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February 14, 2019

Mr. Riley Neumann
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128

***Re: Quarterly Groundwater Sampling Report***
***(January 2019 Results)***
***BRRTS #: 02-41-576336 & 02-41-579429***
***FID #: 241828620***
***Sunrise Shopping Center***
***2410-2424 10th Avenue & 1009 Marquette Avenue***
***South Milwaukee, Wisconsin 53172***

Mr. Neumann:

Please find enclosed the *Quarterly Groundwater Sampling Report* for the Sunrise Shopping Center facility located at the above-referenced address. As discussed in the October 18, 2018, *Design Report Addendum/Remedial Action Plan*, quarterly groundwater sampling will continue to being performed at three (3) monitoring wells on-site to monitor any changes in Polynuclear Aromatic Hydrocarbon groundwater contaminant concentrations and determine the need for any future remedial actions, as well as to document Tetrachloroethene groundwater concentrations in monitoring well MW-5 during and following the chemical injections.

A brief discussion of the quarterly sampling protocol and results of the January 2019 groundwater sampling are included in this quarterly report. As required, this quarterly report and all supporting documentation have also been submitted electronically to WDNR.

If you have any questions or require additional information in regards to this submission, please contact me at 847-573-8900 extension 580. Thank you for your time.

Sincerely,
**DAI Environmental, Inc.**

Christopher Cailles, P.E.
Project Engineer

Enclosure

cc: Steven Dukatt – Carol Investment Corporation (w/enclosure)

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# QUARTERLY GROUNDWATER SAMPLING REPORT
# (JANUARY 2019 RESULTS)
# SUNRISE SHOPPING CENTER
# 2410-2424 10TH AVENUE & 1009 MARQUETTE AVENUE
# SOUTH MILWAUKEE, WISCONSIN 53172
# WDNR BRRTS ACTIVITY #02-41-576336 & 02-41-579429
# WDNR FID #241828620

February 13, 2019

DAI Project Number: 6255

**Prepared For:**
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## 1.0 INTRODUCTION

Soil and groundwater Remedial Actions are being performed at the Sunrise Shopping Center facility, addressed as 2410-2424 10th Avenue and 1009 Marquette Avenue in South Milwaukee, Wisconsin (Site). Figure B.1.b.1 in Attachment B provides an aerial view of the Site and surrounding property. The Remedial Actions to address Volatile Organic Compound (VOC) contamination are being performed under BRRTS number 02-41-576336 and the Remedial Actions to address Polynuclear Aromatic Hydrocarbon (PAH) contamination are being performed under BRRTS number 02-41-579429. As part of the Remedial Actions quarterly groundwater sampling has been conducted since January 2018. A brief discussion of the quarterly sampling protocol and results are provided below.

## 2.0 QUARTERLY GROUNDWATER SAMPLING PROGRAM

Quarterly groundwater sampling was first performed on January 5, 2018. The first quarterly sampling event included a complete round of sampling from each of the six (6) monitoring wells (MW-1 to MW-5 and MW-201) installed at the Site. Figure B.3.d provides the locations of the monitoring wells. As proposed in the December 28, 2017, *Site Investigation Work Plan*, the groundwater samples from all monitoring wells were submitted for analysis of PAHs, and a sample from MW-5 was also collected for VOC analysis. Results of the January 2018 groundwater sampling were provided to the Wisconsin Department of Natural Resources (WDNR) in the *Site Investigation Report Amendment Addendum* dated February 28, 2018. Results of subsequent 2018 quarterly sampling events were provided in *Quarterly Groundwater Sampling Reports*.

