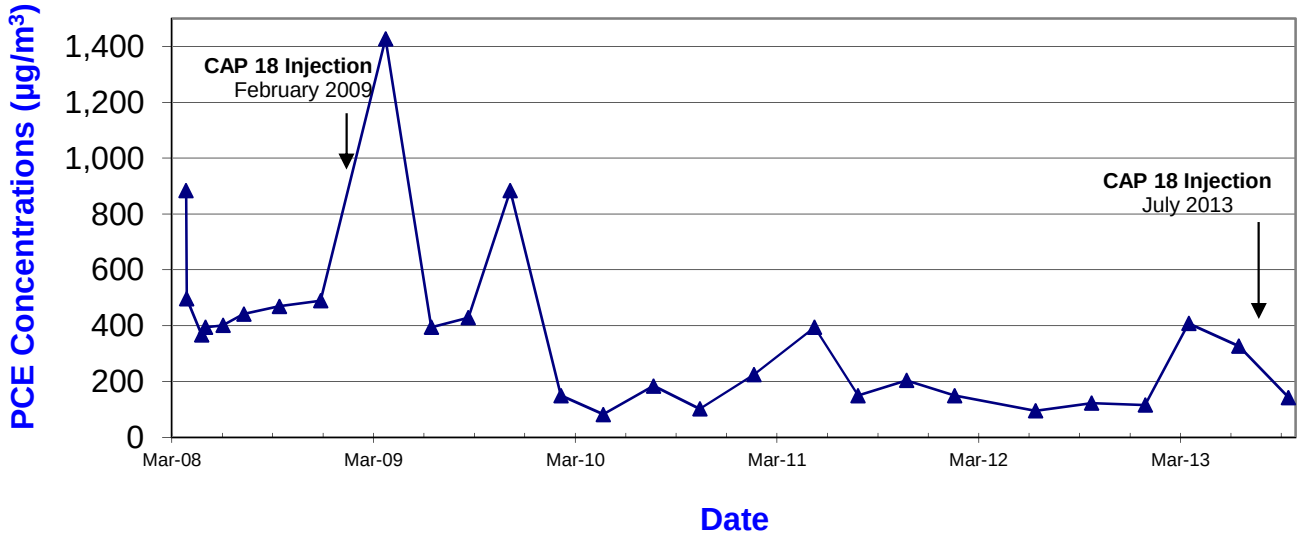

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-4 (Laundromat - Unit 3823)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

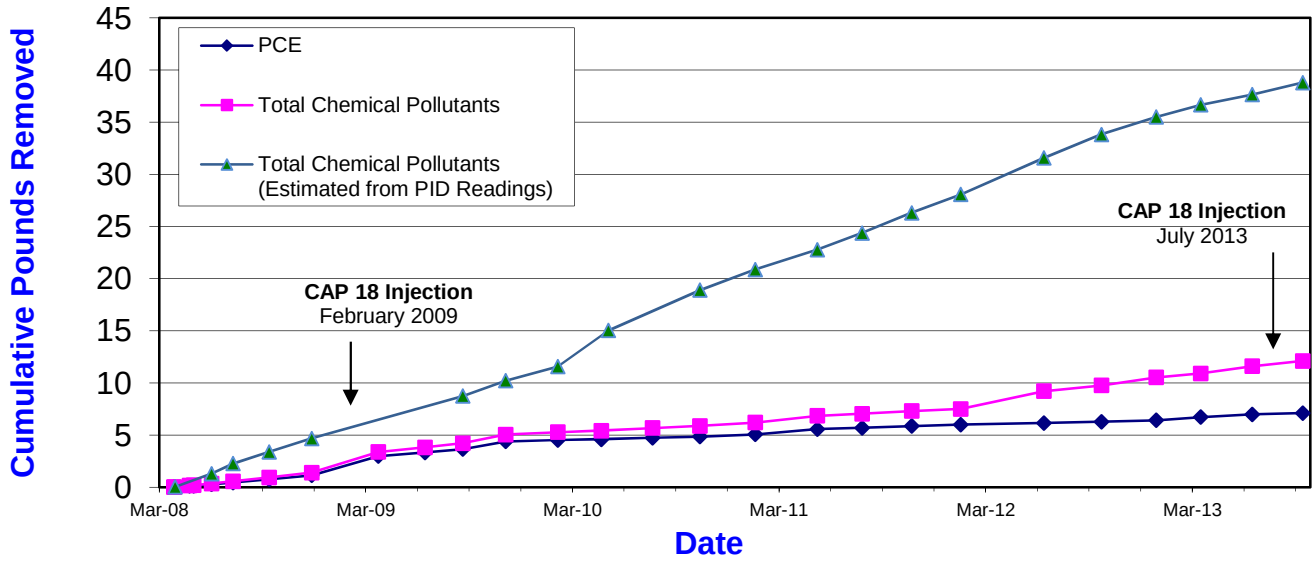
FIGURE

12

## *PCE Vapor Concentrations Trend - Apartment Building 1 Vapor Mitigation System (B5)*




## *Chemical Pounds Removed - Apartment Building 1 Vapor Mitigation System (B5)*




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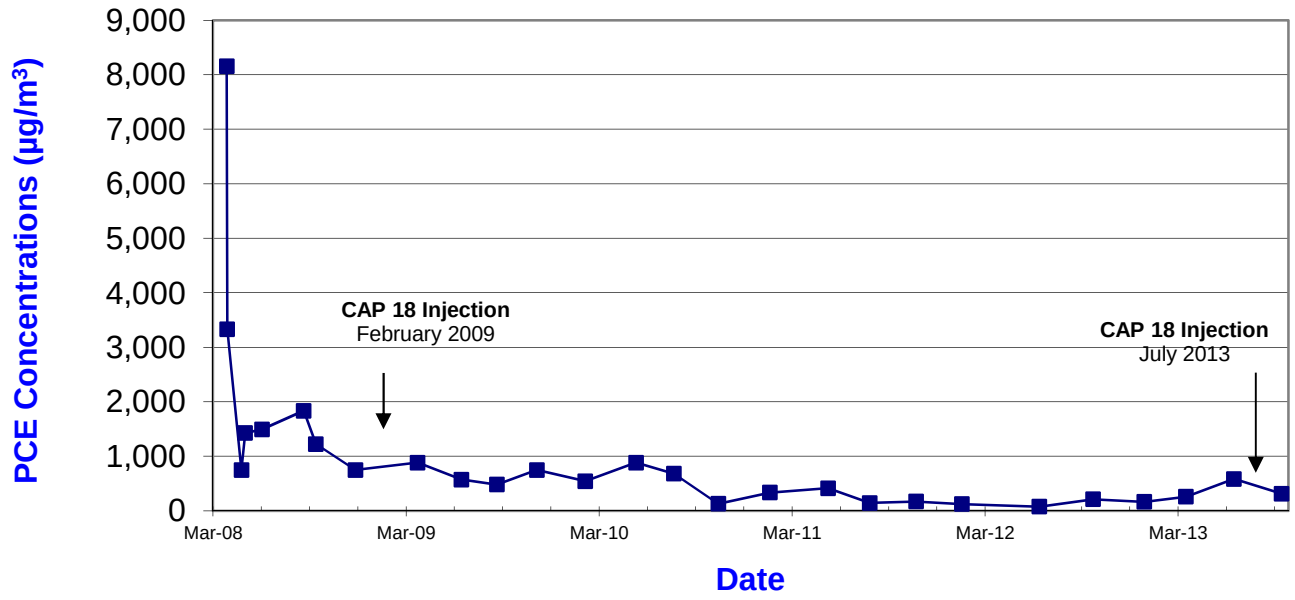

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-5 (Apartments, Bldg. 1)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

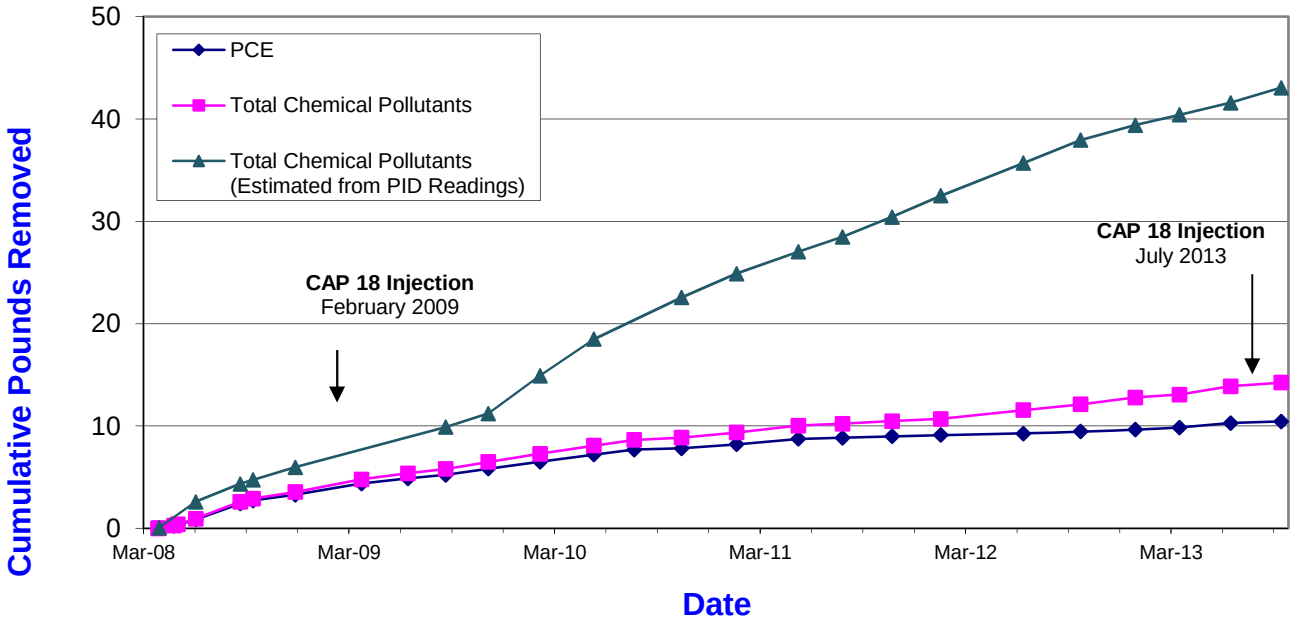
FIGURE

13

## *PCE Vapor Concentrations Trend - Apartment Building 6 Vapor Mitigation System (B6)*

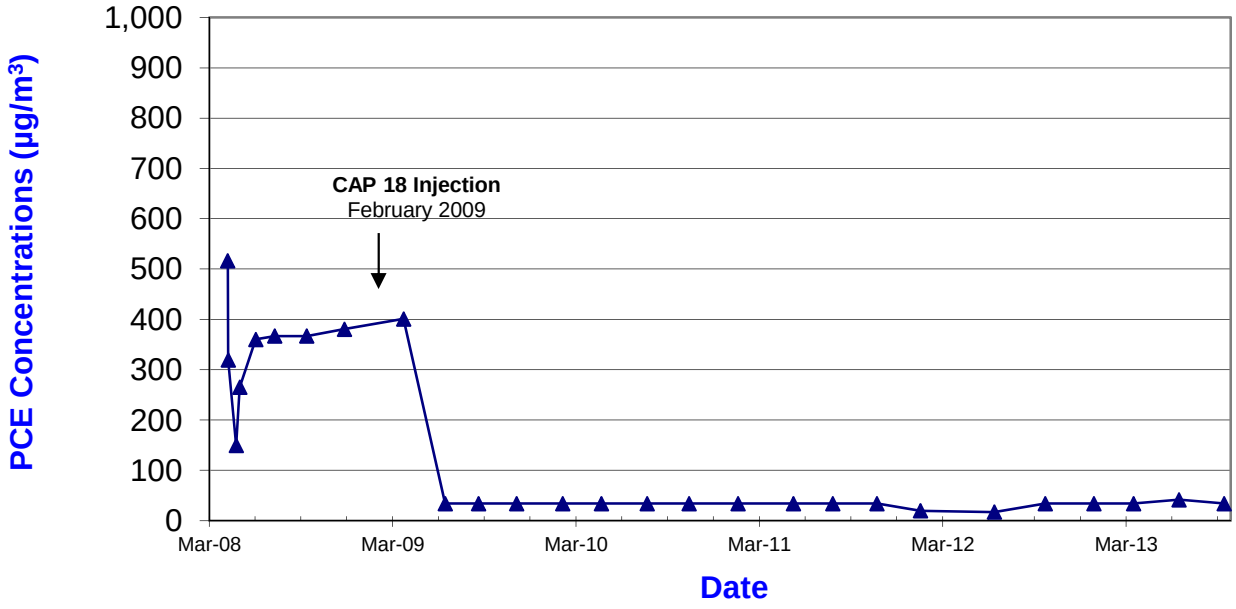



## *Chemical Pounds Removed - Apartment Building 6 Vapor Mitigation System (B6)*

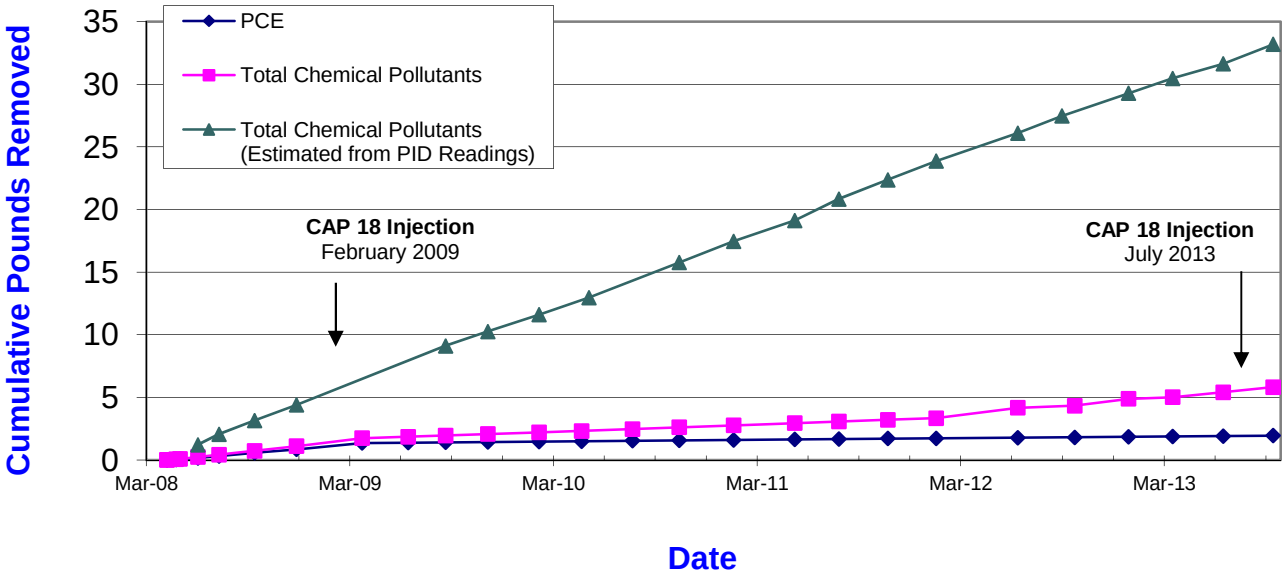



| | | | | |
|---|---|---|---|---|
| Mundell Consulting Professionals for the Earth and the Environment | *Mundell & Associates, Inc.*<br>*110 South Downey Avenue*<br>*Indianapolis, Indiana 46219*<br>*www.MundellAssociates.com* | **Project Number:** M01046<br>**File:** MI Plaza charts<br>**Date Prepared:** 10/22/2013<br>**Scale:** no scale | PCE Concentration Trends and Cumulative Pounds Removed<br>Vapor Mitigation System B-6 (Apartments, Bldg. 6)<br>Third Quarter 2013<br>Michigan Plaza<br>3801-3823 West Michigan Street<br>Indianapolis, IN | FIGURE<br>14 |

## *PCE Vapor Concentrations Trend - Apartment Building 10 Vapor Mitigation System (B7)*




## *Chemical Pounds Removed - Apartment Building 10 Vapor Mitigation System (B7)*




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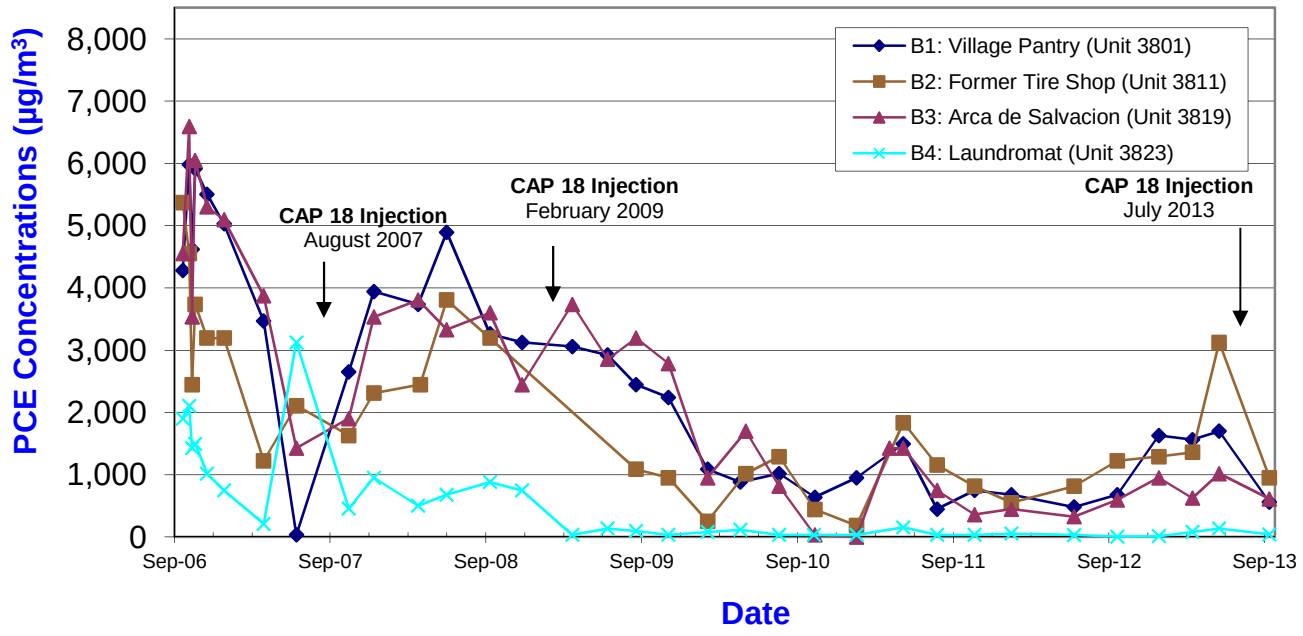

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|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-7 (Apartments, Bldg. 10)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

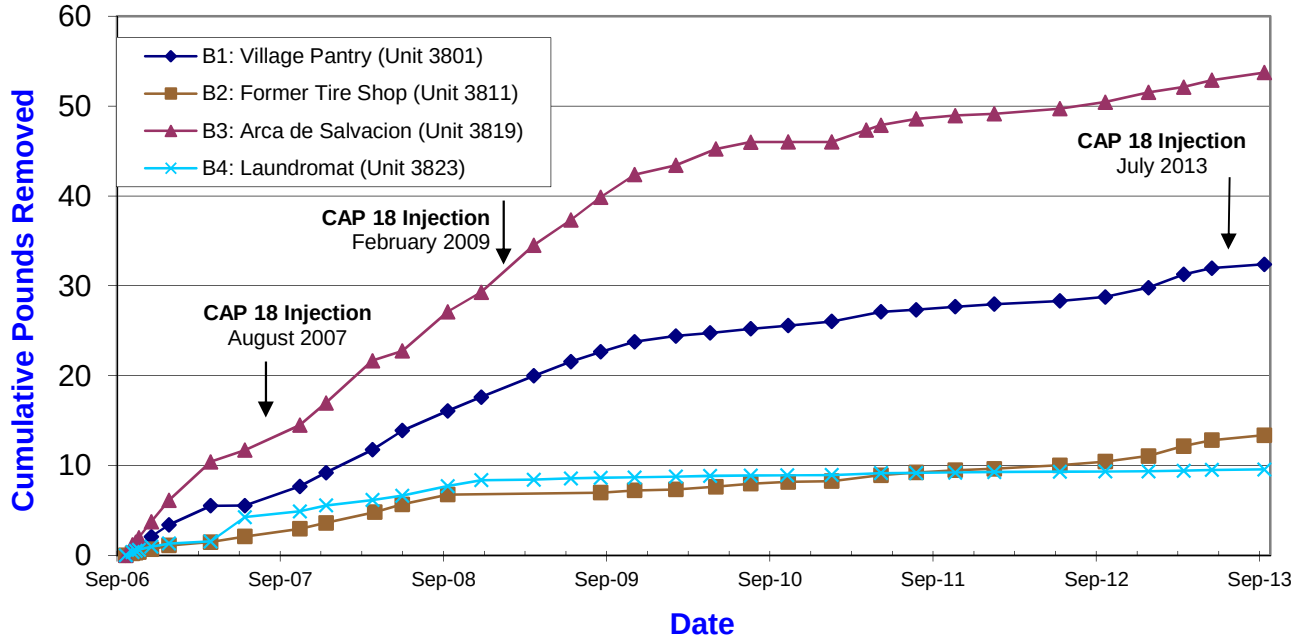
FIGURE

15

## *PCE Concentrations Trend - Plaza Vapor Mitigation Systems (B1-B4)*




## *PCE Pounds Removed - Plaza Vapor Mitigation Systems (B1-B4)*




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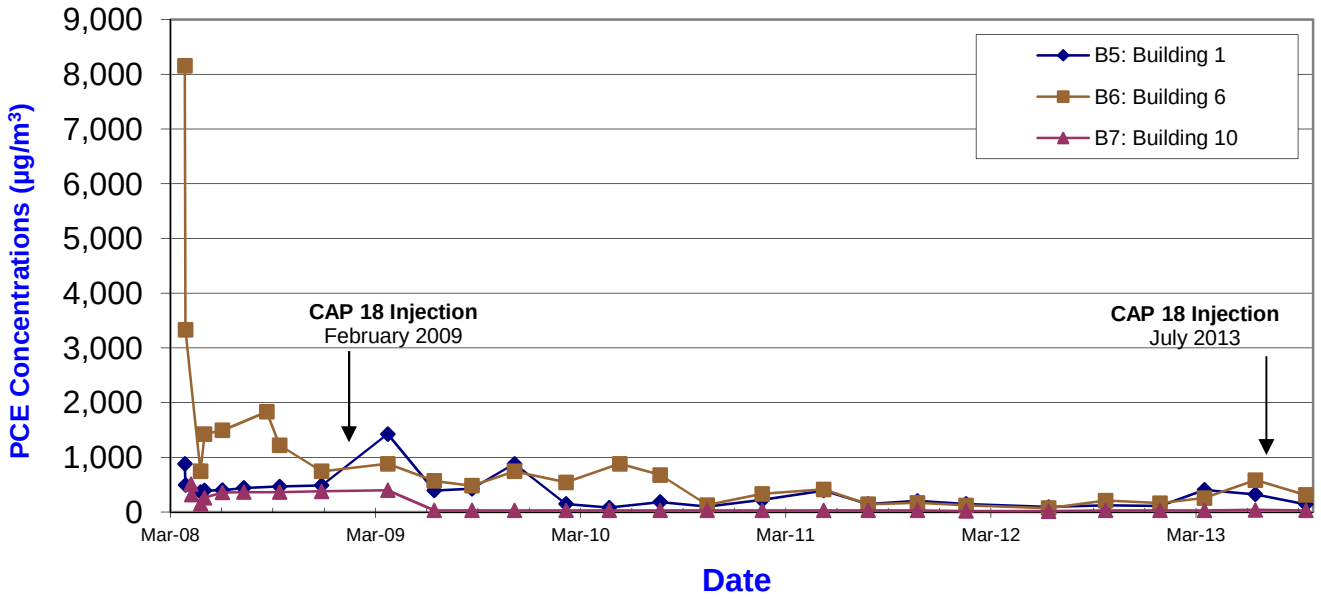

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation Systems B1-B4
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

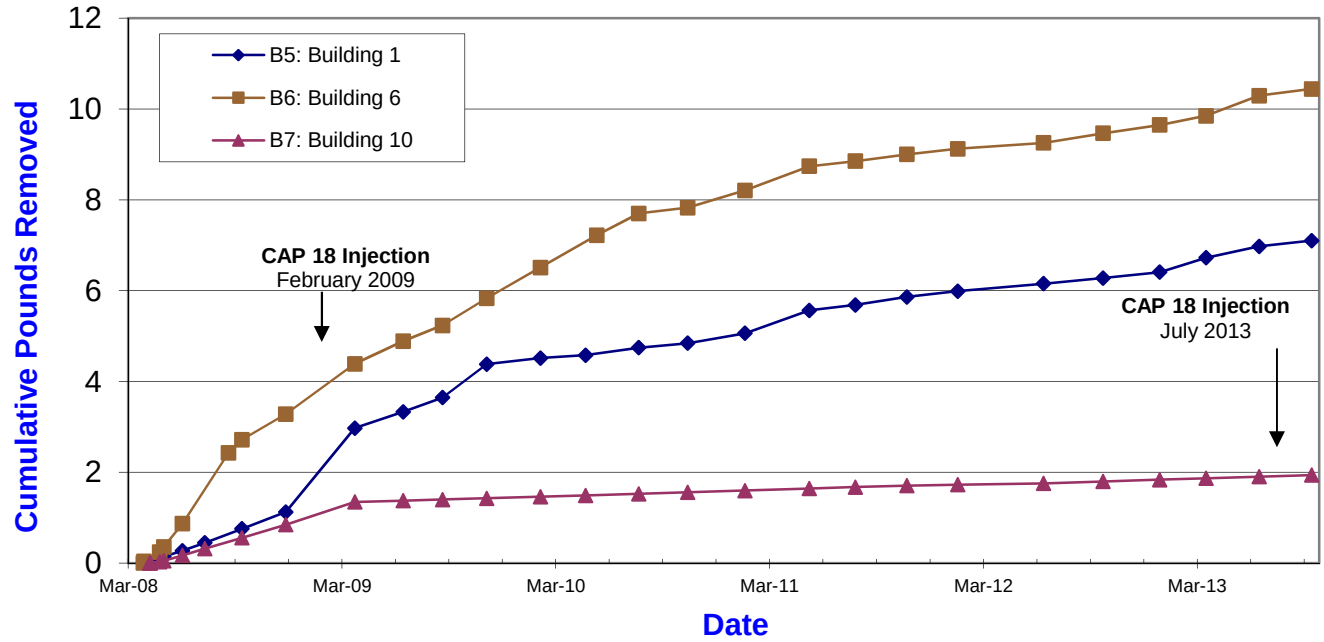
FIGURE

16

## *PCE Concentrations Trend - Apartment Vapor Mitigation Systems (B5-B7)*




## *PCE Pounds Removed - Apartment Vapor Mitigation Systems (B5-B7)*




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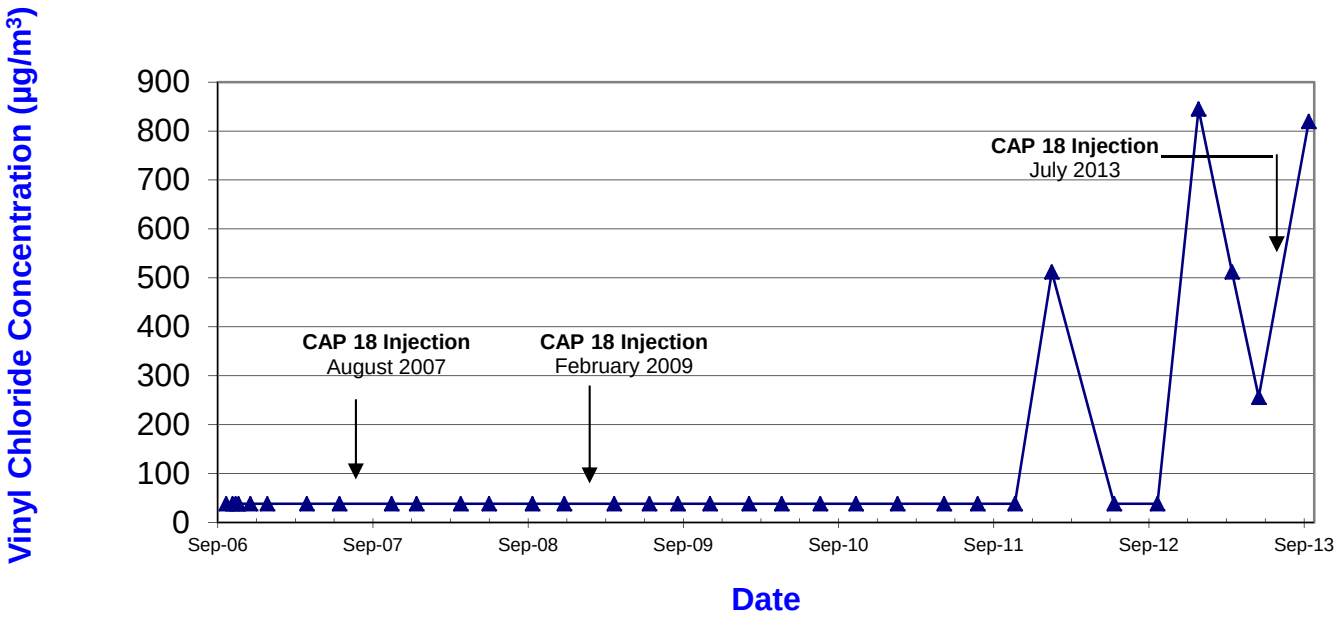

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

PCE Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation Systems B5-B7 (Apartments)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

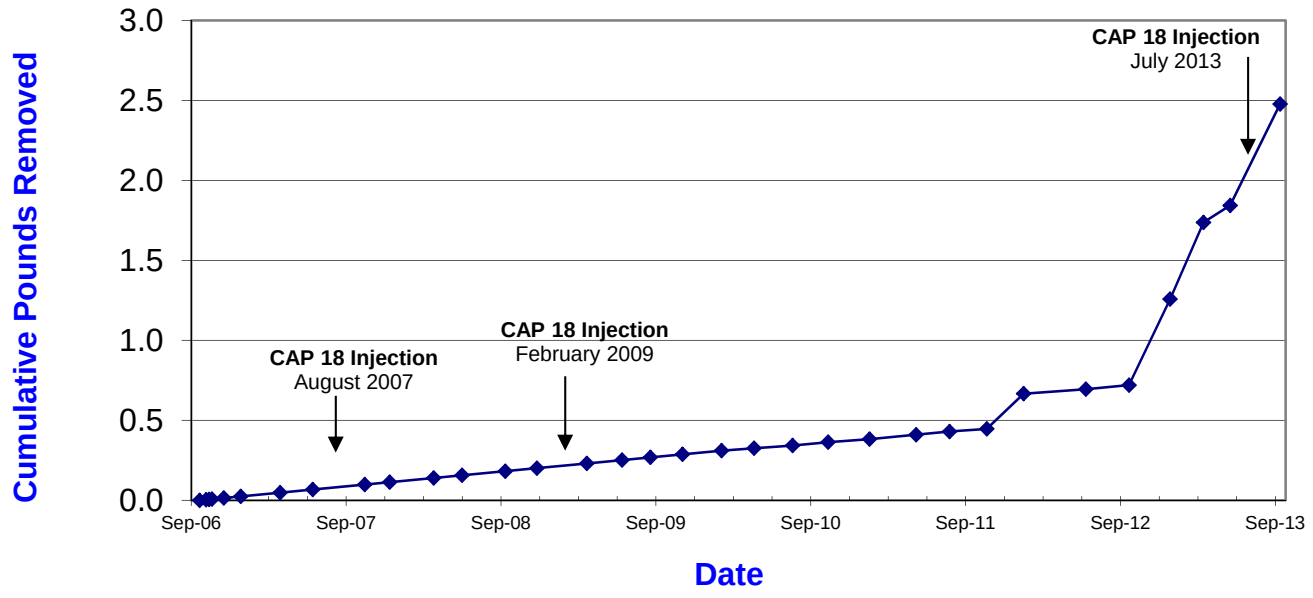
FIGURE

17

## *Vinyl Chloride Vapor Concentrations Trend - Village Pantry (Unit 3801) Vapor Mitigation System (B1)*




## *Chemical Pounds Removed - Villiage Pantry (Unit 3801) Vapor Mitigation System (B1)*




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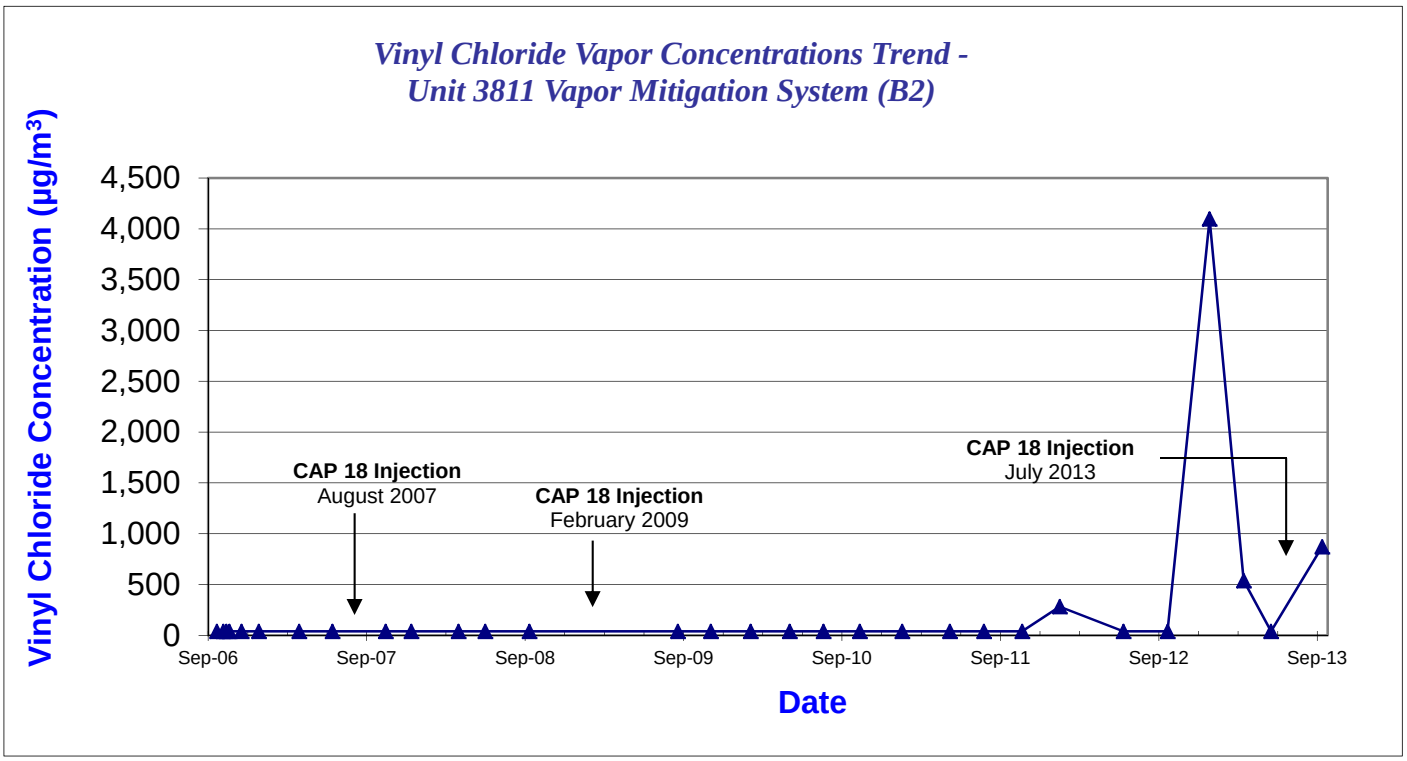

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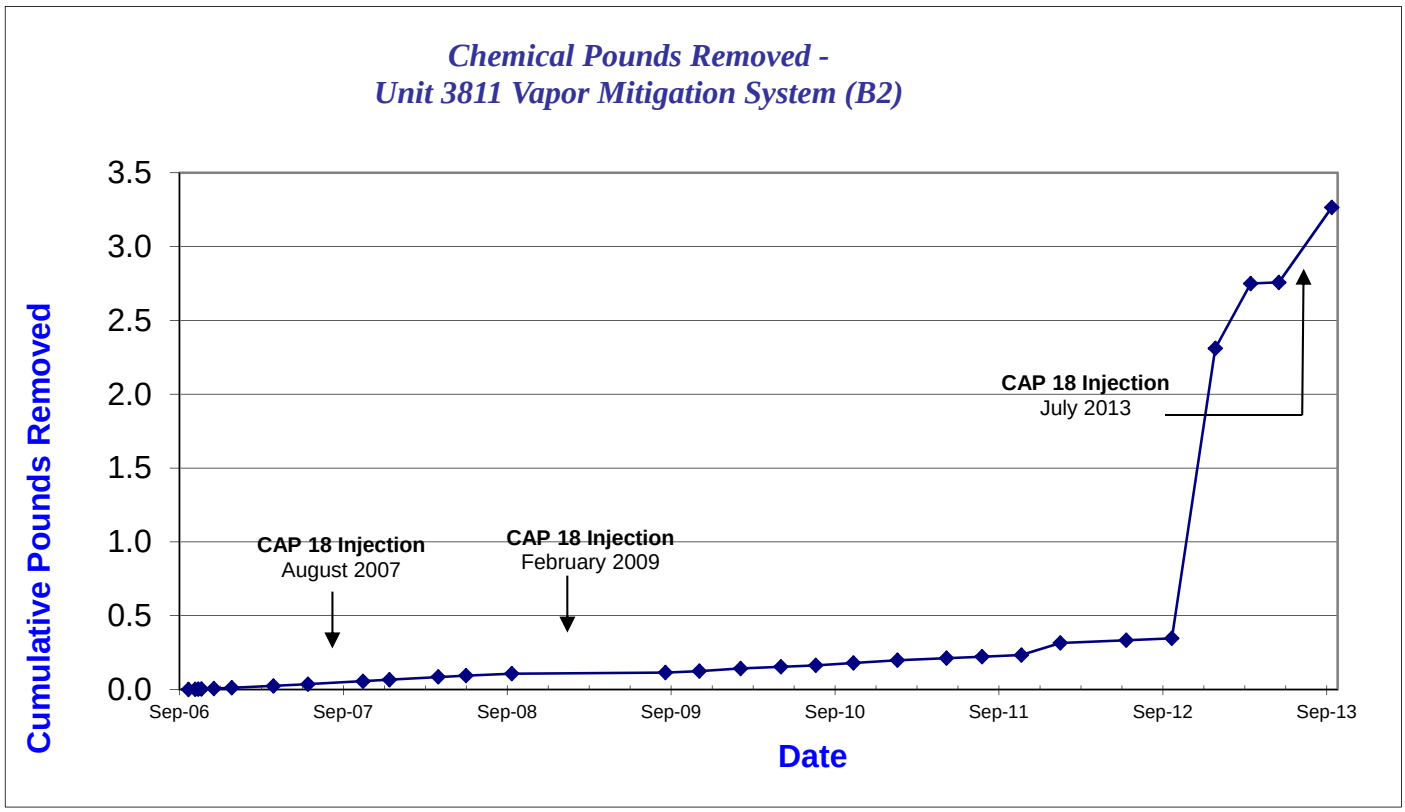

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-1 (Villiage Pantry - Unit 3801)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

FIGURE

18





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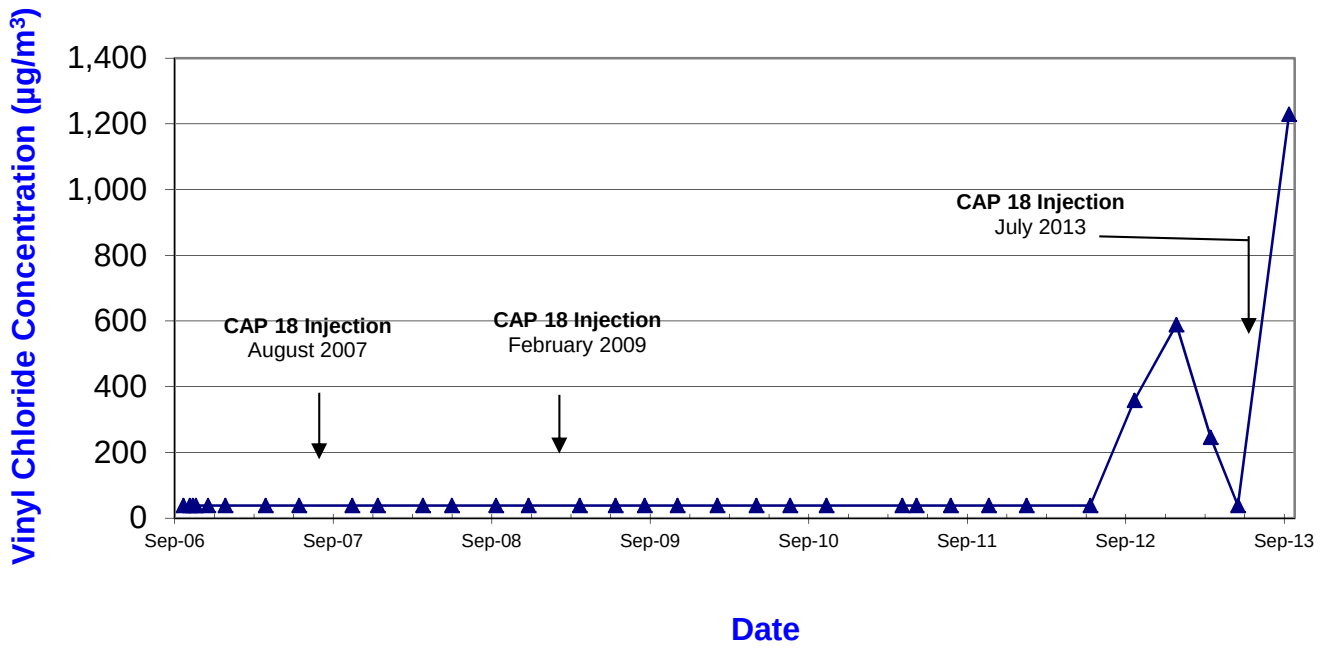

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-2 (Unit 3811)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

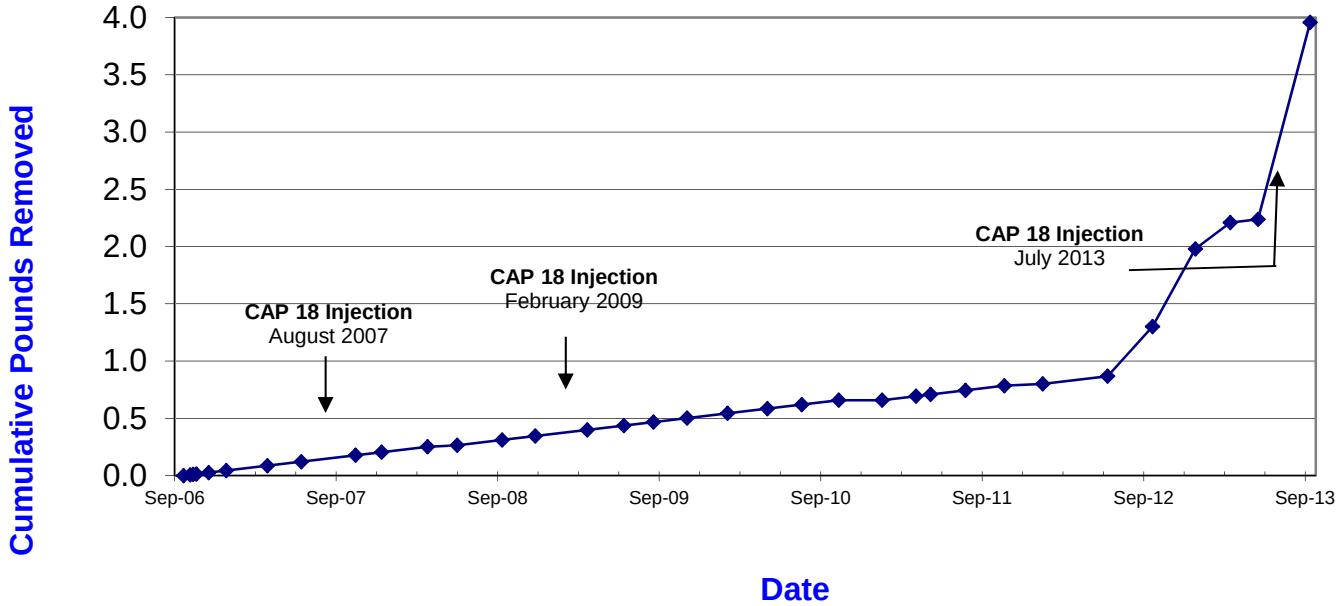
FIGURE

19

## *Vinyl Chloride Vapor Concentrations Trend - Unit 3819 Vapor Mitigation System (B3)*




## *Chemical Pounds Removed - Mexican Store Vapor Mitigation System (B3)*





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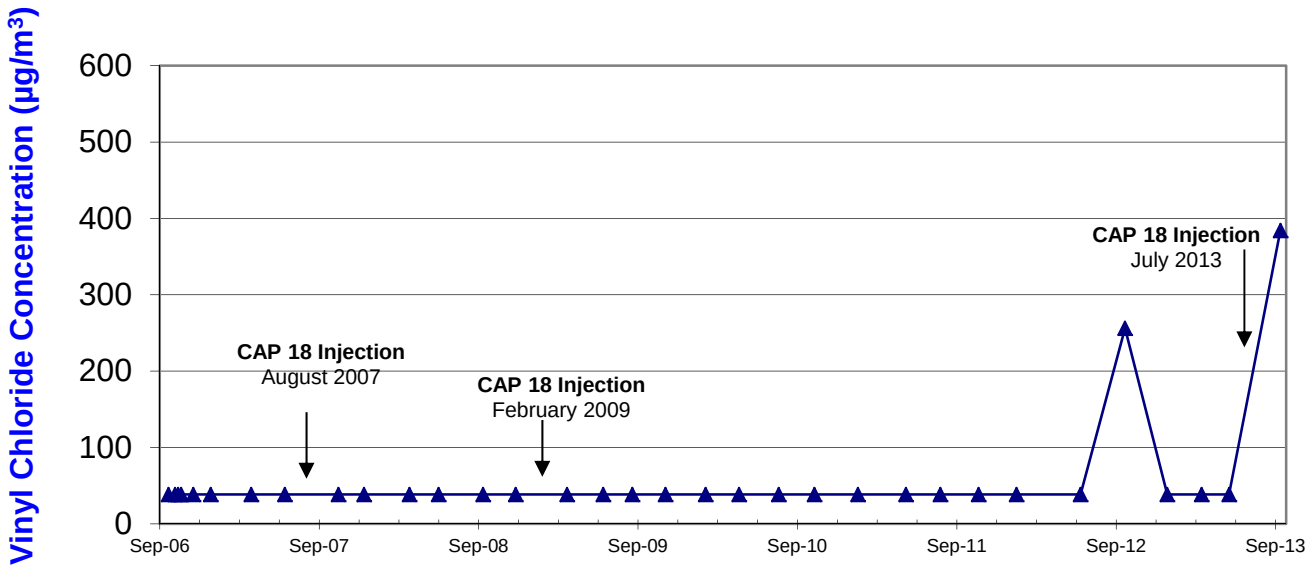

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-3 (Unit 3819)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

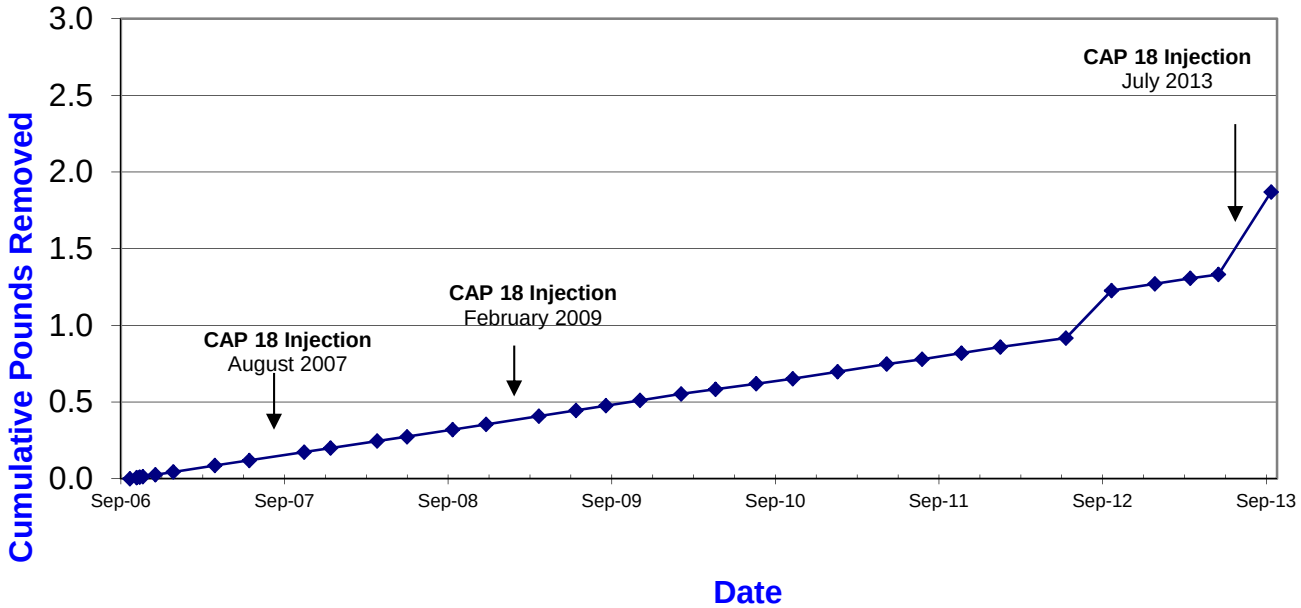
FIGURE

20

## *Vinyl Chloride Vapor Concentrations Trend - Laundromat Vapor Mitigation System (B4)*




## *Chemical Pounds Removed - Laundromat Vapor Mitigation System (B4)*




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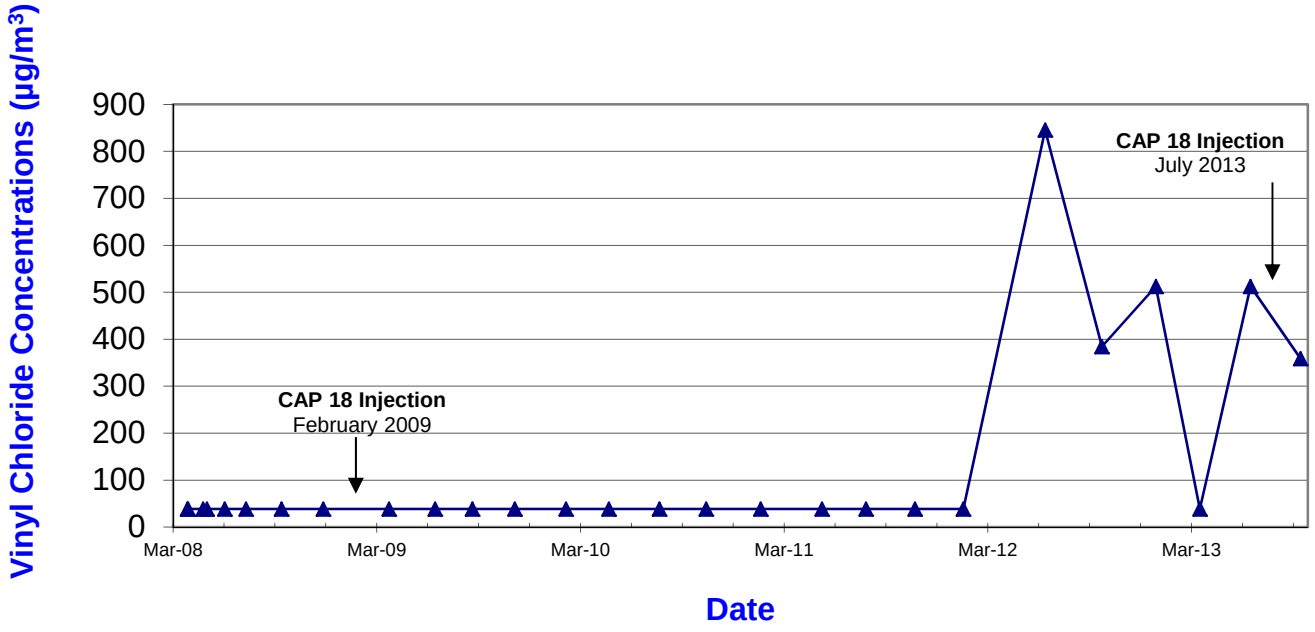

| | |
|---|---|
| **Project Number:** | M01046 |
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| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-4 (Laundromat - Unit 3823)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

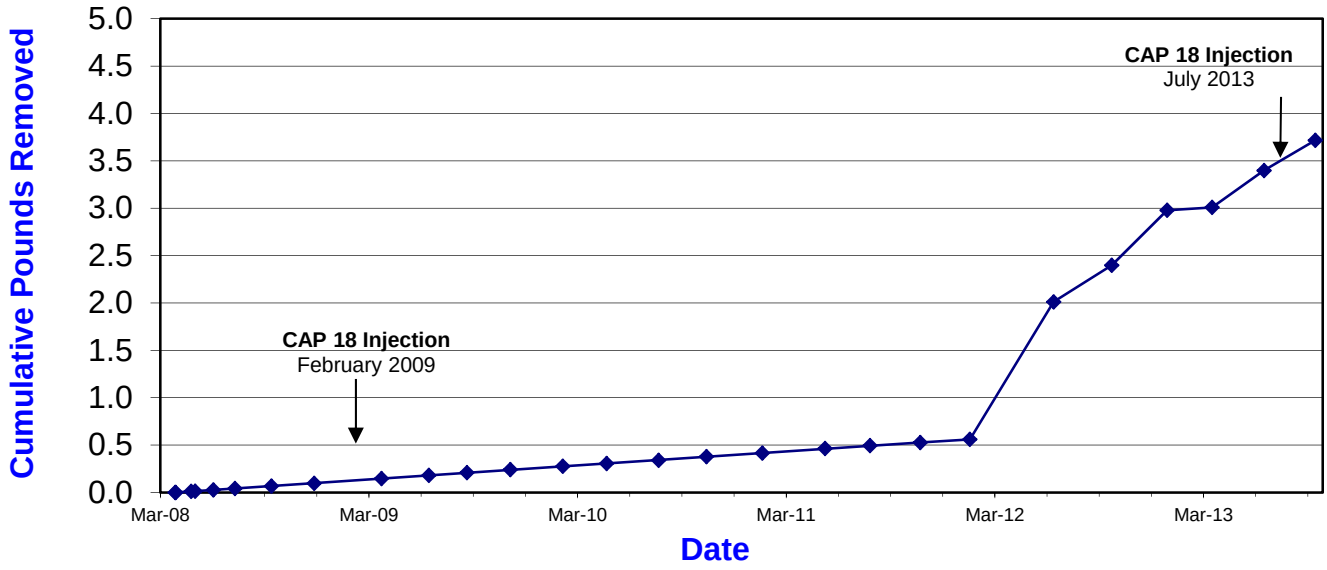
FIGURE

21

## *Vinyl Chloride Vapor Concentrations Trend - Apartment Building 1 Vapor Mitigation System (B5)*




## *Chemical Pounds Removed - Apartment Building 1 Vapor Mitigation System (B5)*




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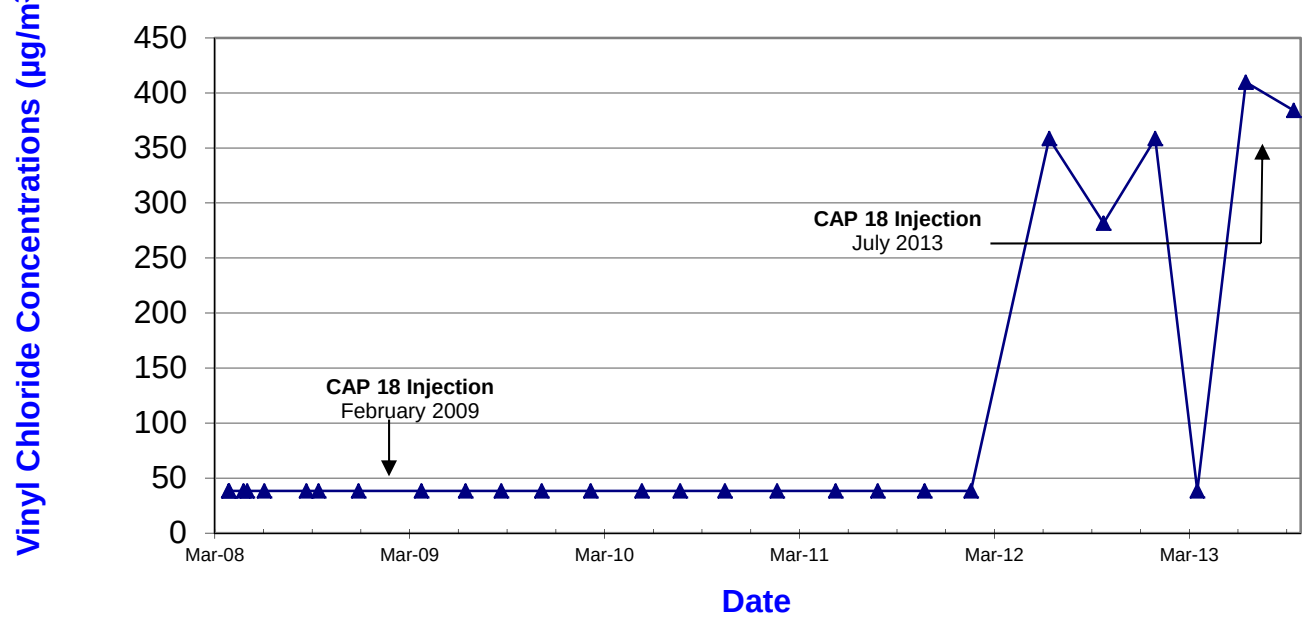

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-5 (Apartments, Bldg. 1)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

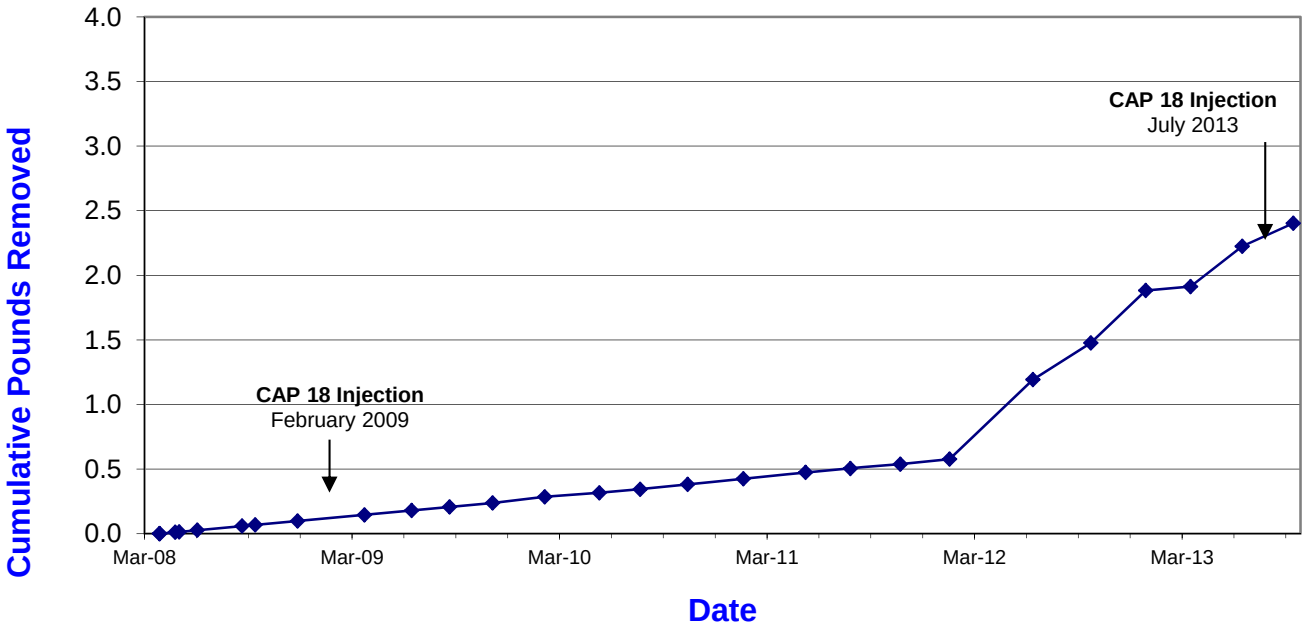
FIGURE

22

## *Vinyl Chloride Vapor Concentrations Trend - Apartment Building 6 Vapor Mitigation System (B6)*




## *Chemical Pounds Removed - Apartment Building 6 Vapor Mitigation System (B6)*





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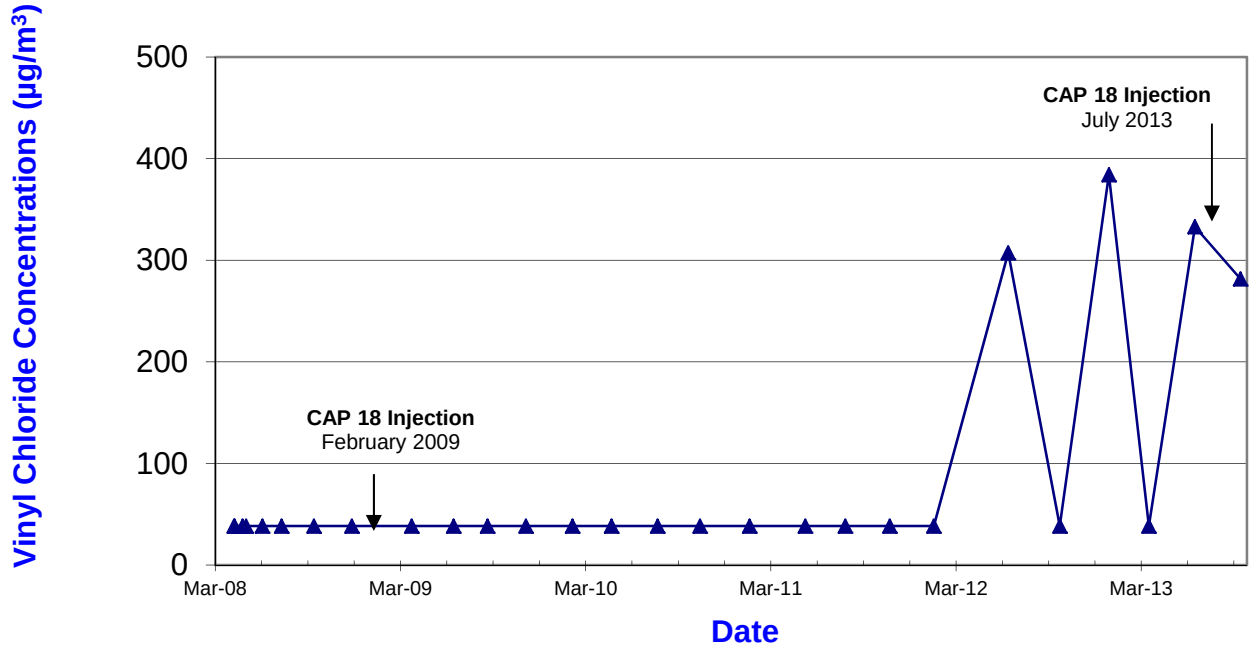

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-6 (Apartments, Bldg. 6)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

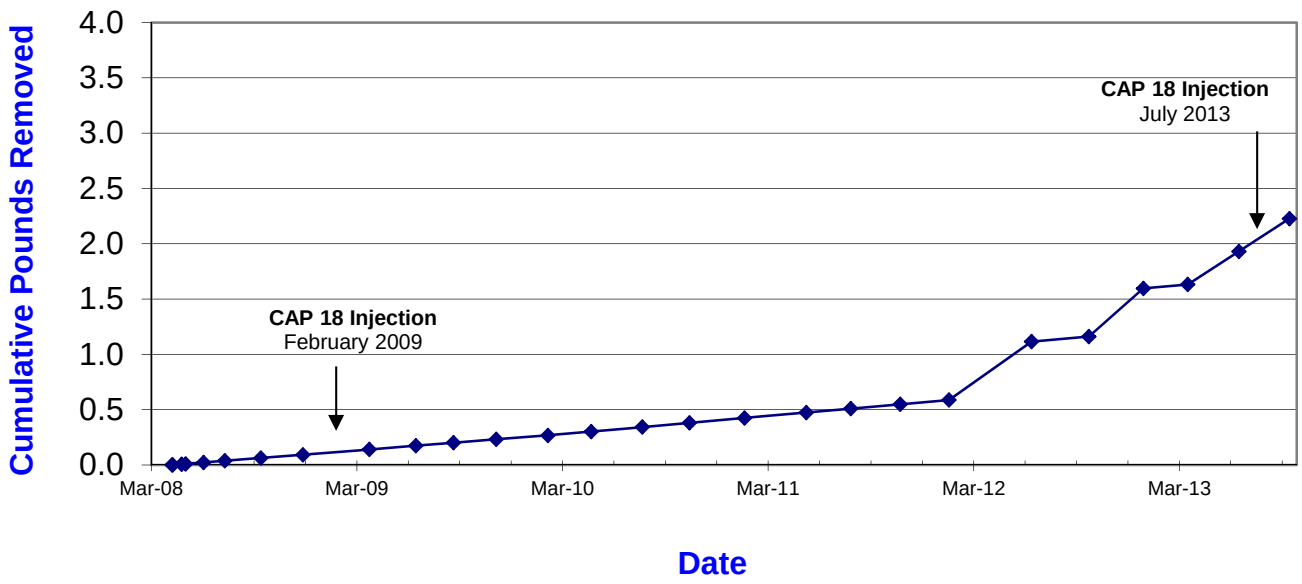
FIGURE

23

## *Vinyl Chloride Vapor Concentrations Trend - Apartment Building 10 Vapor Mitigation System (B7)*




## *Chemical Pounds Removed - Apartment Building 10 Vapor Mitigation System (B7)*




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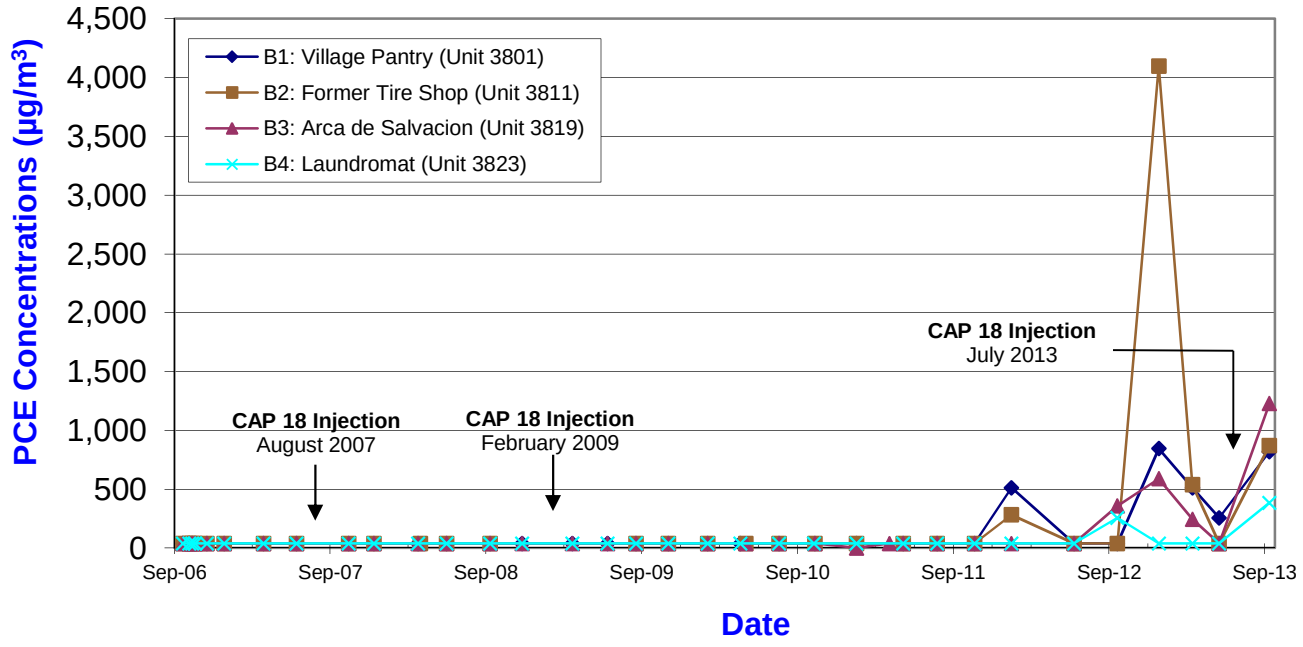

| | |
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| **Project Number:** | M01046 |
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| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation System B-7 (Apartments, Bldg. 10)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

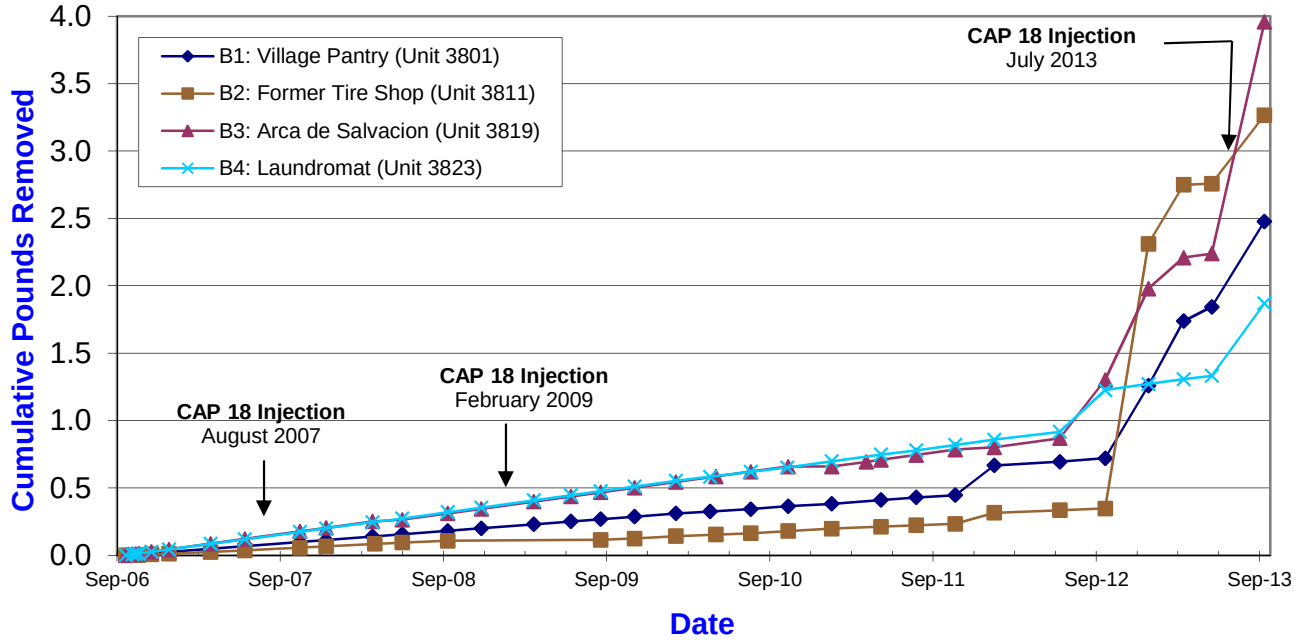
FIGURE

24

## *Vinyl Chloride Concentrations Trend - Plaza Vapor Mitigation Systems (B1-B4)*




## *Vinyl Chloride Pounds Removed - Plaza Vapor Mitigation Systems (B1-B4)*




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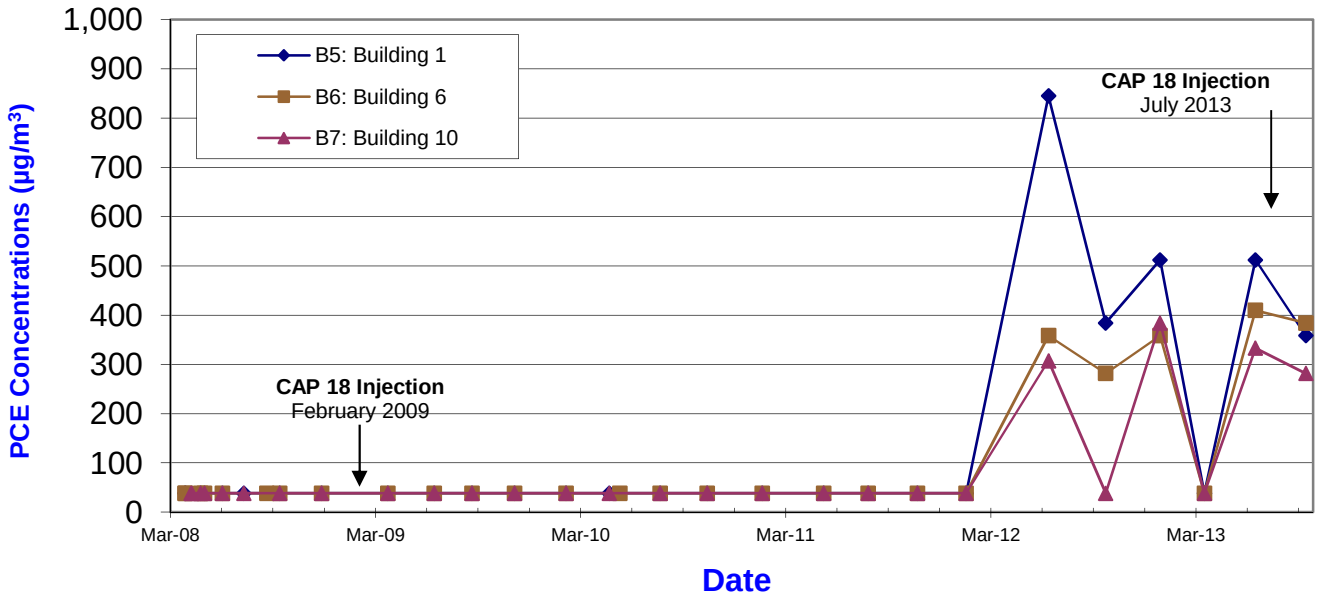

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| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation Systems B1-B4
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

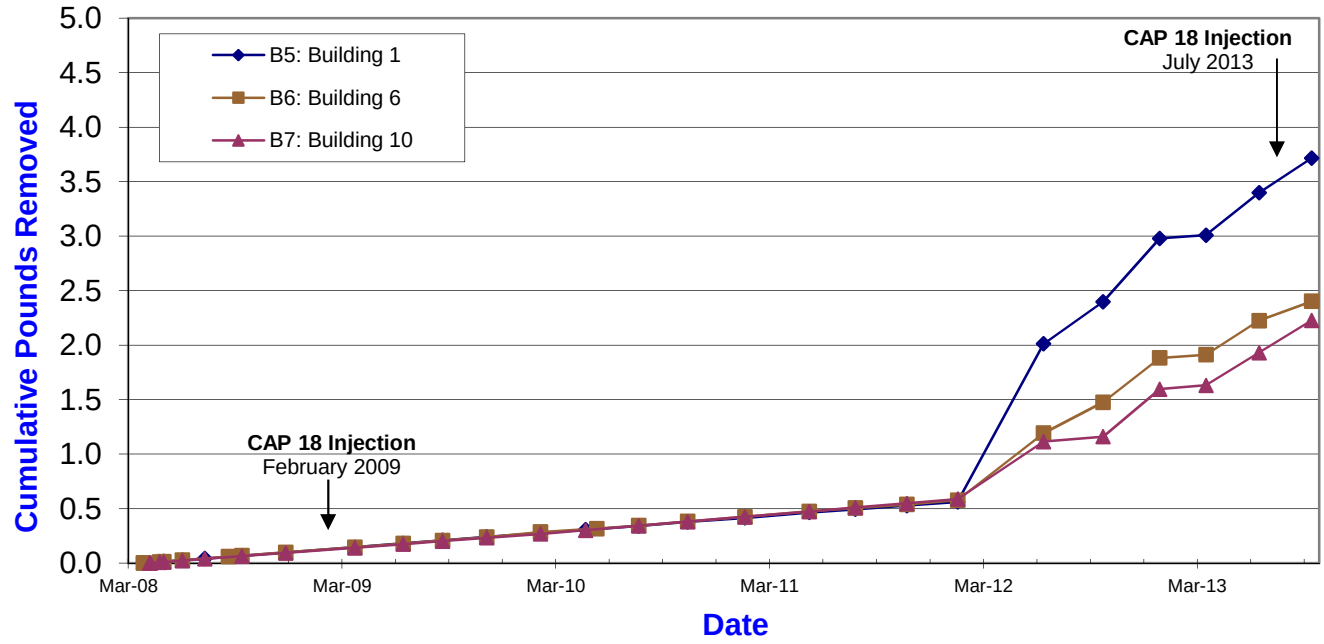
FIGURE

25

## *Vinyl Chloride Concentrations Trend - Apartment Vapor Mitigation Systems (B5-B7)*




## *Vinyl Chloride Pounds Removed - Apartment Vapor Mitigation Systems (B5-B7)*




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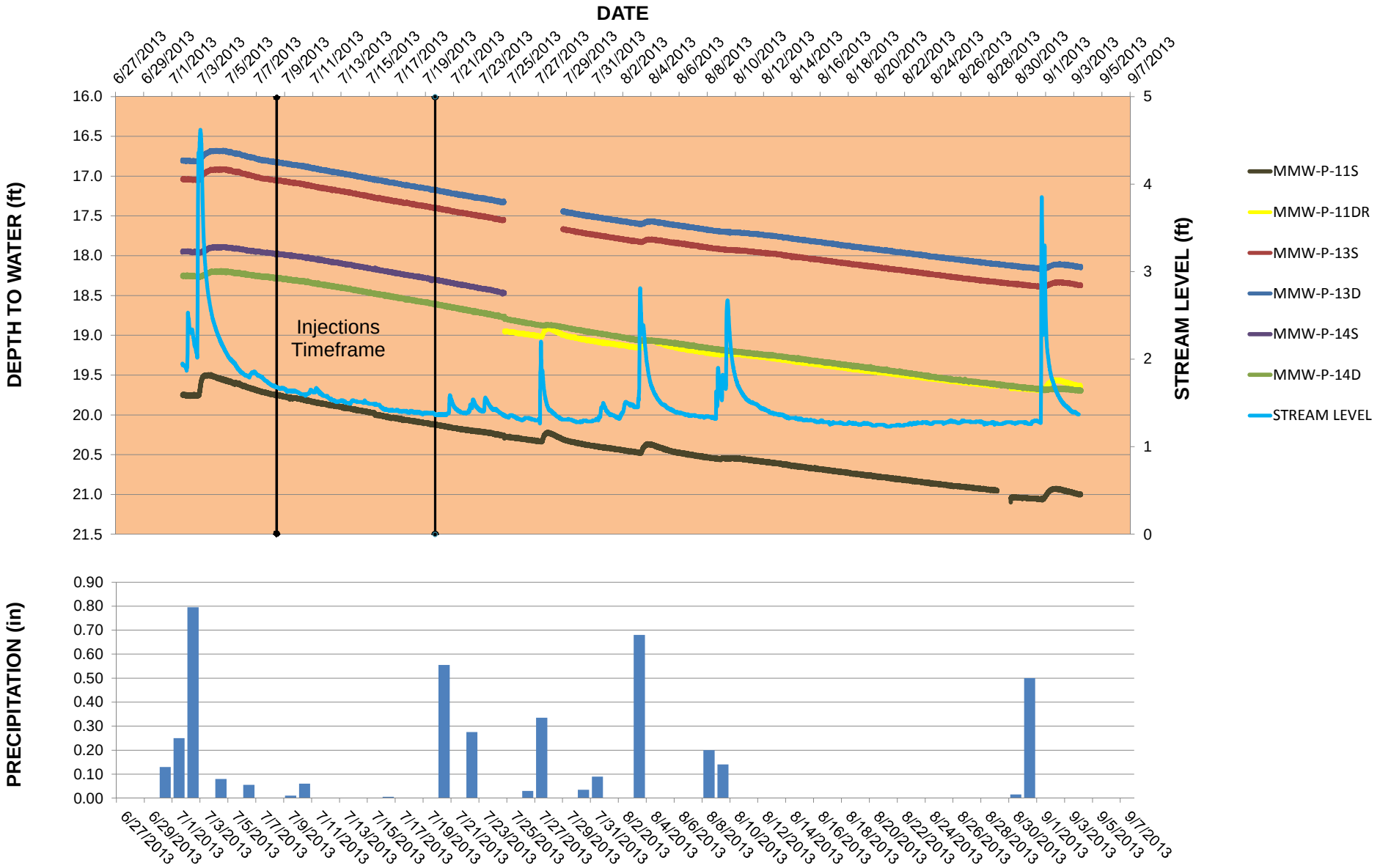

| | |
|---|---|
| **Project Number:** | M01046 |
| **File:** | MI Plaza charts |
| **Date Prepared:** | 10/22/2013 |
| **Scale:** | no scale |

Vinyl Chloride Concentration Trends
and Cumulative Pounds Removed
Vapor Mitigation Systems B5-B7 (Apartments)
Third Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, IN

FIGURE

26

## Figure 27: HOLT RD AREA LONG TERM MONITORING - DEPTH TO WATER (ft)




Precipitation data reflects the average daily precipitation at weather stations located at the Indianapolis International Airport and the Indianapolis Eagle Creek Airpark
Data was obtained through the National Weather Service and National Oceanic and Atmospheric Administration's website (www.nws.noaa.gov/climate)

# APPENDIX A

## Laboratory Certificates of Analysis

# GROUNDWATER ANALYTICAL RESULTS

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(614)486-5421

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

October 07, 2013

Mr. Mark Breting
Mundell & Associates
110 S. Downey Ave.
Indianapolis, IN 46228

RE: Project: MI Plaza M01046
Pace Project No.: 5087185

Dear Mr. Breting:
Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

Tina Sayer

tina.sayer@pacelabs.com
Project Manager

Enclosures



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(317)875-5894

## CERTIFICATIONS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

## REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)875-5894

# SAMPLE SUMMARY

Project: MI Plaza M01046
Pace Project No.: 5087185

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **5087185001** | **MMW-15S** | Water | 09/18/13 10:31 | 09/23/13 09:40 |
| **5087185002** | **MMW-15D** | Water | 09/18/13 11:06 | 09/23/13 09:40 |
| **5087185003** | **MMW-C-17D** | Water | 09/18/13 12:24 | 09/23/13 09:40 |
| **5087185004** | **MMW-P-14S** | Water | 09/18/13 14:05 | 09/23/13 09:40 |
| **5087185005** | **MMW-P-14D** | Water | 09/18/13 15:14 | 09/23/13 09:40 |
| **5087185006** | **MMW-C-02D** | Water | 09/18/13 16:20 | 09/23/13 09:40 |
| **5087185007** | **MMW-6D** | Water | 09/20/13 09:21 | 09/23/13 09:40 |
| **5087185008** | **MMW-4D** | Water | 09/20/13 10:12 | 09/23/13 09:40 |
| **5087185009** | **MMW-13D** | Water | 09/20/13 11:35 | 09/23/13 09:40 |
| **5087185010** | **MMW-12S** | Water | 09/20/13 12:13 | 09/23/13 09:40 |
| **5087185011** | **MMW-14D** | Water | 09/20/13 13:18 | 09/23/13 09:40 |
| **5087185012** | **MMW-11S** | Water | 09/20/13 13:53 | 09/23/13 09:40 |



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(317)875-5894

## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087185

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **5087185001** | **MMW-15S** | EPA 8260 | DAE | 18 |
| **5087185002** | **MMW-15D** | EPA 8260 | DAE | 18 |
| **5087185003** | **MMW-C-17D** | EPA 8260 | DAE | 18 |
| **5087185004** | **MMW-P-14S** | EPA 8260 | DAE | 18 |
| **5087185005** | **MMW-P-14D** | EPA 8260 | DAE | 18 |
| **5087185006** | **MMW-C-02D** | EPA 8260 | DAE | 18 |
| **5087185007** | **MMW-6D** | EPA 8260 | DAE | 18 |
| **5087185008** | **MMW-4D** | EPA 8260 | RSW | 18 |
| **5087185009** | **MMW-13D** | EPA 8260 | RSW | 18 |
| **5087185010** | **MMW-12S** | EPA 8260 | RSW | 18 |
| **5087185011** | **MMW-14D** | EPA 8260 | RSW | 18 |
| **5087185012** | **MMW-11S** | EPA 8260 | DAE | 18 |



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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-15S** **Lab ID: 5087185001** Collected: 09/18/13 10:31 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 19:56 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/02/13 19:56 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/02/13 19:56 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 79-116 | 1 | | 10/02/13 19:56 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/02/13 19:56 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 81-110 | 1 | | 10/02/13 19:56 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-15D** **Lab ID: 5087185002** Collected: 09/18/13 11:06 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | **10.6** | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 20:29 | 79-01-6 | |
| Vinyl chloride | **2.7** | ug/L | 2.0 | 1 | | 10/02/13 20:29 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/02/13 20:29 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 79-116 | 1 | | 10/02/13 20:29 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 80-114 | 1 | | 10/02/13 20:29 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 81-110 | 1 | | 10/02/13 20:29 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-C-17D** **Lab ID: 5087185003** Collected: 09/18/13 12:24 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:02 | 79-01-6 | |
| Vinyl chloride | **5.6** | ug/L | 2.0 | 1 | | 10/02/13 21:02 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/02/13 21:02 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 109 | %. | 79-116 | 1 | | 10/02/13 21:02 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/02/13 21:02 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 81-110 | 1 | | 10/02/13 21:02 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-P-14S** **Lab ID: 5087185004** Collected: 09/18/13 14:05 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 21:35 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/02/13 21:35 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/02/13 21:35 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 104 | %. | 79-116 | 1 | | 10/02/13 21:35 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 93 | %. | 80-114 | 1 | | 10/02/13 21:35 | 460-00-4 | |
| Toluene-d8 (S) | 95 | %. | 81-110 | 1 | | 10/02/13 21:35 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-P-14D** **Lab ID: 5087185005** Collected: 09/18/13 15:14 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:08 | 79-01-6 | |
| Vinyl chloride | **94.4** | ug/L | 2.0 | 1 | | 10/02/13 22:08 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/02/13 22:08 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 79-116 | 1 | | 10/02/13 22:08 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/02/13 22:08 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 81-110 | 1 | | 10/02/13 22:08 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-C-02D** **Lab ID: 5087185006** Collected: 09/18/13 16:20 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/02/13 22:41 | 79-01-6 | |
| Vinyl chloride | **275** | ug/L | 2.0 | 1 | | 10/02/13 22:41 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/02/13 22:41 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 105 | %. | 79-116 | 1 | | 10/02/13 22:41 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 93 | %. | 80-114 | 1 | | 10/02/13 22:41 | 460-00-4 | |
| Toluene-d8 (S) | 94 | %. | 81-110 | 1 | | 10/02/13 22:41 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-6D** **Lab ID: 5087185007** Collected: 09/20/13 09:21 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 00:13 | 79-01-6 | |
| Vinyl chloride | **49.4** | ug/L | 2.0 | 1 | | 10/04/13 00:13 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/04/13 00:13 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 103 | %. | 79-116 | 1 | | 10/04/13 00:13 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 80-114 | 1 | | 10/04/13 00:13 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/04/13 00:13 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-4D** **Lab ID: 5087185008** Collected: 09/20/13 10:12 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 75-35-4 | |
| cis-1,2-Dichloroethene | **260** | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 19:16 | 79-01-6 | |
| Vinyl chloride | **124** | ug/L | 2.0 | 1 | | 10/04/13 19:16 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/04/13 19:16 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/04/13 19:16 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 80-114 | 1 | | 10/04/13 19:16 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/04/13 19:16 | 2037-26-5 | |

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(317)875-5894

## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-13D** **Lab ID: 5087185009** Collected: 09/20/13 11:35 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 75-35-4 | |
| cis-1,2-Dichloroethene | **664** | ug/L | 50.0 | 10 | | 10/04/13 20:55 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 20:22 | 79-01-6 | |
| Vinyl chloride | **139** | ug/L | 2.0 | 1 | | 10/04/13 20:22 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/04/13 20:22 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 106 | %. | 79-116 | 1 | | 10/04/13 20:22 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 102 | %. | 80-114 | 1 | | 10/04/13 20:22 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/04/13 20:22 | 2037-26-5 | |

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(317)875-5894

## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-12S** **Lab ID: 5087185010** Collected: 09/20/13 12:13 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 75-35-4 | |
| cis-1,2-Dichloroethene | **129** | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 21:28 | 79-01-6 | |
| Vinyl chloride | **9.2** | ug/L | 2.0 | 1 | | 10/04/13 21:28 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/04/13 21:28 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 106 | %. | 79-116 | 1 | | 10/04/13 21:28 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 103 | %. | 80-114 | 1 | | 10/04/13 21:28 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/04/13 21:28 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-14D** **Lab ID: 5087185011** Collected: 09/20/13 13:18 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 75-35-4 | |
| cis-1,2-Dichloroethene | **949** | ug/L | 50.0 | 10 | | 10/04/13 18:43 | 156-59-2 | |
| trans-1,2-Dichloroethene | **10.2** | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 18:09 | 79-01-6 | |
| Vinyl chloride | **150** | ug/L | 2.0 | 1 | | 10/04/13 18:09 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/04/13 18:09 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 79-116 | 1 | | 10/04/13 18:09 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 102 | %. | 80-114 | 1 | | 10/04/13 18:09 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/04/13 18:09 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087185

**Sample: MMW-11S** **Lab ID: 5087185012** Collected: 09/20/13 13:53 Received: 09/23/13 09:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 75-35-4 | |
| cis-1,2-Dichloroethene | **43.9** | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 156-59-2 | |
| trans-1,2-Dichloroethene | **5.2** | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/04/13 12:18 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/04/13 12:18 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/04/13 12:18 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 117 | %. | 79-116 | 1 | | 10/04/13 12:18 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 107 | %. | 80-114 | 1 | | 10/04/13 12:18 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 81-110 | 1 | | 10/04/13 12:18 | 2037-26-5 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087185

QC Batch: MSV/57802 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087185001, 5087185002, 5087185003, 5087185004, 5087185005, 5087185006

METHOD BLANK: 990207 Matrix: Water
Associated Lab Samples: 5087185001, 5087185002, 5087185003, 5087185004, 5087185005, 5087185006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Benzene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Chloroform | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Naphthalene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Toluene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/02/13 12:47 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/02/13 12:47 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/02/13 12:47 | |
| 4-Bromofluorobenzene (S) | %. | 99 | 80-114 | 10/02/13 12:47 | |
| Dibromofluoromethane (S) | %. | 102 | 79-116 | 10/02/13 12:47 | |
| Toluene-d8 (S) | %. | 98 | 81-110 | 10/02/13 12:47 | |