### 2.1 Quarterly Sampling Protocol

Quarterly groundwater sampling is being conducted at monitoring wells MW-3 to MW-5. The purpose of the quarterly groundwater sampling is to monitor any changes in groundwater contaminant concentrations and determine the need for any future remedial actions. The groundwater sampling will document Tetrachloroethene (Perc) groundwater concentrations during and following the chemical injections as described in October 18, 2018, *Design Report Addendum/Remedial Action Plan* (RAP) approved by the WDNR in a letter dated December 19, 2018. Based upon the historical sampling results provided in the RAP, the quarterly groundwater sampling shall continue as follows:

- Static water level measurements are collected from all accessible monitoring wells using an electronic water level indicator capable of detecting water depth with an accuracy of ±0.01 ft;
- Groundwater samples are collected from monitoring wells MW-3 and MW-4 for laboratory analysis of PAHs; and
- A groundwater sample is collected from monitoring well MW-5 for laboratory analysis of VOCs.

### 2.2 Groundwater Sampling Procedures and Chemical Analysis

Consistent with sampling protocol followed during Site Investigation activities, the three (3) monitoring wells were purged prior to sample collection, to the extent practicable, to remove

turbidity from the groundwater and allow the collection of a sediment-free sample that was representative of the surrounding groundwater conditions. Following purging, groundwater samples were collected from MW-3 to MW-5. Monitoring wells MW-4 and MW-5 were sampled using disposable PVC bailers; a groundwater sample was obtained from MW-3 using a peristaltic pump with dedicated PVC tubing. Groundwater samples were distributed directly into the appropriate sample containers for subsequent laboratory analyses as follows:

- MW-5: VOCs via USEPA Method SW8260; and
- MW-3 and MW-4: PAHs via USEPA Method SW8270 by HVI.

The sample submitted for analysis of VOCs was dispensed into 40-mL vials preserved with hydrochloric acid, and the samples submitted for analysis of PAHs were dispensed into unpreserved 100-mL amber glass containers. New disposable nitrile gloves were used to collect each sample to limit cross contamination. The samples were stored on ice immediately after collection and were maintained at a temperature of 4$^{o}$C or lower via a cooler with ice. Samples were ultimately transferred to Pace Analytical Services, LLC (Pace Analytical) of Green Bay, Wisconsin, an independent analytical laboratory following the standard chain-of-custody procedures.

## 3.0 QUARTERLY GROUNDWATER SAMPLING RESULTS

### 3.1 Static Groundwater Elevations

In order to evaluate potential seasonal fluctuation in static water elevation and/or groundwater flow direction, a complete round of static groundwater elevations was collected as part of the first quarter 2019 groundwater sampling event. The static water level elevations were collected from all monitoring wells on January 25, 2019. Table A.6 in Attachment A provides a historical summary of groundwater elevation information.

Review of Table A.6 shows that the January 25, 2019, groundwater elevations are all lower than observed in October 2018 and generally comparable to the January 27, 2015, observed elevations. Monitoring wells MW-1 through MW-4 indicate the highest quarterly variability, while MW-5 and MW-201 less fluctuation between quarters. The highest static elevation differences are noted in monitoring wells MW-1 and MW-3, which are located in areas of the Site with known subsurface disturbance. Between January 2015 and January 2019, MW-1 through MW-3 show a difference in elevation of approximately 2.25-ft. The elevation range difference for MW-4 is 1.61-ft, while MW-5 and MW-201 indicate a range difference of less than 0.75-ft (excluding the April 2015 reading at MW-201).

While some variability in elevation between quarters is noted, the groundwater flow direction is generally consistent. The groundwater flow direction along the southern half of the Site remains northwesterly, and a northerly groundwater flow direction is indicated along the northern half of the Site. The potentiometric surface map generated from the January 2019 data is included as Figure B.3.c.8 (see Attachment B).

### 3.2 Groundwater Analytical Results

Groundwater samples for the first quarter 2019 (i.e., January-March 2019) were collected on January 25, 2019. Following the protocol described in Section 2.2, groundwater samples were collected from MW-5 for VOC analysis and MW-3 and MW-4 for PAHs. Additionally, a sample of the Ace Hardware sump water was collected (on February 4, 2019) for VOC analysis. A summary of all groundwater sampling data collected from monitoring wells MW-3 to MW-5

since the beginning of Site Investigations is provided Tables A.1.A-A.1.B (see Attachment A). The results of the sump water samples are summarized in Table A.5. The tables are compared to the Preventative Action Limits PAL (s) and Enforcement Standards listed in Table 1 of NR 140. Copies of the laboratory analytical reports are provided in this report as Attachment C.1.E.