LABORATORY CONTROL SAMPLE: 990208

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 51.9 | 104 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 48.5 | 97 | 68-127 | |
| Benzene | ug/L | 50 | 51.7 | 103 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 46.5 | 93 | 56-137 | |
| Chloroform | ug/L | 50 | 51.5 | 103 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 51.3 | 103 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 52.7 | 105 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 52.9 | 106 | 68-132 | |
| Naphthalene | ug/L | 50 | 47.1 | 94 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 46.6 | 93 | 69-130 | |
| Toluene | ug/L | 50 | 52.2 | 104 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 54.3 | 109 | 72-124 | |
| Trichloroethene | ug/L | 50 | 49.7 | 99 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 52.8 | 106 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 159 | 106 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 104 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 102 | 79-116 | |
| Toluene-d8 (S) | %. | | | 102 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087185

QC Batch: MSV/57861
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 5087185007

METHOD BLANK: 991103
Matrix: Water
Associated Lab Samples: 5087185007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Benzene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Chloroform | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Naphthalene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Toluene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/03/13 14:20 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/03/13 14:20 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/03/13 14:20 | |
| 4-Bromofluorobenzene (S) | %. | 101 | 80-114 | 10/03/13 14:20 | |
| Dibromofluoromethane (S) | %. | 102 | 79-116 | 10/03/13 14:20 | |
| Toluene-d8 (S) | %. | 99 | 81-110 | 10/03/13 14:20 | |

LABORATORY CONTROL SAMPLE: 991104

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 54.2 | 108 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 53.9 | 108 | 68-127 | |
| Benzene | ug/L | 50 | 53.1 | 106 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 49.2 | 98 | 56-137 | |
| Chloroform | ug/L | 50 | 52.9 | 106 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 53.0 | 106 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 53.9 | 108 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 54.7 | 109 | 68-132 | |
| Naphthalene | ug/L | 50 | 47.2 | 94 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 47.9 | 96 | 69-130 | |
| Toluene | ug/L | 50 | 56.0 | 112 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 55.3 | 111 | 72-124 | |
| Trichloroethene | ug/L | 50 | 52.9 | 106 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 63.1 | 126 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 162 | 108 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 104 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 101 | 79-116 | |
| Toluene-d8 (S) | %. | | | 105 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087185

QC Batch: MSV/57865
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 5087185012

METHOD BLANK: 991159
Matrix: Water
Associated Lab Samples: 5087185012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Benzene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Chloroform | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Naphthalene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Toluene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/04/13 02:58 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/04/13 02:58 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/04/13 02:58 | |
| 4-Bromofluorobenzene (S) | %. | 97 | 80-114 | 10/04/13 02:58 | |
| Dibromofluoromethane (S) | %. | 102 | 79-116 | 10/04/13 02:58 | |
| Toluene-d8 (S) | %. | 100 | 81-110 | 10/04/13 02:58 | |

LABORATORY CONTROL SAMPLE: 991160

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 54.2 | 108 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 56.2 | 112 | 68-127 | |
| Benzene | ug/L | 50 | 53.7 | 107 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 47.9 | 96 | 56-137 | |
| Chloroform | ug/L | 50 | 52.1 | 104 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 52.9 | 106 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 52.9 | 106 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 50.3 | 101 | 68-132 | |
| Naphthalene | ug/L | 50 | 47.2 | 94 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 48.3 | 97 | 69-130 | |
| Toluene | ug/L | 50 | 55.5 | 111 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 54.5 | 109 | 72-124 | |
| Trichloroethene | ug/L | 50 | 52.6 | 105 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 64.0 | 128 | 59-126 | L3 |
| Xylene (Total) | ug/L | 150 | 163 | 108 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 104 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 101 | 79-116 | |
| Toluene-d8 (S) | %. | | | 104 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087185

QC Batch: MSV/57905 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087185008, 5087185009, 5087185010, 5087185011

METHOD BLANK: 992016 Matrix: Water
Associated Lab Samples: 5087185008, 5087185009, 5087185010, 5087185011

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Benzene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Chloroform | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Naphthalene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Toluene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/04/13 17:36 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/04/13 17:36 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/04/13 17:36 | |
| 4-Bromofluorobenzene (S) | %. | 102 | 80-114 | 10/04/13 17:36 | |
| Dibromofluoromethane (S) | %. | 101 | 79-116 | 10/04/13 17:36 | |
| Toluene-d8 (S) | %. | 101 | 81-110 | 10/04/13 17:36 | |

LABORATORY CONTROL SAMPLE: 992017

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 55.7 | 111 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 55.6 | 111 | 68-127 | |
| Benzene | ug/L | 50 | 49.3 | 99 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 49.1 | 98 | 56-137 | |
| Chloroform | ug/L | 50 | 51.8 | 104 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 48.6 | 97 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 50.8 | 102 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 56.5 | 113 | 68-132 | |
| Naphthalene | ug/L | 50 | 50.9 | 102 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 50.3 | 101 | 69-130 | |
| Toluene | ug/L | 50 | 49.5 | 99 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 55.3 | 111 | 72-124 | |
| Trichloroethene | ug/L | 50 | 48.2 | 96 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 55.9 | 112 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 167 | 111 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 101 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 103 | 79-116 | |
| Toluene-d8 (S) | %. | | | 102 | 81-110 | |

## REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)875-5894

# QUALIFIERS

Project: MI Plaza M01046
Pace Project No.: 5087185

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MI Plaza M01046
Pace Project No.: 5087185

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **5087185001** | **MMW-15S** | EPA 8260 | MSV/57802 | | |
| **5087185002** | **MMW-15D** | EPA 8260 | MSV/57802 | | |
| **5087185003** | **MMW-C-17D** | EPA 8260 | MSV/57802 | | |
| **5087185004** | **MMW-P-14S** | EPA 8260 | MSV/57802 | | |
| **5087185005** | **MMW-P-14D** | EPA 8260 | MSV/57802 | | |
| **5087185006** | **MMW-C-02D** | EPA 8260 | MSV/57802 | | |
| **5087185007** | **MMW-6D** | EPA 8260 | MSV/57861 | | |
| **5087185008** | **MMW-4D** | EPA 8260 | MSV/57905 | | |
| **5087185009** | **MMW-13D** | EPA 8260 | MSV/57905 | | |
| **5087185010** | **MMW-12S** | EPA 8260 | MSV/57905 | | |
| **5087185011** | **MMW-14D** | EPA 8260 | MSV/57905 | | |
| **5087185012** | **MMW-11S** | EPA 8260 | MSV/57865 | | |



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# CHAIN-OF-CUSTODY / Analytical Request Document

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The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1687287

**Section A** Required Client Information:

Company: Mundell & Assoc.
Address: 110 S. Downey Ave
Indpls, IN
Email To:
Phone: Fax:
Requested Due Date/TAT: STD

**Section B** Required Project Information:

Report To: Mark Bretsky
Copy To:
Purchase Order No.:
Project Name: Mt Plaza
Project Number: M01096

**Section C** Invoice Information:

Attention: Merle Tebbe
Company Name: Mundell
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

**SAMPLE ID**
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test ↓ Y/N | SVOCs 8260 | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MMW-15S | WT | G | | | 9.18.13 | 10:31A | | 3 | | | | X | | | | | | X | | 001 |
| 2 | MMW-15D | | | | | | 11:06A | | 3 | | | | X | | | | | | | | 2 |
| 3 | MMW-C-17D | | | | | | 12:24P | | 3 | | | | X | | | | | | | | 3 |
| 4 | MMW-P-14S | | | | | | 2:05P | | 3 | | | | X | | | | | | | | 4 |
| 5 | MMW-P-14D | | | | | | 3:14P | | 3 | | | | X | | | | | | | | 5 |
| 6 | MMW-C-02D | | | | | | 4:20P | | 3 | | | | X | | | | | | | | 6 |
| 7 | MMW-6D | | | | | 9.20.13 | 9:21A | | 3 | | | | X | | | | | | | | 7 |
| 8 | MMW-4D | | | | | | 10:12A | | 3 | | | | X | | | | | | | | 8 |
| 9 | MMW-13D | | | | | | 11:35A | | 3 | | | | X | | | | | | | | 9 |
| 10 | MMW-12S | | | | | | 12:13P | | 3 | | | | X | | | | | | | | 10 |
| 11 | MMW-14D | | | | | | 1:18P | | 3 | | | | X | | | | | | | | 11 |
| 12 | MMW-11S | | | | | | 1:53P | | 3 | | | | X | | | | | | | | 12 |

5087485

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | | 9/23/13 | 0940 | Pace dlv | 9/23/13 | 0940 | |

CL 9-23-13 1158 Temp: 4.3
ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Andy Dimmers
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 9.20.13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



F-ALL-Q-020rev.07, 15-May-2007

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Mundell + Assc Project # 5087185

**Courier:** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

**Tracking #:** _____

**Custody Seal on Cooler/Box Present:** ☐ yes ☑ no Seals Intact: ☐ yes ☑ no

**Date/Time 5035A kits placed in freezer** _____

**Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other Foam Blocks C

**Thermometer Used** 1 2 3 4 6 A B C (D) E **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

**Cooler Temperature (Corrected, if applicable)** 4.3°C **Ice Visible in Sample Containers:** ☐ yes ☑ no

Temp should be above freezing to 6°C

**Date and Initials of person examining contents:** CP 9-23-13

| | | | | Comments: |
|---|---|---|---|---|
| Chain of Custody Present: | ☑Yes | ☐No | ☐N/A | 1. |
| Chain of Custody Filled Out: | ☑Yes | ☐No | ☐N/A | 2. |
| Chain of Custody Relinquished: | ☑Yes | ☐No | ☐N/A | 3. |
| Sampler Name & Signature on COC: | ☑Yes | ☐No | ☐N/A | 4. |
| **Short Hold Time Analysis (<72hr):** | ☐Yes | ☑No | ☐N/A | 5. |
| **Rush Turn Around Time Requested:** | ☐Yes | ☑No | ☐N/A | 6. |
| Containers Intact: | ☑Yes | ☐No | ☐N/A | 7. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☑Yes | ☐No | ☐N/A | 8. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | ☐Yes | ☐No | ☑N/A | 9. (Circle) HNO3 H2SO4 NaOH HCl |
| All containers needing preservation are found to be in compliance with EPA recommendation. | ☐Yes | ☐No | ☑N/A | |
| Headspace in VOA Vials ( >6mm): | ☑Yes | ☐No | ☐N/A | 10. 1 MMW-6D |
| Trip Blank Present: | ☐Yes | ☑No | ☐N/A | 11. |
| Trip Blank Custody Seals Present | ☐Yes | ☐No | ☑N/A | |
| **Project Manager Review** | | | | |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | ☐N/A | 12. |
| Sufficient Volume: | ☑Yes | ☐No | ☐N/A | 13. |
| Correct Containers Used: | ☑Yes | ☐No | ☐N/A | 14. |

**Client Notification/ Resolution:** Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

**Project Manager Review:** J Sayer **Date:** 9/23/13

Form F-IN-Q290-rev.04, 28Apr2011

# Sample Container Count

CLIENT: Mundell

COC PAGE 1 of 1
COC ID# 1687282

Project # 5087185

| Sample Line Item | DG9H | AG1U | WGFU | AG0U | R 4/6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | VG9H | | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | 3 | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber gl | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved **amber** vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | I | Wipe/Swab |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber gla | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber gla | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved **clear** vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear gla | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

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October 09, 2013

Mr. Mark Breting
Mundell & Associates
110 S. Downey Ave.
Indianapolis, IN 46228

RE: Project: MI Plaza M01046
Pace Project No.: 5087337

Dear Mr. Breting:
Enclosed are the analytical results for sample(s) received by the laboratory on September 25, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tina Sayer

tina.sayer@pacelabs.com
Project Manager

Enclosures

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## CERTIFICATIONS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

**Ohio Certification IDs**
1233 Dublin Road, Columbus, OH 43215
Indiana Drinking Water Certification #: C-OH-11
NVLAP Certification #: 90132
Ohio Drinking Water Certification #: 1030
Ohio Microbiology Certification #: 943

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## SAMPLE SUMMARY

Project: MI Plaza M01046
Pace Project No.: 5087337

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **5087337001** | **MMW-C-16S** | Water | 09/23/13 10:07 | 09/25/13 12:05 |
| **5087337002** | **MMW-C-16D** | Water | 09/23/13 11:38 | 09/25/13 12:05 |
| **5087337003** | **MMW-P-13S** | Water | 09/23/13 13:14 | 09/25/13 12:05 |
| **5087337004** | **MMW-P-13D** | Water | 09/23/13 14:07 | 09/25/13 12:05 |
| **5087337005** | **MMW-C-02S** | Water | 09/23/13 15:00 | 09/25/13 12:05 |
| **5087337006** | **MMW-P-09S** | Water | 09/23/13 15:35 | 09/25/13 12:05 |
| **5087337007** | **MMW-P-09D** | Water | 09/23/13 16:33 | 09/25/13 12:05 |
| **5087337008** | **MMW-P-11S** | Water | 09/24/13 09:27 | 09/25/13 12:05 |
| **5087337009** | **MMW-P-11R** | Water | 09/24/13 11:21 | 09/25/13 12:05 |
| **5087337010** | **MMW-P-12S** | Water | 09/24/13 12:31 | 09/25/13 12:05 |
| **5087337011** | **MMW-P-12D** | Water | 09/24/13 13:47 | 09/25/13 12:05 |
| **5087337012** | **MMW-11D** | Water | 09/24/13 14:39 | 09/25/13 12:05 |
| **5087337013** | **MMW-8S** | Water | 09/24/13 15:00 | 09/25/13 12:05 |
| **5087337014** | **MMW-1S** | Water | 09/24/13 16:37 | 09/25/13 12:05 |

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## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087337

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **5087337001** | **MMW-C-16S** | EPA 8260 | JLZ | 18 |
| **5087337002** | **MMW-C-16D** | EPA 8260 | JLZ | 18 |
| **5087337003** | **MMW-P-13S** | EPA 8260 | JLZ | 18 |
| **5087337004** | **MMW-P-13D** | EPA 8260 | JLZ | 18 |
| **5087337005** | **MMW-C-02S** | EPA 8260 | JLZ | 18 |
| **5087337006** | **MMW-P-09S** | EPA 8260 | JLZ | 18 |
| **5087337007** | **MMW-P-09D** | EPA 8260 | JLZ | 18 |
| **5087337008** | **MMW-P-11S** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | JLZ | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | ZM | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087337009** | **MMW-P-11R** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | JLZ | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | ZM | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087337010** | **MMW-P-12S** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | JLZ | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | ZM | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087337011** | **MMW-P-12D** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | JLZ | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | ZM | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087337012** | **MMW-11D** | EPA 8260 | JLZ | 18 |
| **5087337013** | **MMW-8S** | RSK 175 Modified | HEB, PTH | 3 |
| | | EPA 8260 | JLZ | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | ZM | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087337014** | **MMW-1S** | RSK 175 Modified | HEB, PTH | 3 |
| | | EPA 8260 | JLZ | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | ZM | 1 |

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## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087337

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | EPA 353.2 | ILP | 2 |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-C-16S** **Lab ID: 5087337001** Collected: 09/23/13 10:07 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:13 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/05/13 09:13 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 09:13 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 79-116 | 1 | | 10/05/13 09:13 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 93 | %. | 80-114 | 1 | | 10/05/13 09:13 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/05/13 09:13 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-C-16D** **Lab ID: 5087337002** Collected: 09/23/13 11:38 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 09:46 | 79-01-6 | |
| Vinyl chloride | **165** | ug/L | 2.0 | 1 | | 10/05/13 09:46 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 09:46 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 79-116 | 1 | | 10/05/13 09:46 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 80-114 | 1 | | 10/05/13 09:46 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/05/13 09:46 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-13S** **Lab ID: 5087337003** Collected: 09/23/13 13:14 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:18 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/05/13 10:18 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 10:18 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/05/13 10:18 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 93 | %. | 80-114 | 1 | | 10/05/13 10:18 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/05/13 10:18 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-13D** **Lab ID: 5087337004** Collected: 09/23/13 14:07 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 10:51 | 79-01-6 | |
| Vinyl chloride | **120** | ug/L | 2.0 | 1 | | 10/05/13 10:51 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 10:51 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/05/13 10:51 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 80-114 | 1 | | 10/05/13 10:51 | 460-00-4 | |
| Toluene-d8 (S) | 97 | %. | 81-110 | 1 | | 10/05/13 10:51 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-C-02S** **Lab ID: 5087337005** Collected: 09/23/13 15:00 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:24 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/05/13 11:24 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 11:24 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/05/13 11:24 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 80-114 | 1 | | 10/05/13 11:24 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 81-110 | 1 | | 10/05/13 11:24 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-09S** **Lab ID: 5087337006** Collected: 09/23/13 15:35 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 11:56 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/05/13 11:56 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 11:56 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/05/13 11:56 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 80-114 | 1 | | 10/05/13 11:56 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 81-110 | 1 | | 10/05/13 11:56 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-09D** **Lab ID: 5087337007** Collected: 09/23/13 16:33 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 12:29 | 79-01-6 | |
| Vinyl chloride | **67.5** | ug/L | 2.0 | 1 | | 10/05/13 12:29 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 12:29 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/05/13 12:29 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 80-114 | 1 | | 10/05/13 12:29 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/05/13 12:29 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-11S** **Lab ID: 5087337008** Collected: 09/24/13 09:27 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/02/13 15:44 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/02/13 15:44 | 74-85-1 | N2 |
| Methane | **297** | ug/L | 10.0 | 1 | | 10/02/13 15:44 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 75-35-4 | |
| cis-1,2-Dichloroethene | **7.7** | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 91-20-3 | |
| Tetrachloroethene | **215** | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 17:52 | 79-01-6 | |
| Vinyl chloride | **8.7** | ug/L | 2.0 | 1 | | 10/05/13 17:52 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 17:52 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 79-116 | 1 | | 10/05/13 17:52 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 80-114 | 1 | | 10/05/13 17:52 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 81-110 | 1 | | 10/05/13 17:52 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **2.1** | mg/L | 0.30 | 1 | | 09/29/13 04:06 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **299** | mg/L | 125 | 25 | | 10/01/13 13:35 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 08:07 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 08:07 | | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-11R** **Lab ID: 5087337009** Collected: 09/24/13 11:21 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/02/13 16:21 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/02/13 16:21 | 74-85-1 | N2 |
| Methane | **290** | ug/L | 10.0 | 1 | | 10/02/13 16:21 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 75-35-4 | |
| cis-1,2-Dichloroethene | **8.5** | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 18:25 | 79-01-6 | |
| Vinyl chloride | **101** | ug/L | 2.0 | 1 | | 10/05/13 18:25 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 18:25 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 79-116 | 1 | | 10/05/13 18:25 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 80-114 | 1 | | 10/05/13 18:25 | 460-00-4 | |
| Toluene-d8 (S) | 104 | %. | 81-110 | 1 | | 10/05/13 18:25 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **3.6** | mg/L | 0.30 | 1 | | 09/29/13 04:39 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **155** | mg/L | 50.0 | 10 | | 10/01/13 13:42 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 08:19 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 08:19 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-12S** **Lab ID: 5087337010** Collected: 09/24/13 12:31 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/02/13 16:40 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/02/13 16:40 | 74-85-1 | N2 |
| Methane | **72.7** | ug/L | 10.0 | 1 | | 10/02/13 16:40 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 75-35-4 | |
| cis-1,2-Dichloroethene | **538** | ug/L | 50.0 | 10 | | 10/05/13 20:03 | 156-59-2 | |
| trans-1,2-Dichloroethene | **15.0** | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 19:30 | 79-01-6 | |
| Vinyl chloride | **19.4** | ug/L | 2.0 | 1 | | 10/05/13 19:30 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 19:30 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 79-116 | 1 | | 10/05/13 19:30 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 101 | %. | 80-114 | 1 | | 10/05/13 19:30 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 81-110 | 1 | | 10/05/13 19:30 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **2.8** | mg/L | 0.30 | 1 | | 09/29/13 05:03 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **137** | mg/L | 50.0 | 10 | | 10/01/13 13:42 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 08:24 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 08:24 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-P-12D** **Lab ID: 5087337011** Collected: 09/24/13 13:47 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/02/13 16:59 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/02/13 16:59 | 74-85-1 | N2 |
| Methane | **15.4** | ug/L | 10.0 | 1 | | 10/02/13 16:59 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 75-35-4 | |
| cis-1,2-Dichloroethene | **813** | ug/L | 50.0 | 10 | | 10/05/13 21:08 | 156-59-2 | |
| trans-1,2-Dichloroethene | **20.0** | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 20:35 | 79-01-6 | |
| Vinyl chloride | **37.8** | ug/L | 2.0 | 1 | | 10/05/13 20:35 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 20:35 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 79-116 | 1 | | 10/05/13 20:35 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 102 | %. | 80-114 | 1 | | 10/05/13 20:35 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 81-110 | 1 | | 10/05/13 20:35 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **2.3** | mg/L | 0.30 | 1 | | 09/29/13 05:35 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **157** | mg/L | 50.0 | 10 | | 10/01/13 13:43 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 08:39 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 08:39 | | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-11D** **Lab ID: 5087337012** Collected: 09/24/13 14:39 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 75-35-4 | |
| cis-1,2-Dichloroethene | **524** | ug/L | 50.0 | 10 | | 10/08/13 07:06 | 156-59-2 | |
| trans-1,2-Dichloroethene | **25.3** | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 21:40 | 79-01-6 | |
| Vinyl chloride | **7.7** | ug/L | 2.0 | 1 | | 10/05/13 21:40 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 21:40 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 79-116 | 1 | | 10/05/13 21:40 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 103 | %. | 80-114 | 1 | | 10/05/13 21:40 | 460-00-4 | |
| Toluene-d8 (S) | 105 | %. | 81-110 | 1 | | 10/05/13 21:40 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-8S** **Lab ID: 5087337013** Collected: 09/24/13 15:00 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/02/13 17:17 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/02/13 17:17 | 74-85-1 | N2 |
| Methane | **25000** | ug/L | 50.0 | 5 | | 10/07/13 21:59 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 75-35-4 | |
| cis-1,2-Dichloroethene | **54.5** | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 91-20-3 | |
| Tetrachloroethene | **22.5** | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 71-55-6 | |
| Trichloroethene | **7.3** | ug/L | 5.0 | 1 | | 10/05/13 23:18 | 79-01-6 | |
| Vinyl chloride | **163** | ug/L | 2.0 | 1 | | 10/05/13 23:18 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/05/13 23:18 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 109 | %. | 79-116 | 1 | | 10/05/13 23:18 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 101 | %. | 80-114 | 1 | | 10/05/13 23:18 | 460-00-4 | |
| Toluene-d8 (S) | 104 | %. | 81-110 | 1 | | 10/05/13 23:18 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **33.5** | mg/L | 0.30 | 1 | | 09/29/13 06:09 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **13.5** | mg/L | 5.0 | 1 | | 10/01/13 13:55 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 08:47 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 08:47 | | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087337

**Sample: MMW-1S** **Lab ID: 5087337014** Collected: 09/24/13 16:37 Received: 09/25/13 12:05 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/02/13 17:36 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/02/13 17:36 | 74-85-1 | N2 |
| Methane | **24700** | ug/L | 50.0 | 5 | | 10/07/13 22:18 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 75-35-4 | |
| cis-1,2-Dichloroethene | **74.9** | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 91-20-3 | |
| Tetrachloroethene | **219** | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 71-55-6 | |
| Trichloroethene | **96.5** | ug/L | 5.0 | 1 | | 10/06/13 00:23 | 79-01-6 | |
| Vinyl chloride | **45.1** | ug/L | 2.0 | 1 | | 10/06/13 00:23 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/06/13 00:23 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 108 | %. | 79-116 | 1 | | 10/06/13 00:23 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 101 | %. | 80-114 | 1 | | 10/06/13 00:23 | 460-00-4 | |
| Toluene-d8 (S) | 104 | %. | 81-110 | 1 | | 10/06/13 00:23 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **3.4** | mg/L | 0.30 | 1 | | 09/29/13 07:38 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **22.7** | mg/L | 5.0 | 1 | | 10/01/13 13:50 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 08:49 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 08:49 | | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: GCV/17213 Analysis Method: RSK 175 Modified
QC Batch Method: RSK 175 Modified Analysis Description: RSK 175 HEADSPACE
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337013, 5087337014

METHOD BLANK: 989895 Matrix: Water
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337013, 5087337014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Ethane | ug/L | ND | 10.0 | 10/02/13 15:25 | N2 |
| Ethene | ug/L | ND | 10.0 | 10/02/13 15:25 | N2 |
| Methane | ug/L | ND | 10.0 | 10/02/13 15:25 | N2 |

LABORATORY CONTROL SAMPLE: 989896

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Ethane | ug/L | 1980 | 1950 | 99 | 70-130 | N2 |
| Ethene | ug/L | 2250 | 2710 | 121 | 70-130 | N2 |
| Methane | ug/L | 1980 | 2220 | 112 | 70-130 | N2 |

SAMPLE DUPLICATE: 989900

| Parameter | Units | 5087337008 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Ethane | ug/L | ND | ND | | 20 | N2 |
| Ethene | ug/L | ND | ND | | 20 | N2 |
| Methane | ug/L | 297 | 337 | 12 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: MSV/57918 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087337001, 5087337002, 5087337003, 5087337004, 5087337005, 5087337006, 5087337007

METHOD BLANK: 992100 Matrix: Water
Associated Lab Samples: 5087337001, 5087337002, 5087337003, 5087337004, 5087337005, 5087337006, 5087337007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Benzene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Chloroform | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Naphthalene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Toluene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/05/13 03:47 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/05/13 03:47 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/05/13 03:47 | |
| 4-Bromofluorobenzene (S) | %. | 94 | 80-114 | 10/05/13 03:47 | |
| Dibromofluoromethane (S) | %. | 98 | 79-116 | 10/05/13 03:47 | |
| Toluene-d8 (S) | %. | 99 | 81-110 | 10/05/13 03:47 | |

LABORATORY CONTROL SAMPLE: 992101

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 48.9 | 98 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 48.0 | 96 | 68-127 | |
| Benzene | ug/L | 50 | 46.2 | 92 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 44.5 | 89 | 56-137 | |
| Chloroform | ug/L | 50 | 47.6 | 95 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 46.2 | 92 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 48.4 | 97 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 53.6 | 107 | 68-132 | |
| Naphthalene | ug/L | 50 | 47.0 | 94 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 53.3 | 107 | 69-130 | |
| Toluene | ug/L | 50 | 47.2 | 94 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 45.1 | 90 | 72-124 | |
| Trichloroethene | ug/L | 50 | 46.7 | 93 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 45.6 | 91 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 145 | 97 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 100 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 103 | 79-116 | |
| Toluene-d8 (S) | %. | | | 99 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 992102 992103

| Parameter | Units | 5087284001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 42.6 | 44.2 | 85 | 88 | 60-138 | 4 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 42.7 | 44.8 | 85 | 90 | 55-145 | 5 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 39.0 | 40.6 | 78 | 81 | 62-129 | 4 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 38.2 | 39.5 | 76 | 79 | 46-142 | 3 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 42.1 | 44.7 | 84 | 89 | 54-150 | 6 | 20 | |
| cis-1,2-Dichloroethene | ug/L | 84.5 | 50 | 50 | 116 | 115 | 62 | 62 | 60-135 | 0 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 29.8 | 29.7 | 60 | 59 | 28-153 | 0 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 43.3 | 47.9 | 82 | 91 | 45-156 | 10 | 20 | |
| Naphthalene | ug/L | ND | 50 | 50 | 33.7 | 36.5 | 67 | 73 | 39-140 | 8 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 35.2 | 35.4 | 70 | 71 | 33-151 | 1 | 20 | |
| Toluene | ug/L | ND | 50 | 50 | 34.3 | 34.9 | 69 | 70 | 50-132 | 2 | 20 | |
| trans-1,2-Dichloroethene | ug/L | 6.4 | 50 | 50 | 44.1 | 45.5 | 75 | 78 | 40-153 | 3 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 37.4 | 38.0 | 75 | 76 | 50-143 | 2 | 20 | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 42.1 | 44.2 | 84 | 88 | 44-145 | 5 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 87.1 | 85.1 | 58 | 57 | 29-145 | 2 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 99 | 98 | 80-114 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 102 | 101 | 79-116 | | | |
| Toluene-d8 (S) | %. | | | | | | 99 | 99 | 81-110 | | | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: MSV/57937 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337012, 5087337013, 5087337014

METHOD BLANK: 992502 Matrix: Water
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337012, 5087337013, 5087337014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Benzene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Chloroform | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Naphthalene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Toluene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/05/13 15:42 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/05/13 15:42 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/05/13 15:42 | |
| 4-Bromofluorobenzene (S) | %. | 103 | 80-114 | 10/05/13 15:42 | |
| Dibromofluoromethane (S) | %. | 102 | 79-116 | 10/05/13 15:42 | |
| Toluene-d8 (S) | %. | 106 | 81-110 | 10/05/13 15:42 | |

LABORATORY CONTROL SAMPLE: 992503

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 53.1 | 106 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 52.8 | 106 | 68-127 | |
| Benzene | ug/L | 50 | 50.3 | 101 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 48.9 | 98 | 56-137 | |
| Chloroform | ug/L | 50 | 52.7 | 105 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 56.4 | 113 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 52.8 | 106 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 53.4 | 107 | 68-132 | |
| Naphthalene | ug/L | 50 | 50.5 | 101 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 48.0 | 96 | 69-130 | |
| Toluene | ug/L | 50 | 50.7 | 101 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 50.2 | 100 | 72-124 | |
| Trichloroethene | ug/L | 50 | 52.1 | 104 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 50.3 | 101 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 160 | 107 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 104 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 105 | 79-116 | |
| Toluene-d8 (S) | %. | | | 100 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 992504 992505

| Parameter | Units | 5087337012 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 52.0 | 48.2 | 104 | 96 | 60-138 | 8 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 53.0 | 50.0 | 106 | 100 | 55-145 | 6 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 47.3 | 43.9 | 95 | 88 | 62-129 | 8 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 46.4 | 43.7 | 93 | 87 | 46-142 | 6 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 50.7 | 47.1 | 101 | 94 | 54-150 | 7 | 20 | |
| cis-1,2-Dichloroethene | ug/L | 524 | 50 | 50 | 550 | 528 | 53 | 8 | 60-135 | 4 | 20 | M0 |
| Ethylbenzene | ug/L | ND | 50 | 50 | 40.6 | 35.9 | 81 | 72 | 28-153 | 12 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 48.6 | 45.3 | 90 | 83 | 45-156 | 7 | 20 | |
| Naphthalene | ug/L | ND | 50 | 50 | 40.4 | 38.8 | 81 | 78 | 39-140 | 4 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 39.2 | 35.4 | 78 | 71 | 33-151 | 10 | 20 | |
| Toluene | ug/L | ND | 50 | 50 | 44.8 | 40.6 | 87 | 79 | 50-132 | 10 | 20 | |
| trans-1,2-Dichloroethene | ug/L | 25.3 | 50 | 50 | 68.1 | 62.5 | 86 | 74 | 40-153 | 9 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 46.2 | 43.3 | 92 | 87 | 50-143 | 7 | 20 | |
| Vinyl chloride | ug/L | 7.7 | 50 | 50 | 55.1 | 52.8 | 95 | 90 | 44-145 | 4 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 122 | 107 | 81 | 71 | 29-145 | 13 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 108 | 105 | 80-114 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 112 | 109 | 79-116 | | | |
| Toluene-d8 (S) | %. | | | | | | 105 | 105 | 81-110 | | | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: OHIO/8099 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C TOC
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337013, 5087337014

METHOD BLANK: 988215 Matrix: Water
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337013, 5087337014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 0.30 | 09/28/13 23:48 | N2 |

LABORATORY CONTROL SAMPLE: 988216

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 5 | 4.6 | 93 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 988218 988219

| Parameter | Units | 5087157001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 3.5 | 4 | 4 | 8.0 | 7.9 | 114 | 111 | 75-125 | 1 | 20 | N2 |

SAMPLE DUPLICATE: 988217

| Parameter | Units | 5087157001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 3.5 | 3.5 | 1 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: WET/13240 Analysis Method: ASTM D516-90,02
QC Batch Method: ASTM D516-90,02 Analysis Description: ASTM D516-9002 Sulfate Water
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337013, 5087337014

METHOD BLANK: 989456 Matrix: Water
Associated Lab Samples: 5087337008, 5087337009, 5087337010, 5087337011, 5087337013, 5087337014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Sulfate | mg/L | ND | 5.0 | 10/01/13 12:27 | N2 |

LABORATORY CONTROL SAMPLE: 989457

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfate | mg/L | 20 | 21.0 | 105 | 90-110 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 989458 989459

| Parameter | Units | 5087298008 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 404 | 500 | 500 | 941 | 932 | 107 | 106 | 90-110 | 1 | 20 | N2 |

MATRIX SPIKE SAMPLE: 989460

| Parameter | Units | 5087337008 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 299 | 500 | 832 | 107 | 90-110 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: WETA/10815 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 5087337008, 5087337009, 5087337010

METHOD BLANK: 986360 Matrix: Water
Associated Lab Samples: 5087337008, 5087337009, 5087337010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 0.10 | 09/26/13 08:02 | |
| Nitrogen, Nitrite | mg/L | ND | 0.10 | 09/26/13 08:02 | |

LABORATORY CONTROL SAMPLE: 986361

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | 2 | 2.1 | 107 | 90-110 | |
| Nitrogen, Nitrite | mg/L | 2 | 2.1 | 104 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 986362 986363

| Parameter | Units | 5087321001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 2 | 2 | 1.9 | 2.0 | 95 | 99 | 90-110 | 4 | 20 | |
| Nitrogen, Nitrite | mg/L | ND | 2 | 2 | 1.9 | 1.9 | 95 | 95 | 90-110 | 1 | 20 | |

MATRIX SPIKE SAMPLE: 986364

| Parameter | Units | 5087335008 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | 4.0 | 2 | 5.9 | 95 | 90-110 | |
| Nitrogen, Nitrite | mg/L | ND | 2 | 2.1 | 103 | 90-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087337

QC Batch: WETA/10816 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 5087337011, 5087337013, 5087337014

METHOD BLANK: 986365 Matrix: Water
Associated Lab Samples: 5087337011, 5087337013, 5087337014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 0.10 | 09/26/13 08:32 | |
| Nitrogen, Nitrite | mg/L | ND | 0.10 | 09/26/13 08:32 | |

LABORATORY CONTROL SAMPLE: 986366

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | 2 | 2.0 | 99 | 90-110 | |
| Nitrogen, Nitrite | mg/L | 2 | 2.1 | 103 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 986367 986368

| Parameter | Units | 5087311001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 2 | 2 | 2.1 | 2.1 | 104 | 103 | 90-110 | 0 | 20 | |
| Nitrogen, Nitrite | mg/L | ND | 2 | 2 | 2.1 | 2.1 | 104 | 105 | 90-110 | 1 | 20 | |

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# QUALIFIERS

Project: MI Plaza M01046
Pace Project No.: 5087337

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| N2 | The lab does not hold TNI accreditation for this parameter. |

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MI Plaza M01046
Pace Project No.: 5087337

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **5087337008** | **MMW-P-11S** | RSK 175 Modified | GCV/17213 | | |
| **5087337009** | **MMW-P-11R** | RSK 175 Modified | GCV/17213 | | |
| **5087337010** | **MMW-P-12S** | RSK 175 Modified | GCV/17213 | | |
| **5087337011** | **MMW-P-12D** | RSK 175 Modified | GCV/17213 | | |
| **5087337013** | **MMW-8S** | RSK 175 Modified | GCV/17213 | | |
| **5087337014** | **MMW-1S** | RSK 175 Modified | GCV/17213 | | |
| **5087337001** | **MMW-C-16S** | EPA 8260 | MSV/57918 | | |
| **5087337002** | **MMW-C-16D** | EPA 8260 | MSV/57918 | | |
| **5087337003** | **MMW-P-13S** | EPA 8260 | MSV/57918 | | |
| **5087337004** | **MMW-P-13D** | EPA 8260 | MSV/57918 | | |
| **5087337005** | **MMW-C-02S** | EPA 8260 | MSV/57918 | | |
| **5087337006** | **MMW-P-09S** | EPA 8260 | MSV/57918 | | |
| **5087337007** | **MMW-P-09D** | EPA 8260 | MSV/57918 | | |
| **5087337008** | **MMW-P-11S** | EPA 8260 | MSV/57937 | | |
| **5087337009** | **MMW-P-11R** | EPA 8260 | MSV/57937 | | |
| **5087337010** | **MMW-P-12S** | EPA 8260 | MSV/57937 | | |
| **5087337011** | **MMW-P-12D** | EPA 8260 | MSV/57937 | | |
| **5087337012** | **MMW-11D** | EPA 8260 | MSV/57937 | | |
| **5087337013** | **MMW-8S** | EPA 8260 | MSV/57937 | | |
| **5087337014** | **MMW-1S** | EPA 8260 | MSV/57937 | | |
| **5087337008** | **MMW-P-11S** | SM 5310C | OHIO/8099 | | |
| **5087337009** | **MMW-P-11R** | SM 5310C | OHIO/8099 | | |
| **5087337010** | **MMW-P-12S** | SM 5310C | OHIO/8099 | | |
| **5087337011** | **MMW-P-12D** | SM 5310C | OHIO/8099 | | |
| **5087337013** | **MMW-8S** | SM 5310C | OHIO/8099 | | |
| **5087337014** | **MMW-1S** | SM 5310C | OHIO/8099 | | |
| **5087337008** | **MMW-P-11S** | ASTM D516-90,02 | WET/13240 | | |
| **5087337009** | **MMW-P-11R** | ASTM D516-90,02 | WET/13240 | | |
| **5087337010** | **MMW-P-12S** | ASTM D516-90,02 | WET/13240 | | |
| **5087337011** | **MMW-P-12D** | ASTM D516-90,02 | WET/13240 | | |
| **5087337013** | **MMW-8S** | ASTM D516-90,02 | WET/13240 | | |
| **5087337014** | **MMW-1S** | ASTM D516-90,02 | WET/13240 | | |
| **5087337008** | **MMW-P-11S** | EPA 353.2 | WETA/10815 | | |
| **5087337009** | **MMW-P-11R** | EPA 353.2 | WETA/10815 | | |
| **5087337010** | **MMW-P-12S** | EPA 353.2 | WETA/10815 | | |
| **5087337011** | **MMW-P-12D** | EPA 353.2 | WETA/10816 | | |
| **5087337013** | **MMW-8S** | EPA 353.2 | WETA/10816 | | |
| **5087337014** | **MMW-1S** | EPA 353.2 | WETA/10816 | | |

PRELIMINARY

## REPORT OF LABORATORY ANALYSIS

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October 10, 2013

Tina Sayer
Pace Analytical Services
7726 Moller Road
Indianapolis, IN 46268

RE: **MI PLAZA M01046 / 5087431**
*Microseeps Workorder: 10193*

Dear Tina Sayer:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, September 27, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Robbin Robl 10/10/2013
rrobl@microseeps.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages 20



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## LABORATORY ACCREDITATIONS & CERTIFICATIONS

| | |
|---|---|
| **Accreditor:** | Pennsylvania Department of Environmental Protection, Bureau of Laboratories |
| **Accreditation ID:** | 02-00538 |
| **Scope:** | NELAP Non-Potable Water and Solid & Hazardous Waste |
| **Accreditor:** | NELAP: State of Florida, Department of Health, Bureau of Laboratories |
| **Accreditation ID:** | E87832 |
| **Scope:** | Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA) |
| **Accreditor:** | South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification |
| **Accreditation ID:** | 89009003 |
| **Scope:** | Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA) |
| **Accreditor:** | NELAP: State of Louisiana, Department of Environmental Quality |
| **Accreditation ID:** | 04104 |
| **Scope:** | Solid and Chemical Materials; Non-Potable Water |
| **Accreditor:** | NELAP: New Jersey, Department of Environmental Protection |
| **Accreditation ID:** | PA026 |
| **Scope:** | Non-Potable Water; Solid and Chemical Materials |
| **Accreditor:** | NELAP: New York, Department of Health Wadsworth Center |
| **Accreditation ID:** | 11815 |
| **Scope:** | Non-Potable Water; Solid and Hazardous Waste |
| **Accreditor:** | State of Connecticut, Department of Public Health, Division of Environmental Health |
| **Accreditation ID:** | PH-0263 |
| **Scope:** | Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA) |
| **Accreditor:** | NELAP: Texas, Commission on Environmental Quality |
| **Accreditation ID:** | T104704453-09-TX |
| **Scope:** | Non-Potable Water |
| **Accreditor:** | State of New Hampshire |
| **Accreditation ID:** | 299409 |
| **Scope:** | Non-potable water |
| **Accreditor:** | State of Georgia |
| **Accreditation ID:** | Chapter 391-3-26 |
| **Scope:** | As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC). |



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## SAMPLE SUMMARY

Workorder: 10193 MI PLAZA M01046 / 5087431

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 101930001 | MMW-9S | Water | 9/25/2013 09:22 | 9/27/2013 11:00 |
| 101930002 | MMW-9S MS | Water | 9/25/2013 09:22 | 9/27/2013 11:00 |
| 101930003 | MMW-9S MSD | Water | 9/25/2013 09:22 | 9/27/2013 11:00 |
| 101930004 | MMW-10S | Water | 9/25/2013 10:44 | 9/27/2013 11:00 |
| 101930005 | MMW-P-10S | Water | 9/25/2013 11:57 | 9/27/2013 11:00 |
| 101930006 | MMW-P-10D | Water | 9/25/2013 12:56 | 9/27/2013 11:00 |
| 101930007 | MMW-P-08 | Water | 9/25/2013 14:05 | 9/27/2013 11:00 |
| 101930008 | MMW-P-07 | Water | 9/25/2013 14:48 | 9/27/2013 11:00 |
| 101930009 | MMW-P-02 | Water | 9/25/2013 15:51 | 9/27/2013 11:00 |
| 101930010 | DUP1 | Water | 9/25/2013 08:00 | 9/27/2013 11:00 |



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## PROJECT SUMMARY

Workorder: 10193 MI PLAZA M01046 / 5087431

### Batch Comments

**Batch:** EDON/1886 - Low Level Volatile Fatty Acids

The matrix spike and/or matrix spike duplicate, recovery or relative percent difference; accuracy influenced by the reference sample 101930001. Analyte iso-Hexanoic acid. Batch acceptance based on laboratory control sample recovery.

The percent recovery for the calibration verification analysis was below laboratory control limits. Analytes Pyruvic acid. Results associated to the analytes in samples may be bias low.



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## ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930001** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-9S** Date Collected: 9/25/2013 09:22

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/7/2013 20:54 | KB | |
| Acetic Acid | **0.051J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/7/2013 20:54 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/7/2013 20:54 | KB | |
| Formic Acid | **0.15** | mg/l | 0.10 | 0.0040 | 1 | | | 10/7/2013 20:54 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/7/2013 20:54 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/7/2013 20:54 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/7/2013 20:54 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/7/2013 20:54 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/7/2013 20:54 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/7/2013 20:54 | KB | |



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# ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930002** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-9S MS** Date Collected: 9/25/2013 09:22

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **1.7** | mg/l | 0.10 | 0.013 | 1 | | | 10/7/2013 21:40 | KB | |
| Acetic Acid | **2.1** | mg/l | 0.070 | 0.0050 | 1 | | | 10/7/2013 21:40 | KB | |
| Propionic Acid | **1.9** | mg/l | 0.050 | 0.0080 | 1 | | | 10/7/2013 21:40 | KB | |
| Formic Acid | **1.9** | mg/l | 0.10 | 0.0040 | 1 | | | 10/7/2013 21:40 | KB | |
| Butyric Acid | **2.0** | mg/l | 0.050 | 0.011 | 1 | | | 10/7/2013 21:40 | KB | |
| Pyruvic Acid | **1.8** | mg/l | 0.15 | 0.014 | 1 | | | 10/7/2013 21:40 | KB | |
| i-Pentanoic Acid | **1.9** | mg/l | 0.15 | 0.0090 | 1 | | | 10/7/2013 21:40 | KB | |
| Pentanoic Acid | **1.9** | mg/l | 0.070 | 0.011 | 1 | | | 10/7/2013 21:40 | KB | |
| i-Hexanoic Acid | **5.2** | mg/l | 0.10 | 0.029 | 1 | | | 10/7/2013 21:40 | KB | |
| Hexanoic Acid | **2.0** | mg/l | 0.50 | 0.22 | 1 | | | 10/7/2013 21:40 | KB | |



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# ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930003** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-9S MSD** Date Collected: 9/25/2013 09:22

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **1.7** | mg/l | 0.10 | 0.013 | 1 | | | 10/7/2013 22:26 | KB | |
| Acetic Acid | **2.1** | mg/l | 0.070 | 0.0050 | 1 | | | 10/7/2013 22:26 | KB | |
| Propionic Acid | **2.0** | mg/l | 0.050 | 0.0080 | 1 | | | 10/7/2013 22:26 | KB | |
| Formic Acid | **2.0** | mg/l | 0.10 | 0.0040 | 1 | | | 10/7/2013 22:26 | KB | |
| Butyric Acid | **2.1** | mg/l | 0.050 | 0.011 | 1 | | | 10/7/2013 22:26 | KB | |
| Pyruvic Acid | **1.7** | mg/l | 0.15 | 0.014 | 1 | | | 10/7/2013 22:26 | KB | |
| i-Pentanoic Acid | **1.9** | mg/l | 0.15 | 0.0090 | 1 | | | 10/7/2013 22:26 | KB | |
| Pentanoic Acid | **2.0** | mg/l | 0.070 | 0.011 | 1 | | | 10/7/2013 22:26 | KB | |
| i-Hexanoic Acid | **4.0** | mg/l | 0.10 | 0.029 | 1 | | | 10/7/2013 22:26 | KB | |
| Hexanoic Acid | **2.0** | mg/l | 0.50 | 0.22 | 1 | | | 10/7/2013 22:26 | KB | |



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## ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930004** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-10S** Date Collected: 9/25/2013 10:44

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/7/2013 23:12 | KB | |
| Acetic Acid | **0.056J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/7/2013 23:12 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/7/2013 23:12 | KB | |
| Formic Acid | **0.14** | mg/l | 0.10 | 0.0040 | 1 | | | 10/7/2013 23:12 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/7/2013 23:12 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/7/2013 23:12 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/7/2013 23:12 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/7/2013 23:12 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/7/2013 23:12 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/7/2013 23:12 | KB | |



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## ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930005** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-P-10S** Date Collected: 9/25/2013 11:57

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/7/2013 23:58 | KB | |
| Acetic Acid | **0.047J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/7/2013 23:58 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/7/2013 23:58 | KB | |
| Formic Acid | **0.12** | mg/l | 0.10 | 0.0040 | 1 | | | 10/7/2013 23:58 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/7/2013 23:58 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/7/2013 23:58 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/7/2013 23:58 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/7/2013 23:58 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/7/2013 23:58 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/7/2013 23:58 | KB | |



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## ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930006** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-P-10D** Date Collected: 9/25/2013 12:56

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/8/2013 00:44 | KB | |
| Acetic Acid | **0.053J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/8/2013 00:44 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/8/2013 00:44 | KB | |
| Formic Acid | **0.11** | mg/l | 0.10 | 0.0040 | 1 | | | 10/8/2013 00:44 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/8/2013 00:44 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/8/2013 00:44 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/8/2013 00:44 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/8/2013 00:44 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/8/2013 00:44 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/8/2013 00:44 | KB | |



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# ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930007** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-P-08** Date Collected: 9/25/2013 14:05

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/8/2013 01:30 | KB | |
| Acetic Acid | **0.11** | mg/l | 0.070 | 0.0050 | 1 | | | 10/8/2013 01:30 | KB | |
| Propionic Acid | **0.046J** | mg/l | 0.050 | 0.0080 | 1 | | | 10/8/2013 01:30 | KB | |
| Formic Acid | **0.081J** | mg/l | 0.10 | 0.0040 | 1 | | | 10/8/2013 01:30 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/8/2013 01:30 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/8/2013 01:30 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/8/2013 01:30 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/8/2013 01:30 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/8/2013 01:30 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/8/2013 01:30 | KB | |



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# ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930008** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-P-07** Date Collected: 9/25/2013 14:48

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/8/2013 02:16 | KB | |
| Acetic Acid | **0.057J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/8/2013 02:16 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/8/2013 02:16 | KB | |
| Formic Acid | **0.11** | mg/l | 0.10 | 0.0040 | 1 | | | 10/8/2013 02:16 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/8/2013 02:16 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/8/2013 02:16 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/8/2013 02:16 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/8/2013 02:16 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/8/2013 02:16 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/8/2013 02:16 | KB | |



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Phone: (412) 826-5245
Fax: (412) 826-3433

# ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930009** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **MMW-P-02** Date Collected: 9/25/2013 15:51

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/8/2013 03:02 | KB | |
| Acetic Acid | **0.047J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/8/2013 03:02 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/8/2013 03:02 | KB | |
| Formic Acid | **0.048J** | mg/l | 0.10 | 0.0040 | 1 | | | 10/8/2013 03:02 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/8/2013 03:02 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/8/2013 03:02 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/8/2013 03:02 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/8/2013 03:02 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/8/2013 03:02 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/8/2013 03:02 | KB | |



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# ANALYTICAL RESULTS

Workorder: 10193 MI PLAZA M01046 / 5087431

Lab ID: **101930010** Date Received: 9/27/2013 11:00 Matrix: Water

Sample ID: **DUP1** Date Collected: 9/25/2013 08:00

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **EDonors - MICR** | | | | | | | | | | |
| Analysis Desc: AM23G | | Analytical Method: AM23G | | | | | | | | |
| Lactic Acid | **0.10 U** | mg/l | 0.10 | 0.013 | 1 | | | 10/8/2013 03:49 | KB | |
| Acetic Acid | **0.052J** | mg/l | 0.070 | 0.0050 | 1 | | | 10/8/2013 03:49 | KB | |
| Propionic Acid | **0.050 U** | mg/l | 0.050 | 0.0080 | 1 | | | 10/8/2013 03:49 | KB | |
| Formic Acid | **0.11** | mg/l | 0.10 | 0.0040 | 1 | | | 10/8/2013 03:49 | KB | |
| Butyric Acid | **0.050 U** | mg/l | 0.050 | 0.011 | 1 | | | 10/8/2013 03:49 | KB | |
| Pyruvic Acid | **0.15 U** | mg/l | 0.15 | 0.014 | 1 | | | 10/8/2013 03:49 | KB | |
| i-Pentanoic Acid | **0.15 U** | mg/l | 0.15 | 0.0090 | 1 | | | 10/8/2013 03:49 | KB | |
| Pentanoic Acid | **0.070 U** | mg/l | 0.070 | 0.011 | 1 | | | 10/8/2013 03:49 | KB | |
| i-Hexanoic Acid | **0.10 U** | mg/l | 0.10 | 0.029 | 1 | | | 10/8/2013 03:49 | KB | |
| Hexanoic Acid | **0.50 U** | mg/l | 0.50 | 0.22 | 1 | | | 10/8/2013 03:49 | KB | |



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# ANALYTICAL RESULTS QUALIFIERS

Workorder: 10193 MI PLAZA M01046 / 5087431

**DEFINITIONS/QUALIFIERS**

Disclaimer : The Pennsylvania Department of Environmental Protection (PADEP) has decided to no longer recognize analyses that do not produce data for primary compliance, for NELAP accreditation. The methods affected by this decision are AM20GAx, AM21G, SW846 7199 and AM4.02. The laboratory shall continue to administer the NELAP/TNI standard requirements in the performance of these methods.

| | |
|---|---|
| MDL | Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection. |
| PQL | Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation. |
| ND | Not detected at or above reporting limit. |
| DF | Dilution Factor. |
| S | Surrogate. |
| RPD | Relative Percent Difference. |
| % Rec | Percent Recovery. |
| U | Indicates the compound was analyzed for, but not detected at or above the noted concentration. |
| J | Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL). |



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## QUALITY CONTROL DATA

Workorder: 10193 MI PLAZA M01046 / 5087431

QC Batch: EDON/1886 Analysis Method: AM23G

QC Batch Method: AM23G

Associated Lab Samples: 101930001, 101930002, 101930003, 101930004, 101930005, 101930006, 101930007, 101930008, 101930009, 101930010

METHOD BLANK: 23326

| Parameter | Units | Blank Result | Reporting Limit | Qualifiers |
|---|---|---|---|---|
| EDonors | | | | |
| Lactic Acid | mg/l | 0.038J | 0.10 | |
| Acetic Acid | mg/l | 0.016J | 0.070 | |
| Propionic Acid | mg/l | 0.050 U | 0.050 | |
| Formic Acid | mg/l | 0.025J | 0.10 | |
| Butyric Acid | mg/l | 0.050 U | 0.050 | |
| Pyruvic Acid | mg/l | 0.15 U | 0.15 | |
| i-Pentanoic Acid | mg/l | 0.15 U | 0.15 | |
| Pentanoic Acid | mg/l | 0.070 U | 0.070 | |
| i-Hexanoic Acid | mg/l | 0.10 U | 0.10 | |
| Hexanoic Acid | mg/l | 0.50 U | 0.50 | |

LABORATORY CONTROL SAMPLE: 23327

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| EDonors | | | | | | |
| Lactic Acid | mg/l | 2 | 1.9 | 93 | 70-130 | |
| Acetic Acid | mg/l | 2 | 2.2 | 110 | 70-130 | |
| Propionic Acid | mg/l | 2 | 2.0 | 100 | 70-130 | |
| Formic Acid | mg/l | 2 | 1.9 | 96 | 70-130 | |
| Butyric Acid | mg/l | 2 | 2.0 | 100 | 70-130 | |
| Pyruvic Acid | mg/l | 2 | 1.7 | 83 | 70-130 | |
| i-Pentanoic Acid | mg/l | 2 | 2.0 | 98 | 70-130 | |
| Pentanoic Acid | mg/l | 2 | 1.9 | 96 | 70-130 | |
| i-Hexanoic Acid | mg/l | 2 | 2.2 | 113 | 70-130 | |
| Hexanoic Acid | mg/l | 2 | 1.7 | 86 | 70-130 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 23328 23329 Original: 101930001

| Parameter | Units | Original Result | Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limit | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EDonors | | | | | | | | | | | |



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## QUALITY CONTROL DATA

Workorder: 10193 MI PLAZA M01046 / 5087431

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 23328 23329 Original: 101930001

| Parameter | Units | Original Result | Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limit | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lactic Acid | mg/l | 0 | 2 | 1.7 | 1.7 | 86 | 86 | 70-130 | 0 | 30 | |
| Acetic Acid | mg/l | 0.051 | 2 | 2.1 | 2.1 | 103 | 105 | 70-130 | 1.9 | 30 | |
| Propionic Acid | mg/l | 0 | 2 | 1.9 | 2.0 | 97 | 100 | 70-130 | 3 | 30 | |
| Formic Acid | mg/l | 0.15 | 2 | 1.9 | 2.0 | 88 | 90 | 70-130 | 2.2 | 30 | |
| Butyric Acid | mg/l | 0 | 2 | 2.0 | 2.1 | 103 | 104 | 70-130 | 0.97 | 30 | |
| Pyruvic Acid | mg/l | 0 | 2 | 1.8 | 1.7 | 88 | 87 | 70-130 | 1.1 | 30 | |
| i-Pentanoic Acid | mg/l | 0 | 2 | 1.9 | 1.9 | 97 | 96 | 70-130 | 1 | 30 | |
| Pentanoic Acid | mg/l | 0 | 2 | 1.9 | 2.0 | 94 | 101 | 70-130 | 7.2 | 30 | |
| i-Hexanoic Acid | mg/l | 0 | 2 | 5.2 | 4.0 | 261 | 198 | 70-130 | 27 | 30 | |
| Hexanoic Acid | mg/l | 0 | 2 | 2.0 | 2.0 | 100 | 102 | 70-130 | 2 | 30 | |



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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 10193 MI PLAZA M01046 / 5087431

| Lab ID | Sample ID | Prep Method | Prep Batch | Analysis Method | Analysis Batch |
|---|---|---|---|---|---|
| 101930001 | MMW-9S | | | AM23G | EDON/1886 |
| 101930002 | MMW-9S MS | | | AM23G | EDON/1886 |
| 101930003 | MMW-9S MSD | | | AM23G | EDON/1886 |
| 101930004 | MMW-10S | | | AM23G | EDON/1886 |
| 101930005 | MMW-P-10S | | | AM23G | EDON/1886 |
| 101930006 | MMW-P-10D | | | AM23G | EDON/1886 |
| 101930007 | MMW-P-08 | | | AM23G | EDON/1886 |
| 101930008 | MMW-P-07 | | | AM23G | EDON/1886 |
| 101930009 | MMW-P-02 | | | AM23G | EDON/1886 |
| 101930010 | DUP1 | | | AM23G | EDON/1886 |



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# Chain of Custody

10193

Pace Analytical®
www.pacelabs.com

**Workorder:** 5087431 **Workorder Name:** MI Plaza M01046 **Results Requested** 10/10/2013

| Report / Invoice To | Subcontract To |
|---|---|
| Tina Sayer<br>Pace Analytical Indianapolis<br>7726 Moller Road<br>Indianapolis, IN 46268<br>Phone (317)875-5894<br>Email: tina.sayer@pacelabs.com | Microseeps- PA |

| | | | | | | Preserved Containers | | | | | | Requested Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item | Sample ID | Collect Date/Time | Lab ID | Matrix | GN | | | | | | Low Level VFA | | | | | | | | | | | | | LAB USE ONLY |
| 1 | MMW-9S | 9/25/2013 09:22 | 5087431001 | Water | 5 | | | | | | X | | | | | | | | | | | | | MS/MSD |
| 2 | MMW-10S | 9/25/2013 10:44 | 5087431002 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 3 | MMW-P-10S | 9/25/2013 11:57 | 5087431003 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 4 | MMW-P-10D | 9/25/2013 12:56 | 5087431004 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 5 | MMW-P-08 | 9/25/2013 14:05 | 5087431005 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 6 | MMW-P-07 | 9/25/2013 14:48 | 5087431006 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 7 | MMW-P-02 | 9/25/2013 15:51 | 5087431007 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 8 | Dup 1 | 9/25/2013 08:00 | 5087431008 | Water | 2 | | | | | | X | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | |

| Transfers | Released By | Date/Time | Received By | Date/Time |
|---|---|---|---|---|
| 1 | Marcia Bennett | 9/26/13 16:44 | [illegible] | 9/27/13 1100 |
| 2 | | | | |
| 3 | | | | |

**Comments**

**Cooler Temperature on Receipt** 2 °C **Custody Seal** Y or N **Received on Ice** Y or N **Samples Intact** Y or N

# Cooler Receipt Form

**Client Name:** Pace - IN **Project:** MI Plaza/ 5087431 **Lab Work Order:** 10193

A. **Shipping/Container Information** (circle appropriate response)

**Courier:** (FedEx) UPS USPS Client Other:_____ **Air bill Present:** (Yes) No

**Tracking Number:** 9869 5372 5001

**Custody Seal on Cooler/Box Present:** Yes (No) **Seals Intact:** Yes No

**Cooler/Box Packing Material:** (Bubble Wrap) Absorbent Foam Other:_____

**Type of Ice:** (Wet) Blue None **Ice Intact:** (Yes) Melted

**Cooler Temperature:** 2°C **Radiation Screened:** Yes (No) **Chain of Custody Present:** (Yes) No

**Comments:**_____

B. **Laboratory Assignment/Log-in** (check appropriate response)

| | YES | NO | N/A | Comment Reference non-Conformance |
|---|---|---|---|---|
| Chain of Custody properly filled out | ✓ | | | |
| Chain of Custody relinquished | ✓ | | | |
| Sampler Name & Signature on COC | | ✓ | | |
| Containers intact | ✓ | | | |
| Were samples in separate bags | ✓ | | | |
| Sample container labels match COC Sample name/date and time collected | ✓ | | | |
| Sufficient volume provided | ✓ | | | |
| Microseeps containers used | ✓ | | | |
| Are containers properly preserved for the requested testing? (as labeled) | ✓ | | | |
| If an unknown preservation state, were containers checked? Exception: VOA's coliform | | | ✓ | If yes, see pH form. |
| Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container? | | | ✓ | |

**Comments:**_____

**Cooler contents examined/received by :** LG **Date:** 9/27/13

**Project Manager Review :** C.T. **Date:** 9/27/13

**Pace Analytical Services, Inc.**
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

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

October 14, 2013

Mr. Mark Breting
Mundell & Associates
110 S. Downey Ave.
Indianapolis, IN 46228

RE: Project: MI Plaza M01046
Pace Project No.: 5087498

Dear Mr. Breting:
Enclosed are the analytical results for sample(s) received by the laboratory on September 27, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mick Mayse for
Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures

PRELIMINARY

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

## CERTIFICATIONS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

**Ohio Certification IDs**
1233 Dublin Road, Columbus, OH 43215
Indiana Drinking Water Certification #: C-OH-11
NVLAP Certification #: 90132
Ohio Microbiology Certification #: 943
Ohio Drinking Water Certification #: 1030

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## SAMPLE SUMMARY

Project: MI Plaza M01046
Pace Project No.: 5087498

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **5087498001** | **MMW-P-03S** | Water | 09/26/13 09:18 | 09/27/13 11:40 |
| **5087498002** | **MMW-P-03D** | Water | 09/26/13 09:52 | 09/27/13 11:40 |
| **5087498003** | **MMW-P-05** | Water | 09/26/13 10:34 | 09/27/13 11:40 |
| **5087498004** | **MMW-P-01** | Water | 09/26/13 11:11 | 09/27/13 11:40 |
| **5087498005** | **MMW-P-06** | Water | 09/26/13 11:49 | 09/27/13 11:40 |
| **5087498006** | **MMW-C-01** | Water | 09/26/13 12:31 | 09/27/13 11:40 |
| **5087498007** | **MMW-P-04** | Water | 09/26/13 13:15 | 09/27/13 11:40 |
| **5087498008** | **DUP-2** | Water | 09/26/13 08:00 | 09/27/13 11:40 |
| **5087498009** | **TRIP BLANK** | Water | 09/26/13 08:00 | 09/27/13 11:40 |

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(317)875-5894

## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087498

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **5087498001** | **MMW-P-03S** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498002** | **MMW-P-03D** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498003** | **MMW-P-05** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498004** | **MMW-P-01** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498005** | **MMW-P-06** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498006** | **MMW-C-01** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498007** | **MMW-P-04** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | RSW | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | ILP | 2 |
| **5087498008** | **DUP-2** | EPA 8260 | RSW | 18 |
| **5087498009** | **TRIP BLANK** | EPA 8260 | RSW | 18 |

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## REPORT OF LABORATORY ANALYSIS

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

# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-P-03S** **Lab ID: 5087498001** Collected: 09/26/13 09:18 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 18:38 | 74-84-0 | 1d,N2 |
| Ethene | **279** | ug/L | 10.0 | 1 | | 10/09/13 18:38 | 74-85-1 | N2 |
| Methane | **14200** | ug/L | 10.0 | 1 | | 10/09/13 18:38 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 75-35-4 | |
| cis-1,2-Dichloroethene | **29.8** | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 03:46 | 79-01-6 | |
| Vinyl chloride | **2500** | ug/L | 20.0 | 10 | | 10/10/13 16:26 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 03:46 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/10/13 03:46 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 03:46 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 03:46 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **3.1** | mg/L | 0.30 | 1 | | 10/10/13 04:02 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **61.6** | mg/L | 25.0 | 5 | | 10/04/13 14:39 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 17:59 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 17:59 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-P-03D** **Lab ID: 5087498002** Collected: 09/26/13 09:52 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | **115** | ug/L | 10.0 | 1 | | 10/09/13 18:57 | 74-84-0 | 1d,N2 |
| Ethene | **111** | ug/L | 10.0 | 1 | | 10/09/13 18:57 | 74-85-1 | N2 |
| Methane | **1130** | ug/L | 10.0 | 1 | | 10/09/13 18:57 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 04:18 | 79-01-6 | |
| Vinyl chloride | **664** | ug/L | 20.0 | 10 | | 10/10/13 04:51 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 04:18 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 79-116 | 1 | | 10/10/13 04:18 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/10/13 04:18 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 81-110 | 1 | | 10/10/13 04:18 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **3.7** | mg/L | 0.30 | 1 | | 10/10/13 04:34 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **35.4** | mg/L | 12.5 | 2.5 | | 10/04/13 14:37 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 18:02 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 18:02 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-P-05** **Lab ID: 5087498003** Collected: 09/26/13 10:34 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 19:15 | 74-84-0 | 1d,N2 |
| Ethene | **448** | ug/L | 10.0 | 1 | | 10/09/13 19:15 | 74-85-1 | N2 |
| Methane | **8600** | ug/L | 10.0 | 1 | | 10/09/13 19:15 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 05:24 | 79-01-6 | |
| Vinyl chloride | **248** | ug/L | 2.0 | 1 | | 10/10/13 05:24 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 05:24 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 79-116 | 1 | | 10/10/13 05:24 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 05:24 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 81-110 | 1 | | 10/10/13 05:24 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **4.9** | mg/L | 0.30 | 1 | | 10/10/13 05:07 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **60.7** | mg/L | 25.0 | 5 | | 10/04/13 14:10 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 18:06 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 18:06 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-P-01** **Lab ID: 5087498004** Collected: 09/26/13 11:11 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 19:34 | 74-84-0 | 1d,N2 |
| Ethene | **451** | ug/L | 10.0 | 1 | | 10/09/13 19:34 | 74-85-1 | N2 |
| Methane | **12700** | ug/L | 10.0 | 1 | | 10/09/13 19:34 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | **302** | ug/L | 100 | 20 | | 10/10/13 07:02 | 156-59-2 | |
| trans-1,2-Dichloroethene | **8.1** | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 91-20-3 | |
| Tetrachloroethene | **28.1** | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 71-55-6 | |
| Trichloroethene | **13.3** | ug/L | 5.0 | 1 | | 10/10/13 06:29 | 79-01-6 | |
| Vinyl chloride | **1070** | ug/L | 40.0 | 20 | | 10/10/13 07:02 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 06:29 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 95 | %. | 79-116 | 1 | | 10/10/13 06:29 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 94 | %. | 80-114 | 1 | | 10/10/13 06:29 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 06:29 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **3.2** | mg/L | 0.30 | 1 | | 10/10/13 05:31 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **122** | mg/L | 25.0 | 5 | | 10/04/13 14:20 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 18:07 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 18:07 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-P-06** **Lab ID: 5087498005** Collected: 09/26/13 11:49 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 19:53 | 74-84-0 | 1d,N2 |
| Ethene | **393** | ug/L | 10.0 | 1 | | 10/09/13 19:53 | 74-85-1 | N2 |
| Methane | **18800** | ug/L | 10.0 | 1 | | 10/09/13 19:53 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 75-35-4 | |
| cis-1,2-Dichloroethene | **2280** | ug/L | 50.0 | 10 | | 10/10/13 08:07 | 156-59-2 | |
| trans-1,2-Dichloroethene | **26.4** | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 07:35 | 79-01-6 | |
| Vinyl chloride | **2590** | ug/L | 20.0 | 10 | | 10/10/13 08:07 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 07:35 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 94 | %. | 79-116 | 1 | | 10/10/13 07:35 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 07:35 | 460-00-4 | |
| Toluene-d8 (S) | 103 | %. | 81-110 | 1 | | 10/10/13 07:35 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **3.1** | mg/L | 0.30 | 1 | | 10/10/13 06:04 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **124** | mg/L | 50.0 | 10 | | 10/04/13 14:20 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 18:12 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 18:12 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-C-01** **Lab ID: 5087498006** Collected: 09/26/13 12:31 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 20:11 | 74-84-0 | 1d,N2 |
| Ethene | **117** | ug/L | 10.0 | 1 | | 10/09/13 20:11 | 74-85-1 | N2 |
| Methane | **16300** | ug/L | 10.0 | 1 | | 10/09/13 20:11 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 75-35-4 | |
| cis-1,2-Dichloroethene | **11.4** | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 91-20-3 | |
| Tetrachloroethene | **12.2** | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 08:40 | 79-01-6 | |
| Vinyl chloride | **19.6** | ug/L | 2.0 | 1 | | 10/10/13 08:40 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 08:40 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/10/13 08:40 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 08:40 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 81-110 | 1 | | 10/10/13 08:40 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **2.8** | mg/L | 0.30 | 1 | | 10/10/13 06:35 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **62.0** | mg/L | 25.0 | 5 | | 10/04/13 14:21 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 18:14 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 18:14 | | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: MMW-P-04** **Lab ID: 5087498007** Collected: 09/26/13 13:15 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 20:30 | 74-84-0 | 1d,N2 |
| Ethene | **61.0** | ug/L | 10.0 | 1 | | 10/09/13 20:30 | 74-85-1 | N2 |
| Methane | **22900** | ug/L | 10.0 | 1 | | 10/09/13 20:30 | 74-82-8 | 2d,E,N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 75-35-4 | |
| cis-1,2-Dichloroethene | **15.5** | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:12 | 79-01-6 | |
| Vinyl chloride | **8.1** | ug/L | 2.0 | 1 | | 10/10/13 09:12 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 09:12 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 79-116 | 1 | | 10/10/13 09:12 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 80-114 | 1 | | 10/10/13 09:12 | 460-00-4 | |
| Toluene-d8 (S) | 104 | %. | 81-110 | 1 | | 10/10/13 09:12 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **30.0** | mg/L | 0.30 | 1 | | 10/10/13 07:01 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **42.8** | mg/L | 12.5 | 2.5 | | 10/04/13 14:21 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/27/13 18:15 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/27/13 18:15 | | |

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(317)875-5894

## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: DUP-2** **Lab ID: 5087498008** Collected: 09/26/13 08:00 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 75-35-4 | |
| cis-1,2-Dichloroethene | **9.4** | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 91-20-3 | |
| Tetrachloroethene | **12.1** | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 09:45 | 79-01-6 | |
| Vinyl chloride | **15.9** | ug/L | 2.0 | 1 | | 10/10/13 09:45 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 09:45 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 79-116 | 1 | | 10/10/13 09:45 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 09:45 | 460-00-4 | |
| Toluene-d8 (S) | 102 | %. | 81-110 | 1 | | 10/10/13 09:45 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087498

**Sample: TRIP BLANK** **Lab ID: 5087498009** Collected: 09/26/13 08:00 Received: 09/27/13 11:40 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 100-41-4 | |
| Methylene Chloride | **8.3** | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 75-09-2 | C9 |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 10:18 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/10/13 10:18 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 10:18 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/10/13 10:18 | 1868-53-7 | HS |
| 4-Bromofluorobenzene (S) | 96 | %. | 80-114 | 1 | | 10/10/13 10:18 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 10:18 | 2037-26-5 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087498

QC Batch: GCV/17239 Analysis Method: RSK 175 Modified
QC Batch Method: RSK 175 Modified Analysis Description: RSK 175 HEADSPACE
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

METHOD BLANK: 994029 Matrix: Water
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Ethane | ug/L | ND | 10.0 | 10/09/13 14:35 | N2 |
| Ethene | ug/L | ND | 10.0 | 10/09/13 14:35 | N2 |
| Methane | ug/L | ND | 10.0 | 10/09/13 14:35 | N2 |

LABORATORY CONTROL SAMPLE: 994030

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Ethane | ug/L | 1980 | 1730 | 88 | 70-130 | N2 |
| Ethene | ug/L | 2250 | 2590 | 115 | 70-130 | N2 |
| Methane | ug/L | 1980 | 2170 | 110 | 70-130 | N2 |

SAMPLE DUPLICATE: 994031

| Parameter | Units | 5087431001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Ethane | ug/L | ND | 5.2J | | 20 | N2 |
| Ethene | ug/L | ND | 15.1 | | 20 | N2 |
| Methane | ug/L | 7580 | 6970 | 8 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087498

QC Batch: MSV/58081 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007, 5087498008, 5087498009

METHOD BLANK: 994429 Matrix: Water
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007, 5087498008, 5087498009

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Benzene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Chloroform | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Naphthalene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Toluene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/10/13 02:41 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/10/13 02:41 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/10/13 02:41 | |
| 4-Bromofluorobenzene (S) | %. | 95 | 80-114 | 10/10/13 02:41 | |
| Dibromofluoromethane (S) | %. | 94 | 79-116 | 10/10/13 02:41 | |
| Toluene-d8 (S) | %. | 100 | 81-110 | 10/10/13 02:41 | |

LABORATORY CONTROL SAMPLE: 994430

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 42.2 | 84 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 48.1 | 96 | 68-127 | |
| Benzene | ug/L | 50 | 42.1 | 84 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 36.2 | 72 | 56-137 | |
| Chloroform | ug/L | 50 | 42.5 | 85 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 41.3 | 83 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 45.2 | 90 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 48.3 | 97 | 68-132 | |
| Naphthalene | ug/L | 50 | 34.8 | 70 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 43.6 | 87 | 69-130 | |
| Toluene | ug/L | 50 | 44.2 | 88 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 47.2 | 94 | 72-124 | |
| Trichloroethene | ug/L | 50 | 40.4 | 81 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 45.1 | 90 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 149 | 99 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 98 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 97 | 79-116 | |
| Toluene-d8 (S) | %. | | | 103 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087498

MATRIX SPIKE SAMPLE: 994431

| Parameter | Units | 5087498003 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 44.9 | 90 | 60-138 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 47.6 | 95 | 55-145 | |
| Benzene | ug/L | ND | 50 | 40.1 | 80 | 62-129 | |
| Carbon tetrachloride | ug/L | ND | 50 | 39.3 | 79 | 46-142 | |
| Chloroform | ug/L | ND | 50 | 40.5 | 81 | 54-150 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 43.1 | 77 | 60-135 | |
| Ethylbenzene | ug/L | ND | 50 | 41.4 | 82 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 43.1 | 86 | 45-156 | |
| Naphthalene | ug/L | ND | 50 | 31.5 | 61 | 39-140 | |
| Tetrachloroethene | ug/L | ND | 50 | 41.4 | 83 | 33-151 | |
| Toluene | ug/L | ND | 50 | 40.8 | 82 | 50-132 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 45.8 | 92 | 40-153 | |
| Trichloroethene | ug/L | ND | 50 | 39.3 | 79 | 50-143 | |
| Vinyl chloride | ug/L | 248 | 50 | 261 | 26 | 44-145 | M0 |
| Xylene (Total) | ug/L | ND | 150 | 137 | 91 | 29-145 | |
| 4-Bromofluorobenzene (S) | %. | | | | 97 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | | 98 | 79-116 | |
| Toluene-d8 (S) | %. | | | | 101 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087498

QC Batch: OHIO/8192 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C TOC
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

METHOD BLANK: 994038 Matrix: Water
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 0.30 | 10/09/13 18:46 | N2 |

LABORATORY CONTROL SAMPLE: 994039

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 5 | 4.4 | 89 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 994041 994042

| Parameter | Units | 5087431001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 4.9 | 4 | 4 | 8.9 | 8.7 | 99 | 94 | 75-125 | 2 | 20 | N2 |

SAMPLE DUPLICATE: 994040

| Parameter | Units | 5087431001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 4.9 | 4.7 | 4 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087498

QC Batch: WET/13322 Analysis Method: ASTM D516-90,02
QC Batch Method: ASTM D516-90,02 Analysis Description: ASTM D516-9002 Sulfate Water
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

METHOD BLANK: 991834 Matrix: Water
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Sulfate | mg/L | ND | 5.0 | 10/04/13 13:45 | N2 |

LABORATORY CONTROL SAMPLE: 991835

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfate | mg/L | 20 | 18.7 | 93 | 90-110 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 991836 991837

| Parameter | Units | 5087472001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 77.7 | 100 | 100 | 157 | 160 | 79 | 82 | 90-110 | 2 | 20 | M3,N2 |

MATRIX SPIKE SAMPLE: 991838

| Parameter | Units | 5087498001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 61.6 | 100 | 161 | 100 | 90-110 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087498

QC Batch: WETA/10844 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

METHOD BLANK: 988197 Matrix: Water
Associated Lab Samples: 5087498001, 5087498002, 5087498003, 5087498004, 5087498005, 5087498006, 5087498007

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 0.10 | 09/27/13 17:57 | |
| Nitrogen, Nitrite | mg/L | ND | 0.10 | 09/27/13 17:57 | |

LABORATORY CONTROL SAMPLE: 988198

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | 2 | 1.9 | 97 | 90-110 | |
| Nitrogen, Nitrite | mg/L | 2 | 2.1 | 103 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 988199 988200

| Parameter | Units | 5087498001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 2 | 2 | 1.8 | 1.8 | 92 | 91 | 90-110 | 1 | 20 | |
| Nitrogen, Nitrite | mg/L | ND | 2 | 2 | 2.0 | 2.0 | 101 | 101 | 90-110 | 0 | 20 | |

MATRIX SPIKE SAMPLE: 988201

| Parameter | Units | 5087470002 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | 0.41 | 2 | 2.5 | 103 | 90-110 | |
| Nitrogen, Nitrite | mg/L | ND | 2 | 2.0 | 99 | 90-110 | |

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# QUALIFIERS

Project: MI Plaza M01046
Pace Project No.: 5087498

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| 1d | Ethane result may be biased low as indicated by the closing CCV at 79.6% recovery (80-120% control limits). HEB 10/10/13 |
| 2d | Further analysis not possible within hold time. HEB 10/10/13 |
| C9 | Common Laboratory Contaminant. |
| E | Analyte concentration exceeded the calibration range. The reported result is estimated. |
| HS | Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter). |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| M3 | Matrix spike recovery was outside laboratory control limits due to matrix interferences. |
| N2 | The lab does not hold TNI accreditation for this parameter. |

PRELIMINARY



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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MI Plaza M01046
Pace Project No.: 5087498

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **5087498001** | **MMW-P-03S** | RSK 175 Modified | GCV/17239 | | |
| **5087498002** | **MMW-P-03D** | RSK 175 Modified | GCV/17239 | | |
| **5087498003** | **MMW-P-05** | RSK 175 Modified | GCV/17239 | | |
| **5087498004** | **MMW-P-01** | RSK 175 Modified | GCV/17239 | | |
| **5087498005** | **MMW-P-06** | RSK 175 Modified | GCV/17239 | | |
| **5087498006** | **MMW-C-01** | RSK 175 Modified | GCV/17239 | | |
| **5087498007** | **MMW-P-04** | RSK 175 Modified | GCV/17239 | | |
| **5087498001** | **MMW-P-03S** | EPA 8260 | MSV/58081 | | |
| **5087498002** | **MMW-P-03D** | EPA 8260 | MSV/58081 | | |
| **5087498003** | **MMW-P-05** | EPA 8260 | MSV/58081 | | |
| **5087498004** | **MMW-P-01** | EPA 8260 | MSV/58081 | | |
| **5087498005** | **MMW-P-06** | EPA 8260 | MSV/58081 | | |
| **5087498006** | **MMW-C-01** | EPA 8260 | MSV/58081 | | |
| **5087498007** | **MMW-P-04** | EPA 8260 | MSV/58081 | | |
| **5087498008** | **DUP-2** | EPA 8260 | MSV/58081 | | |
| **5087498009** | **TRIP BLANK** | EPA 8260 | MSV/58081 | | |
| **5087498001** | **MMW-P-03S** | SM 5310C | OHIO/8192 | | |
| **5087498002** | **MMW-P-03D** | SM 5310C | OHIO/8192 | | |
| **5087498003** | **MMW-P-05** | SM 5310C | OHIO/8192 | | |
| **5087498004** | **MMW-P-01** | SM 5310C | OHIO/8192 | | |
| **5087498005** | **MMW-P-06** | SM 5310C | OHIO/8192 | | |
| **5087498006** | **MMW-C-01** | SM 5310C | OHIO/8192 | | |
| **5087498007** | **MMW-P-04** | SM 5310C | OHIO/8192 | | |
| **5087498001** | **MMW-P-03S** | ASTM D516-90,02 | WET/13322 | | |
| **5087498002** | **MMW-P-03D** | ASTM D516-90,02 | WET/13322 | | |
| **5087498003** | **MMW-P-05** | ASTM D516-90,02 | WET/13322 | | |
| **5087498004** | **MMW-P-01** | ASTM D516-90,02 | WET/13322 | | |
| **5087498005** | **MMW-P-06** | ASTM D516-90,02 | WET/13322 | | |
| **5087498006** | **MMW-C-01** | ASTM D516-90,02 | WET/13322 | | |
| **5087498007** | **MMW-P-04** | ASTM D516-90,02 | WET/13322 | | |
| **5087498001** | **MMW-P-03S** | EPA 353.2 | WETA/10844 | | |
| **5087498002** | **MMW-P-03D** | EPA 353.2 | WETA/10844 | | |
| **5087498003** | **MMW-P-05** | EPA 353.2 | WETA/10844 | | |
| **5087498004** | **MMW-P-01** | EPA 353.2 | WETA/10844 | | |
| **5087498005** | **MMW-P-06** | EPA 353.2 | WETA/10844 | | |
| **5087498006** | **MMW-C-01** | EPA 353.2 | WETA/10844 | | |
| **5087498007** | **MMW-P-04** | EPA 353.2 | WETA/10844 | | |

PRELIMINARY

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October 15, 2013

Mr. Mark Breting
Mundell & Associates
110 S. Downey Ave.
Indianapolis, IN 46228

RE: Project: MI Plaza M01046
Pace Project No.: 5087579

Dear Mr. Breting:
Enclosed are the analytical results for sample(s) received by the laboratory on September 30, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lyle Cable for
Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures



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## CERTIFICATIONS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

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## SAMPLE SUMMARY

Project: MI Plaza M01046
Pace Project No.: 5087579

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **5087579001** | **MW-170S** | Water | 09/27/13 09:14 | 09/30/13 12:01 |
| **5087579002** | **MW-167S** | Water | 09/27/13 10:15 | 09/30/13 12:01 |
| **5087579003** | **MW-167D** | Water | 09/27/13 10:24 | 09/30/13 12:01 |
| **5087579004** | **MW-168S** | Water | 09/27/13 11:02 | 09/30/13 12:01 |
| **5087579005** | **MW-168D** | Water | 09/27/13 11:57 | 09/30/13 12:01 |
| **5087579006** | **MW-170D** | Water | 09/27/13 13:25 | 09/30/13 12:01 |
| **5087579007** | **Trip Blank** | Water | 09/27/13 08:00 | 09/30/13 12:01 |
| **5087579008** | **Field Blank** | Water | 09/30/13 09:00 | 09/30/13 12:01 |
| **5087579009** | **EQ Blank** | Water | 09/30/13 09:05 | 09/30/13 12:01 |

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## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087579

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **5087579001** | **MW-170S** | EPA 8260 | RSW | 18 |
| **5087579002** | **MW-167S** | EPA 8260 | RSW | 18 |
| **5087579003** | **MW-167D** | EPA 8260 | RSW | 18 |
| **5087579004** | **MW-168S** | EPA 8260 | RSW | 18 |
| **5087579005** | **MW-168D** | EPA 8260 | RSW | 18 |
| **5087579006** | **MW-170D** | EPA 8260 | RSW | 18 |
| **5087579007** | **Trip Blank** | EPA 8260 | RSW | 18 |
| **5087579008** | **Field Blank** | EPA 8260 | RSW | 18 |
| **5087579009** | **EQ Blank** | EPA 8260 | RSW | 18 |



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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: MW-170S** **Lab ID: 5087579001** Collected: 09/27/13 09:14 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 75-35-4 | |
| cis-1,2-Dichloroethene | **12.6** | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 18:54 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/10/13 18:54 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 18:54 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/10/13 18:54 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 18:54 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 18:54 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: MW-167S** **Lab ID: 5087579002** Collected: 09/27/13 10:15 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 19:59 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/10/13 19:59 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 19:59 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/10/13 19:59 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 99 | %. | 80-114 | 1 | | 10/10/13 19:59 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/10/13 19:59 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: MW-167D** **Lab ID: 5087579003** Collected: 09/27/13 10:24 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 75-35-4 | |
| cis-1,2-Dichloroethene | **371** | ug/L | 50.0 | 10 | | 10/11/13 17:30 | 156-59-2 | |
| trans-1,2-Dichloroethene | **18.5** | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 20:32 | 79-01-6 | |
| Vinyl chloride | **9.6** | ug/L | 2.0 | 1 | | 10/10/13 20:32 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 20:32 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/10/13 20:32 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 20:32 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 20:32 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: MW-168S** **Lab ID: 5087579004** Collected: 09/27/13 11:02 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 75-35-4 | |
| cis-1,2-Dichloroethene | **10.9** | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 18:36 | 79-01-6 | |
| Vinyl chloride | **19.4** | ug/L | 2.0 | 1 | | 10/11/13 18:36 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/11/13 18:36 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 96 | %. | 79-116 | 1 | | 10/11/13 18:36 | 1868-53-7 | HS |
| 4-Bromofluorobenzene (S) | 99 | %. | 80-114 | 1 | | 10/11/13 18:36 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/11/13 18:36 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: MW-168D** **Lab ID: 5087579005** Collected: 09/27/13 11:57 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:10 | 79-01-6 | |
| Vinyl chloride | **100** | ug/L | 2.0 | 1 | | 10/10/13 22:10 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 22:10 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 79-116 | 1 | | 10/10/13 22:10 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/10/13 22:10 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 22:10 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: MW-170D** **Lab ID: 5087579006** Collected: 09/27/13 13:25 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 22:43 | 79-01-6 | |
| Vinyl chloride | **48.0** | ug/L | 2.0 | 1 | | 10/10/13 22:43 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 22:43 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/10/13 22:43 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/10/13 22:43 | 460-00-4 | |
| Toluene-d8 (S) | 100 | %. | 81-110 | 1 | | 10/10/13 22:43 | 2037-26-5 | |

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(317)875-5894

## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: Trip Blank** **Lab ID: 5087579007** Collected: 09/27/13 08:00 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:15 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/10/13 23:15 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 23:15 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 97 | %. | 79-116 | 1 | | 10/10/13 23:15 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 23:15 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/10/13 23:15 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: Field Blank** **Lab ID: 5087579008** Collected: 09/30/13 09:00 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/10/13 23:47 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/10/13 23:47 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/10/13 23:47 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 79-116 | 1 | | 10/10/13 23:47 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/10/13 23:47 | 460-00-4 | |
| Toluene-d8 (S) | 99 | %. | 81-110 | 1 | | 10/10/13 23:47 | 2037-26-5 | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087579

**Sample: EQ Blank** **Lab ID: 5087579009** Collected: 09/30/13 09:05 Received: 09/30/13 12:01 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/11/13 00:20 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/11/13 00:20 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/11/13 00:20 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 98 | %. | 79-116 | 1 | | 10/11/13 00:20 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 80-114 | 1 | | 10/11/13 00:20 | 460-00-4 | |
| Toluene-d8 (S) | 101 | %. | 81-110 | 1 | | 10/11/13 00:20 | 2037-26-5 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087579

QC Batch: MSV/58110 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087579001, 5087579002, 5087579003, 5087579005, 5087579006, 5087579007, 5087579008, 5087579009

METHOD BLANK: 995200 Matrix: Water
Associated Lab Samples: 5087579001, 5087579002, 5087579003, 5087579005, 5087579006, 5087579007, 5087579008, 5087579009

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Benzene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Chloroform | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Naphthalene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Toluene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/10/13 15:04 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/10/13 15:04 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/10/13 15:04 | |
| 4-Bromofluorobenzene (S) | %. | 99 | 80-114 | 10/10/13 15:04 | |
| Dibromofluoromethane (S) | %. | 98 | 79-116 | 10/10/13 15:04 | |
| Toluene-d8 (S) | %. | 100 | 81-110 | 10/10/13 15:04 | |

LABORATORY CONTROL SAMPLE: 995201

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 56.3 | 113 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 58.2 | 116 | 68-127 | |
| Benzene | ug/L | 50 | 51.9 | 104 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 53.1 | 106 | 56-137 | |
| Chloroform | ug/L | 50 | 56.6 | 113 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 54.2 | 108 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 55.0 | 110 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 59.4 | 119 | 68-132 | |
| Naphthalene | ug/L | 50 | 49.6 | 99 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 56.9 | 114 | 69-130 | |
| Toluene | ug/L | 50 | 52.7 | 105 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 57.8 | 116 | 72-124 | |
| Trichloroethene | ug/L | 50 | 57.4 | 115 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 52.9 | 106 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 163 | 109 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 101 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 103 | 79-116 | |
| Toluene-d8 (S) | %. | | | 100 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087579

MATRIX SPIKE SAMPLE: 995202

| Parameter | Units | 5087579001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 45.9 | 92 | 60-138 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50.6 | 101 | 55-145 | |
| Benzene | ug/L | ND | 50 | 45.6 | 91 | 62-129 | |
| Carbon tetrachloride | ug/L | ND | 50 | 41.5 | 83 | 46-142 | |
| Chloroform | ug/L | ND | 50 | 48.9 | 98 | 54-150 | |
| cis-1,2-Dichloroethene | ug/L | 12.6 | 50 | 59.4 | 94 | 60-135 | |
| Ethylbenzene | ug/L | ND | 50 | 48.7 | 97 | 28-153 | |
| Methylene Chloride | ug/L | ND | 50 | 47.1 | 94 | 45-156 | |
| Naphthalene | ug/L | ND | 50 | 44.2 | 88 | 39-140 | |
| Tetrachloroethene | ug/L | ND | 50 | 50.3 | 101 | 33-151 | |
| Toluene | ug/L | ND | 50 | 46.9 | 94 | 50-132 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 51.8 | 101 | 40-153 | |
| Trichloroethene | ug/L | ND | 50 | 49.8 | 100 | 50-143 | |
| Vinyl chloride | ug/L | ND | 50 | 47.4 | 95 | 44-145 | |
| Xylene (Total) | ug/L | ND | 150 | 146 | 97 | 29-145 | |
| 4-Bromofluorobenzene (S) | %. | | | | 101 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | | 102 | 79-116 | |
| Toluene-d8 (S) | %. | | | | 100 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087579

QC Batch: MSV/58160
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 5087579004

METHOD BLANK: 996015
Matrix: Water
Associated Lab Samples: 5087579004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Benzene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Chloroform | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Naphthalene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Toluene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/11/13 16:57 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/11/13 16:57 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/11/13 16:57 | |
| 4-Bromofluorobenzene (S) | %. | 100 | 80-114 | 10/11/13 16:57 | |
| Dibromofluoromethane (S) | %. | 97 | 79-116 | 10/11/13 16:57 | |
| Toluene-d8 (S) | %. | 101 | 81-110 | 10/11/13 16:57 | |

LABORATORY CONTROL SAMPLE: 996016

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 54.0 | 108 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 53.5 | 107 | 68-127 | |
| Benzene | ug/L | 50 | 49.7 | 99 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 50.9 | 102 | 56-137 | |
| Chloroform | ug/L | 50 | 54.3 | 109 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 51.5 | 103 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 53.8 | 108 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 54.2 | 108 | 68-132 | |
| Naphthalene | ug/L | 50 | 48.9 | 98 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 53.4 | 107 | 69-130 | |
| Toluene | ug/L | 50 | 50.0 | 100 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 54.5 | 109 | 72-124 | |
| Trichloroethene | ug/L | 50 | 55.1 | 110 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 49.0 | 98 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 159 | 106 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 100 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 104 | 79-116 | |
| Toluene-d8 (S) | %. | | | 101 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087579

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 996017 996018

| Parameter | Units | 5087604002 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 46.6 | 47.9 | 93 | 96 | 60-138 | 3 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 50.5 | 49.8 | 101 | 100 | 55-145 | 2 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 45.1 | 44.2 | 90 | 88 | 62-129 | 2 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 43.1 | 44.8 | 86 | 90 | 46-142 | 4 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 48.8 | 47.7 | 98 | 95 | 54-150 | 2 | 20 | |
| cis-1,2-Dichloroethene | ug/L | 16.8 | 50 | 50 | 61.4 | 61.7 | 89 | 90 | 60-135 | 0 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 48.7 | 46.7 | 97 | 93 | 28-153 | 4 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 47.6 | 45.0 | 95 | 90 | 45-156 | 5 | 20 | |
| Naphthalene | ug/L | ND | 50 | 50 | 41.3 | 40.3 | 79 | 77 | 39-140 | 2 | 20 | |
| Tetrachloroethene | ug/L | 87.8 | 50 | 50 | 130 | 130 | 85 | 84 | 33-151 | 0 | 20 | |
| Toluene | ug/L | ND | 50 | 50 | 45.5 | 45.3 | 91 | 91 | 50-132 | 0 | 20 | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 51.7 | 49.9 | 102 | 98 | 40-153 | 4 | 20 | |
| Trichloroethene | ug/L | 6.3 | 50 | 50 | 56.7 | 54.8 | 101 | 97 | 50-143 | 3 | 20 | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 47.8 | 47.2 | 95 | 94 | 44-145 | 1 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 140 | 143 | 94 | 95 | 29-145 | 2 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 99 | 100 | 80-114 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 102 | 102 | 79-116 | | | |
| Toluene-d8 (S) | %. | | | | | | 100 | 100 | 81-110 | | | |

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# QUALIFIERS

Project: MI Plaza M01046
Pace Project No.: 5087579

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).