**Volatile Organic Compounds**

Table A.1.A summarizes the groundwater results for VOC analyses at MW-5, installed to the rear of the 2410 tenant space (former Sunbrite Cleaners location). As observed in the table, Perc has been consistently noted in monitoring well MW-5, with concentrations exceeding the Enforcement Standard of 0.005-mg/L since February 2016. A Perc concentration of 0.0065-mg/L was observed in January 2019, a decrease from October 2018, but still above the Enforcement Standard. Additional chemical injection of RemOx® to reduce concentrations to below the Enforcement Standard was proposed in the October 2018 RAP and approved by WDNR in a letter dated December 19, 2018. Initial injection activities are planned to be performed in the latter part of the first quarter 2019.

Table A.5 summarizes sump water analysis for VOCs. The January 2019 sample indicated a Perc concentration (0.0064-mg/L) above the Enforcement Standard and consistent with the two (2) past samples collected in June 2017 (0.006-mg/L) and January 2018 (0.0082-mg/L). Due to the close proximity of the Ace Hardware building to the Perc groundwater plume (as defined by monitoring well MW-5), Perc impacted groundwater is being captured by the stormwater drainage system surrounding the Ace Hardware basement. Consistent with the WDNR RAP approval letter, the groundwater flowing to the sump will be treated so as to minimize any volatilization and vapor intrusion into the Ace Hardware building, as well as to ensure compliance with the 0.050-mg/L discharge limitation listed in Section 4.2.1.1 Table 1 of WPDES Permit WI-0046566-7.

Figure B.3.b.1 provides a historical summary of Perc groundwater concentrations and the estimated extent of Perc groundwater contamination. Historical sump water sample results are also provided in Figure B.3.b.1.

**Polynuclear Aromatic Hydrocarbons**

Table A.1.B summarizes the results of the PAH analyses for MW-3 and MW-4. Figures B.3.b.2a to B.3.b.2d provide a historical summary of groundwater results for Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, and Naphthalene, respectively.

A review of historical sampling results from MW-3 (which is installed in the southern portion of the property where contamination from historical petroleum and/or coal storage is identified) indicates the presence of PAH contamination in groundwater during each sampling event. Consistent with past sampling events, Benzo(a)pyrene, Benzo(b)fluoranthene, and Chrysene groundwater contamination were observed in MW-3. The January 2019 results indicate Benzo(b)fluoranthene and Chrysene at concentrations slightly above the Enforcement Standards; the observed Benzo(a)pyrene concentration is above the PAL, but below the Enforcement Standard. All three (3) contaminants continue to show PAH concentrations fluctuating. A graphical analysis of all concentrations over time indicates a slight trend of increasing concentration as a result of concentration "spikes" noted in samples collected during the spring.

Several PAH constituents continue to be observed at concentrations above the Limit of Detection (LOD) in MW-4 (installed to the rear of the 2414B tenant space in the approximate location of a former heating oil UST) indicate). However, all concentrations were below the PALs with the exception of Chrysene, the only PAH constituent regularly observed in MW-4 above the PAL. A Chrysene concentration of 0.000033-mg/L was noted above the PAL of 0.00002-mg/L. Graphical analysis of all Chrysene concentrations over time indicates a decreasing concentration trend. The Benzo(b)fluoranthene concentration observed at a concentration marginally above the PAL in October 2018 decreased to below the PAL. Benzo(b)fluoranthene has only been observed above the PAL in two (2) of nine samples. The Naphthalene concentration has continued to decline each quarter, last observed slightly above the PAL in January 2018.

## 4.0 SUMMARY AND SCHEDULE

- Perc has been observed in monitoring well MW-5 at concentrations exceeding the Enforcement Standard since February 2016. The concentrations were increasing with time July 2018 when the pilot-scale chemical injection was performed. The Perc concentration measured in MW-5 in July 2018 indicated a reduction in concentration, demonstrating that the chemical injection activities helped reduce the Perc concentration in the area of MW-5. However, the Perc concentration observed in January 2019 remains above the Enforcement Standard. Therefore, further injection within this area will be performed. The additional injections are planned for the first quarter 2019.
- Benzo(b)fluoranthene and Chrysene were observed in MW-3 at concentrations exceeding the Enforcement Standards during the January 2019 quarterly sampling. Benzo(a)pyrene was observed at a concentration exceeding the PAL, but below the Enforcement Standard. The observed concentrations in MW-3 continue to fluctuate. A slightly increasing trend in concentration is observed as a result of two (2) concentration "spikes" observed in May 2017 and April 2018. There are no other indications of contaminant spread, and contaminant concentrations appear stable if the April 2018 spike is excluded from analysis. Therefore, no active Remedial Actions are planned for MW-3 at this time. Quarterly groundwater sampling will continue to assess whether an increasing concentration trend is occurring.
- The groundwater sampling results from MW-4 indicate that only Chrysene was observed at a concentration exceeding the PAL (but below the Enforcement Standard). Evaluation of Chrysene concentrations over time indicate a declining trend, and all PAH concentrations have decreased since performing the pilot-scale chemical injection in July 2018. No additional active remedial actions are proposed within the area of MW-4, although quarterly monitoring will continue.
- Quarterly groundwater sampling will continue until Site closure is requested. The next quarterly sampling event is scheduled for April 2019.

# APPENDIX A
# TABLES

## Table A.1.A. Groundwater Analytical Table for Volatile Organic Compounds (mg/L) (Quarterly Groundwater Sampling Wells)