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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MI Plaza M01046
Pace Project No.: 5087579

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **5087579001** | **MW-170S** | EPA 8260 | MSV/58110 | | |
| **5087579002** | **MW-167S** | EPA 8260 | MSV/58110 | | |
| **5087579003** | **MW-167D** | EPA 8260 | MSV/58110 | | |
| **5087579004** | **MW-168S** | EPA 8260 | MSV/58160 | | |
| **5087579005** | **MW-168D** | EPA 8260 | MSV/58110 | | |
| **5087579006** | **MW-170D** | EPA 8260 | MSV/58110 | | |
| **5087579007** | **Trip Blank** | EPA 8260 | MSV/58110 | | |
| **5087579008** | **Field Blank** | EPA 8260 | MSV/58110 | | |
| **5087579009** | **EQ Blank** | EPA 8260 | MSV/58110 | | |



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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1561942

**Section A** Required Client Information:

Company: Mundell & Assoc
Address: 1105. Downey Ave Indpls, IN
Email To:
Phone: Fax:
Requested Due Date/TAT: STD

**Section B** Required Project Information:

Report To: Merk Breting
Copy To: Matt Bono
Purchase Order No.:
Project Name: MT Plaza
Project Number: M01046

**Section C** Invoice Information:

Attention: Merle Tebbe
Company Name: Mundell
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

**REGULATORY AGENCY**

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

**Section D** Required Client Information

**SAMPLE ID** (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | Requested Analysis Filtered (Y/N): 5260 | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-170S | WT | G | | | 9-27-13 | 9:14 | | 3 | | | | X | | | | | Y | Y | | 5087579-001 |
| 2 | MW-167S | | | | | | 10:15 | | 3 | | | | X | | | | | | | | -002 |
| 3 | MW-167D | | | | | | 10:24 | | 3 | | | | X | | | | | | | | -003 |
| 4 | MW-168S | | | | | | 11:02 | | 3 | | | | X | | | | | | | | -004 |
| 5 | MW-168D | | | | | | 11:57 | | 3 | | | | X | | | | | | | | -005 |
| 6 | MW-170D | | | | | | 12:25 | | 3 | | | | X | | | | | | | | -006 |
| 7 | Trip Blank | | | | | | | | 3 | | | | X | | | | | | | | -007 |
| 8 | Field Blank | | | | | 9-30-13 | 9:00 | | 3 | | | | X | | | | | | | | -008 |
| 9 | EQ Blank | | | | | 9-30-13 | 9:05 | | 3 | | | | X | | | | | | | | -009 |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | | 9/30/13 | 12:00 | | 9/30/13 | 12:00 | 3.4 Y N Y |

**SAMPLER NAME AND SIGNATURE**

PRINT Name of SAMPLER: Andy Damaris
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9-27-13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Page 2022 of Pace

ORIGINAL

Keep 9-30-13 1249

F-ALL-Q-020rev.07, 15-May-2007

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Mundell + Assoc. Project # 5087579

**Courier:** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

**Tracking #:** _____

**Custody Seal on Cooler/Box Present:** ☐ yes ☑ no Seals Intact: ☐ yes ☐ no

**Date/Time 5035A kits placed in freezer** _____

**Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other foam

**Thermometer Used** 1 2 3 4 (6) A B C D E **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

**Cooler Temperature** 3.4°C **Ice Visible in Sample Containers:** ☐ yes ☑ no

**(Corrected, if applicable)**

Temp should be above freezing to 6°C

**Comments:**

**Date and Initials of person examining contents:** KDE 9-30-13

| | | | |
|---|---|---|---|
| Chain of Custody Present: | ☑Yes | ☐No | ☐N/A |
| Chain of Custody Filled Out: | ☑Yes | ☐No | ☐N/A |
| Chain of Custody Relinquished: | ☑Yes | ☐No | ☐N/A |
| Sampler Name & Signature on COC: | ☑Yes | ☐No | ☐N/A |
| **Short Hold Time Analysis (<72hr):** | ☐Yes | ☑No | ☐N/A |
| **Rush Turn Around Time Requested:** | ☐Yes | ☑No | ☐N/A |
| Containers Intact: | ☑Yes | ☐No | ☐N/A |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☑Yes | ☐No | ☐N/A |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | ☐Yes | ☐No | ☑N/A |
| All containers needing preservation are found to be in compliance with EPA recommendation. | ☐Yes | ☐No | ☑N/A |
| Headspace in VOA Vials ( >6mm): | ☒Yes | ☐No | ☐N/A |
| Trip Blank Present: | ☒Yes | ☐No | ☐N/A |
| Trip Blank Custody Seals Present | ☒Yes | ☐No | ☐N/A |
| **Project Manager Review** | | | |
| Samples Arrived within Hold Time: | ☑Yes | ☐No | ☐N/A |
| Sufficient Volume: | ☑Yes | ☐No | ☐N/A |
| Correct Containers Used: | ☑Yes | ☐No | ☐N/A |

9. (Circle) HNO3 H2SO4 NaOH HCl

10. 1 T.B. vial +2 vials for MW-168S

11.

12.

13.

14.

**Client Notification/ Resolution:** Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

**Project Manager Review:** J Sayer **Date:** 9/30/13

# Sample Container Count

CLIENT: Mundell

COC PAGE 1 of 1
COC ID# 1561942

Project # 5087579

| Sample Line Item | DG9H | AG1U | WGFU | AG0U | R 4/6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | | | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber gl | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved **amber** vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | I | Wipe/Swab |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber gla | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber gla | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved **clear** vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear gla | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

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October 16, 2013

Mr. Mark Breting
Mundell & Associates
110 S. Downey Ave.
Indianapolis, IN 46228

RE: Project: MI Plaza M01046
Pace Project No.: 5087431

Dear Mr. Breting:
Enclosed are the analytical results for sample(s) received by the laboratory on September 26, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kelly M Jones

Kelly Jones for
Tina Sayer
tina.sayer@pacelabs.com
Project Manager

Enclosures



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## CERTIFICATIONS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Indiana Certification IDs**
7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 200074
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP Certification #: 101170-0
Pennsylvania Certification #: 68-04991
West Virginia Certification #: 330

**Ohio Certification IDs**
1233 Dublin Road, Columbus, OH 43215
Indiana Drinking Water Certification #: C-OH-11
NVLAP Certification #: 90132
Ohio Microbiology Certification #: 943
Ohio Drinking Water Certification #: 1030



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## SAMPLE SUMMARY

Project: MI Plaza M01046
Pace Project No.: 5087431

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **5087431001** | **MMW-9S** | Water | 09/25/13 09:22 | 09/26/13 12:00 |
| **5087431002** | **MMW-10S** | Water | 09/25/13 10:44 | 09/26/13 12:00 |
| **5087431003** | **MMW-P-10S** | Water | 09/25/13 11:57 | 09/26/13 12:00 |
| **5087431004** | **MMW-P-10D** | Water | 09/25/13 12:56 | 09/26/13 12:00 |
| **5087431005** | **MMW-P-08** | Water | 09/25/13 14:05 | 09/26/13 12:00 |
| **5087431006** | **MMW-P-07** | Water | 09/25/13 14:48 | 09/26/13 12:00 |
| **5087431007** | **MMW-P-02** | Water | 09/25/13 15:51 | 09/26/13 12:00 |
| **5087431008** | **Dup 1** | Water | 09/25/13 08:00 | 09/26/13 12:00 |



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## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087431

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **5087431001** | **MMW-9S** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431002** | **MMW-10S** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431003** | **MMW-P-10S** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431004** | **MMW-P-10D** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431005** | **MMW-P-08** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431006** | **MMW-P-07** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431007** | **MMW-P-02** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |
| **5087431008** | **Dup 1** | RSK 175 Modified | HEB | 3 |
| | | EPA 8260 | AMV | 18 |

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: MI Plaza M01046
Pace Project No.: 5087431

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| | | SM 5310C | GR1 | 1 |
| | | ASTM D516-90,02 | TPD | 1 |
| | | EPA 353.2 | DDM | 2 |



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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-9S** **Lab ID: 5087431001** Collected: 09/25/13 09:22 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 14:54 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/09/13 14:54 | 74-85-1 | N2 |
| Methane | **7580** | ug/L | 10.0 | 1 | | 10/09/13 14:54 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 75-35-4 | |
| cis-1,2-Dichloroethene | **1000** | ug/L | 50.0 | 10 | | 10/08/13 16:52 | 156-59-2 | |
| trans-1,2-Dichloroethene | **33.2** | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:40 | 79-01-6 | |
| Vinyl chloride | **1370** | ug/L | 20.0 | 10 | | 10/08/13 16:52 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/09/13 18:40 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 79-116 | 1 | | 10/09/13 18:40 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 90 | %. | 80-114 | 1 | | 10/09/13 18:40 | 460-00-4 | |
| Toluene-d8 (S) | 95 | %. | 81-110 | 1 | | 10/09/13 18:40 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **4.9** | mg/L | 0.30 | 1 | | 10/09/13 19:32 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **99.6** | mg/L | 50.0 | 10 | | 10/03/13 14:19 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:11 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:11 | | |

## REPORT OF LABORATORY ANALYSIS

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-10S** **Lab ID: 5087431002** Collected: 09/25/13 10:44 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 15:31 | 74-84-0 | N2 |
| Ethene | **279** | ug/L | 10.0 | 1 | | 10/09/13 15:31 | 74-85-1 | N2 |
| Methane | **9890** | ug/L | 10.0 | 1 | | 10/09/13 15:31 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 75-35-4 | |
| cis-1,2-Dichloroethene | **126** | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 91-20-3 | |
| Tetrachloroethene | **6.6** | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 71-55-6 | |
| Trichloroethene | **5.2** | ug/L | 5.0 | 1 | | 10/08/13 17:31 | 79-01-6 | |
| Vinyl chloride | **463** | ug/L | 20.0 | 10 | | 10/08/13 18:11 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 17:31 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 118 | %. | 79-116 | 1 | | 10/08/13 17:31 | 1868-53-7 | S5 |
| 4-Bromofluorobenzene (S) | 95 | %. | 80-114 | 1 | | 10/08/13 17:31 | 460-00-4 | |
| Toluene-d8 (S) | 81 | %. | 81-110 | 1 | | 10/08/13 17:31 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **5.0** | mg/L | 0.30 | 1 | | 09/29/13 08:02 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **137** | mg/L | 50.0 | 10 | | 10/03/13 14:26 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:14 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:14 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-P-10S** **Lab ID: 5087431003** Collected: 09/25/13 11:57 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 15:50 | 74-84-0 | N2 |
| Ethene | ND | ug/L | 10.0 | 1 | | 10/09/13 15:50 | 74-85-1 | N2 |
| Methane | **11800** | ug/L | 10.0 | 1 | | 10/09/13 15:50 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 18:50 | 79-01-6 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 10/08/13 18:50 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 18:50 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 125 | %. | 79-116 | 1 | | 10/08/13 18:50 | 1868-53-7 | S3 |
| 4-Bromofluorobenzene (S) | 93 | %. | 80-114 | 1 | | 10/08/13 18:50 | 460-00-4 | |
| Toluene-d8 (S) | 81 | %. | 81-110 | 1 | | 10/08/13 18:50 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **4.6** | mg/L | 0.30 | 1 | | 09/29/13 08:35 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **30.6** | mg/L | 12.5 | 2.5 | | 10/03/13 14:26 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:15 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:15 | | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-P-10D** **Lab ID: 5087431004** Collected: 09/25/13 12:56 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 16:09 | 74-84-0 | N2 |
| Ethene | **358** | ug/L | 10.0 | 1 | | 10/09/13 16:09 | 74-85-1 | N2 |
| Methane | **29800** | ug/L | 10.0 | 1 | | 10/09/13 16:09 | 74-82-8 | 2d,E,N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | **152** | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 19:29 | 79-01-6 | |
| Vinyl chloride | **2020** | ug/L | 20.0 | 10 | | 10/08/13 20:09 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 19:29 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 125 | %. | 79-116 | 1 | | 10/08/13 19:29 | 1868-53-7 | S5 |
| 4-Bromofluorobenzene (S) | 100 | %. | 80-114 | 1 | | 10/08/13 19:29 | 460-00-4 | |
| Toluene-d8 (S) | 84 | %. | 81-110 | 1 | | 10/08/13 19:29 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **4.9** | mg/L | 0.30 | 1 | | 09/29/13 09:09 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **50.2** | mg/L | 12.5 | 2.5 | | 10/03/13 14:36 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:16 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:16 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-P-08** **Lab ID: 5087431005** Collected: 09/25/13 14:05 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | **11.9** | ug/L | 10.0 | 1 | | 10/09/13 16:27 | 74-84-0 | N2 |
| Ethene | **164** | ug/L | 10.0 | 1 | | 10/09/13 16:27 | 74-85-1 | N2 |
| Methane | **7340** | ug/L | 10.0 | 1 | | 10/09/13 16:27 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | **37.2** | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/09/13 16:02 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/09/13 16:02 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/09/13 16:02 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/09/13 16:02 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 11:56 | 79-01-6 | |
| Vinyl chloride | **197** | ug/L | 2.0 | 1 | | 10/08/13 11:56 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 11:56 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 106 | %. | 79-116 | 1 | | 10/08/13 11:56 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 97 | %. | 80-114 | 1 | | 10/08/13 11:56 | 460-00-4 | |
| Toluene-d8 (S) | 82 | %. | 81-110 | 1 | | 10/08/13 11:56 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **6.7** | mg/L | 0.30 | 1 | | 10/09/13 21:39 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **34.7** | mg/L | 12.5 | 2.5 | | 10/03/13 14:36 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:17 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:17 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-P-07** **Lab ID: 5087431006** Collected: 09/25/13 14:48 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 17:42 | 74-84-0 | 1d,N2 |
| Ethene | **83.7** | ug/L | 10.0 | 1 | | 10/09/13 17:42 | 74-85-1 | N2 |
| Methane | **16500** | ug/L | 10.0 | 1 | | 10/09/13 17:42 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 75-35-4 | |
| cis-1,2-Dichloroethene | **25.1** | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/09/13 16:41 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/09/13 16:41 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/09/13 16:41 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/09/13 16:41 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:15 | 79-01-6 | |
| Vinyl chloride | **239** | ug/L | 2.0 | 1 | | 10/08/13 13:15 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 13:15 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 106 | %. | 79-116 | 1 | | 10/08/13 13:15 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 96 | %. | 80-114 | 1 | | 10/08/13 13:15 | 460-00-4 | |
| Toluene-d8 (S) | 81 | %. | 81-110 | 1 | | 10/08/13 13:15 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **4.3** | mg/L | 0.30 | 1 | | 10/09/13 22:04 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **77.3** | mg/L | 25.0 | 5 | | 10/03/13 14:37 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:18 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:18 | | |

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# ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: MMW-P-02** **Lab ID: 5087431007** Collected: 09/25/13 15:51 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 18:00 | 74-84-0 | 1d,N2 |
| Ethene | **18.0** | ug/L | 10.0 | 1 | | 10/09/13 18:00 | 74-85-1 | N2 |
| Methane | **4370** | ug/L | 10.0 | 1 | | 10/09/13 18:00 | 74-82-8 | N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 75-35-4 | |
| cis-1,2-Dichloroethene | **22.7** | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/09/13 17:21 | 91-20-3 | |
| Tetrachloroethene | **11.2** | ug/L | 5.0 | 1 | | 10/09/13 17:21 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/09/13 17:21 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/09/13 17:21 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 13:54 | 79-01-6 | |
| Vinyl chloride | **165** | ug/L | 2.0 | 1 | | 10/08/13 13:54 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 13:54 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 107 | %. | 79-116 | 1 | | 10/08/13 13:54 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 92 | %. | 80-114 | 1 | | 10/08/13 13:54 | 460-00-4 | |
| Toluene-d8 (S) | 79 | %. | 81-110 | 1 | | 10/08/13 13:54 | 2037-26-5 | 4d,S0 |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **2.0** | mg/L | 0.30 | 1 | | 10/09/13 22:35 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **145** | mg/L | 25.0 | 5 | | 10/03/13 14:37 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:19 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:19 | | |

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## ANALYTICAL RESULTS

Project: MI Plaza M01046
Pace Project No.: 5087431

**Sample: Dup 1** **Lab ID: 5087431008** Collected: 09/25/13 08:00 Received: 09/26/13 12:00 Matrix: Water

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **RSK 175 Headspace** | Analytical Method: RSK 175 Modified | | | | | | | |
| Ethane | ND | ug/L | 10.0 | 1 | | 10/09/13 18:19 | 74-84-0 | 1d,N2 |
| Ethene | **283** | ug/L | 10.0 | 1 | | 10/09/13 18:19 | 74-85-1 | N2 |
| Methane | **22500** | ug/L | 10.0 | 1 | | 10/09/13 18:19 | 74-82-8 | 2d,E,N2 |
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | |
| Benzene | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 71-43-2 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 56-23-5 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 67-66-3 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 75-35-4 | |
| cis-1,2-Dichloroethene | **128** | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 156-60-5 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 100-41-4 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 75-09-2 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:00 | 91-20-3 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:00 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 10/09/13 18:00 | 108-88-3 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 10/09/13 18:00 | 71-55-6 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 10/08/13 14:34 | 79-01-6 | |
| Vinyl chloride | **1740** | ug/L | 20.0 | 10 | | 10/08/13 15:13 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 10/08/13 14:34 | 1330-20-7 | |
| ***Surrogates*** | | | | | | | | |
| Dibromofluoromethane (S) | 109 | %. | 79-116 | 1 | | 10/08/13 14:34 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 91 | %. | 80-114 | 1 | | 10/08/13 14:34 | 460-00-4 | |
| Toluene-d8 (S) | 81 | %. | 81-110 | 1 | | 10/08/13 14:34 | 2037-26-5 | |
| **5310C TOC** | Analytical Method: SM 5310C | | | | | | | |
| Total Organic Carbon | **4.4** | mg/L | 0.30 | 1 | | 10/09/13 23:00 | 7440-44-0 | N2 |
| **ASTM D516-9002 Sulfate Water** | Analytical Method: ASTM D516-90,02 | | | | | | | |
| Sulfate | **51.1** | mg/L | 25.0 | 5 | | 10/03/13 14:42 | 14808-79-8 | N2 |
| **353.2 Nitrogen, NO2/NO3 unpres** | Analytical Method: EPA 353.2 | | | | | | | |
| Nitrogen, Nitrate | ND | mg/L | 0.10 | 1 | | 09/26/13 22:10 | | |
| Nitrogen, Nitrite | ND | mg/L | 0.10 | 1 | | 09/26/13 22:10 | | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: GCV/17239 Analysis Method: RSK 175 Modified
QC Batch Method: RSK 175 Modified Analysis Description: RSK 175 HEADSPACE
Associated Lab Samples: 5087431001, 5087431002, 5087431003, 5087431004, 5087431005, 5087431006, 5087431007, 5087431008

METHOD BLANK: 994029 Matrix: Water
Associated Lab Samples: 5087431001, 5087431002, 5087431003, 5087431004, 5087431005, 5087431006, 5087431007, 5087431008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Ethane | ug/L | ND | 10.0 | 10/09/13 14:35 | N2 |
| Ethene | ug/L | ND | 10.0 | 10/09/13 14:35 | N2 |
| Methane | ug/L | ND | 10.0 | 10/09/13 14:35 | N2 |

LABORATORY CONTROL SAMPLE: 994030

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Ethane | ug/L | 1980 | 1730 | 88 | 70-130 | N2 |
| Ethene | ug/L | 2250 | 2590 | 115 | 70-130 | N2 |
| Methane | ug/L | 1980 | 2170 | 110 | 70-130 | N2 |

SAMPLE DUPLICATE: 994031

| Parameter | Units | 5087431001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Ethane | ug/L | ND | 5.2J | | 20 | N2 |
| Ethene | ug/L | ND | 15.1 | | 20 | N2 |
| Methane | ug/L | 7580 | 6970 | 8 | 20 | N2 |

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# QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: MSV/58003 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087431002, 5087431003, 5087431004

METHOD BLANK: 993057 Matrix: Water
Associated Lab Samples: 5087431002, 5087431003, 5087431004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Benzene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Chloroform | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Naphthalene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Toluene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/08/13 10:57 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/08/13 10:57 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/08/13 10:57 | |
| 4-Bromofluorobenzene (S) | %. | 98 | 80-114 | 10/08/13 10:57 | |
| Dibromofluoromethane (S) | %. | 114 | 79-116 | 10/08/13 10:57 | |
| Toluene-d8 (S) | %. | 85 | 81-110 | 10/08/13 10:57 | |

LABORATORY CONTROL SAMPLE: 993058

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 53.9 | 108 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 42.7 | 85 | 68-127 | |
| Benzene | ug/L | 50 | 43.1 | 86 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 50.0 | 100 | 56-137 | |
| Chloroform | ug/L | 50 | 46.4 | 93 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 48.3 | 97 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 46.2 | 92 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 43.3 | 87 | 68-132 | |
| Naphthalene | ug/L | 50 | 40.0 | 80 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 43.9 | 88 | 69-130 | |
| Toluene | ug/L | 50 | 39.1 | 78 | 72-122 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 43.9 | 88 | 72-124 | |
| Trichloroethene | ug/L | 50 | 50.2 | 100 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 56.4 | 113 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 140 | 93 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 107 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 113 | 79-116 | |
| Toluene-d8 (S) | %. | | | 88 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 993059 993060

| Parameter | Units | 5087471012 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 41.8 | 39.7 | 84 | 79 | 60-138 | 5 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 35.8 | 33.6 | 72 | 67 | 55-145 | 6 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 34.0 | 34.3 | 68 | 69 | 62-129 | 1 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 38.8 | 34.9 | 78 | 70 | 46-142 | 11 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 39.7 | 37.7 | 79 | 75 | 54-150 | 5 | 20 | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 39.4 | 36.1 | 79 | 72 | 60-135 | 9 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 23.4 | 17.9 | 47 | 36 | 28-153 | 27 | 20 | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 36.6 | 34.6 | 73 | 69 | 45-156 | 6 | 20 | |
| Naphthalene | ug/L | ND | 50 | 50 | 26.6 | 22.5 | 53 | 45 | 39-140 | 16 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 23.3 | 18.6 | 47 | 37 | 33-151 | 22 | 20 | |
| Toluene | ug/L | ND | 50 | 50 | 23.9 | 19.9 | 48 | 40 | 50-132 | 18 | 20 | M0 |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 39.1 | 34.2 | 78 | 68 | 40-153 | 13 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 34.2 | 30.3 | 68 | 61 | 50-143 | 12 | 20 | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 53.6 | 49.5 | 107 | 99 | 44-145 | 8 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 67.5 | 51.2 | 45 | 34 | 29-145 | 28 | 20 | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 105 | 104 | 80-114 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 108 | 105 | 79-116 | | | 3d |
| Toluene-d8 (S) | %. | | | | | | 88 | 87 | 81-110 | | | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: MSV/58088 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 5087431001, 5087431005, 5087431006, 5087431007, 5087431008

METHOD BLANK: 994447 Matrix: Water
Associated Lab Samples: 5087431001, 5087431005, 5087431006, 5087431007, 5087431008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Benzene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Chloroform | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Ethylbenzene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Methylene Chloride | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Naphthalene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Toluene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Trichloroethene | ug/L | ND | 5.0 | 10/08/13 10:37 | |
| Vinyl chloride | ug/L | ND | 2.0 | 10/08/13 10:37 | |
| Xylene (Total) | ug/L | ND | 10.0 | 10/08/13 10:37 | |
| 4-Bromofluorobenzene (S) | %. | 96 | 80-114 | 10/08/13 10:37 | |
| Dibromofluoromethane (S) | %. | 101 | 79-116 | 10/08/13 10:37 | |
| Toluene-d8 (S) | %. | 81 | 81-110 | 10/08/13 10:37 | |

LABORATORY CONTROL SAMPLE: 994448

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 40.1 | 80 | 71-129 | |
| 1,1-Dichloroethene | ug/L | 50 | 46.3 | 93 | 68-127 | |
| Benzene | ug/L | 50 | 44.2 | 88 | 74-122 | |
| Carbon tetrachloride | ug/L | 50 | 43.1 | 86 | 56-137 | |
| Chloroform | ug/L | 50 | 43.2 | 86 | 78-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 42.8 | 86 | 75-122 | |
| Ethylbenzene | ug/L | 50 | 42.6 | 85 | 66-133 | |
| Methylene Chloride | ug/L | 50 | 50.3 | 101 | 68-132 | |
| Naphthalene | ug/L | 50 | 39.1 | 78 | 68-127 | |
| Tetrachloroethene | ug/L | 50 | 35.1 | 70 | 69-130 | |
| Toluene | ug/L | 50 | 35.0 | 70 | 72-122 | 5d |
| trans-1,2-Dichloroethene | ug/L | 50 | 43.1 | 86 | 72-124 | |
| Trichloroethene | ug/L | 50 | 44.3 | 89 | 76-126 | |
| Vinyl chloride | ug/L | 50 | 40.5 | 81 | 59-126 | |
| Xylene (Total) | ug/L | 150 | 132 | 88 | 70-124 | |
| 4-Bromofluorobenzene (S) | %. | | | 111 | 80-114 | |
| Dibromofluoromethane (S) | %. | | | 100 | 79-116 | |
| Toluene-d8 (S) | %. | | | 82 | 81-110 | |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 993051 993052

| Parameter | Units | 5087431001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 34.7 | 35.8 | 69 | 72 | 60-138 | 3 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 41.1 | 44.0 | 82 | 88 | 55-145 | 7 | 20 | |
| Benzene | ug/L | ND | 50 | 50 | 36.9 | 37.3 | 74 | 75 | 62-129 | 1 | 20 | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 36.7 | 39.3 | 73 | 79 | 46-142 | 7 | 20 | |
| Chloroform | ug/L | ND | 50 | 50 | 43.2 | 39.9 | 86 | 80 | 54-150 | 8 | 20 | |
| cis-1,2-Dichloroethene | ug/L | 1000 | 50 | 50 | 683 | 659 | -639 | -688 | 60-135 | 4 | 20 | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 17.6 | 26.1 | 35 | 52 | 28-153 | 39 | 20 | R1 |
| Methylene Chloride | ug/L | ND | 50 | 50 | 49.6 | 43.5 | 99 | 87 | 45-156 | 13 | 20 | |
| Naphthalene | ug/L | ND | 50 | 50 | 24.4 | 25.2 | 49 | 50 | 39-140 | 3 | 20 | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 15.8 | 23.2 | 32 | 46 | 33-151 | 38 | 20 | M0,R1 |
| Toluene | ug/L | ND | 50 | 50 | 21.2 | 24.5 | 42 | 49 | 50-132 | 14 | 20 | M0 |
| trans-1,2-Dichloroethene | ug/L | 33.2 | 50 | 50 | 63.7 | 67.1 | 61 | 68 | 40-153 | 5 | 20 | |
| Trichloroethene | ug/L | ND | 50 | 50 | 31.3 | 35.6 | 63 | 71 | 50-143 | 13 | 20 | |
| Vinyl chloride | ug/L | 1370 | 50 | 50 | 806 | 727 | -1130 | -1290 | 44-145 | 10 | 20 | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 53.4 | 77.1 | 36 | 51 | 29-145 | 36 | 20 | R1,RS |
| 4-Bromofluorobenzene (S) | %. | | | | | | 111 | 109 | 80-114 | | | |
| Dibromofluoromethane (S) | %. | | | | | | 104 | 100 | 79-116 | | | |
| Toluene-d8 (S) | %. | | | | | | 85 | 78 | 81-110 | | | S0 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: OHIO/8099 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C TOC
Associated Lab Samples: 5087431002, 5087431003, 5087431004

METHOD BLANK: 988215 Matrix: Water
Associated Lab Samples: 5087431002, 5087431003, 5087431004

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 0.30 | 09/28/13 23:48 | N2 |

LABORATORY CONTROL SAMPLE: 988216

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 5 | 4.6 | 93 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 988218 988219

| Parameter | Units | 5087157001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 3.5 | 4 | 4 | 8.0 | 7.9 | 114 | 111 | 75-125 | 1 | 20 | N2 |

SAMPLE DUPLICATE: 988217

| Parameter | Units | 5087157001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 3.5 | 3.5 | 1 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: OHIO/8192 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C TOC
Associated Lab Samples: 5087431001, 5087431005, 5087431006, 5087431007, 5087431008

METHOD BLANK: 994038 Matrix: Water
Associated Lab Samples: 5087431001, 5087431005, 5087431006, 5087431007, 5087431008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | ND | 0.30 | 10/09/13 18:46 | N2 |

LABORATORY CONTROL SAMPLE: 994039

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 5 | 4.4 | 89 | 80-120 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 994041 994042

| Parameter | Units | 5087431001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 4.9 | 4 | 4 | 8.9 | 8.7 | 99 | 94 | 75-125 | 2 | 20 | N2 |

SAMPLE DUPLICATE: 994040

| Parameter | Units | 5087431001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|
| Total Organic Carbon | mg/L | 4.9 | 4.7 | 4 | 20 | N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: WET/13293 Analysis Method: ASTM D516-90,02
QC Batch Method: ASTM D516-90,02 Analysis Description: ASTM D516-9002 Sulfate Water
Associated Lab Samples: 5087431001, 5087431002, 5087431003, 5087431004, 5087431005, 5087431006, 5087431007, 5087431008

METHOD BLANK: 991076 Matrix: Water
Associated Lab Samples: 5087431001, 5087431002, 5087431003, 5087431004, 5087431005, 5087431006, 5087431007, 5087431008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Sulfate | mg/L | ND | 5.0 | 10/03/13 14:00 | N2 |

LABORATORY CONTROL SAMPLE: 991077

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfate | mg/L | 20 | 19.8 | 99 | 90-110 | N2 |

MATRIX SPIKE SAMPLE: 991078

| Parameter | Units | 5087335001 Result | Spike Conc. | MS Result | MS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 30.1 | 50 | 84.7 | 109 | 90-110 | N2 |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 991079 991080

| Parameter | Units | 5087431001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | mg/L | 99.6 | 200 | 200 | 286 | 274 | 93 | 87 | 90-110 | 4 | 20 | M0,N2 |

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## QUALITY CONTROL DATA

Project: MI Plaza M01046
Pace Project No.: 5087431

QC Batch: WETA/10824 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 5087431001, 5087431002, 5087431003, 5087431004, 5087431005, 5087431006, 5087431007, 5087431008

METHOD BLANK: 987138 Matrix: Water
Associated Lab Samples: 5087431001, 5087431002, 5087431003, 5087431004, 5087431005, 5087431006, 5087431007, 5087431008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 0.10 | 09/26/13 22:04 | |
| Nitrogen, Nitrite | mg/L | ND | 0.10 | 09/26/13 22:04 | |

LABORATORY CONTROL SAMPLE: 987139

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | 2 | 2.1 | 103 | 90-110 | |
| Nitrogen, Nitrite | mg/L | 2 | 2.1 | 103 | 90-110 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 987140 987141

| Parameter | Units | 5087431001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrogen, Nitrate | mg/L | ND | 2 | 2 | 1.5 | 1.6 | 75 | 78 | 90-110 | 3 | 20 | M3 |
| Nitrogen, Nitrite | mg/L | ND | 2 | 2 | 1.9 | 1.9 | 93 | 92 | 90-110 | 1 | 20 | |

## REPORT OF LABORATORY ANALYSIS

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**Pace Analytical Services, Inc.**
1233 Dublin Road
Columbus, OH 43215
(614)486-5421

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

# QUALIFIERS

Project: MI Plaza M01046
Pace Project No.: 5087431

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| 1d | Ethane result may be biased low as indicated by the closing CCV at 79.6% recovery (80-120% control limits). HEB 10/10/13 |
| 2d | Further analysis not possible within hold time. HEB 10/10/13 |
| 3d | Multiple compounds have matrix spike recovery and/or RPD's that are outside acceptance limits. Refer to LCS for system control and data acceptability. AMV 10/8/13 |
| 4d | Sample results confirmed by second analysis. AMV 10/9/13 |
| 5d | Toluene was reported from another analysis with passing LCS. AMV 10/9/13 |
| E | Analyte concentration exceeded the calibration range. The reported result is estimated. |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| M3 | Matrix spike recovery was outside laboratory control limits due to matrix interferences. |
| N2 | The lab does not hold TNI accreditation for this parameter. |
| R1 | RPD value was outside control limits. |
| RS | The RPD value in one of the constituent analytes was outside the control limits. |
| S0 | Surrogate recovery outside laboratory control limits. |
| S3 | Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| S5 | Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis). |



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Indianapolis, IN 46268
(317)875-5894

# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MI Plaza M01046
Pace Project No.: 5087431

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **5087431001** | **MMW-9S** | RSK 175 Modified | GCV/17239 | | |
| **5087431002** | **MMW-10S** | RSK 175 Modified | GCV/17239 | | |
| **5087431003** | **MMW-P-10S** | RSK 175 Modified | GCV/17239 | | |
| **5087431004** | **MMW-P-10D** | RSK 175 Modified | GCV/17239 | | |
| **5087431005** | **MMW-P-08** | RSK 175 Modified | GCV/17239 | | |
| **5087431006** | **MMW-P-07** | RSK 175 Modified | GCV/17239 | | |
| **5087431007** | **MMW-P-02** | RSK 175 Modified | GCV/17239 | | |
| **5087431008** | **Dup 1** | RSK 175 Modified | GCV/17239 | | |
| **5087431001** | **MMW-9S** | EPA 8260 | MSV/58088 | | |
| **5087431002** | **MMW-10S** | EPA 8260 | MSV/58003 | | |
| **5087431003** | **MMW-P-10S** | EPA 8260 | MSV/58003 | | |
| **5087431004** | **MMW-P-10D** | EPA 8260 | MSV/58003 | | |
| **5087431005** | **MMW-P-08** | EPA 8260 | MSV/58088 | | |
| **5087431006** | **MMW-P-07** | EPA 8260 | MSV/58088 | | |
| **5087431007** | **MMW-P-02** | EPA 8260 | MSV/58088 | | |
| **5087431008** | **Dup 1** | EPA 8260 | MSV/58088 | | |
| **5087431001** | **MMW-9S** | SM 5310C | OHIO/8192 | | |
| **5087431002** | **MMW-10S** | SM 5310C | OHIO/8099 | | |
| **5087431003** | **MMW-P-10S** | SM 5310C | OHIO/8099 | | |
| **5087431004** | **MMW-P-10D** | SM 5310C | OHIO/8099 | | |
| **5087431005** | **MMW-P-08** | SM 5310C | OHIO/8192 | | |
| **5087431006** | **MMW-P-07** | SM 5310C | OHIO/8192 | | |
| **5087431007** | **MMW-P-02** | SM 5310C | OHIO/8192 | | |
| **5087431008** | **Dup 1** | SM 5310C | OHIO/8192 | | |
| **5087431001** | **MMW-9S** | ASTM D516-90,02 | WET/13293 | | |
| **5087431002** | **MMW-10S** | ASTM D516-90,02 | WET/13293 | | |
| **5087431003** | **MMW-P-10S** | ASTM D516-90,02 | WET/13293 | | |
| **5087431004** | **MMW-P-10D** | ASTM D516-90,02 | WET/13293 | | |
| **5087431005** | **MMW-P-08** | ASTM D516-90,02 | WET/13293 | | |
| **5087431006** | **MMW-P-07** | ASTM D516-90,02 | WET/13293 | | |
| **5087431007** | **MMW-P-02** | ASTM D516-90,02 | WET/13293 | | |
| **5087431008** | **Dup 1** | ASTM D516-90,02 | WET/13293 | | |
| **5087431001** | **MMW-9S** | EPA 353.2 | WETA/10824 | | |
| **5087431002** | **MMW-10S** | EPA 353.2 | WETA/10824 | | |
| **5087431003** | **MMW-P-10S** | EPA 353.2 | WETA/10824 | | |
| **5087431004** | **MMW-P-10D** | EPA 353.2 | WETA/10824 | | |
| **5087431005** | **MMW-P-08** | EPA 353.2 | WETA/10824 | | |
| **5087431006** | **MMW-P-07** | EPA 353.2 | WETA/10824 | | |
| **5087431007** | **MMW-P-02** | EPA 353.2 | WETA/10824 | | |
| **5087431008** | **Dup 1** | EPA 353.2 | WETA/10824 | | |

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1561925

**Section A** Required Client Information:

Company: Mundell & Assoc.
Address: 110 S. Downey Ave
Indpls, IN
Email To:
Phone: Fax:
Requested Due Date/TAT: STD

**Section B** Required Project Information:

Report To: Mark Brenney
Copy To: Matt Bono
Purchase Order No.:
Project Name: M 1 Plaza
Project Number: M06096

**Section C** Invoice Information:

Attention: Merle Tebbe
Company Name: Mundell
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

**Section D** Required Client Information

**SAMPLE ID** (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED COMPOSITE START DATE | COMPOSITE START TIME | COMPOSITE END/GRAB DATE | COMPOSITE END/GRAB TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | $H_2SO_4$ | $HNO_3$ | HCl | NaOH | $Na_2S_2O_3$ | Methanol | Other | Analysis Test Y/N | SL VOC's 8260 | voc 415.1 | nitrate/nitrite 353.2 | sulfate 375.4 | MEE RSK175 | RFA low level Am23G | Residual Chlorine (Y/N) | Pace Project No./ Lab I.D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MMW-05 | WT | G | | | 9.25.13 | 9:22A | | 10 | X | X | | X | | | | X | X | X | X | X | X | X | X | | 5087431 |
| 2 | MS (MSD) | | | | | | 9:22A | | 20 | X | X | | X | | | | X | | | | | | | | | -001 |
| 3 | MMW-10S | | | | | | 10:44A | | 10 | X | X | | X | | | | X | | | | | | | | | -002 |
| 4 | MMW-D-10S | | | | | | 11:57A | | 10 | X | X | | X | | | | X | | | | | | | | | -003 |
| 5 | MMW-D-10D | | | | | | 12:56P | | 10 | X | X | | X | | | | X | | | | | | | | | -004 |
| 6 | MMW-D-08 | | | | | | 2:05P | | 10 | X | X | | X | | | | X | | | | | | | | | -005 |
| 7 | MMW-D-07 | | | | | | 2:48P | | 10 | X | X | | X | | | | X | | | | | | | | | -006 |
| 8 | MMW-D-02 | | | | | | 3:51P | | 10 | X | X | | X | | | | X | | | | | | | | | -007 |
| 9 | DUP 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | | 9/26/13 | 12.00 | | 9/26/13 | 12.00 | 2.4° Y |

@ lab: MB 9/26/13 12:58
Pace courier w/ice

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Andy Dammeyer
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 9.25.13

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



F-ALL-Q-020rev.07, 15-May-2007

## Sample Condition Upon Receipt

Pace Analytical

Client Name: Mundell + Assoc. Project # 5087431

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals Intact: ☐ yes ☑ no

Date/Time 5035A kits placed in freezer: _____

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other foam

Thermometer Used: 1 2 3 4 6 A B C D E

Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable): 2.4°C

Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: MB 9/26/13

| | | Comments: |
|---|---|---|
| Chain of Custody Present: | ☑Yes ☐No ☐N/A | 1. |
| Chain of Custody Filled Out: | ☑Yes ☐No ☐N/A | 2. |
| Chain of Custody Relinquished: | ☑Yes ☐No ☐N/A | 3. |
| Sampler Name & Signature on COC: | ☑Yes ☐No ☐N/A | 4. |
| **Short Hold Time Analysis (<72hr):** | ☑Yes ☐No ☐N/A | 5. MB 9/26/13 Nitrate MB |
| **Rush Turn Around Time Requested:** | ☐Yes ☐No ☑N/A | 6. |
| Containers Intact: | ☑Yes ☐No ☐N/A | 7. |
| Sample Labels match COC: -Includes date/time/ID/Analysis | ☑Yes ☐No ☐N/A | 8. |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, TOC, O&G | ☐Yes ☐No ☑N/A | 9. (Circle) HNO3 H2SO4 NaOH HCl |
| All containers needing preservation are found to be in compliance with EPA recommendation. | ☐Yes ☐No ☑N/A | |
| Headspace in VOA Vials ( >6mm): | ☐Yes ☑No ☐N/A | 10. |
| Trip Blank Present: | ☐Yes ☐No ☑N/A | 11. |
| Trip Blank Custody Seals Present | ☐Yes ☐No ☑N/A | |
| **Project Manager Review** | | |
| Samples Arrived within Hold Time: | ☑Yes ☐No ☐N/A | 12. |
| Sufficient Volume: | ☑Yes ☐No ☐N/A | 13. |
| Correct Containers Used: | ☑Yes ☐No ☐N/A | 14. |

**Client Notification/ Resolution:** Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

**Project Manager Review:** _____ **Date:** 9/26/13

# Sample Container Count

CLIENT: Mundell & Assoc.

COC PAGE 1 of 1
COC ID# 1561925

Project # 5087431

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| Sample Line Item | DG9H | AG1U | WGFU | AG0U | R 4/6 | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | Benzyalkonium Chloride | | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | | | | | | | | | 3 | | 3 | | 5 | | |
| 2 | — see line #1 MB 9/26/13 — | | | | | | | | | | | | | | | |
| 3 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 4 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 5 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 6 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 7 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 8 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 9 | 6 | | | | | | | | | 1 | | 1 | | 2 | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DG9H | 40mL HCL amber voa vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
| AG1U | 1liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S | 40mL H2SO4 amber vial |
| WGFU | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T | 40mL Na Thio amber vial |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber gl | BP1Z | 1 liter NaOH, Zn, Ac | DG9U | 40mL unpreserved **amber** vial |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | I | Wipe/Swab |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU | 4oz unpreserved amber wide |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber gla | BP2Z | 500mL NaOH, Zn Ac | U | Summa Can |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber gla | AF | Air Filter | VG9H | 40mL HCL clear vial |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3C | 250mL NaOH plastic | VG9T | 40mL Na Thio. clear vial |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U | 40mL unpreserved **clear** vial |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear gla | C | Air Cassettes | VSG | Headspace septa vial & HCL |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX | 4oz wide jar w/hexane wipe |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC | Ziploc Bag |

# AIR ANALYTICAL RESULTS

**Pace Analytical Services, Inc.**
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

September 17, 2013

Mark Breting
Mundell And Associates
110 S. Downey St.
Indianapolis, IN 46219

RE: Project: M01046 MI Plaza
Pace Project No.: 10241081

Dear Mark Breting:
Enclosed are the analytical results for sample(s) received by the laboratory on September 04, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout

carolynne.trout@pacelabs.com
Project Manager

Enclosures



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# CERTIFICATIONS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Minnesota Certification IDs**

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nebraska Certification #: Pace
Nevada Certification #: MN_00064
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970



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## SAMPLE SUMMARY

Project: M01046 MI Plaza
Pace Project No.: 10241081

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **10241081001** | **MMW-P-12 S** | Air | 08/29/13 11:26 | 09/04/13 12:45 |
| **10241081002** | **MMW-P-12 D** | Air | 08/29/13 11:26 | 09/04/13 12:45 |
| **10241081003** | **MMW-P-11 S** | Air | 08/29/13 12:42 | 09/04/13 12:45 |
| **10241081004** | **MMW-P-11 DR** | Air | 08/29/13 12:42 | 09/04/13 12:45 |
| **10241081005** | **MMW-12 S** | Air | 08/29/13 13:25 | 09/04/13 12:45 |
| **10241081006** | **MMW-11 S** | Air | 08/29/13 14:03 | 09/04/13 12:45 |
| **10241081007** | **Unlabled PACE1519** | Air | 08/29/13 00:00 | 09/04/13 12:45 |

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## SAMPLE ANALYTE COUNT

Project: M01046 MI Plaza
Pace Project No.: 10241081

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **10241081001** | **MMW-P-12 S** | TO-3 Air | DL1 | 1 |
| **10241081002** | **MMW-P-12 D** | TO-3 Air | DL1 | 1 |
| **10241081003** | **MMW-P-11 S** | TO-3 Air | DL1 | 1 |
| **10241081004** | **MMW-P-11 DR** | TO-3 Air | DL1 | 1 |
| **10241081005** | **MMW-12 S** | TO-3 Air | DL1 | 1 |
| **10241081006** | **MMW-11 S** | TO-3 Air | DL1 | 1 |

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## ANALYTICAL RESULTS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Sample: MMW-P-12 S** **Lab ID: 10241081001** Collected: 08/29/13 11:26 Received: 09/04/13 12:45 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO3 GCV AIR Meth,Ethane,Ethene** | Analytical Method: TO-3 Air | | | | | | | |
| Methane | **3.4** | ppmv | 1.6 | 1.61 | | 09/17/13 09:39 | 74-82-8 | |

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## ANALYTICAL RESULTS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Sample: MMW-P-12 D** **Lab ID: 10241081002** Collected: 08/29/13 11:26 Received: 09/04/13 12:45 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO3 GCV AIR Meth,Ethane,Ethene** | Analytical Method: TO-3 Air | | | | | | | |
| Methane | **3.2** | ppmv | 2.1 | 2.12 | | 09/17/13 10:24 | 74-82-8 | |

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

## ANALYTICAL RESULTS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Sample: MMW-P-11 S** **Lab ID: 10241081003** Collected: 08/29/13 12:42 Received: 09/04/13 12:45 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO3 GCV AIR Meth,Ethane,Ethene** | Analytical Method: TO-3 Air | | | | | | | |
| Methane | ND | ppmv | 1.7 | 1.68 | | 09/17/13 10:32 | 74-82-8 | |

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## ANALYTICAL RESULTS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Sample: MMW-P-11 DR** **Lab ID: 10241081004** Collected: 08/29/13 12:42 Received: 09/04/13 12:45 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO3 GCV AIR Meth,Ethane,Ethene** | Analytical Method: TO-3 Air | | | | | | | |
| Methane | **2.4** | ppmv | 1.6 | 1.61 | | 09/17/13 10:39 | 74-82-8 | |

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## ANALYTICAL RESULTS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Sample: MMW-12 S** **Lab ID: 10241081005** Collected: 08/29/13 13:25 Received: 09/04/13 12:45 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO3 GCV AIR Meth,Ethane,Ethene** | Analytical Method: TO-3 Air | | | | | | | |
| Methane | **29100** | ppmv | 1.8 | 1.75 | | 09/17/13 11:02 | 74-82-8 | E |

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## ANALYTICAL RESULTS

Project: M01046 MI Plaza
Pace Project No.: 10241081

**Sample: MMW-11 S** **Lab ID: 10241081006** Collected: 08/29/13 14:03 Received: 09/04/13 12:45 Matrix: Air

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|
| **TO3 GCV AIR Meth,Ethane,Ethene** | Analytical Method: TO-3 Air | | | | | | | |
| Methane | ND | ppmv | 1.8 | 1.75 | | 09/17/13 11:23 | 74-82-8 | |

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## QUALITY CONTROL DATA

Project: M01046 MI Plaza
Pace Project No.: 10241081

QC Batch: AIR/18253 Analysis Method: TO-3 Air
QC Batch Method: TO-3 Air Analysis Description: TO3 GCV AIR METH,ETHANE,ETHENE
Associated Lab Samples: 10241081001, 10241081002, 10241081003, 10241081004, 10241081005, 10241081006

METHOD BLANK: 1526406 Matrix: Air
Associated Lab Samples: 10241081001, 10241081002, 10241081003, 10241081004, 10241081005, 10241081006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Methane | ppmv | ND | 1.0 | 09/17/13 09:29 | |

LABORATORY CONTROL SAMPLE & LCSD: 1526407 1526408

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Methane | ppmv | 5 | 5.4 | 5.0 | 109 | 99 | 70-130 | 9 | 30 | |

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# QUALIFIERS

Project: M01046 MI Plaza
Pace Project No.: 10241081

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## ANALYTE QUALIFIERS

| | |
|---|---|
| E | Analyte concentration exceeded the calibration range. The reported result is estimated. |

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: M01046 MI Plaza
Pace Project No.: 10241081

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **10241081001** | **MMW-P-12 S** | TO-3 Air | AIR/18253 | | |
| **10241081002** | **MMW-P-12 D** | TO-3 Air | AIR/18253 | | |
| **10241081003** | **MMW-P-11 S** | TO-3 Air | AIR/18253 | | |
| **10241081004** | **MMW-P-11 DR** | TO-3 Air | AIR/18253 | | |
| **10241081005** | **MMW-12 S** | TO-3 Air | AIR/18253 | | |
| **10241081006** | **MMW-11 S** | TO-3 Air | AIR/18253 | | |



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# AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

10241081

10839

Page: 1 of 1

**Section A** Required Client Information:

Company: Mundell Associates
Address: 110 S. Downey Ave
Indianapolis, IN 46219
Email To:
Phone: 317-630-9060 Fax: 317-630-9065
Requested Due Date/TAT: Standard

**Section B** Required Project Information:

Report To: Mark Breting
Copy To: Matt Bono
Purchase Order No.:
Project Name: MI Plaza
Project Number: M01046

**Section C** Invoice Information:

Attention: Merle Tebbe
Company Name: Mundell + Associates
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State:

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other___

**'Section D Required Client Information**

**AIR SAMPLE ID**
Sample IDs MUST BE UNIQUE

Valid Media Codes

| MEDIA | CODE |
|---|---|
| Tedlar Bag | TB |
| 1 Liter Summa Can | 1LC |
| 6 Liter Summa Can | 6LC |
| Low Volume Puff | LVP |
| High Volume Puff | HVP |
| Other | PM10 |

| ITEM # | 'Section D Required Client Information / AIR SAMPLE ID | MEDIA CODE | PID Reading (Client only) | COLLECTED: COMPOSITE START END/GRAB DATE | COLLECTED: COMPOSITE START END/GRAB TIME | COLLECTED: COMPOSITE - DATE | COLLECTED: COMPOSITE - TIME | Canister Pressure (Initial Field - psig) | Canister Pressure (Final Field - psig) | Summa Can Number | Flow Control Number | Method: PM10 | 3C- Fixed Gas (%) | TO-3 | TO-3M (Methane) | TO-4 (PCBs) | TO-13 (PAH) | TO-14 | TO-15 | TO15 Short List* | Pace Lab ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MMW-P-12S | 6LC | | 8-29-13 | 10:59 | 8-29 | 11:26 | >30 | 5 | 0327 | | | | X | | | | | | | |
| 2 | MMW-P-12D | 6LC | | 8-29-13 | 10:59 | 8-29 | 11:26 | 29 | 11 | 0783 | | | | X | | | | | | | |
| 3 | MMW-P-11S | 6LC | | 8-29 | 12:08 | 8-29 | 12:42 | >30 | 9 | 1242 | | | | X | | | | | | | |
| 4 | MMW-P-11DR | 6LC | | 8-29 | 12:09 | 8-29 | 12:42 | 30 | 7 | 0177 | | | | X | | | | | | | |
| 5 | MMW-12S | 6LC | | 8-29 | 12:53 | 8-29 | 1:25 | 30 | 6 | 0300 | | | | X | | | | | | | |
| 6 | MMW-11S | 6LC | | 8-29 | 1:31 | 8-29 | 2:03 | 26 | 8 | 1490 | | | | X | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | |

Comments :

| RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME |
|---|---|---|---|---|---|
| Matthew Bono/Mundell | 8-29 | 3:15 PM | FEDEX | | |
| | | | [signature] | 9-4-13 | 12:45 |
| | | | | | |
| | | | | | |

SAMPLE CONDITIONS

| | | | | |
|---|---|---|---|---|
| AMB | Y/N (Y) | Y/N (Y) | Y/N (Y) | Y/N |
| | Y/N | Y/N | Y/N | Y/N |
| Temp in °C | Received on Ice Y/N | Custody Sealed Cooler Y/N | Samples Intact Y/N | |

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Matthew Bono

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 8/29/13

ORIGINAL



1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

| Pace Analytical® | Document Name: Air Sample Condition Upon Receipt | Document Revised: 28Jan2013 Page 1 of 1 |
|---|---|---|
| | Document No.: F-MN-A-106-rev.07 | Issuing Authority: Pace Minnesota Quality Office |

**Air Sample Condition Upon Receipt**

**Client Name:** Mundell + Asso.

**Project #:** WO# : 10241081

10241081

**Courier:** ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other: _____

**Tracking Number:** _____

**Custody Seal on Cooler/Box Present?** ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

**Optional:** Proj. Due Date: Proj. Name:

**Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other: _____

**Temp. (TO17 and TO13 samples only) (°C):** _____ **Corrected Temp (°C):** _____ **Thermom. Used:** ☐ B88A912167504 ☐ 80512447 ☑ 72337080

Temp should be above freezing to 6°C **Correction Factor:** 1.1/3 **Date & Initials of Person Examining Contents:** CJ 9.4.13

**Comments:**

| | | | | |
|---|---|---|---|---|
| Chain of Custody Present? | ☑ Yes | ☐ No | ☐ N/A | 1. |
| Chain of Custody Filled Out? | ☑ Yes | ☐ No | ☐ N/A | 2. |
| Chain of Custody Relinquished? | ☑ Yes | ☐ No | ☐ N/A | 3. |
| Sampler Name and/or Signature on COC? | ☑ Yes | ☐ No | ☐ N/A | 4. |
| Samples Arrived within Hold Time? | ☑ Yes | ☐ No | ☐ N/A | 5. |
| **Short Hold Time Analysis (<72 hr)?** | ☐ Yes | ☑ No | ☐ N/A | 6. |
| **Rush Turn Around Time Requested?** | ☐ Yes | ☑ No | ☐ N/A | 7. |
| Sufficient Volume? | ☑ Yes | ☐ No | ☐ N/A | 8. |
| Correct Containers Used? | ☑ Yes | ☐ No | ☐ N/A | 9. |
| -Pace Containers Used? | ☑ Yes | ☐ No | ☐ N/A | |
| Containers Intact? | ☑ Yes | ☐ No | ☐ N/A | 10. |
| Media: Air (Cans) | | | | 11. |
| Sample Labels Match COC? | ☐ Yes | ☐ No | ☐ N/A | 12. |

Samples Received: 6 Air Cans, 6 Flow Controllers

| Canisters 7 6 9/6 7 | | Flow Controllers | | Stand Alone G | |
|---|---|---|---|---|---|
| Sample Number | Can ID | Sample Number | Can ID | Sample Number | Can ID |
| MW-P-125 | PACE 0327 | FC 0485 | | | |
| " -P-120 | " 0783 | FC 0571 | | | |
| " -P-115 | " 1242 | FC 0627 | | | |
| " -P-110R | " 0177 | FC 0615 | | | |
| " -12S | " 0300 | FC 0619 | | | |
| " -11S | " 1490 | FC 0643 | | | |
| unlabeled | " 1519 | FC 0552 | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**CLIENT NOTIFICATION/RESOLUTION** **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

**Project Manager Review:** _____ **Date:** 9/6/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e out of hold, incorrect preservative, out of temp, incorrect containers)

# MITIGATION SYSTEM ANALYTICAL RESULTS

Microseeps
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

October 1, 2013

Mark Breting
Mundell & Associates, Inc.
110 South Downey Ave.
Indianapolis, IN 46219

RE: **MICHIGAN PLAZA / M01046**
*Microseeps Workorder: 10096*

Dear Mark Breting:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, September 19, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Robin Robl 10/2/13

Robbin Robl 10/01/2013
rrobl@microseeps.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages 17



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## LABORATORY ACCREDITATIONS & CERTIFICATIONS

| | |
|---|---|
| **Accreditor:** | Pennsylvania Department of Environmental Protection, Bureau of Laboratories |
| **Accreditation ID:** | 02-00538 |
| **Scope:** | NELAP Non-Potable Water and Solid & Hazardous Waste |
| **Accreditor:** | NELAP: State of Florida, Department of Health, Bureau of Laboratories |
| **Accreditation ID:** | E87832 |
| **Scope:** | Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA) |
| **Accreditor:** | South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification |
| **Accreditation ID:** | 89009003 |
| **Scope:** | Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA) |
| **Accreditor:** | NELAP: State of Louisiana, Department of Environmental Quality |
| **Accreditation ID:** | 04104 |
| **Scope:** | Solid and Chemical Materials; Non-Potable Water |
| **Accreditor:** | NELAP: New Jersey, Department of Environmental Protection |
| **Accreditation ID:** | PA026 |
| **Scope:** | Non-Potable Water; Solid and Chemical Materials |
| **Accreditor:** | NELAP: New York, Department of Health Wadsworth Center |
| **Accreditation ID:** | 11815 |
| **Scope:** | Non-Potable Water; Solid and Hazardous Waste |
| **Accreditor:** | State of Connecticut, Department of Public Health, Division of Environmental Health |
| **Accreditation ID:** | PH-0263 |
| **Scope:** | Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA) |
| **Accreditor:** | NELAP: Texas, Commission on Environmental Quality |
| **Accreditation ID:** | T104704453-09-TX |
| **Scope:** | Non-Potable Water |
| **Accreditor:** | State of New Hampshire |
| **Accreditation ID:** | 299409 |
| **Scope:** | Non-potable water |
| **Accreditor:** | State of Georgia |
| **Accreditation ID:** | Chapter 391-3-26 |
| **Scope:** | As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC). |



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## SAMPLE SUMMARY

Workorder: 10096 MICHIGAN PLAZA / M01046

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 100960001 | B-1 | Vapor | 9/17/2013 13:55 | 9/19/2013 13:00 |
| 100960002 | B-2 | Vapor | 9/17/2013 13:48 | 9/19/2013 13:00 |
| 100960003 | B-3 | Vapor | 9/17/2013 13:35 | 9/19/2013 13:00 |
| 100960004 | B-4 | Vapor | 9/17/2013 13:25 | 9/19/2013 13:00 |
| 100960005 | B-5 | Vapor | 9/17/2013 13:10 | 9/19/2013 13:00 |
| 100960006 | B-6 | Vapor | 9/17/2013 13:04 | 9/19/2013 13:00 |
| 100960007 | B-7 | Vapor | 9/17/2013 13:15 | 9/19/2013 13:00 |



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# ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960001** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-1** Date Collected: 9/17/2013 13:55

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **2.4** | ppmv | 0.20 | | 1 | | | 9/27/2013 15:55 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.32J** | ppmv | 1.0 | 0.095 | 1 | | | 9/26/2013 23:56 | SL | |
| 1,1-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/26/2013 23:56 | SL | |
| Methylene Chloride | **2.0 U** | ppmv | 2.0 | 0.19 | 1 | | | 9/26/2013 23:56 | SL | |
| trans-1,2-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0080 | 1 | | | 9/26/2013 23:56 | SL | |
| 1,1-Dichloroethane | **0.020 U** | ppmv | 0.020 | 0.0040 | 1 | | | 9/26/2013 23:56 | SL | |
| cis-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0070 | 1 | | | 9/26/2013 23:56 | SL | |
| Chloroform | **0.0063** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/26/2013 23:56 | SL | |
| 1,1,1-Trichloroethane | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/26/2013 23:56 | SL | |
| Carbon Tetrachloride | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/26/2013 23:56 | SL | |
| Trichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/26/2013 23:56 | SL | |
| Tetrachloroethene | **0.082** | ppmv | 0.010 | 0.0010 | 1 | | | 9/26/2013 23:56 | SL | |



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# ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960002** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-2** Date Collected: 9/17/2013 13:48

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **2.3** | ppmv | 0.20 | | 1 | | | 9/27/2013 15:43 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.34J** | ppmv | 1.0 | 0.095 | 1 | | | 9/27/2013 01:04 | SL | |
| 1,1-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 01:04 | SL | |
| Methylene Chloride | **2.0 U** | ppmv | 2.0 | 0.19 | 1 | | | 9/27/2013 01:04 | SL | |
| trans-1,2-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0080 | 1 | | | 9/27/2013 01:04 | SL | |
| 1,1-Dichloroethane | **0.020 U** | ppmv | 0.020 | 0.0040 | 1 | | | 9/27/2013 01:04 | SL | |
| cis-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0070 | 1 | | | 9/27/2013 01:04 | SL | |
| Chloroform | **0.0026J** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 01:04 | SL | |
| 1,1,1-Trichloroethane | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 01:04 | SL | |
| Carbon Tetrachloride | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 01:04 | SL | |
| Trichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 01:04 | SL | |
| Tetrachloroethene | **0.14** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 01:04 | SL | |



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# ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960003** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-3** Date Collected: 9/17/2013 13:35

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **3.2** | ppmv | 0.20 | | 1 | | | 9/27/2013 15:30 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.48J** | ppmv | 2.0 | 0.19 | 2 | | | 9/27/2013 18:04 | SL | |
| 1,1-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0020 | 2 | | | 9/27/2013 18:04 | SL | |
| Methylene Chloride | **4.0 U** | ppmv | 4.0 | 0.39 | 2 | | | 9/27/2013 18:04 | SL | |
| trans-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.016 | 2 | | | 9/27/2013 18:04 | SL | |
| 1,1-Dichloroethane | **0.040 U** | ppmv | 0.040 | 0.0080 | 2 | | | 9/27/2013 18:04 | SL | |
| cis-1,2-Dichloroethene | **0.040 U** | ppmv | 0.040 | 0.014 | 2 | | | 9/27/2013 18:04 | SL | |
| Chloroform | **0.0024J** | ppmv | 0.010 | 0.0020 | 2 | | | 9/27/2013 18:04 | SL | |
| 1,1,1-Trichloroethane | **0.010 U** | ppmv | 0.010 | 0.0020 | 2 | | | 9/27/2013 18:04 | SL | |
| Carbon Tetrachloride | **0.010 U** | ppmv | 0.010 | 0.0020 | 2 | | | 9/27/2013 18:04 | SL | |
| Trichloroethene | **0.020 U** | ppmv | 0.020 | 0.0020 | 2 | | | 9/27/2013 18:04 | SL | |
| Tetrachloroethene | **0.090** | ppmv | 0.020 | 0.0020 | 2 | | | 9/27/2013 18:04 | SL | |



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Phone: (412) 826-5245
Fax: (412) 826-3433

# ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960004** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-4** Date Collected: 9/17/2013 13:25

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **8.8** | ppmv | 0.20 | | 1 | | | 9/27/2013 16:12 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.15J** | ppmv | 1.0 | 0.095 | 1 | | | 9/27/2013 03:20 | SL | |
| 1,1-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 03:20 | SL | |
| Methylene Chloride | **2.0 U** | ppmv | 2.0 | 0.19 | 1 | | | 9/27/2013 03:20 | SL | |
| trans-1,2-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0080 | 1 | | | 9/27/2013 03:20 | SL | |
| 1,1-Dichloroethane | **0.020 U** | ppmv | 0.020 | 0.0040 | 1 | | | 9/27/2013 03:20 | SL | |
| cis-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0070 | 1 | | | 9/27/2013 03:20 | SL | |
| Chloroform | **0.010** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 03:20 | SL | |
| 1,1,1-Trichloroethane | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 03:20 | SL | |
| Carbon Tetrachloride | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 03:20 | SL | |
| Trichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 03:20 | SL | |
| Tetrachloroethene | **0.0063J** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 03:20 | SL | |



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# ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960005** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-5** Date Collected: 9/17/2013 13:10

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **2.3** | ppmv | 0.20 | | 1 | | | 9/27/2013 16:25 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.14J** | ppmv | 1.0 | 0.095 | 1 | | | 9/27/2013 04:28 | SL | |
| 1,1-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 04:28 | SL | |
| Methylene Chloride | **2.0 U** | ppmv | 2.0 | 0.19 | 1 | | | 9/27/2013 04:28 | SL | |
| trans-1,2-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0080 | 1 | | | 9/27/2013 04:28 | SL | |
| 1,1-Dichloroethane | **0.020 U** | ppmv | 0.020 | 0.0040 | 1 | | | 9/27/2013 04:28 | SL | |
| cis-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0070 | 1 | | | 9/27/2013 04:28 | SL | |
| Chloroform | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 04:28 | SL | |
| 1,1,1-Trichloroethane | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 04:28 | SL | |
| Carbon Tetrachloride | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 04:28 | SL | |
| Trichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 04:28 | SL | |
| Tetrachloroethene | **0.021** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 04:28 | SL | |



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# ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960006** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-6** Date Collected: 9/17/2013 13:04

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **2.2** | ppmv | 0.20 | | 1 | | | 9/27/2013 16:38 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.15J** | ppmv | 1.0 | 0.095 | 1 | | | 9/27/2013 05:36 | SL | |
| 1,1-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 05:36 | SL | |
| Methylene Chloride | **2.0 U** | ppmv | 2.0 | 0.19 | 1 | | | 9/27/2013 05:36 | SL | |
| trans-1,2-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0080 | 1 | | | 9/27/2013 05:36 | SL | |
| 1,1-Dichloroethane | **0.020 U** | ppmv | 0.020 | 0.0040 | 1 | | | 9/27/2013 05:36 | SL | |
| cis-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0070 | 1 | | | 9/27/2013 05:36 | SL | |
| Chloroform | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 05:36 | SL | |
| 1,1,1-Trichloroethane | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 05:36 | SL | |
| Carbon Tetrachloride | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 05:36 | SL | |
| Trichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 05:36 | SL | |
| Tetrachloroethene | **0.046** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 05:36 | SL | |



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## ANALYTICAL RESULTS

Workorder: 10096 MICHIGAN PLAZA / M01046

Lab ID: **100960007** Date Received: 9/19/2013 13:00 Matrix: Vapor

Sample ID: **B-7** Date Collected: 9/17/2013 13:15

| Parameters | Results | Units | PQL | MDL | DF | Prepared | By | Analyzed | By | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| **RISK - MICR** | | | | | | | | | | |
| Analysis Desc: AM20GAX | | Analytical Method: AM20GAX | | | | | | | | |
| Methane | **2.3** | ppmv | 0.20 | | 1 | | | 9/27/2013 16:51 | GT | |
| Analysis Desc: AM4.02 Vapors | | Analytical Method: AM4.02 Vapors | | | | | | | | |
| Vinyl Chloride | **0.11J** | ppmv | 1.0 | 0.095 | 1 | | | 9/27/2013 06:44 | SL | |
| 1,1-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 06:44 | SL | |
| Methylene Chloride | **2.0 U** | ppmv | 2.0 | 0.19 | 1 | | | 9/27/2013 06:44 | SL | |
| trans-1,2-Dichloroethene | **0.010 U** | ppmv | 0.010 | 0.0080 | 1 | | | 9/27/2013 06:44 | SL | |
| 1,1-Dichloroethane | **0.020 U** | ppmv | 0.020 | 0.0040 | 1 | | | 9/27/2013 06:44 | SL | |
| cis-1,2-Dichloroethene | **0.020 U** | ppmv | 0.020 | 0.0070 | 1 | | | 9/27/2013 06:44 | SL | |
| Chloroform | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 06:44 | SL | |
| 1,1,1-Trichloroethane | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 06:44 | SL | |
| Carbon Tetrachloride | **0.0050 U** | ppmv | 0.0050 | 0.0010 | 1 | | | 9/27/2013 06:44 | SL | |
| Trichloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 06:44 | SL | |
| Tetrachloroethene | **0.010 U** | ppmv | 0.010 | 0.0010 | 1 | | | 9/27/2013 06:44 | SL | |



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# ANALYTICAL RESULTS QUALIFIERS

Workorder: 10096 MICHIGAN PLAZA / M01046

## DEFINITIONS/QUALIFIERS

Disclaimer : The Pennsylvania Department of Environmental Protection (PADEP) has decided to no longer recognize analyses that do not produce data for primary compliance, for NELAP accreditation. The methods affected by this decision are AM20GAx, AM21G, SW846 7199 and AM4.02. The laboratory shall continue to administer the NELAP/TNI standard requirements in the performance of these methods.

| | |
|---|---|
| MDL | Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection. |
| PQL | Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation. |
| ND | Not detected at or above reporting limit. |
| DF | Dilution Factor. |
| S | Surrogate. |
| RPD | Relative Percent Difference. |
| % Rec | Percent Recovery. |
| U | Indicates the compound was analyzed for, but not detected at or above the noted concentration. |
| J | Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL). |



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## QUALITY CONTROL DATA

Workorder: 10096 MICHIGAN PLAZA / M01046

QC Batch: VAP/1474 Analysis Method: AM4.02 Vapors

QC Batch Method: AM4.02 Vapors

Associated Lab Samples: 100960001, 100960002, 100960003, 100960004, 100960005, 100960006, 100960007

METHOD BLANK: 23046

| Parameter | Units | Blank Result | Reporting Limit | Qualifiers |
|---|---|---|---|---|
| RISK | | | | |
| 1,1-Dichloroethene | ppmv | 0.010 U | 0.010 | |
| trans-1,2-Dichloroethene | ppmv | 0.010 U | 0.010 | |
| 1,1-Dichloroethane | ppmv | 0.020 U | 0.020 | |
| cis-1,2-Dichloroethene | ppmv | 0.020 U | 0.020 | |
| Chloroform | ppmv | 0.0050 U | 0.0050 | |
| 1,1,1-Trichloroethane | ppmv | 0.0050 U | 0.0050 | |
| Carbon Tetrachloride | ppmv | 0.0050 U | 0.0050 | |
| Trichloroethene | ppmv | 0.010 U | 0.010 | |
| Tetrachloroethene | ppmv | 0.010 U | 0.010 | |

METHOD BLANK: 23047

| Parameter | Units | Blank Result | Reporting Limit | Qualifiers |
|---|---|---|---|---|
| RISK | | | | |
| Vinyl Chloride | ppmv | 1.0 U | 1.0 | |
| Methylene Chloride | ppmv | 2.0 U | 2.0 | |

LABORATORY CONTROL SAMPLE & LCSD: 23048 23050

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limit | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| RISK | | | | | | | | | | |
| 1,1-Dichloroethene | ppmv | 0.65 | 0.69 | 0.70 | 106 | 107 | 75-125 | 0.94 | 20 | |
| trans-1,2-Dichloroethene | ppmv | 0.65 | 0.67 | 0.68 | 103 | 105 | 75-125 | 1.9 | 20 | |
| 1,1-Dichloroethane | ppmv | 0.64 | 0.64 | 0.64 | 100 | 101 | 75-125 | 1 | 20 | |
| cis-1,2-Dichloroethene | ppmv | | 0.020 U | 0.020 U | | | | | | |
| Chloroform | ppmv | 0.53 | 0.54 | 0.54 | 101 | 102 | 75-125 | 0.99 | 20 | |
| 1,1,1-Trichloroethane | ppmv | 0.47 | 0.49 | 0.50 | 104 | 106 | 75-125 | 1.9 | 20 | |
| Carbon Tetrachloride | ppmv | 0.41 | 0.38 | 0.39 | 94 | 95 | 75-125 | 1.1 | 20 | |
| Trichloroethene | ppmv | 0.48 | 0.39 | 0.40 | 82 | 83 | 75-125 | 1.2 | 20 | |
| Tetrachloroethene | ppmv | | 0.010 U | 0.010 U | | | | | | |



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## QUALITY CONTROL DATA

Workorder: 10096 MICHIGAN PLAZA / M01046

LABORATORY CONTROL SAMPLE & LCSD: 23049 23051

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limit | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| RISK | | | | | | | | | | |
| Vinyl Chloride | ppmv | | 1.0 U | 1.0 U | | | | | | |
| Methylene Chloride | ppmv | | 0.78J | 0.92J | | | | | | |



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## QUALITY CONTROL DATA

Workorder: 10096 MICHIGAN PLAZA / M01046

QC Batch: DISG/3284 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 100960001, 100960002, 100960003, 100960004, 100960005, 100960006, 100960007

METHOD BLANK: 23079

| Parameter | Units | Blank Result | Reporting Limit | Qualifiers |
|---|---|---|---|---|
| RISK | | | | |
| Methane | ppmv | 0.20 U | 0.20 | |

LABORATORY CONTROL SAMPLE & LCSD: 23080 23081

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limit | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| RISK | | | | | | | | | | |
| Methane | ppmv | 150 | 150 | 150 | 100 | 100 | 80-120 | 0 | 20 | |



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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 10096 MICHIGAN PLAZA / M01046

| Lab ID | Sample ID | Prep Method | Prep Batch | Analysis Method | Analysis Batch |
|---|---|---|---|---|---|
| 100960001 | B-1 | | | AM4.02 Vapors | VAP/1474 |
| 100960002 | B-2 | | | AM4.02 Vapors | VAP/1474 |
| 100960003 | B-3 | | | AM4.02 Vapors | VAP/1474 |
| 100960004 | B-4 | | | AM4.02 Vapors | VAP/1474 |
| 100960005 | B-5 | | | AM4.02 Vapors | VAP/1474 |
| 100960006 | B-6 | | | AM4.02 Vapors | VAP/1474 |
| 100960007 | B-7 | | | AM4.02 Vapors | VAP/1474 |
| 100960001 | B-1 | | | AM20GAX | DISG/3284 |
| 100960002 | B-2 | | | AM20GAX | DISG/3284 |
| 100960003 | B-3 | | | AM20GAX | DISG/3284 |
| 100960004 | B-4 | | | AM20GAX | DISG/3284 |
| 100960005 | B-5 | | | AM20GAX | DISG/3284 |
| 100960006 | B-6 | | | AM20GAX | DISG/3284 |
| 100960007 | B-7 | | | AM20GAX | DISG/3284 |



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Microseeps Lab. Proj. # 10096

# CHAIN - OF - CUSTODY RECORD

Microseeps COC cont. # _____

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Company : Mundell & Assoc. INC

Co. Address : 110 S. Downey Ave Indpls. IN

Phone # : 317-630-90600 Fax # : _____

Proj. Manager : Mark Bretting

Proj. Name/Number : Michigan Plaza / M01046

Sampler's signature :

Cooler Temp. _____

Results to : _____

Invoice to : _____

| Sample ID | Sample Description | Sample Type (Water / Vapor / Solid) | Date | Time | # bottles | Parameters Requested: Chlorinated Hydrocarbons | Remarks : |
|---|---|---|---|---|---|---|---|
| B-1 | Vapor | Vapor | 9-17-13 | 1:55p | 2 | X | |
| B-2 | " | Vapor | " | 1:48p | 2 | " | |
| B-3 | " | Vapor | " | 1:35p | 2 | " | |
| B-4 | " | Vapor | " | 1:25p | 2 | " | |
| B-5 | " | Vapor | " | 1:10p | 2 | " | |
| B-6 | " | Vapor | " | 1:04p | 2 | " | |
| B-7 | " | Vapor | " | 1:15p | 2 | " | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |
|---|---|---|---|---|---|---|---|
| [signature] | Mundell | 9-17-13 | 3:30p | [signature] | MS | 9.19.13 | 1300 |
| Relinquished by : | Company : | Date : | Time : | Received by : [signature] | Company : | Date : | Time : |
| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |

WHITE COPY : Accompany Samples YELLOW COPY : Laboratory File PINK COPY : Submitter

**Mark Mikesell**

**From:** Chris Thomas
**Sent:** Friday, September 27, 2013 9:25 AM
**To:** Mark Mikesell
**Subject:** MICHIGAN PLAZA MUNDELL SAMPLES

Hello Mark,

Matt Bono from Mundell got back to me this morning. Apparently he does want methane analyzed. Please let me know if we can do this so I can send him a response. E-mail he sent me is below.

If at all possible, we'd like to have all of the samples analyzed for methane. Let us know if you anticipate issues with the analysis due to the sampling containers used.

Christopher Thomas
Microseeps, a Division of Pace Analytical Energy Services, LLC
220 William Pitt Way
Pittsburgh, PA 15238

Office: 412-826-5245
Direct: 412-826-4481

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# APPENDIX B

## 3rd Quarter 2013 Low Flow Sampling Data

**Appendix B**
Low Flow Data
3rd Quarter 2013
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No.: M01046

| Well ID | Date | pH | Conductivity | Temperature ($^{o}$C) | Dissolved Oxygen (ug/L) | Oxygen Reduction Potential (mV) |
|---|---|---|---|---|---|---|
| MMW-1S | 9/24/2013 | 6.50 | 1222.79 | 18.61 | 80.0 | -23.53 |
| MMW-4D | 9/20/2013 | 6.44 | 1451.95 | 19.08 | 360 | -62.44 |
| MMW-6D | 9/20/2013 | 7.29 | 771.54 | 17.69 | 180 | -116.23 |
| MMW-8S | 9/20/2013 | 6.75 | 1300.87 | 19.76 | 100 | -85.84 |
| MMW-9S | 9/25/2013 | 6.46 | 1339.39 | 18.02 | 380 | -66.87 |
| MMW-10S | 9/25/2013 | 6.39 | 1638.09 | 21.39 | 140 | -55.52 |
| MMW-11S | 9/20/2013 | 7.01 | 971.83 | 17.79 | 770 | 77.35 |
| MMW-11D | 9/24/2013 | 7.04 | 974.30 | 16.50 | 140 | 26.85 |
| MMW-12S | 9/20/2013 | 6.23 | 1050.56 | 19.04 | 220 | 18.05 |
| MMW-13D | 9/20/2013 | 7.26 | 883.03 | 19.18 | 180 | -105.00 |
| MMW-14D | 9/20/2013 | 6.34 | 872.99 | 17.55 | 170 | -47.14 |
| MMW-15S | 9/18/2013 | 6.98 | 1038.87 | 17.23 | 680 | 173.21 |
| MMW-15D | 9/18/2013 | 7.32 | 604.22 | 16.76 | 170 | -106.00 |
| MMW-P-01 | 9/26/2013 | 6.60 | 1877.00 | 19.05 | 430 | -52.90 |
| MMW-P-02 | 9/25/2013 | 6.64 | 1006.46 | 21.68 | 710 | -55.87 |
| MMW-P-03S | 9/26/2013 | 6.76 | 1314.80 | 18.62 | 160 | -71.49 |
| MMW-P-03D | 9/26/2013 | 6.06 | 1.36 | 20.67 | 2100 | -17.46 |
| MMW-P-04 | Insufficient water. Sampled with bailer | | | | | |
| MMW-P-05 | 9/26/2013 | 6.52 | 1177.60 | 19.20 | 240 | -69.14 |
| MMW-P-06 | 9/26/2013 | 6.71 | 1483.16 | 17.38 | 130 | -59.54 |
| MMW-P-07 | 9/25/2013 | 6.33 | 1878.59 | 21.59 | 180 | -60.71 |
| MMW-P-08 | 9/25/2013 | 6.70 | 1091.61 | 21.61 | 110 | -81.56 |
| MMW-P-09S | 9/23/2013 | 6.65 | 789.87 | 17.02 | 950 | 80.23 |
| MMW-P-09D | 9/23/2013 | 7.07 | 879.05 | 16.66 | 210 | -82.61 |
| MMW-P-10S | 9/25/2013 | 6.63 | 1200.84 | 22.16 | 220 | -74.45 |
| MMW-P-10D | 9/25/2013 | 6.62 | 1560.22 | 18.61 | 70 | -62.12 |
| MMW-P-11S | 9/24/2013 | 6.88 | 968.57 | 15.82 | 540 | -35.01 |
| MMW-P-11DR | 9/24/2013 | 6.82 | 1193.80 | 15.12 | 80 | -63.78 |
| MMW-P-12S | 9/24/2013 | 6.82 | 1469.46 | 18.97 | 150 | -73.89 |
| MMW-P-12D | 9/24/2013 | 6.88 | 1489.40 | 18.59 | 80 | -75.48 |
| MMW-P-13S | 9/23/2013 | 6.77 | 849.83 | 16.02 | 1140 | 91.34 |
| MMW-P-13D | 9/23/2013 | 6.86 | 1003.83 | 15.05 | 140 | -77.94 |
| MMW-P-14S | 9/18/2013 | 6.75 | 1102.01 | 16.93 | 770 | 96.59 |
| MMW-P-14D | 9/18/2013 | 6.81 | 1377.40 | 18.11 | 90 | -73.78 |
| MW-167S | Insufficient water. Sampled with bailer | | | | | |
| MW-167D | 9/27/2013 | 7.09 | 811.36 | 16.70 | 200 | -74.79 |
| MW-168S | Insufficient water. Sampled with bailer | | | | | |
| MW-168D | 9/27/2013 | 6.75 | 1394.49 | 19.35 | 100 | -73.81 |
| MW-170S | 9/27/2013 | 6.85 | 1505.68 | 16.32 | 260 | 173.78 |
| MW-170D | 9/27/2013 | 6.85 | 1350.83 | 19.36 | 100 | -68.59 |
| MMW-C-01 | 9/26/2013 | 6.72 | 1097.89 | 17.90 | 310 | -53.60 |
| MMW-C-02S | 9/23/2013 | 6.76 | 810.51 | 16.46 | 230 | 36.84 |
| MMW-C-02D | 9/18/2013 | 6.76 | 793.86 | 16.93 | 90 | -87.12 |
| MMW-C-16S | 9/23/2013 | 6.71 | 1020.23 | 17.05 | 220 | 3.00 |
| MMW-C-16D | 9/23/2013 | 6.89 | 1283.42 | 17.72 | 60 | -76.71 |
| MMW-C-17D | 9/18/2013 | 6.91 | 883.21 | 16.66 | 120 | -102.66 |

ug/L - micrograms per liter

mV - millivolts

# APPENDIX C

## Air Mitigation Systems: Pounds of Contaminants Removed

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Plaza**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | Perchloroethylene (PCE) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 |
| | (ppmv) | | | | (ppm) | | | | ($\mu g/m^3$) | | | |
| 9/21/2006 | 0.6300 | 0.7900 | 0.6700 | 0.2800 | 0.0043 | 0.0054 | 0.0046 | 0.0019 | 4281.48 | 5368.84 | 4553.32 | 1902.88 |
| 10/6/2006 | 0.8800 | 0.6700 | 0.9700 | 0.3100 | 0.0060 | 0.0046 | 0.0066 | 0.0021 | 5980.48 | 4553.32 | 6592.12 | 2106.76 |
| 10/13/2006 | 0.6800 | 0.3600 | 0.5200 | 0.2100 | 0.0046 | 0.0024 | 0.0035 | 0.0014 | 4621.28 | 2446.56 | 3533.92 | 1427.16 |
| 10/20/2006 | 0.8700 | 0.5500 | 0.8900 | 0.2200 | 0.0059 | 0.0037 | 0.0060 | 0.0015 | 5912.52 | 3737.80 | 6048.44 | 1495.12 |
| 11/17/2006 | 0.8100 | 0.4700 | 0.7800 | 0.1500 | 0.0055 | 0.0032 | 0.0053 | 0.0010 | 5504.76 | 3194.12 | 5300.88 | 1019.40 |
| 12/27/2006 | 0.7400 | 0.4700 | 0.7500 | 0.1100 | 0.0050 | 0.0032 | 0.0051 | 0.0007 | 5029.04 | 3194.12 | 5097.00 | 747.56 |
| 3/30/2007 | 0.5100 | 0.1800 | 0.5700 | 0.0310 | 0.0035 | 0.0012 | 0.0039 | 0.0002 | 3465.96 | 1223.28 | 3873.72 | 210.68 |
| 6/15/2007 | *0.0050* | 0.3100 | 0.2100 | 0.4600 | 0.0000 | 0.0021 | 0.0014 | 0.0031 | 33.98 | 2106.76 | 1427.16 | 3126.16 |
| 10/16/2007 | 0.3900 | 0.2400 | 0.2800 | 0.0670 | 0.0027 | 0.0016 | 0.0019 | 0.0005 | 2650.44 | 1631.04 | 1902.88 | 455.33 |
| 12/14/2007 | 0.5800 | 0.3400 | 0.5200 | 0.1400 | 0.0039 | 0.0023 | 0.0035 | 0.0010 | 3941.68 | 2310.64 | 3533.92 | 951.44 |
| 3/27/2008 | 0.5500 | NS | 0.5600 | 0.0740 | 0.0037 | NS | 0.0038 | 0.0005 | 3737.80 | NS | 3805.76 | 502.90 |
| 4/1/2008 | NS | 0.3600 | NS | NS | NS | 0.0024 | NS | NS | NS | 2446.56 | NS | NS |
| 6/2/2008 | 0.7200 | 0.5600 | 0.4900 | 0.1000 | 0.0049 | 0.0038 | 0.0033 | 0.0007 | 4893.12 | 3805.76 | 3330.04 | 679.60 |
| 9/12/2008 | 0.4800 | 0.4700 | 0.5300 | 0.1300 | 0.0033 | 0.0032 | 0.0036 | 0.0009 | 3262.08 | 3194.12 | 3601.88 | 883.48 |
| 11/26/2008 | 0.4600 | NS | 0.3600 | 0.1100 | 0.0031 | NS | 0.0024 | 0.0007 | 3126.16 | NS | 2446.56 | 747.56 |
| 3/24/2009 | 0.4500 | NS | 0.5500 | *0.0050* | 0.0031 | NS | 0.0037 | *0.00003* | 3058.20 | NS | 3737.80 | 33.98 |
| 6/15/2009 | 0.4300 | NS | 0.4200 | 0.0200 | 0.0029 | NS | 0.0029 | 0.0001 | 2922.28 | NS | 2854.32 | 135.92 |
| 8/21/2009 | 0.3600 | 0.1600 | 0.4700 | 0.0140 | 0.0024 | 0.0011 | 0.0032 | 0.0001 | 2446.56 | 1087.36 | 3194.12 | 95.14 |
| 11/5/2009 | 0.3300 | 0.1400 | 0.4100 | *0.0050* | 0.0022 | 0.0010 | 0.0028 | *0.00003* | 2242.68 | 951.44 | 2786.36 | 33.98 |
| 2/5/2010 | 0.1600 | 0.0370 | 0.1400 | 0.0120 | 0.0011 | 0.0003 | 0.0010 | 0.0001 | 1087.36 | 251.45 | 951.44 | 81.55 |
| 4/23/2010 | 0.1300 | NS | NS | 0.0170 | 0.0009 | NS | NS | 0.0001 | 883.48 | NS | NS | 115.53 |
| 5/6/2010 | NS | 0.1500 | 0.2500 | NS | NS | 0.0010 | 0.0017 | NS | NS | 1019.40 | 1699.00 | NS |
| 7/23/2010 | 0.1500 | 0.1900 | 0.1200 | *0.0050* | 0.0010 | 0.0013 | 0.0008 | *0.00003* | 1019.40 | 1291.24 | 815.52 | *33.98* |
| 10/13/2010 | NS | NS | NS | *0.0050* | NS | NS | NS | *0.00003* | NS | NS | NS | *33.98* |
| 10/15/2010 | 0.0940 | 0.0650 | *0.0050* | NS | 0.0006 | 0.0004 | *0.0000* | NS | 638.82 | 441.74 | *33.98* | NS |
| 1/21/2011 | 0.1400 | 0.0270 | NS | *0.0050* | 0.0010 | 0.0002 | NS | *0.00003* | 951.44 | 183.49 | NS | *33.98* |
| 4/8/2011 | NS | NS | 0.2100 | NS | NS | NS | 0.0014 | NS | NS | NS | 1427.16 | NS |
| 5/11/2011 | 0.2200 | 0.2700 | 0.2100 | 0.0230 | 0.0015 | 0.0018 | 0.0014 | 0.0002 | 1495.12 | 1834.92 | 1427.16 | 156.31 |
| 7/29/2011 | 0.0660 | 0.1700 | 0.1100 | *0.0050* | 0.0004 | 0.0012 | 0.0007 | *0.00003* | 448.54 | 1155.32 | 747.56 | *33.98* |
| 10/25/2011 | 0.1100 | 0.1200 | 0.0530 | *0.0050* | 0.0007 | 0.0008 | 0.0004 | *0.00003* | 747.56 | 815.52 | 360.19 | *33.98* |
| 1/20/2012 | 0.1000 | 0.0810 | 0.0660 | *0.0081* | 0.0007 | 0.0006 | 0.0004 | *0.00006* | 679.60 | 550.48 | 448.54 | *55.05* |
| 6/15/2012 | 0.0710 | 0.1200 | 0.0480 | *0.0046* | 0.0005 | 0.0008 | 0.0003 | *0.00003* | 482.52 | 815.52 | 326.21 | *31.26* |
| 9/25/2012 | 0.1000 | 0.1800 | 0.0880 | *0.0010* | 0.0007 | 0.0012 | 0.0006 | *0.00001* | 679.60 | 1223.28 | 598.05 | *6.80* |
| 12/31/2012 | 0.2400 | 0.1900 | 0.1400 | *0.0019* | 0.0016 | 0.0013 | 0.0010 | *0.00001* | 1631.04 | 1291.24 | 951.44 | *12.91* |
| 3/20/2013 | 0.2300 | 0.2000 | 0.0920 | 0.0120 | 0.0016 | 0.0014 | 0.0006 | 0.00008 | 1563.08 | 1359.20 | 625.23 | 81.55 |
| 5/22/2013 | 0.2500 | 0.4600 | 0.1500 | 0.0200 | 0.0017 | 0.0031 | 0.0010 | 0.00014 | 1699.00 | 3126.16 | 1019.40 | 135.92 |
| 9/17/2013 | 0.0820 | 0.1400 | 0.0900 | *0.0063* | 0.0006 | 0.0010 | 0.0006 | *0.00004* | 557.27 | 951.44 | 611.64 | *42.81* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Plaza**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | Trichloroethylene (TCE) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 |
| | (ppmv) | | | | (ppm) | | | | ($\mu g/m^3$) | | | |
| 9/21/2006 | 0.0240 | 0.0120 | *0.0050* | *0.0050* | 0.0001 | 0.0001 | *0.00003* | *0.00003* | 129.24 | 64.62 | *26.93* | *26.93* |
| 10/6/2006 | 0.0120 | *0.0050* | *0.0050* | *0.0050* | 0.0001 | *0.00003* | *0.00003* | *0.00003* | 64.62 | *26.93* | *26.93* | *26.93* |
| 10/13/2006 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 10/20/2006 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 11/17/2006 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 12/27/2006 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 3/30/2007 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 6/15/2007 | 0.4600 | *0.0050* | *0.0050* | *0.0050* | 0.0025 | *0.00003* | *0.00003* | *0.00003* | 2,477.10 | *26.93* | *26.93* | *26.93* |
| 10/16/2007 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 12/14/2007 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 3/27/2008 | *0.0050* | NS | *0.0050* | *0.0050* | *0.00003* | NS | *0.00003* | *0.00003* | *26.93* | NS | *26.93* | *26.93* |
| 4/1/2008 | NS | *0.0050* | NS | NS | NS | *0.0000* | NS | NS | NS | *26.93* | NS | NS |
| 6/2/2008 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 9/12/2008 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 11/26/2008 | *0.0050* | NS | *0.0050* | *0.0050* | *0.00003* | NS | *0.00003* | *0.00003* | *26.93* | NS | *26.93* | *26.93* |
| 3/24/2009 | *0.0050* | NS | *0.0050* | *0.0050* | *0.00003* | NS | *0.00003* | *0.00003* | *26.93* | NS | *26.93* | *26.93* |
| 6/15/2009 | *0.0050* | NS | *0.0050* | *0.0050* | *0.00003* | NS | *0.00003* | *0.00003* | *26.93* | NS | *26.93* | *26.93* |
| 8/21/2009 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 11/5/2009 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 2/5/2010 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 4/23/2010 | *0.0050* | NS | NS | *0.0050* | *0.00003* | NS | NS | *0.00003* | *26.93* | NS | NS | *26.93* |
| 5/6/2010 | NS | *0.0050* | *0.0050* | NS | NS | *0.00003* | *0.00003* | NS | NS | *26.93* | *26.93* | NS |
| 7/23/2010 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 10/13/2010 | NS | NS | NS | *0.0050* | NS | NS | NS | *0.00003* | NS | NS | NS | *26.93* |
| 10/15/2010 | *0.0050* | *0.0050* | *0.0050* | NS | *0.00003* | *0.00003* | *0.00003* | NS | *26.93* | *26.93* | *26.93* | NS |
| 1/21/2011 | *0.0050* | *0.0050* | NS | *0.0050* | *0.00003* | *0.00003* | NS | *0.00003* | *26.93* | *26.93* | NS | *26.93* |
| 4/8/2011 | NS | NS | 0.0050 | NS | NS | NS | 0.00003 | NS | NS | NS | 26.93 | NS |
| 5/11/2011 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 7/29/2011 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 10/25/2011 | *0.0050* | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* | *26.93* |
| 1/20/2012 | *0.0050* | *0.0050* | *0.0011* | *0.0050* | *0.00003* | *0.00003* | *0.00001* | *0.00003* | *26.93* | *26.93* | *5.92* | *26.93* |
| 6/15/2012 | *0.0013* | *0.0011* | *0.0050* | *0.0050* | *0.00001* | *0.00001* | *0.00003* | *0.00003* | *7.00* | *5.92* | *26.93* | *26.93* |
| 9/25/2012 | *0.0013* | *0.0017* | *0.0018* | *0.0050* | *0.00001* | *0.00001* | *0.00001* | *0.00003* | *7.00* | *9.15* | *9.69* | *26.93* |
| 12/31/2012 | *0.0021* | *0.0019* | *0.0028* | *0.0050* | *0.00001* | *0.00001* | *0.00002* | *0.00003* | *11.31* | *10.23* | *15.08* | *26.93* |
| 3/20/2013 | *0.0020* | *0.0017* | *0.0022* | *0.0050* | *0.00001* | *0.00001* | *0.00001* | *0.00003* | *10.77* | *9.15* | *11.85* | *26.93* |
| 5/22/2013 | *0.0020* | *0.0028* | *0.0029* | *0.0050* | *0.00001* | *0.00002* | *0.00002* | *0.00003* | *10.77* | *15.08* | *15.62* | *26.93* |
| 9/17/2013 | *0.0050* | *0.0050* | *0.0100* | *0.0050* | *0.00003* | *0.00003* | *0.00005* | *0.00003* | *26.93* | *26.93* | *53.85* | *26.93* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Plaza**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | Vinyl Chloride | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 |
| | (ppmv) | | | | (ppm) | | | | ($\mu g/m^3$) | | | |
| 9/21/2006 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 10/6/2006 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 10/13/2006 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 10/20/2006 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 11/17/2006 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 12/27/2006 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 3/30/2007 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 6/15/2007 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 10/16/2007 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 12/14/2007 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 3/27/2008 | *0.0150* | NS | *0.0150* | *0.0150* | *0.00004* | NS | *0.00004* | *0.00004* | *38.42* | NS | *38.42* | *38.42* |
| 4/1/2008 | NS | *0.0150* | NS | NS | NS | *0.00004* | NS | NS | NS | *38.42* | NS | NS |
| 6/2/2008 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 9/12/2008 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 11/26/2008 | *0.0150* | NS | *0.0150* | *0.0150* | *0.00004* | NS | *0.00004* | *0.00004* | *38.42* | NS | *38.42* | *38.42* |
| 3/24/2009 | *0.0150* | NS | *0.0150* | *0.0150* | *0.00004* | NS | *0.00004* | *0.00004* | *38.42* | NS | *38.42* | *38.42* |
| 6/15/2009 | *0.0150* | NS | *0.0150* | *0.0150* | *0.00004* | NS | *0.00004* | *0.00004* | *38.42* | NS | *38.42* | *38.42* |
| 8/21/2009 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 11/5/2009 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 2/5/2010 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 4/23/2010 | *0.0150* | NS | NS | *0.0150* | *0.00004* | NS | NS | *0.00004* | *38.42* | NS | NS | *38.42* |
| 5/6/2010 | NS | *0.0150* | *0.0150* | NS | NS | *0.00004* | *0.00004* | NS | NS | *38.42* | *38.42* | NS |
| 7/23/2010 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 10/13/2010 | NS | NS | NS | *0.0150* | NS | NS | NS | *0.00004* | NS | NS | NS | *38.42* |
| 10/15/2010 | *0.0150* | *0.0150* | *0.0150* | NS | *0.00004* | *0.00004* | *0.00004* | NS | *38.42* | *38.42* | *38.42* | NS |
| 1/21/2011 | *0.0150* | *0.0150* | NS | *0.0150* | *0.00004* | *0.00004* | NS | *0.00004* | *38.42* | *38.42* | NS | *38.42* |
| 4/8/2011 | NS | NS | *0.0150* | NS | NS | NS | *0.00004* | NS | NS | NS | 38.42 | NS |
| 5/11/2011 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 7/29/2011 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 10/25/2011 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 1/20/2012 | *0.2000* | *0.1100* | *0.0150* | *0.0150* | *0.00051* | *0.00028* | *0.00004* | *0.00004* | *512.20* | *281.71* | *38.42* | *38.42* |
| 6/15/2012 | *0.0150* | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* | *38.42* |
| 9/25/2012 | *0.0150* | *0.0150* | *0.1400* | *0.1000* | *0.00004* | *0.00004* | *0.00036* | *0.00026* | *38.42* | *38.42* | *358.54* | *256.10* |
| 12/31/2012 | *0.3300* | 1.6000 | *0.2300* | *0.0150* | *0.00085* | 0.00410 | *0.00059* | *0.00004* | *845.13* | 4,097.60 | *589.03* | *38.42* |
| 3/20/2013 | *0.2000* | *0.2100* | *0.0960* | *0.0150* | *0.00051* | 0.00054 | *0.00025* | *0.00004* | *512.20* | 537.81 | *245.86* | *38.42* |
| 5/22/2013 | *0.1000* | *0.0150* | *0.0150* | *0.0150* | *0.00026* | 0.00004 | *0.00004* | *0.00004* | *256.10* | *38.42* | *38.42* | *38.42* |
| 9/17/2013 | *0.3200* | *0.3400* | *0.4800* | *0.1500* | *0.00082* | 0.00087 | *0.00123* | *0.00038* | *819.52* | *870.74* | *1,229.28* | *384.15* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Plaza**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | cis-1,2-Dichloroethylene | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 | B-1 | B-2 | B-3 | B-4 |
| | (ppmv) | | | | (ppm) | | | | ($\mu g/m^3$) | | | |
| 9/21/2006 | 0.1400 | *0.0100* | *0.0100* | *0.0100* | 0.0006 | *0.00004* | *0.00004* | *0.00004* | 556.22 | *39.73* | *39.73* | *39.73* |
| 10/6/2006 | 0.0300 | *0.0100* | *0.0100* | *0.0100* | 0.0001 | *0.00004* | *0.00004* | *0.00004* | 119.19 | *39.73* | *39.73* | *39.73* |
| 10/13/2006 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 10/20/2006 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 11/17/2006 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 12/27/2006 | 0.0240 | *0.0100* | *0.0100* | *0.0100* | 0.0001 | *0.00004* | *0.00004* | *0.00004* | 95.35 | *39.73* | *39.73* | *39.73* |
| 3/30/2007 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 6/15/2007 | 0.2100 | *0.0100* | *0.0100* | *0.0100* | 0.0008 | *0.00004* | *0.00004* | *0.00004* | 834.33 | *39.73* | *39.73* | *39.73* |
| 10/16/2007 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 12/14/2007 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 3/27/2008 | 0.0340 | NS | *0.0100* | *0.0100* | 0.0001 | NS | *0.00004* | *0.00004* | 135.08 | NS | *39.73* | *39.73* |
| 4/1/2008 | NS | *0.0100* | NS | NS | NS | *0.00004* | NS | NS | NS | *39.73* | NS | NS |
| 6/2/2008 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 9/12/2008 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 11/26/2008 | *0.0100* | NS | *0.0100* | *0.0100* | *0.00004* | NS | *0.00004* | *0.00004* | *39.73* | NS | *39.73* | *39.73* |
| 3/24/2009 | *0.0100* | NS | *0.0100* | *0.0100* | *0.00004* | NS | *0.00004* | *0.00004* | *39.73* | NS | *39.73* | *39.73* |
| 6/15/2009 | *0.0100* | NS | *0.0100* | *0.0100* | *0.00004* | NS | *0.00004* | *0.00004* | *39.73* | NS | *39.73* | *39.73* |
| 8/21/2009 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 11/5/2009 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 2/5/2010 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 4/23/2010 | *0.0100* | NS | NS | *0.0100* | *0.00004* | NS | NS | *0.00004* | *39.73* | NS | NS | *39.73* |
| 5/6/2010 | NS | *0.0100* | *0.0100* | NS | NS | *0.00004* | *0.00004* | NS | NS | *39.73* | *39.73* | NS |
| 7/23/2010 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 10/13/2010 | NS | NS | NS | *0.0100* | NS | NS | NS | *0.00004* | NS | NS | NS | *39.73* |
| 10/15/2010 | *0.0100* | *0.0100* | *0.0100* | NS | *0.00004* | *0.00004* | *0.00004* | NS | *39.73* | *39.73* | *39.73* | NS |
| 1/21/2011 | *0.0100* | *0.0100* | NS | *0.0100* | *0.00004* | *0.00004* | NS | *0.00004* | *39.73* | *39.73* | NS | *39.73* |
| 4/8/2011 | NS | NS | 0.0500 | NS | NS | NS | 0.0002 | NS | NS | NS | 198.65 | NS |
| 5/11/2011 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 7/29/2011 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 10/25/2011 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 1/20/2012 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 6/15/2012 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 9/25/2012 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 12/31/2012 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 3/20/2013 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 5/22/2013 | *0.0100* | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* | *39.73* |
| 9/17/2013 | *0.0100* | *0.0100* | *0.0200* | *0.0100* | *0.00004* | *0.00004* | *0.00008* | *0.00004* | *39.73* | *39.73* | *79.46* | *39.73* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Meadows Apartments**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | Perchloroethylene (PCE) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 |
| | (ppmv) | | | (ppm) | | | ($\mu g/m^3$) | | |
| 3/27/2008 | 0.1300 | 1.2000 | NS | 0.0009 | 0.0082 | NS | 883.48 | 8155.20 | NS |
| 3/28/2008 | 0.0730 | 0.4900 | NS | 0.0005 | 0.0033 | NS | 496.11 | 3330.04 | NS |
| 4/7/2008 | NS | NS | 0.0760 | NS | NS | 0.0005 | NS | NS | 516.50 |
| 4/8/2008 | NS | NS | 0.0470 | NS | NS | 0.0003 | NS | NS | 319.41 |
| 4/24/2008 | 0.0540 | 0.1100 | 0.0220 | 0.0004 | 0.0007 | 0.0001 | 366.98 | 747.56 | 149.51 |
| 5/1/2008 | 0.0580 | 0.2100 | 0.0390 | 0.0004 | 0.0014 | 0.0003 | 394.17 | 1427.16 | 265.04 |
| 6/2/2008 | 0.0590 | 0.2200 | 0.0530 | 0.0004 | 0.0015 | 0.0004 | 400.96 | 1495.12 | 360.19 |
| 7/10/2008 | 0.0650 | NS | 0.0540 | 0.0004 | NS | 0.0004 | 441.74 | NS | 366.98 |
| 8/20/2008 | NS | 0.2700 | NS | NS | 0.0018 | NS | NS | 1834.92 | NS |
| 9/12/2008 | 0.0690 | 0.1800 | 0.0540 | 0.0005 | 0.0012 | 0.0004 | 468.92 | 1223.28 | 366.98 |
| 11/26/2008 | 0.0720 | 0.1100 | 0.0560 | 0.0005 | 0.0007 | 0.0004 | 489.31 | 747.56 | 380.58 |
| 3/24/2009 | 0.2100 | 0.1300 | 0.0590 | 0.0014 | 0.0009 | 0.0004 | 1427.16 | 883.48 | 400.96 |
| 6/15/2009 | 0.0580 | 0.0840 | *0.0050* | 0.0004 | 0.0006 | *0.00003* | 394.17 | 570.86 | *33.98* |
| 8/21/2009 | 0.0630 | 0.0710 | *0.0050* | 0.0004 | 0.0005 | *0.00003* | 428.15 | 482.52 | *33.98* |
| 11/5/2009 | 0.1300 | 0.1100 | *0.0050* | 0.0009 | 0.0007 | *0.00003* | 883.48 | 747.56 | *33.98* |
| 2/5/2010 | 0.0220 | 0.0800 | *0.0050* | 0.0001 | 0.0005 | *0.00003* | 149.51 | 543.68 | *33.98* |
| 2/6/2010 | 0.0220 | 0.0800 | *0.0050* | 0.0001 | 0.0005 | *0.00003* | 149.51 | 543.68 | *33.98* |
| 4/23/2010 | 0.0120 | NS | *0.0050* | 0.0001 | NS | *0.00003* | 81.55 | NS | *33.98* |
| 5/12/2010 | NS | 0.1300 | NS | NS | 0.0009 | NS | NS | 883.48 | NS |
| 7/23/2010 | 0.0270 | 0.1000 | *0.0050* | 0.0002 | 0.0007 | *0.00003* | 183.49 | 679.60 | *33.98* |
| 10/15/2010 | 0.0150 | 0.0190 | *0.0050* | 0.0001 | 0.0001 | *0.00003* | 101.94 | 129.12 | *33.98* |
| 1/21/2011 | 0.0330 | 0.0490 | *0.0050* | 0.0002 | 0.0003 | *0.00003* | 224.27 | 333.00 | *33.98* |
| 5/11/2011 | 0.0580 | 0.0610 | *0.0050* | 0.0004 | 0.0004 | *0.00003* | 394.17 | 414.56 | *33.98* |
| 7/29/2011 | 0.0220 | 0.0210 | *0.0050* | 0.0001 | 0.0001 | *0.00003* | 149.51 | 142.72 | *33.98* |
| 10/25/2011 | 0.0300 | 0.0250 | *0.0050* | 0.0002 | 0.0002 | *0.00003* | 203.88 | 169.90 | *33.98* |
| 1/20/2012 | 0.0220 | 0.0180 | *0.0029* | 0.0001 | 0.0001 | *0.00002* | 149.51 | 122.33 | *19.71* |
| 6/15/2012 | 0.0140 | 0.0110 | *0.0025* | 0.0001 | 0.0001 | *0.00002* | 95.14 | 74.76 | *16.99* |
| 9/25/2012 | 0.0180 | 0.0310 | *0.0050* | 0.0001 | 0.0002 | *0.00003* | 122.33 | 210.68 | *33.98* |
| 12/31/2012 | 0.0170 | 0.0240 | *0.0050* | 0.0001 | 0.0002 | *0.00003* | 115.53 | 163.10 | *33.98* |
| 3/20/2013 | 0.0600 | 0.0380 | *0.0050* | 0.0004 | 0.0003 | *0.00003* | 407.76 | 258.25 | *33.98* |
| 6/19/2013 | 0.0480 | 0.0860 | *0.0061* | 0.0003 | 0.0006 | *0.00004* | 326.21 | 584.46 | *41.46* |
| 9/17/2013 | 0.0210 | 0.0460 | *0.0050* | 0.0001 | 0.0003 | *0.00003* | 142.72 | 312.62 | *33.98* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Meadows Apartments**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | Trichloroethylene (TCE) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 |
| | (ppmv) | | | (ppm) | | | ($\mu g/m^3$) | | |
| 3/27/2008 | *0.0050* | *0.0050* | NS | *0.00003* | *0.00003* | NS | *26.93* | *26.93* | NS |
| 3/28/2008 | *0.0050* | *0.0050* | NS | *0.00003* | *0.00003* | NS | *26.93* | *26.93* | NS |
| 4/7/2008 | NS | NS | *0.0050* | NS | NS | *0.00003* | NS | NS | *26.93* |
| 4/8/2008 | NS | NS | *0.0050* | NS | NS | *0.00003* | NS | NS | *26.93* |
| 4/24/2008 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 5/1/2008 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 6/2/2008 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 7/10/2008 | *0.0050* | NS | *0.0050* | *0.00003* | NS | *0.00003* | *26.93* | NS | *26.93* |
| 8/20/2008 | NS | *0.0050* | NS | NS | *0.00003* | NS | NS | *26.93* | NS |
| 9/12/2008 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 11/26/2008 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 3/24/2009 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 6/15/2009 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 8/21/2009 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 11/5/2009 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 2/5/2010 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 2/6/2010 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 4/23/2010 | *0.0050* | NS | *0.0050* | *0.00003* | NS | *0.00003* | *26.93* | NS | *26.93* |
| 5/12/2010 | NS | *0.0050* | NS | NS | *0.00003* | NS | NS | *26.93* | NS |
| 7/23/2010 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 10/15/2010 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 1/21/2011 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 5/11/2011 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 7/29/2011 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 10/25/2011 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |
| 1/20/2012 | *0.0012* | *0.0050* | *0.0050* | *0.00001* | *0.00003* | *0.00003* | *6.46* | *26.93* | *26.93* |
| 6/15/2012 | *0.0015* | *0.0050* | *0.0050* | *0.00001* | *0.00003* | *0.00003* | *8.08* | *26.93* | *26.93* |
| 9/25/2012 | *0.0012* | *0.0050* | *0.0050* | *0.00001* | *0.00003* | *0.00003* | *6.46* | *26.93* | *26.93* |
| 12/31/2012 | *0.0011* | *0.0050* | *0.0050* | *0.00001* | *0.00003* | *0.00003* | *5.92* | *26.93* | *26.93* |
| 3/20/2013 | *0.0034* | *0.0050* | *0.0050* | *0.00002* | *0.00003* | *0.00003* | *18.31* | *26.93* | *26.93* |
| 6/19/2013 | *0.0028* | *0.0050* | *0.0050* | *0.00002* | *0.00003* | *0.00003* | *15.08* | *26.93* | *26.93* |
| 9/17/2013 | *0.0050* | *0.0050* | *0.0050* | *0.00003* | *0.00003* | *0.00003* | *26.93* | *26.93* | *26.93* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Maple Creek Village Apartments**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | Vinyl Chloride | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 |
| | (ppmv) | | | (ppm) | | | ($\mu g/m^3$) | | |
| 3/27/2008 | *0.0150* | *0.0150* | NS | *0.00004* | *0.00004* | NS | *38.42* | *38.42* | NS |
| 3/28/2008 | *0.0150* | *0.0150* | NS | *0.00004* | *0.00004* | NS | *38.42* | *38.42* | NS |
| 4/7/2008 | NS | NS | *0.0150* | NS | NS | *0.00004* | NS | NS | *38.42* |
| 4/8/2008 | NS | NS | *0.0150* | NS | NS | *0.00004* | NS | NS | *38.42* |
| 4/24/2008 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 5/1/2008 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 6/2/2008 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 7/10/2008 | *0.0150* | NS | *0.0150* | *0.00004* | NS | *0.00004* | *38.42* | NS | 38.42 |
| 8/20/2008 | NS | *0.0150* | NS | NS | *0.00004* | NS | NS | *38.42* | NS |
| 9/12/2008 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 11/26/2008 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 3/24/2009 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 6/15/2009 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 8/21/2009 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 11/5/2009 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 2/5/2010 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 2/6/2010 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 4/23/2010 | *0.0150* | NS | *0.0150* | *0.00004* | NS | *0.00004* | *38.42* | NS | *38.42* |
| 5/12/2010 | NS | *0.0150* | NS | NS | *0.00004* | NS | NS | *38.42* | NS |
| 7/23/2010 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 10/15/2010 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 1/21/2011 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 5/11/2011 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 7/29/2011 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 10/25/2011 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 1/20/2012 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 6/15/2012 | *0.3300* | *0.1400* | *0.1200* | *0.00085* | *0.00036* | *0.00031* | *845.13* | *358.54* | *307.32* |
| 9/25/2012 | *0.1500* | *0.1100* | *0.0150* | *0.00038* | *0.00028* | *0.00004* | *384.15* | *281.71* | *38.42* |
| 12/31/2012 | *0.2000* | *0.1400* | *0.1500* | *0.00051* | *0.00036* | *0.00038* | *512.20* | *358.54* | *384.15* |
| 3/20/2013 | *0.0150* | *0.0150* | *0.0150* | *0.00004* | *0.00004* | *0.00004* | *38.42* | *38.42* | *38.42* |
| 6/19/2013 | *0.2000* | *0.1600* | *0.1300* | *0.00051* | *0.00041* | *0.00033* | *512.20* | *409.76* | *332.93* |
| 9/17/2013 | *0.1400* | *0.1500* | *0.1100* | *0.00036* | *0.00038* | *0.00028* | *358.54* | *384.15* | *281.71* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX C**

**Air Mitigation System - Historical Air Analytical Results**

**Maple Creek Village Apartments**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

| Sample Date | cis-1,2-Dichloroethylene | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 | B-5 | B-6 | B-7 |
| | (ppmv) | | | (ppm) | | | ($\mu g/m^3$) | | |
| 3/27/2008 | *0.0100* | *0.0100* | NS | *0.00004* | *0.00004* | NS | *39.73* | *39.73* | NS |
| 3/28/2008 | *0.0100* | *0.0100* | NS | *0.00004* | *0.00004* | NS | *39.73* | *39.73* | NS |
| 4/7/2008 | NS | NS | *0.0100* | NS | NS | *0.00004* | NS | NS | *39.73* |
| 4/8/2008 | NS | NS | *0.0100* | NS | NS | *0.00004* | NS | NS | *39.73* |
| 4/24/2008 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 5/1/2008 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 6/2/2008 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 7/10/2008 | *0.0100* | NS | *0.0100* | *0.00004* | NS | *0.00004* | *39.73* | NS | *39.73* |
| 8/20/2008 | NS | *0.0100* | NS | NS | *0.00004* | NS | NS | 39.73 | NS |
| 9/12/2008 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 11/26/2008 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 3/24/2009 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 6/15/2009 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 8/21/2009 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 11/5/2009 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 2/5/2010 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 2/6/2010 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 4/23/2010 | *0.0100* | NS | *0.0100* | *0.00004* | NS | *0.00004* | *39.73* | NS | *39.73* |
| 5/12/2010 | NS | *0.0100* | NS | NS | *0.00004* | NS | NS | *39.73* | NS |
| 7/23/2010 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 10/15/2010 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 1/21/2011 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 5/11/2011 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 7/29/2011 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 10/25/2011 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 1/20/2012 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 6/15/2012 | *0.0100* | *0.0100* | 0.0340 | *0.00004* | *0.00004* | 0.00014 | *39.73* | *39.73* | 135.08 |
| 9/25/2012 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 12/31/2012 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 3/20/2013 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 6/19/2013 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |
| 9/17/2013 | *0.0100* | *0.0100* | *0.0100* | *0.00004* | *0.00004* | *0.00004* | *39.73* | *39.73* | *39.73* |

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**Lab Data for Air Mitigation System B-1**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

**B-1 (Lab Data)**

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed (ug/m3) | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/21/2006 | 0.5 | 73 | 2,190 | 4,281 | 0.00 | 129 | 0.00 | 38 | 0.00 | 556 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10/6/2006 | 360 | 73 | 1,576,800 | 5,980 | 0.59 | 65 | 0.01 | 38 | 0.00 | 119 | 0.01 | 0.61 | 0.59 | 0.61 |
| 10/13/2006 | 168 | 73 | 735,840 | 4,621 | 0.21 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.22 | 0.80 | 0.83 |
| 10/20/2006 | 168 | 73 | 735,840 | 5,913 | 0.27 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.28 | 1.07 | 1.10 |
| 11/17/2006 | 672 | 73 | 2,943,360 | 5,505 | 1.01 | 27 | 0.00 | 38 | 0.01 | 40 | 0.01 | 1.03 | 2.08 | 2.13 |
| 12/27/2006 | 960 | 73 | 4,204,800 | 5,029 | 1.32 | 27 | 0.01 | 38 | 0.01 | 95 | 0.03 | 1.36 | 3.40 | 3.50 |
| 3/30/2007 | 2,232 | 73 | 9,776,160 | 3,466 | 2.11 | 27 | 0.02 | 38 | 0.02 | 40 | 0.02 | 2.18 | 5.52 | 5.67 |
| 6/15/2007 | 1,848 | 73 | 8,094,240 | 34 | 0.02 | 2,477 | 1.25 | 38 | 0.02 | 834 | 0.42 | 1.71 | 5.53 | 7.38 |
| 10/16/2007 | 2,952 | 73 | 12,929,760 | 2,650 | 2.14 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 2.22 | 7.67 | 9.60 |
| 12/14/2007 | 1,416 | 73 | 6,202,080 | 3,942 | 1.52 | 27 | 0.01 | 38 | 0.01 | 40 | 0.02 | 1.57 | 9.20 | 11.17 |
| 3/27/2008 | 2,496 | 73 | 10,932,480 | 3,738 | 2.55 | 27 | 0.02 | 38 | 0.03 | 135 | 0.09 | 2.69 | 11.74 | 13.86 |
| 6/2/2008 | 1,608 | 73 | 7,043,040 | 4,893 | 2.15 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 2.20 | 13.89 | 16.05 |
| 9/12/2008 | 2,448 | 73 | 10,722,240 | 3,262 | 2.18 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 2.25 | 16.08 | 18.30 |
| 11/26/2008 | 1,800 | 73 | 7,884,000 | 3,126 | 1.54 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 1.59 | 17.61 | 19.89 |
| 3/24/2009 | 2,832 | 73 | 12,404,160 | 3,058 | 2.37 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 2.45 | 19.98 | 22.34 |
| 6/15/2009 | 1,992 | 73 | 8,724,960 | 2,922 | 1.59 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 1.65 | 21.57 | 23.99 |
| 8/21/2009 | 1,608 | 73 | 7,043,040 | 2,447 | 1.07 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 1.12 | 22.65 | 25.11 |
| 11/5/2009 | 1,824 | 73 | 7,989,120 | 2,243 | 1.12 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 1.17 | 23.76 | 26.28 |
| 2/5/2010 | 2,208 | 73 | 9,671,040 | 1,087 | 0.66 | 27 | 0.02 | 38 | 0.02 | 40 | 0.02 | 0.72 | 24.42 | 27.00 |
| 4/23/2010 | 1,848 | 55 | 6,098,400 | 883 | 0.34 | 27 | 0.01 | 38 | 0.01 | 40 | 0.02 | 0.38 | 24.75 | 27.37 |
| 7/23/2010 | 2,184 | 55 | 7,207,200 | 1,019 | 0.46 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.51 | 25.21 | 27.88 |
| 10/15/2010 | 2,016 | 73 | 8,830,080 | 639 | 0.35 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.41 | 25.57 | 28.29 |
| 1/21/2011 | 2,352 | 55 | 7,761,600 | 951 | 0.46 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.51 | 26.03 | 28.80 |
| 5/11/2011 | 2,640 | 73 | 11,563,200 | 1,495 | 1.08 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 1.15 | 27.10 | 29.95 |
| 7/29/2011 | 1,896 | 73 | 8,304,480 | 449 | 0.23 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.29 | 27.34 | 30.24 |
| 10/25/2011 | 2,112 | 55 | 6,969,600 | 748 | 0.33 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.37 | 27.66 | 30.61 |
| 1/20/2012 | 2,088 | 55 | 6,890,400 | 680 | 0.29 | 27 | 0.01 | 512 | 0.22 | 40 | 0.02 | 0.54 | 27.95 | 31.15 |
| 6/15/2012 | 3,528 | 55 | 11,642,400 | 483 | 0.35 | 7 | 0.01 | 38 | 0.03 | 40 | 0.03 | 0.41 | 28.30 | 31.57 |
| 9/25/2012 | 2,448 | 73 | 10,722,240 | 680 | 0.45 | 7 | 0.00 | 38 | 0.03 | 40 | 0.03 | 0.51 | 28.76 | 32.08 |
| 12/31/2012 | 2,328 | 73 | 10,196,640 | 1,631 | 1.04 | 11 | 0.01 | 845 | 0.54 | 40 | 0.03 | 1.61 | 29.80 | 33.68 |
| 3/20/2013 | 1,896 | 132 | 15,016,320 | 1,563 | 1.46 | 11 | 0.01 | 512 | 0.48 | 40 | 0.04 | 1.99 | 31.26 | 35.68 |
| 5/22/2013 | 1,512 | 73 | 6,622,560 | 1,699 | 0.70 | 11 | 0.00 | 256 | 0.11 | 40 | 0.02 | 0.83 | 31.96 | 36.50 |
| 9/17/2013 | 2,832 | 73 | 12,404,160 | 557 | 0.43 | 27 | 0.02 | 820 | 0.63 | 40 | 0.03 | 1.12 | 32.39 | 37.62 |
| **TOTALS:** | **61,273** | | **259,844,430** | | **32.39** | | **1.62** | | **2.48** | | **1.13** | **37.62** | | |

**B-1 (PID Readings)**

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 11/17/2006 | 672 | 73 | 2,943,360 | 0.1 | 1,483 | 0.27 | 0.27 |
| 12/27/2006 | 960 | 73 | 4,204,800 | 0.0 | 1,296 | 0.34 | 0.61 |
| 6/15/2007 | 4,080 | 73 | 17,870,400 | 0.1 | 1,483 | 1.65 | 2.26 |
| 10/16/2007 | 2,952 | 73 | 12,929,760 | 0.1 | 1,483 | 1.20 | 3.46 |
| 12/14/2007 | 1,416 | 73 | 6,202,080 | 0.1 | 1,483 | 0.57 | 4.03 |
| 6/2/2008 | 4,104 | 73 | 17,975,520 | 2.2 | 5,401 | 6.06 | 10.09 |
| 9/12/2008 | 2,448 | 73 | 10,722,240 | 0.3 | 1,856 | 1.24 | 11.33 |
| 11/26/2008 | 1,800 | 73 | 7,884,000 | 0.1 | 1,483 | 0.73 | 12.06 |
| 8/21/2009 | 6,432 | 73 | 28,172,160 | 3.8 | 8,387 | 14.74 | 26.80 |
| 11/5/2009 | 1,824 | 73 | 7,989,120 | 2.1 | 5,215 | 2.60 | 29.40 |
| 2/5/2010 | 2,208 | 73 | 9,671,040 | 2.3 | 5,588 | 3.37 | 32.77 |
| 5/6/2010 | 2,160 | 55 | 7,128,000 | 2.2 | 5,401 | 2.40 | 35.17 |
| 10/15/2010 | 3,888 | 73 | 17,029,440 | 2.0 | 5,028 | 5.34 | 40.51 |
| 1/21/2011 | 2,352 | 55 | 7,761,600 | 1.9 | 4,841 | 2.34 | 42.86 |
| 5/11/2011 | 2,640 | 73 | 11,563,200 | 1.9 | 4,841 | 3.49 | 46.35 |
| 7/29/2011 | 1,896 | 73 | 8,304,480 | 1.1 | 3,349 | 1.73 | 48.08 |
| 10/25/2011 | 2,112 | 55 | 6,969,600 | 2.1 | 5,215 | 2.27 | 50.35 |
| 1/20/2012 | 2,088 | 55 | 6,890,400 | 1.7 | 4,468 | 1.92 | 52.27 |
| 6/15/2012 | 3,528 | 55 | 11,642,400 | 2.4 | 5,774 | 4.19 | 56.46 |
| 9/25/2012 | 2,448 | 73 | 10,722,240 | 2.5 | 5,961 | 3.99 | 60.45 |
| 12/31/2012 | 2,328 | 73 | 10,196,640 | 0.3 | 1,856 | 1.18 | 61.63 |
| 3/20/2013 | 1,896 | 132 | 15,016,320 | 0.1 | 1,483 | 1.39 | 63.02 |
| 5/22/2013 | 1,512 | 73 | 6,622,560 | 0.0 | 1,296 | 0.54 | 63.56 |
| 9/17/2013 | 2,832 | 73 | 12,404,160 | 1.2 | 3,535 | 2.74 | 66.29 |
| **TOTALS:** | **60,576** | | **258,815,520** | | | **66.29** | |

**Lab Data for Air Mitigation System B-2**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

**B-2 (Lab Data)**

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/21/2006 | 0.5 | 37 | 1,110 | 5,369 | 0.00 | 65 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10/6/2006 | 360 | 37 | 799,200 | 4,553 | 0.23 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.23 | 0.23 | 0.23 |
| 10/13/2006 | 168 | 37 | 372,960 | 2,447 | 0.06 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.06 | 0.28 | 0.29 |
| 10/20/2006 | 168 | 37 | 372,960 | 3,738 | 0.09 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.09 | 0.37 | 0.38 |
| 11/17/2006 | 672 | 37 | 1,491,840 | 3,194 | 0.30 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.31 | 0.67 | 0.69 |
| 12/27/2006 | 960 | 37 | 2,131,200 | 3,194 | 0.42 | 27 | 0.00 | 38 | 0.01 | 40 | 0.01 | 0.44 | 1.09 | 1.13 |
| 3/30/2007 | 2,232 | 38 | 5,088,960 | 1,223 | 0.39 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.42 | 1.48 | 1.55 |
| 6/15/2007 | 1,848 | 42 | 4,656,960 | 2,107 | 0.61 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.64 | 2.09 | 2.19 |
| 10/16/2007 | 2,952 | 48 | 8,501,760 | 1,631 | 0.86 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.92 | 2.96 | 3.11 |
| 12/14/2007 | 1,416 | 53 | 4,502,880 | 2,311 | 0.65 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.68 | 3.61 | 3.79 |
| 4/1/2008 | 2,616 | 50 | 7,848,000 | 2,447 | 1.20 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 1.25 | 4.81 | 5.04 |
| 6/2/2008 | 1,488 | 42 | 3,705,120 | 3,806 | 0.88 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.90 | 5.68 | 5.94 |
| 9/12/2008 | 2,448 | 37 | 5,434,560 | 3,194 | 1.08 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 1.12 | 6.77 | 7.06 |
| 8/21/2009 | 1,440 | 37 | 3,196,800 | 1,087 | 0.22 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.24 | 6.98 | 7.30 |
| 11/5/2009 | 1,824 | 37 | 4,049,280 | 951 | 0.24 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.27 | 7.22 | 7.57 |
| 2/5/2010 | 2,208 | 55 | 7,286,400 | 251 | 0.11 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.16 | 7.34 | 7.73 |
| 5/6/2010 | 2,160 | 37 | 4,795,200 | 1,019 | 0.30 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.34 | 7.64 | 8.06 |
| 7/23/2010 | 1,872 | 37 | 4,155,840 | 1,291 | 0.33 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.36 | 7.98 | 8.43 |
| 10/15/2010 | 2,016 | 55 | 6,652,800 | 442 | 0.18 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.23 | 8.16 | 8.65 |
| 1/21/2011 | 2,352 | 55 | 7,761,600 | 183 | 0.09 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.14 | 8.25 | 8.79 |
| 5/11/2011 | 2,640 | 37 | 5,860,800 | 1,835 | 0.67 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.71 | 8.92 | 9.50 |
| 7/29/2011 | 1,896 | 37 | 4,209,120 | 1,155 | 0.30 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.33 | 9.23 | 9.83 |
| 10/25/2011 | 2,112 | 37 | 4,688,640 | 816 | 0.24 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.27 | 9.46 | 10.10 |
| 1/20/2012 | 2,088 | 37 | 4,635,360 | 550 | 0.16 | 27 | 0.01 | 282 | 0.08 | 40 | 0.01 | 0.26 | 9.62 | 10.36 |
| 6/15/2012 | 3,528 | 37 | 7,832,160 | 816 | 0.40 | 6 | 0.00 | 38 | 0.02 | 40 | 0.02 | 0.44 | 10.02 | 10.80 |
| 9/25/2012 | 2,448 | 37 | 5,434,560 | 1,223 | 0.41 | 9 | 0.00 | 38 | 0.01 | 40 | 0.01 | 0.44 | 10.44 | 11.25 |
| 12/31/2012 | 2,328 | 55 | 7,682,400 | 1,291 | 0.62 | 10 | 0.00 | 4,098 | 1.96 | 40 | 0.02 | 2.61 | 11.05 | 13.85 |
| 3/20/2013 | 1,896 | 115 | 13,082,400 | 1,359 | 1.11 | 9 | 0.01 | 538 | 0.44 | 40 | 0.03 | 1.59 | 12.16 | 15.44 |
| 5/22/2013 | 1,512 | 37 | 3,356,640 | 3,126 | 0.65 | 15 | 0.00 | 38 | 0.01 | 40 | 0.01 | 0.67 | 12.82 | 16.12 |
| 9/17/2013 | 2,832 | 55 | 9,345,600 | 951 | 0.55 | 27 | 0.02 | 871 | 0.51 | 40 | 0.02 | 1.10 | 13.37 | 17.22 |
| **TOTALS:** | **54,481** | | **148,933,110** | | **13.37** | | **0.21** | | **3.27** | | **0.37** | **17.22** | | |

**B-2 (PID Readings)**

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 11/17/2006 | 672.0 | 37 | 1,491,840 | 0.1 | 1,483 | 0.14 | 0.14 |
| 12/27/2006 | 960 | 37 | 2,131,200 | 0.1 | 1,483 | 0.20 | 0.34 |
| 6/15/2007 | 4,080 | 37 | 9,057,600 | 0.1 | 1,483 | 0.84 | 1.17 |
| 10/16/2007 | 2,952 | 37 | 6,553,440 | 0.1 | 1,483 | 0.61 | 1.78 |
| 12/14/2007 | 1,416 | 55 | 4,672,800 | 0.1 | 1,483 | 0.43 | 2.21 |
| 6/2/2008 | 4,104 | 132 | 32,503,680 | 1.5 | 4,095 | 8.30 | 10.51 |
| 9/12/2008 | 2,448 | 37 | 5,434,560 | 0.5 | 2,229 | 0.76 | 11.27 |
| 8/21/2009 | 8,232 | 55 | 27,165,600 | 2.4 | 5,774 | 9.79 | 21.05 |
| 11/5/2009 | 1,824 | 94 | 10,287,360 | 1.6 | 4,282 | 2.75 | 23.80 |
| 2/5/2010 | 2,208 | 55 | 7,286,400 | 0.6 | 2,416 | 1.10 | 24.90 |
| 5/6/2010 | 2,160 | 37 | 4,795,200 | 1.4 | 3,908 | 1.17 | 26.07 |
| 10/15/2010 | 3,888 | 55 | 12,830,400 | 3.2 | 7,267 | 5.82 | 31.89 |
| 1/21/2011 | 2,352 | 55 | 7,761,600 | 1.4 | 3,908 | 1.89 | 33.78 |
| 5/11/2011 | 2,640 | 37 | 5,860,800 | 1.6 | 4,282 | 1.57 | 35.34 |
| 7/29/2011 | 1,896 | 37 | 4,209,120 | 1.7 | 4,468 | 1.2 | 36.52 |
| 10/25/2011 | 2,112 | 37 | 4,688,640 | 1.9 | 4,841 | 1.4 | 37.93 |
| 1/20/2012 | 2,088 | 37 | 4,635,360 | 1.5 | 4,095 | 1.2 | 39.12 |
| 6/15/2012 | 3,528 | 37 | 7,832,160 | 2.8 | 6,521 | 3.2 | 42.30 |
| 9/25/2012 | 2,448 | 37 | 5,434,560 | 2.9 | 6,707 | 2.3 | 44.58 |
| 12/31/2012 | 2,328 | 55 | 7,682,400 | 4.3 | 9,320 | 4.5 | 49.04 |
| 3/20/2013 | 1,896 | 115 | 13,082,400 | 1.4 | 3,908 | 3.2 | 52.23 |
| 5/22/2013 | 1,512 | 37 | 3,356,640 | 0.2 | 1,669 | 0.3 | 52.58 |
| 9/17/2013 | 2,832 | 55 | 9,345,600 | 1.7 | 4,468 | 2.6 | 55.19 |
| **TOTALS:** | **60,576** | | **198,099,360** | | | **55.19** | |

**Lab Data for Air Mitigation System B-3**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

## B-3 (Lab Data)

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/21/2006 | 0.5 | 132 | 3,960 | 4,553 | 0.00 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10/6/2006 | 360 | 132 | 2,851,200 | 6,592 | 1.17 | 27 | 0.00 | 38 | 0.01 | 40 | 0.01 | 1.19 | 1.17 | 1.19 |
| 10/13/2006 | 168 | 132 | 1,330,560 | 3,534 | 0.29 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.30 | 1.47 | 1.49 |
| 10/20/2006 | 168 | 132 | 1,330,560 | 6,048 | 0.50 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.51 | 1.97 | 2.01 |
| 11/17/2006 | 672 | 132 | 5,322,240 | 5,301 | 1.76 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 1.79 | 3.73 | 3.80 |
| 12/27/2006 | 960 | 132 | 7,603,200 | 5,097 | 2.42 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 2.47 | 6.15 | 6.27 |
| 3/30/2007 | 2,232 | 132 | 17,677,440 | 3,874 | 4.27 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 4.39 | 10.42 | 10.65 |
| 6/15/2007 | 1,848 | 132 | 14,636,160 | 1,427 | 1.30 | 27 | 0.02 | 38 | 0.04 | 40 | 0.04 | 1.40 | 11.72 | 12.05 |
| 10/16/2007 | 2,952 | 132 | 23,379,840 | 1,903 | 2.78 | 27 | 0.04 | 38 | 0.06 | 40 | 0.06 | 2.93 | 14.50 | 14.98 |
| 12/14/2007 | 1,416 | 132 | 11,214,720 | 3,534 | 2.47 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 2.55 | 16.97 | 17.53 |
| 3/27/2008 | 2,496 | 132 | 19,768,320 | 3,806 | 4.69 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 4.82 | 21.66 | 22.35 |
| 6/2/2008 | 1,608 | 55 | 5,306,400 | 3,330 | 1.10 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 1.14 | 22.76 | 23.49 |
| 9/12/2008 | 2,448 | 132 | 19,388,160 | 3,602 | 4.36 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 4.48 | 27.12 | 27.97 |
| 11/26/2008 | 1,800 | 132 | 14,256,000 | 2,447 | 2.18 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 2.27 | 29.30 | 30.24 |
| 3/24/2009 | 2,832 | 132 | 22,429,440 | 3,738 | 5.23 | 27 | 0.04 | 38 | 0.05 | 40 | 0.06 | 5.38 | 34.52 | 35.62 |
| 6/15/2009 | 1,992 | 132 | 15,776,640 | 2,854 | 2.81 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 2.91 | 37.33 | 38.53 |
| 8/21/2009 | 1,608 | 132 | 12,735,360 | 3,194 | 2.54 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 2.62 | 39.87 | 41.15 |
| 11/5/2009 | 1,824 | 132 | 14,446,080 | 2,786 | 2.51 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 2.61 | 42.38 | 43.75 |
| 2/5/2010 | 2,208 | 132 | 17,487,360 | 951.44 | 1.04 | 26.93 | 0.03 | 38 | 0.04 | 40 | 0.04 | 1.15 | 43.42 | 44.91 |
| 5/6/2010 | 2,160 | 132 | 17,107,200 | 1,699 | 1.81 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 1.93 | 45.23 | 46.83 |
| 7/23/2010 | 1,872 | 132 | 14,826,240 | 816 | 0.75 | 27 | 0.02 | 38 | 0.04 | 40 | 0.04 | 0.85 | 45.99 | 47.68 |
| 10/15/2010 | 2,016 | 132 | 15,966,720 | 34 | 0.03 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.14 | 46.02 | 47.82 |
| 1/21/2011 | 2,352 | 132 | 18,627,840 | NS | 0.00 | NS | 0.00 | NS | 0.00 | NS | 0.00 | 0.00 | 46.02 | 47.82 |
| 4/8/2011 | 1,848 | 132 | 14,636,160 | 1,427 | 1.30 | 27 | 0.02 | 38 | 0.04 | 199 | 0.18 | 1.54 | 47.32 | 49.37 |
| 5/11/2011 | 792 | 132 | 6,272,640 | 1,427 | 0.56 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.60 | 47.88 | 49.97 |
| 7/29/2011 | 1,896 | 132 | 15,016,320 | 748 | 0.70 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.80 | 48.58 | 50.76 |
| 10/25/2011 | 2,112 | 132 | 16,727,040 | 360 | 0.38 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.49 | 48.96 | 51.25 |
| 1/20/2012 | 2,088 | 55 | 6,890,400 | 449 | 0.19 | 6 | 0.00 | 38 | 0.02 | 40 | 0.02 | 0.23 | 49.15 | 51.48 |
| 6/15/2012 | 3,528 | 132 | 27,941,760 | 326 | 0.57 | 27 | 0.05 | 38 | 0.07 | 40 | 0.07 | 0.75 | 49.72 | 52.23 |
| 9/25/2012 | 2,448 | 132 | 19,388,160 | 598 | 0.72 | 10 | 0.01 | 359 | 0.43 | 40 | 0.05 | 1.22 | 50.44 | 53.45 |
| 12/31/2012 | 2,328 | 132 | 18,437,760 | 951 | 1.09 | 15 | 0.02 | 589 | 0.68 | 40 | 0.05 | 1.83 | 51.54 | 55.28 |
| 3/20/2013 | 1,896 | 132 | 15,016,320 | 625 | 0.59 | 12 | 0.01 | 246 | 0.23 | 40 | 0.04 | 0.86 | 52.12 | 56.15 |
| 5/22/2013 | 1,512 | 132 | 11,975,040 | 1,019 | 0.76 | 16 | 0.01 | 38 | 0.03 | 40 | 0.03 | 0.83 | 52.88 | 56.98 |
| 9/17/2013 | 2,832 | 132 | 22,429,440 | 612 | 0.86 | 54 | 0.08 | 1,229 | 1.72 | 79 | 0.11 | 2.76 | 53.74 | 59.74 |
| **TOTALS:** | **61,273** | | **468,202,680** | | **53.74** | | **0.73** | | **3.96** | | **1.31** | **59.74** | | |

## B-3 (PID Readings)

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 11/17/2006 | 672 | 132 | 5,322,240 | 2.0 | 5,028 | 1.67 | 1.67 |
| 12/27/2006 | 960 | 132 | 7,603,200 | 0.1 | 1,483 | 0.70 | 2.37 |
| 6/15/2007 | 4,080 | 132 | 32,313,600 | 0.1 | 1,483 | 2.99 | 5.36 |
| 10/16/2007 | 2,952 | 132 | 23,379,840 | 0.1 | 1,483 | 2.16 | 7.52 |
| 12/14/2007 | 1,416 | 132 | 11,214,720 | 0.1 | 1,483 | 1.04 | 8.56 |
| 6/2/2008 | 4,104 | 55 | 13,543,200 | 1.2 | 3,535 | 2.99 | 11.55 |
| 9/12/2008 | 2,448 | 132 | 19,388,160 | 0.5 | 2,229 | 2.70 | 14.24 |
| 11/26/2008 | 1,800 | 132 | 14,256,000 | 0.8 | 2,789 | 2.48 | 16.72 |
| 8/21/2009 | 6,432 | 132 | 50,941,440 | 0.0 | 1,296 | 4.12 | 20.84 |
| 11/5/2009 | 1,824 | 132 | 14,446,080 | 1.8 | 4,655 | 4.19 | 25.04 |
| 2/5/2010 | 2,208 | 132 | 17,487,360 | 1.5 | 4,095 | 4.47 | 29.50 |
| 5/6/2010 | 2,160 | 132 | 17,107,200 | 1.7 | 4,468 | 4.77 | 34.27 |
| 10/15/2010 | 3,888 | 132 | 30,792,960 | 0.1 | 1,483 | 2.85 | 37.12 |
| 1/21/2011 | 2,352 | 132 | 18,627,840 | 1.4 | 3,908 | 4.54 | 41.66 |
| 4/8/2011 | 1,848 | 132 | 14,636,160 | 2.4 | 5,774 | 5.27 | 46.93 |
| 5/11/2011 | 792 | 132 | 6,272,640 | 1.2 | 3,535 | 1.38 | 48.32 |
| 7/29/2011 | 1,896 | 132 | 15,016,320 | 1.3 | 3,722 | 3.5 | 51.80 |
| 10/25/2011 | 2,112 | 132 | 16,727,040 | 1.5 | 4,095 | 4.3 | 56.07 |
| 1/20/2012 | 2,088 | 55 | 6,890,400 | 1.4 | 3,908 | 1.7 | 57.75 |
| 6/15/2012 | 3,528 | 132 | 27,941,760 | 1.4 | 3,908 | 6.8 | 64.57 |
| 9/25/2012 | 2,448 | 132 | 19,388,160 | 1.5 | 4,095 | 5.0 | 69.52 |
| 12/31/2012 | 2,328 | 132 | 18,437,760 | 0.6 | 2,416 | 2.8 | 72.30 |
| 3/20/2013 | 1,896 | 132 | 15,016,320 | 0.1 | 1,483 | 1.4 | 73.69 |
| 5/22/2013 | 1,512 | 132 | 11,975,040 | 0.0 | 1,296 | 1.0 | 74.65 |
| 9/17/2013 | 2,832 | 132 | 22,429,440 | 0.1 | 1,483 | 2.1 | 76.73 |
| **TOTALS:** | **60,576** | | **451,154,880** | | | **76.73** | |

**Lab Data for Air Mitigation System B-4**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

**B-4 (Lab Data)**

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/21/2006 | 0.5 | 132 | 3,960 | 1,903 | 0.00 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10/6/2006 | 360 | 132 | 2,851,200 | 2,107 | 0.37 | 27 | 0.00 | 38 | 0.01 | 40 | 0.01 | 0.39 | 0.38 | 0.39 |
| 10/13/2006 | 168 | 132 | 1,330,560 | 1,427 | 0.12 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.13 | 0.49 | 0.52 |
| 10/20/2006 | 168 | 132 | 1,330,560 | 1,495 | 0.12 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.13 | 0.62 | 0.65 |
| 11/17/2006 | 672 | 132 | 5,322,240 | 1,019 | 0.34 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.37 | 0.96 | 1.03 |
| 12/27/2006 | 960 | 132 | 7,603,200 | 748 | 0.35 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.40 | 1.31 | 1.43 |
| 3/30/2007 | 2,232 | 130 | 17,342,640 | 211 | 0.23 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.34 | 1.54 | 1.77 |
| 6/15/2007 | 1,848 | 125 | 13,887,720 | 3,126 | 2.71 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 2.80 | 4.25 | 4.57 |
| 10/16/2007 | 2,952 | 128 | 22,627,080 | 455 | 0.64 | 27 | 0.04 | 38 | 0.05 | 40 | 0.06 | 0.79 | 4.89 | 5.36 |
| 12/14/2007 | 1,416 | 132 | 11,214,720 | 951 | 0.67 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.74 | 5.56 | 6.10 |
| 3/27/2008 | 2,496 | 128 | 19,094,400 | 503 | 0.60 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.72 | 6.15 | 6.83 |
| 6/2/2008 | 1,608 | 119 | 11,481,120 | 680 | 0.49 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.56 | 6.64 | 7.39 |
| 9/12/2008 | 2,448 | 132 | 19,388,160 | 883 | 1.07 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 1.20 | 7.71 | 8.58 |
| 11/26/2008 | 1,800 | 132 | 14,256,000 | 748 | 0.66 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.76 | 8.37 | 9.34 |
| 3/24/2009 | 2,832 | 132 | 22,429,440 | 34 | 0.05 | 27 | 0.04 | 38 | 0.05 | 40 | 0.06 | 0.19 | 8.42 | 9.54 |
| 6/15/2009 | 1,992 | 132 | 15,776,640 | 136 | 0.13 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.24 | 8.56 | 9.77 |
| 8/21/2009 | 1,608 | 132 | 12,735,360 | 95 | 0.08 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.16 | 8.63 | 9.93 |
| 11/5/2009 | 1,824 | 132 | 14,446,080 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.13 | 8.66 | 10.06 |
| 2/5/2010 | 2,208 | 132 | 17,487,360 | 82 | 0.09 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.20 | 8.75 | 10.26 |
| 4/23/2010 | 1,848 | 115 | 12,751,200 | 116 | 0.09 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.18 | 8.84 | 10.44 |
| 7/23/2010 | 2,184 | 115 | 15,069,600 | 34 | 0.03 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.13 | 8.87 | 10.57 |
| 10/13/2010 | 1,968 | 115 | 13,579,200 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.12 | 8.90 | 10.69 |
| 1/21/2011 | 2,400 | 132 | 19,008,000 | 34 | 0.04 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.16 | 8.94 | 10.85 |
| 5/11/2011 | 2,640 | 132 | 20,908,800 | 156 | 0.20 | 27 | 0.04 | 38 | 0.05 | 40 | 0.05 | 0.34 | 9.15 | 11.19 |
| 7/29/2011 | 1,896 | 115 | 13,082,400 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.11 | 9.18 | 11.31 |
| 10/25/2011 | 2,112 | 132 | 16,727,040 | 34 | 0.04 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.15 | 9.21 | 11.45 |
| 1/20/2012 | 2,088 | 132 | 16,536,960 | 55 | 0.06 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.17 | 9.27 | 11.62 |
| 6/15/2012 | 3,528 | 115 | 24,343,200 | 31 | 0.05 | 27 | 0.04 | 38 | 0.06 | 40 | 0.06 | 0.21 | 9.31 | 11.82 |
| 9/25/2012 | 2,448 | 132 | 19,388,160 | 7 | 0.01 | 27 | 0.03 | 256 | 0.31 | 40 | 0.05 | 0.40 | 9.32 | 12.22 |
| 12/31/2012 | 2,328 | 132 | 18,437,760 | 13 | 0.01 | 27 | 0.03 | 38 | 0.04 | 40 | 0.05 | 0.14 | 9.34 | 12.36 |
| 3/20/2013 | 1,896 | 132 | 15,016,320 | 82 | 0.08 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.17 | 9.41 | 12.53 |
| 5/22/2013 | 1,512 | 115 | 10,432,800 | 136 | 0.09 | 27 | 0.02 | 38 | 0.02 | 40 | 0.03 | 0.16 | 9.50 | 12.69 |
| 9/17/2013 | 2,832 | 132 | 22,429,440 | 43 | 0.06 | 27 | 0.04 | 384 | 0.54 | 40 | 0.06 | 0.69 | 9.56 | 13.38 |
| **TOTALS:** | **61,273** | | **468,319,320** | | **9.56** | | **0.79** | | **1.87** | | **1.16** | **13.38** | | |

**B-4 (PID Readings)**

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 11/17/2006 | 672 | 132 | 5,322,240 | 0.1 | 1,483 | 0.49 | 0.49 |
| 12/27/2006 | 960 | 132 | 7,603,200 | 0.1 | 1,483 | 0.70 | 1.20 |
| 6/15/2007 | 4,080 | 132 | 32,313,600 | 0.1 | 1,483 | 2.99 | 4.18 |
| 10/16/2007 | 2,952 | 132 | 23,379,840 | 0.1 | 1,483 | 2.16 | 6.35 |
| 12/14/2007 | 1,416 | 132 | 11,214,720 | 0.1 | 1,483 | 1.04 | 7.38 |
| 3/29/2008 | 2,544 | 132 | 20,148,480 | 1.8 | 4,655 | 5.85 | 13.23 |
| 6/2/2008 | 1,560 | 132 | 12,355,200 | 0.3 | 1,856 | 1.43 | 14.66 |
| 9/12/2008 | 2,448 | 132 | 19,388,160 | 0.4 | 2,042 | 2.47 | 17.13 |
| 11/26/2008 | 1,800 | 132 | 14,256,000 | 0.1 | 1,483 | 1.32 | 18.45 |
| 8/21/2009 | 6,432 | 115 | 44,380,800 | 0.0 | 1,296 | 3.59 | 22.04 |
| 11/6/2009 | 1,848 | 132 | 14,636,160 | 0.4 | 2,042 | 1.86 | 23.90 |
| 2/5/2010 | 2,184 | 132 | 17,297,280 | 0.6 | 2,416 | 2.61 | 26.51 |
| 4/23/2010 | 1,848 | 115 | 12,751,200 | 0.9 | 2,975 | 2.37 | 28.88 |
| 10/15/2010 | 4,200 | 115 | 28,980,000 | 0.5 | 2,229 | 4.03 | 32.91 |
| 1/21/2011 | 2,352 | 132 | 18,627,840 | 0.2 | 1,669 | 1.94 | 34.85 |
| 5/11/2011 | 2,640 | 132 | 20,908,800 | 0.1 | 1,483 | 1.93 | 36.78 |
| 7/29/2011 | 1,896 | 115 | 13,082,400 | 0.4 | 2,042 | 1.7 | 38.45 |
| 10/25/2011 | 2,112 | 132 | 16,727,040 | 0.5 | 2,229 | 2.3 | 40.77 |
| 1/20/2012 | 2,088 | 132 | 16,536,960 | 0.4 | 2,042 | 2.1 | 42.88 |
| 6/15/2012 | 3,528 | 115 | 24,343,200 | 0.2 | 1,669 | 2.5 | 45.41 |
| 9/25/2012 | 2,448 | 132 | 19,388,160 | 0.3 | 1,856 | 2.2 | 47.66 |
| 12/31/2012 | 2,328 | 132 | 18,437,760 | 0.1 | 1,483 | 1.7 | 49.36 |
| 3/20/2013 | 1,896 | 132 | 15,016,320 | 0.0 | 1,296 | 1.2 | 50.58 |
| 5/22/2013 | 1,512 | 115 | 10,432,800 | 0.0 | 1,296 | 0.8 | 51.42 |
| 9/17/2013 | 2,832 | 132 | 22,429,440 | 0.3 | 1,856 | 2.6 | 54.02 |
| **TOTALS:** | **60,576** | | **459,957,600** | | | **54.02** | |

**Lab Data for Air Mitigation System B-5**
**Third Quarter 2013**
**6/19/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

**B-5 (Lab Data)**

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/27/2008 | 0.5 | 130 | 3,900 | 883 | 0.00 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3/28/2008 | 24 | 127 | 182,880 | 496 | 0.01 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.01 | 0.01 | 0.01 |
| 4/24/2008 | 648 | 120 | 4,665,600 | 367 | 0.11 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.14 | 0.11 | 0.14 |
| 5/1/2008 | 168 | 115 | 1,159,200 | 394 | 0.03 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.04 | 0.14 | 0.18 |
| 6/2/2008 | 768 | 114 | 5,253,120 | 401 | 0.13 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.17 | 0.27 | 0.35 |
| 7/10/2008 | 912 | 115 | 6,292,800 | 442 | 0.17 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.21 | 0.45 | 0.56 |
| 9/12/2008 | 1,536 | 114 | 10,506,240 | 469 | 0.31 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.38 | 0.75 | 0.94 |
| 11/26/2008 | 1,800 | 113 | 12,204,000 | 489 | 0.37 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.45 | 1.13 | 1.39 |
| 3/24/2009 | 2,832 | 122 | 20,730,240 | 1,427 | 1.85 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 1.98 | 2.97 | 3.37 |
| 6/15/2009 | 1,992 | 122 | 14,581,440 | 394 | 0.36 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.45 | 3.33 | 3.83 |
| 8/21/2009 | 1,608 | 122 | 11,770,560 | 428 | 0.31 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.39 | 3.64 | 4.22 |
| 11/5/2009 | 1,824 | 122 | 13,351,680 | 883 | 0.74 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.82 | 4.38 | 5.04 |
| 2/5/2010 | 2,208 | 110 | 14,572,800 | 150 | 0.14 | 26.93 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.23 | 4.52 | 5.27 |
| 4/23/2010 | 1,848 | 110 | 12,196,800 | 82 | 0.06 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.14 | 4.58 | 5.41 |
| 7/23/2010 | 2,184 | 110 | 14,414,400 | 183 | 0.16 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.26 | 4.74 | 5.67 |
| 10/15/2010 | 2,016 | 130 | 15,724,800 | 102 | 0.10 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.20 | 4.84 | 5.88 |
| 1/21/2011 | 2,352 | 110 | 15,523,200 | 224 | 0.22 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.32 | 5.06 | 6.19 |
| 5/11/2011 | 2,640 | 130 | 20,592,000 | 394 | 0.51 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.64 | 5.57 | 6.84 |
| 7/29/2011 | 1,896 | 110 | 12,513,600 | 150 | 0.12 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.20 | 5.68 | 7.03 |
| 10/25/2011 | 2,112 | 110 | 13,939,200 | 204 | 0.18 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.27 | 5.86 | 7.30 |
| 1/20/2012 | 2,088 | 110 | 13,780,800 | 150 | 0.13 | 6 | 0.01 | 38 | 0.03 | 40 | 0.03 | 0.20 | 5.99 | 7.50 |
| 6/15/2012 | 3,528 | 130 | 27,518,400 | 95 | 0.16 | 8 | 0.01 | 845 | 1.45 | 40 | 0.07 | 1.70 | 6.15 | 9.20 |
| 9/25/2012 | 2,448 | 110 | 16,156,800 | 122 | 0.12 | 6 | 0.01 | 384 | 0.39 | 40 | 0.04 | 0.56 | 6.28 | 9.76 |
| 12/31/2012 | 2,328 | 130 | 18,158,400 | 116 | 0.13 | 6 | 0.01 | 512 | 0.58 | 40 | 0.05 | 0.76 | 6.41 | 10.52 |
| 3/20/2013 | 1,896 | 110 | 12,513,600 | 408 | 0.32 | 18 | 0.01 | 38 | 0.03 | 40 | 0.03 | 0.39 | 6.72 | 10.91 |
| 6/19/2013 | 2,184 | 93 | 12,186,720 | 326 | 0.25 | 15 | 0.01 | 512 | 0.39 | 40 | 0.03 | 0.68 | 6.97 | 11.59 |
| 9/17/2013 | 2,160 | 110 | 14,256,000 | 143 | 0.13 | 27 | 0.02 | 359 | 0.32 | 40 | 0.04 | 0.51 | 7.10 | 12.10 |
| **TOTALS:** | **48,001** | | **334,749,180** | | **7.10** | | **0.45** | | **3.72** | | **0.83** | **12.10** | | |

**B-5 (PID Readings)**

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 3/29/2008 | 50 | 110 | 330,000 | 0.1 | 1,483 | 0.03 | 0.03 |
| 6/2/2008 | 1,560 | 130 | 12,168,000 | 0.2 | 1,669 | 1.27 | 1.30 |
| 7/10/2008 | 912 | 110 | 6,019,200 | 0.7 | 2,602 | 0.98 | 2.27 |
| 9/12/2008 | 1,536 | 130 | 11,980,800 | 0.1 | 1,483 | 1.11 | 3.38 |
| 11/26/2008 | 1,800 | 130 | 14,040,000 | 0.1 | 1,483 | 1.30 | 4.68 |
| 8/21/2009 | 6,432 | 130 | 50,169,600 | 0.0 | 1,296 | 4.06 | 8.74 |
| 11/5/2009 | 1,824 | 130 | 14,227,200 | 0.2 | 1,669 | 1.48 | 10.22 |
| 2/5/2010 | 2,208 | 110 | 14,581,440 | 0.5 | 1,483 | 1.35 | 11.57 |
| 5/6/2010 | 2,160 | 110 | 14,256,000 | 1.4 | 3,908 | 3.48 | 15.04 |
| 10/15/2010 | 3,888 | 130 | 30,326,400 | 0.4 | 2,042 | 3.86 | 18.91 |
| 1/21/2011 | 2,352 | 110 | 15,523,200 | 0.4 | 2,042 | 1.98 | 20.88 |
| 5/11/2011 | 2,640 | 130 | 20,592,000 | 0.1 | 1,483 | 1.90 | 22.79 |
| 7/29/2011 | 1,896 | 110 | 12,513,600 | 0.4 | 2,042 | 1.6 | 24.38 |
| 10/25/2011 | 2,112 | 110 | 13,939,200 | 0.5 | 2,229 | 1.9 | 26.32 |
| 1/20/2012 | 2,088 | 110 | 13,780,800 | 0.4 | 2,042 | 1.8 | 28.08 |
| 6/15/2012 | 3,528 | 130 | 27,518,400 | 0.4 | 2,042 | 3.5 | 31.58 |
| 9/25/2012 | 2,448 | 110 | 16,156,800 | 0.5 | 2,229 | 2.2 | 33.83 |
| 12/31/2012 | 2,328 | 130 | 18,158,400 | 0.1 | 1,483 | 1.7 | 35.51 |
| 3/20/2013 | 1,896 | 110 | 12,513,600 | 0.1 | 1,483 | 1.2 | 36.67 |
| 6/19/2013 | 2,184 | 93 | 12,186,720 | 0.0 | 1,296 | 1.0 | 37.65 |
| 9/17/2013 | 2,160 | 110 | 14,256,000 | 0.0 | 1,296 | 1.2 | 38.80 |
| **TOTALS:** | **48,002** | | **345,237,360** | | | **38.80** | |

**Lab Data for Air Mitigation System B-6**
**Third Quarter 2013**
**6/19/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

## B-6 (Lab Data)

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/27/2008 | 0.5 | 130 | 3,900 | 8,155 | 0.00 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3/28/2008 | 24 | 119 | 171,144 | 3,330 | 0.04 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.04 | 0.04 | 0.04 |
| 4/24/2008 | 648 | 114 | 4,426,488 | 748 | 0.21 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.24 | 0.24 | 0.27 |
| 5/1/2008 | 168 | 123 | 1,234,800 | 1,427 | 0.11 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.12 | 0.35 | 0.39 |
| 6/2/2008 | 768 | 120 | 5,506,560 | 1,495 | 0.51 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.55 | 0.87 | 0.94 |
| 8/20/2008 | 1,896 | 120 | 13,651,200 | 1,835 | 1.56 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 1.65 | 2.43 | 2.59 |
| 9/12/2008 | 552 | 114 | 3,775,680 | 1,223 | 0.29 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.31 | 2.72 | 2.91 |
| 11/26/2008 | 1,800 | 112 | 12,096,000 | 748 | 0.56 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.64 | 3.28 | 3.55 |
| 3/24/2009 | 2,832 | 118 | 20,050,560 | 883 | 1.10 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 1.24 | 4.39 | 4.79 |
| 6/15/2009 | 1,992 | 118 | 14,103,360 | 571 | 0.50 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.59 | 4.89 | 5.38 |
| 8/21/2009 | 1,608 | 118 | 11,384,640 | 483 | 0.34 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.42 | 5.23 | 5.80 |
| 11/5/2009 | 1,824 | 118 | 12,913,920 | 748 | 0.60 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.69 | 5.83 | 6.49 |
| 2/5/2010 | 2,208 | 150 | 19,872,000 | 544 | 0.67 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.80 | 6.51 | 7.29 |
| 5/12/2010 | 2,304 | 93 | 12,856,320 | 883 | 0.71 | 26.93 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.79 | 7.22 | 8.08 |
| 7/23/2010 | 1,728 | 110 | 11,404,800 | 680 | 0.48 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.56 | 7.70 | 8.64 |
| 10/15/2010 | 2,016 | 130 | 15,724,800 | 129 | 0.13 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.23 | 7.83 | 8.87 |
| 1/21/2011 | 2,352 | 130 | 18,345,600 | 333 | 0.38 | 27 | 0.03 | 38 | 0.04 | 40 | 0.05 | 0.50 | 8.21 | 9.37 |
| 5/11/2011 | 2,640 | 130 | 20,592,000 | 415 | 0.53 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.67 | 8.74 | 10.04 |
| 7/29/2011 | 1,896 | 110 | 12,513,600 | 143 | 0.11 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.19 | 8.85 | 10.23 |
| 10/25/2011 | 2,112 | 110 | 13,939,200 | 170 | 0.15 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.24 | 9.00 | 10.47 |
| 1/20/2012 | 2,088 | 130 | 16,286,400 | 122 | 0.12 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.23 | 9.12 | 10.70 |
| 6/15/2012 | 3,528 | 130 | 27,518,400 | 75 | 0.13 | 27 | 0.05 | 359 | 0.62 | 40 | 0.07 | 0.86 | 9.25 | 11.56 |
| 9/25/2012 | 2,448 | 110 | 16,156,800 | 211 | 0.21 | 27 | 0.03 | 282 | 0.28 | 40 | 0.04 | 0.56 | 9.46 | 12.12 |
| 12/31/2012 | 2,328 | 130 | 18,158,400 | 163 | 0.18 | 27 | 0.03 | 359 | 0.41 | 40 | 0.05 | 0.67 | 9.65 | 12.79 |
| 3/20/2013 | 1,896 | 110 | 12,513,600 | 258 | 0.20 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.28 | 9.85 | 13.07 |
| 6/19/2013 | 2,184 | 93 | 12,186,720 | 584 | 0.44 | 27 | 0.02 | 410 | 0.31 | 40 | 0.03 | 0.81 | 10.30 | 13.88 |
| 9/17/2013 | *1,080* | *115* | 7,452,000 | 313 | 0.15 | 27 | 0.01 | 384 | 0.18 | 40 | 0.02 | 0.35 | 10.44 | 14.24 |
| **TOTALS:** | **46,921** | | **334,838,892** | | **10.44** | | **0.56** | | **2.40** | | **0.83** | **14.24** | | |

## B-6 (PID Readings)

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 3/29/2008 | 50 | 74 | 222,000 | 1.7 | 4,468 | 0.06 | 0.06 |
| 6/2/2008 | 1,560 | 130 | 12,168,000 | 1.1 | 3,349 | 2.54 | 2.60 |
| 8/20/2008 | 1,896 | 110 | 12,513,600 | 0.5 | 2,229 | 1.74 | 4.34 |
| 9/12/2008 | 552 | 130 | 4,305,600 | 0.1 | 1,483 | 0.40 | 4.74 |
| 11/26/2008 | 1,800 | 110 | 11,880,000 | 0.2 | 1,669 | 1.24 | 5.98 |
| 8/21/2009 | 6,432 | 110 | 42,451,200 | 0.1 | 1,483 | 3.93 | 9.90 |
| 11/5/2009 | 1,824 | 130 | 14,227,200 | 0.1 | 1,483 | 1.32 | 11.22 |
| 2/5/2010 | 2,208 | 150 | 19,872,000 | 0.9 | 2,975 | 3.69 | 14.91 |
| 5/12/2010 | 2,304 | 93 | 12,856,320 | 1.7 | 4,468 | 3.58 | 18.49 |
| 10/15/2010 | 3,744 | 130 | 29,203,200 | 0.5 | 2,229 | 4.06 | 22.55 |
| 1/21/2011 | 2,352 | 130 | 18,345,600 | 0.4 | 2,042 | 2.34 | 24.89 |
| 5/11/2011 | 2,640 | 130 | 20,592,000 | 0.2 | 1,669 | 2.14 | 27.03 |
| 7/29/2011 | 1,896 | 110 | 12,513,600 | 0.3 | 1,856 | 1.45 | 28.48 |
| 10/25/2011 | 2,112 | 110 | 13,939,200 | 0.5 | 2,229 | 1.94 | 30.42 |
| 1/20/2012 | 2,088 | 130 | 16,286,400 | 0.4 | 2,042 | 2.07 | 32.50 |
| 6/15/2012 | 3,528 | 130 | 27,518,400 | 0.3 | 1,856 | 3.19 | 35.68 |
| 9/25/2012 | 2,448 | 110 | 16,156,800 | 0.5 | 2,229 | 2.25 | 37.93 |
| 12/31/2012 | 2,328 | 130 | 18,158,400 | 0.0 | 1,296 | 1.47 | 39.40 |
| 3/20/2013 | 1,896 | 110 | 12,513,600 | 0.0 | 1,296 | 1.01 | 40.41 |
| 6/19/2013 | 2,184 | 110 | 14,414,400 | 0.0 | 1,296 | 1.17 | 41.57 |
| 9/17/2013 | *1,080* | *115* | 7,452,000 | 1.0 | 3,162 | 1.47 | 43.04 |
| **TOTALS:** | **46,922** | | **337,589,520** | | | **43.04** | |

***Note that because the system was not running on 9/17/2013, the average flow rate during the 3rd quarter of 2013 was assumed to be 115 CFM (average during previous 8 quarters) and the hours per cycle was cut in half.**

**Lab Data for Air Mitigation System B-7**
**Third Quarter 2013**
**6/19/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

## B-7 (Lab Data)

| Sample Date | Hours per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | µg/m3 PCE | Lbs. PCE removed | µg/m3 TCE | Lbs. TCE removed | µg/m3 VC | Lbs. VC removed | µg/m3 cis-1,2-DCE | Lbs. cis-1,2-DCE removed | Lbs. Total Pollutants Removed | Cumulative PCE lbs Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/7/2008 | 0.5 | 118 | 3,540 | 516 | 0.00 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4/8/2008 | 24 | 118 | 169,920 | 319 | 0.00 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4/24/2008 | 384 | 118 | 2,718,720 | 150 | 0.03 | 27 | 0.00 | 38 | 0.01 | 40 | 0.01 | 0.04 | 0.03 | 0.05 |
| 5/1/2008 | 168 | 120 | 1,209,600 | 265 | 0.02 | 27 | 0.00 | 38 | 0.00 | 40 | 0.00 | 0.03 | 0.05 | 0.08 |
| 6/2/2008 | 768 | 117 | 5,391,360 | 360 | 0.12 | 27 | 0.01 | 38 | 0.01 | 40 | 0.01 | 0.16 | 0.17 | 0.23 |
| 7/10/2008 | 912 | 118 | 6,456,960 | 367 | 0.15 | 27 | 0.01 | 38 | 0.02 | 40 | 0.02 | 0.19 | 0.32 | 0.42 |
| 9/12/2008 | 1,536 | 114 | 10,506,240 | 367 | 0.24 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.31 | 0.56 | 0.73 |
| 11/26/2008 | 1,800 | 112 | 12,096,000 | 381 | 0.29 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.37 | 0.85 | 1.10 |
| 3/24/2009 | 2,832 | 118 | 20,050,560 | 401 | 0.50 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.63 | 1.35 | 1.73 |
| 6/15/2009 | 1,992 | 118 | 14,103,360 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.12 | 1.38 | 1.85 |
| 8/21/2009 | 1,608 | 118 | 11,384,640 | 34 | 0.02 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.10 | 1.40 | 1.95 |
| 11/5/2009 | 1,824 | 118 | 12,913,920 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.03 | 0.11 | 1.43 | 2.06 |
| 2/5/2010 | 2,208 | 110 | 14,572,800 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.13 | 1.46 | 2.19 |
| 4/23/2010 | 1,848 | 130 | 14,414,400 | 34 | 0.03 | 27 | 0.02 | 38 | 0.03 | 40 | 0.04 | 0.13 | 1.49 | 2.32 |
| 7/23/2010 | 2,184 | 130 | 17,035,200 | 34 | 0.04 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.15 | 1.53 | 2.46 |
| 10/15/2010 | 2,016 | 130 | 15,724,800 | 34 | 0.03 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.14 | 1.56 | 2.60 |
| 1/21/2011 | 2,352 | 130 | 18,345,600 | 34 | 0.04 | 27 | 0.03 | 38 | 0.04 | 40 | 0.05 | 0.16 | 1.60 | 2.76 |
| 5/11/2011 | 2,640 | 130 | 20,592,000 | 34 | 0.04 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.18 | 1.64 | 2.94 |
| 7/29/2011 | 1,896 | 130 | 14,788,800 | 34 | 0.03 | 27 | 0.02 | 38 | 0.04 | 40 | 0.04 | 0.13 | 1.67 | 3.07 |
| 10/25/2011 | 2,112 | 130 | 16,473,600 | 34 | 0.03 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.14 | 1.71 | 3.21 |
| 1/20/2012 | 2,088 | 130 | 16,286,400 | 20 | 0.02 | 27 | 0.03 | 38 | 0.04 | 40 | 0.04 | 0.13 | 1.73 | 3.34 |
| 6/15/2012 | 3,528 | 130 | 27,518,400 | 17 | 0.03 | 27 | 0.05 | 307 | 0.53 | 135 | 0.23 | 0.83 | 1.76 | 4.17 |
| 9/25/2012 | 2,448 | 130 | 19,094,400 | 34 | 0.04 | 27 | 0.03 | 38 | 0.05 | 40 | 0.05 | 0.17 | 1.80 | 4.34 |
| 12/31/2012 | 2,328 | 130 | 18,158,400 | 34 | 0.04 | 27 | 0.03 | 384 | 0.44 | 40 | 0.05 | 0.55 | 1.84 | 4.88 |
| 3/20/2013 | 1,896 | 130 | 14,788,800 | 34 | 0.03 | 27 | 0.02 | 38 | 0.04 | 40 | 0.04 | 0.13 | 1.87 | 5.01 |
| 6/19/2013 | 2,184 | 110 | 14,414,400 | 41 | 0.04 | 27 | 0.02 | 333 | 0.30 | 40 | 0.04 | 0.40 | 1.90 | 5.41 |
| 9/17/2013 | 2,160 | 130 | 16,848,000 | 34 | 0.04 | 27 | 0.03 | 282 | 0.30 | 40 | 0.04 | 0.40 | 1.94 | 5.81 |
| **TOTALS:** | **47,737** | | **356,060,820** | | **1.94** | | **0.60** | | **2.23** | | **1.05** | **5.81** | | |

## B-7 (PID Readings)

| Sample Date | Hours Per Cycle | Average Flow Rate (CFM) | Air Vol. Removed per Cycle (CF) | PID Reading (ppm VOCs) | µg/m3 VOCs | Lbs. VOCs Removed | Cum Total lbs Removed (Est from PID) |
|---|---|---|---|---|---|---|---|
| 6/2/2008 | 1,344 | 130 | 10,483,200 | 0.3 | 1,856 | 1.21 | 1.21 |
| 7/10/2008 | 912 | 110 | 6,019,200 | 0.5 | 2,229 | 0.84 | 2.05 |
| 9/12/2008 | 1,536 | 130 | 11,980,800 | 0.1 | 1,483 | 1.11 | 3.16 |
| 11/26/2008 | 1,800 | 110 | 11,880,000 | 0.2 | 1,669 | 1.24 | 4.40 |
| 8/21/2009 | 6,432 | 132 | 50,941,440 | 0.1 | 1,483 | 4.71 | 9.11 |
| 11/5/2009 | 1,824 | 130 | 14,227,200 | 0.0 | 1,296 | 1.15 | 10.26 |
| 2/5/2010 | 2,208 | 110 | 14,572,800 | 0.1 | 1,483 | 1.35 | 11.60 |
| 5/6/2010 | 2,160 | 130 | 16,848,000 | 0.0 | 1,296 | 1.36 | 12.97 |
| 10/15/2010 | 3,888 | 130 | 30,326,400 | 0.1 | 1,483 | 2.80 | 15.77 |
| 1/21/2011 | 2,352 | 130 | 18,345,600 | 0.1 | 1,483 | 1.70 | 17.47 |
| 5/11/2011 | 2,640 | 130 | 20,592,000 | 0.0 | 1,296 | 1.66 | 19.13 |
| 7/29/2011 | 1,896 | 130 | 14,788,800 | 0.3 | 1,856 | 1.71 | 20.84 |
| 10/25/2011 | 2,112 | 130 | 16,473,600 | 0.1 | 1,483 | 1.52 | 22.37 |
| 1/20/2012 | 2,088 | 130 | 16,286,400 | 0.1 | 1,483 | 1.51 | 23.87 |
| 6/15/2012 | 3,528 | 130 | 27,518,400 | 0.0 | 1,296 | 2.22 | 26.10 |
| 9/2/2012 | 1,896 | 130 | 14,788,800 | 0.1 | 1,483 | 1.37 | 27.47 |
| 12/31/2012 | 2,880 | 130 | 22,464,000 | 0.0 | 1,296 | 1.82 | 29.28 |
| 3/20/2013 | 1,896 | 130 | 14,788,800 | 0.0 | 1,296 | 1.20 | 30.48 |
| 6/19/2013 | 2,184 | 110 | 14,414,400 | 0.0 | 1,296 | 1.17 | 31.64 |
| 9/17/2013 | 2,160 | 130 | 16,848,000 | 0.1 | 1,483 | 1.56 | 33.20 |
| **TOTALS:** | **47,736** | | **364,587,840** | | | **33.20** | |

**Michigan Plaza**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

## Cumulative Totals (B-1-B-4)

| Sample Date | Lbs PCE Removed | Cumulative PCE lbs Removed | Lbs. Total Pollutants Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|
| 9/21/2006 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10/6/2006 | 2.36 | 2.36 | 2.43 | 2.43 |
| 10/13/2006 | 0.68 | 3.05 | 0.71 | 3.14 |
| 10/20/2006 | 0.98 | 4.03 | 1.01 | 4.14 |
| 11/17/2006 | 3.41 | 7.44 | 3.51 | 7.65 |
| 12/27/2006 | 4.52 | 11.95 | 4.67 | 12.32 |
| 3/30/2007 | 7.00 | 18.95 | 7.33 | 19.65 |
| 6/15/2007 | 4.64 | 23.59 | 6.55 | 26.20 |
| 10/16/2007 | 6.42 | 30.01 | 6.86 | 33.06 |
| 12/14/2007 | 5.31 | 35.33 | 5.53 | 38.59 |
| 3/27/2008 | 7.84 | 43.17 | 8.23 | 46.82 |
| 4/1/2008 | 1.20 | 44.36 | 1.25 | 48.07 |
| 6/2/2008 | 4.62 | 48.98 | 4.80 | 52.87 |
| 9/12/2008 | 8.69 | 57.67 | 9.05 | 61.92 |
| 11/26/2008 | 4.38 | 62.05 | 4.62 | 66.54 |
| 3/24/2009 | 7.64 | 69.69 | 8.02 | 74.55 |
| 6/15/2009 | 4.53 | 74.23 | 4.80 | 79.35 |
| 8/21/2009 | 3.90 | 78.13 | 4.14 | 83.49 |
| 11/5/2009 | 3.90 | 82.03 | 4.17 | 87.66 |
| 2/5/2010 | 1.90 | 83.93 | 2.24 | 89.90 |
| 4/23/2010 | 0.43 | 84.36 | 0.55 | 90.45 |
| 7/23/2010 | 1.58 | 85.94 | 1.85 | 92.30 |
| 10/15/2010 | 0.57 | 86.50 | 0.78 | 93.07 |
| 1/21/2011 | 0.59 | 87.09 | 0.82 | 93.89 |
| 4/8/2011 | 1.30 | 88.40 | 1.54 | 95.43 |
| 5/11/2011 | 2.51 | 90.91 | 2.80 | 98.24 |
| 7/29/2011 | 1.26 | 92.17 | 1.53 | 99.77 |
| 10/25/2011 | 0.97 | 93.15 | 1.27 | 101.04 |
| 1/20/2012 | 0.70 | 93.85 | 1.19 | 102.23 |
| 6/15/2012 | 1.36 | 95.21 | 1.81 | 104.04 |
| 9/25/2012 | 1.60 | 96.81 | 2.57 | 106.61 |
| 12/31/2012 | 2.77 | 99.58 | 6.18 | 112.80 |
| 3/20/2013 | 3.24 | 102.81 | 4.62 | 117.42 |
| 5/22/2013 | 2.21 | 105.02 | 2.49 | 119.91 |
| 9/17/2013 | 1.90 | 106.92 | 5.67 | 125.58 |

**Maple Creek Village Apartments**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

## Cumulative Totals (B-5-B-7)

| Sample Date | Lbs PCE Removed | Cumulative PCE lbs Removed | Lbs. Total Pollutants Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|
| 3/27/2008 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3/28/2008 | 0.04 | 0.04 | 0.04 | 0.05 |
| 4/7/2008 | 0.00 | 0.04 | 0.00 | 0.05 |
| 4/8/2008 | 0.00 | 0.05 | 0.00 | 0.05 |
| 4/24/2008 | 0.34 | 0.39 | 0.42 | 0.47 |
| 5/1/2008 | 0.16 | 0.54 | 0.18 | 0.65 |
| 6/2/2008 | 0.77 | 1.31 | 0.87 | 1.52 |
| 7/10/2008 | 0.32 | 1.63 | 0.40 | 1.93 |
| 8/20/2008 | 1.56 | 3.19 | 1.65 | 3.58 |
| 9/12/2008 | 0.84 | 4.03 | 1.00 | 4.58 |
| 11/26/2008 | 1.22 | 5.25 | 1.46 | 6.04 |
| 3/24/2009 | 3.45 | 8.71 | 3.85 | 9.89 |
| 6/15/2009 | 0.89 | 9.60 | 1.17 | 11.06 |
| 8/21/2009 | 0.68 | 10.28 | 0.91 | 11.97 |
| 11/5/2009 | 1.37 | 11.64 | 1.62 | 13.59 |
| 2/5/2010 | 0.84 | 12.48 | 1.16 | 14.75 |
| 4/23/2010 | 0.09 | 12.58 | 0.27 | 15.02 |
| 7/23/2010 | 0.68 | 13.26 | 0.97 | 15.98 |
| 10/15/2010 | 0.26 | 13.52 | 0.57 | 16.55 |
| 1/21/2011 | 0.64 | 14.16 | 0.98 | 17.53 |
| 5/11/2011 | 1.08 | 15.24 | 1.49 | 19.02 |
| 7/29/2011 | 0.26 | 15.50 | 0.52 | 19.54 |
| 10/25/2011 | 0.36 | 15.86 | 0.65 | 20.19 |
| 1/20/2012 | 0.27 | 16.13 | 0.56 | 20.75 |
| 6/15/2012 | 0.32 | 16.45 | 3.39 | 24.14 |
| 9/25/2012 | 0.38 | 16.83 | 1.29 | 25.42 |
| 12/31/2012 | 0.35 | 17.18 | 1.98 | 27.40 |
| 3/20/2013 | 0.55 | 17.73 | 0.81 | 28.21 |
| 6/19/2013 | 0.73 | 18.46 | 1.88 | 30.09 |
| 9/17/2013 | 0.31 | 18.77 | 1.26 | 31.35 |

**Cumulative Total LBS Removed**
**Third Quarter 2013**
**9/17/2013**
**Michigan Plaza**
**3801-3823 West Michigan Street**
**Indianapolis, Indiana**
**MUNDELL Project No.: M01046**

## Cumulative Totals (B-1-B-7)

| Sample Date | Lbs PCE Removed | Cumulative PCE lbs Removed | Lbs. Total Pollutants Removed | Cumulative Total Pollutant lbs Removed |
|---|---|---|---|---|
| 9/21/2006 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10/6/2006 | 2.36 | 2.36 | 2.43 | 2.43 |
| 10/13/2006 | 0.68 | 3.05 | 0.71 | 3.14 |
| 10/20/2006 | 0.98 | 4.03 | 1.01 | 4.14 |
| 11/17/2006 | 3.41 | 7.44 | 3.51 | 7.65 |
| 12/27/2006 | 4.52 | 11.95 | 4.67 | 12.32 |
| 3/30/2007 | 7.00 | 18.95 | 7.33 | 19.65 |
| 6/15/2007 | 4.64 | 23.59 | 6.55 | 26.20 |
| 10/16/2007 | 6.42 | 30.01 | 6.86 | 33.06 |
| 12/14/2007 | 5.31 | 35.33 | 5.53 | 38.59 |
| 3/27/2008 | 7.84 | 43.17 | 8.23 | 46.82 |
| 3/28/2008 | 0.04 | 43.21 | 0.04 | 46.87 |
| 4/1/2008 | 1.20 | 44.41 | 1.25 | 48.12 |
| 4/7/2008 | 0.00 | 44.41 | 0.00 | 48.12 |
| 4/8/2008 | 0.00 | 44.41 | 0.00 | 48.12 |
| 4/24/2008 | 0.34 | 44.75 | 0.42 | 48.54 |
| 5/1/2008 | 0.16 | 44.91 | 0.18 | 48.72 |
| 6/2/2008 | 5.38 | 50.29 | 5.67 | 54.39 |
| 7/10/2008 | 0.32 | 50.61 | 0.40 | 54.80 |
| 8/20/2008 | 1.56 | 52.18 | 1.65 | 56.45 |
| 9/12/2008 | 9.53 | 61.70 | 10.05 | 66.49 |
| 11/26/2008 | 5.60 | 67.30 | 6.08 | 72.57 |
| 3/24/2009 | 11.10 | 78.40 | 11.87 | 84.44 |
| 6/15/2009 | 5.42 | 83.82 | 5.97 | 90.41 |
| 8/21/2009 | 4.59 | 88.41 | 5.05 | 95.46 |
| 11/5/2009 | 5.26 | 93.67 | 5.79 | 101.25 |
| 2/5/2010 | 2.74 | 96.41 | 3.40 | 104.65 |
| 4/23/2010 | 0.52 | 96.93 | 0.82 | 105.47 |
| 7/23/2010 | 2.26 | 99.20 | 2.82 | 108.28 |
| 10/15/2010 | 0.83 | 100.02 | 1.34 | 109.63 |
| 1/21/2011 | 1.23 | 101.25 | 1.80 | 111.42 |
| 4/8/2011 | 1.30 | 102.55 | 1.54 | 112.96 |
| 5/11/2011 | 3.59 | 106.15 | 4.29 | 117.26 |
| 7/29/2011 | 1.52 | 107.67 | 2.05 | 119.31 |
| 10/25/2011 | 1.33 | 109.01 | 1.92 | 121.23 |
| 1/20/2012 | 0.97 | 109.98 | 1.75 | 122.98 |
| 6/15/2012 | 1.69 | 111.67 | 5.20 | 128.18 |
| 9/25/2012 | 1.98 | 113.64 | 3.86 | 132.04 |
| 12/31/2012 | 3.12 | 116.76 | 8.16 | 140.20 |
| 3/20/2013 | 3.79 | 120.55 | 5.42 | 145.62 |
| 6/19/2013 | 2.94 | 123.48 | 4.37 | 150.00 |
| 9/17/2013 | 2.94 | 123.48 | 4.37 | 150.00 |