| Volatile Organic Compound | Sample Location (Sample Date) | | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|---|
| | TW-2 (11/12/14) | MW-5 (01/27/15) | MW-5 (02/23/16) | MW-5 (05/30/17) | MW-5 (01/05/18) | | |
| Benzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.0005 | 0.005 |
| Bromobenzene | <0.00023 | <0.00023 | <0.00023 | <0.00023 | <0.00023 | NL | NL |
| Bromochloromethane | <0.00034 | <0.00034 | <0.00034 | <0.00034 | <0.00034 | NL | NL |
| Bromodichloromethane | <0.0005* | <0.0005* | <0.0005* | <0.0005* | <0.0005* | 0.00006 | 0.0006 |
| Bromoform | <0.0005* | <0.0005* | <0.0005* | <0.0005* | <0.0005* | 0.00044 | 0.0044 |
| Bromomethane | <0.0024* | <0.0024* | <0.0024* | <0.0024* | <0.0024* | 0.001 | 0.01 |
| n-Butylbenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| sec-Butylbenzene | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | NL | NL |
| tert-Butylbenzene | <0.00018 | <0.00018 | <0.00018 | <0.00018 | <0.00018 | NL | NL |
| Carbon tetrachloride | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.0005 | 0.005 |
| Chlorobenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| Chloroethane | <0.00037 | <0.00037 | <0.00037 | <0.00037 | <0.00037 | 0.08 | 0.4 |
| Chloroform | <0.0025* | <0.0025* | <0.0025* | <0.0025* | <0.0025* | 0.0006 | 0.006 |
| Chloromethane | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.003 | 0.03 |
| 2-Chlorotoluene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| 4-Chlorotoluene | <0.00021 | <0.00021 | <0.00021 | <0.00021 | <0.00021 | NL | NL |
| Dibromochloromethane | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.006 | 0.006 |
| 1,2-Dibromo-3-chloropropane | <0.0022* | <0.0022* | <0.0022* | <0.0022* | <0.0022* | 0.00002 | 0.0002 |
| 1,2-Dibromoethane (EDB) | <0.00016* | <0.00018* | <0.00018* | <0.00018* | <0.00018* | 0.000005 | 0.00005 |
| Dibromomethane | <0.00043 | <0.00043 | <0.00043 | <0.00043 | <0.00043 | NL | NL |
| 1,2-Dichlorobenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.06 | 0.6 |
| 1,3-Dichlorobenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.12 | 0.6 |
| 1,4-Dichlorobenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.015 | 0.075 |
| Dichlorodifluoromethane | <0.0002 | <0.00022 | <0.00022 | <0.00022 | <0.00022 | 0.2 | 1 |
| 1,1-Dichloroethane | <0.00024 | <0.00024 | <0.00024 | <0.00024 | <0.00024 | 0.085 | 0.85 |
| 1,2-Dichloroethane | <0.00017 | <0.00017 | <0.00017 | <0.00017 | <0.00017 | 0.0005 | 0.005 |
| 1,1-Dichloroethene | <0.00041 | <0.00041 | <0.00041 | <0.00041 | <0.00041 | 0.0007 | 0.007 |
| cis-1,2-Dichloroethene | <0.00026 | <0.00026 | <0.00026 | <0.00026 | <0.00026 | 0.007 | 0.07 |
| trans-1,2-Dichoroethene | <0.00026 | <0.00026 | <0.00026 | <0.00026 | <0.00026 | 0.02 | 0.1 |
| 1,2-Dichloropropane | <0.00023 | <0.00023 | <0.00023 | <0.00023 | <0.00023 | 0.0005 | 0.005 |
| 1,3-Dichloropropane | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| 2,2-Dichloropropane | <0.00048 | <0.00048 | <0.00048 | <0.00048 | <0.00048 | NL | NL |
| 1,1-Dichloropropene | <0.00044 | <0.00044 | <0.00044 | <0.00044 | <0.00044 | NL | NL |
| 1,3-Dichloropropene (c & t) | <0.00073* | <0.00073* | <0.00073* | <0.00073* | <0.00073* | 0.00004 | 0.0004 |
| Diisopropyl ether | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| Ethylbenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.14 | 0.7 |
| Hexachloro-1,3-butadiene | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NL | NL |
| Isopropyl benzene | <0.00014 | <0.00014 | <0.00014 | <0.00014 | <0.00014 | NL | NL |
| p-Isopropyltoluene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| Methylene chloride | <0.00023 | <0.00023 | <0.00023 | <0.00023 | <0.00023 | 0.0005 | 0.005 |
| Methyl tertiary-butyl ether | <0.00017 | <0.00017 | <0.00017 | <0.00017 | <0.00017 | 0.012 | 0.06 |
| Naphthalene | <0.0025 | <0.0025 | <0.0025 | <0.0025 | <0.0025 | 0.01 | 0.1 |
| n-Propylbenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | NL | NL |
| Styrene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.01 | 0.1 |
| 1,1,1,2-Tetrachloroethane | <0.00018 | <0.00018 | <0.00018 | <0.00018 | <0.00018 | 0.007 | 0.07 |
| 1,1,2,2-Tetrachloroethane | <0.00025* | <0.00025* | <0.00025* | <0.00025* | <0.00025* | 0.00002 | 0.0002 |
| Tetrachloroethene | **0.0026** | **0.0026** | **0.0083** | **0.0124** | **0.0181** | 0.0005 | 0.005 |

## Table A.1.A (Continued). Groundwater Analytical Table for Volatile Organic Compounds (mg/L) (Quarterly Groundwater Sampling Wells)

| Volatile Organic Compound | Sample Location (Sample Date) | | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|---|
| | TW-2 (11/12/14) | MW-5 (01/27/15) | MW-5 (02/23/16) | MW-5 (05/30/17) | MW-5 (01/05/18) | | |
| Toluene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.16 | 0.8 |
| 1,2,3-Trichlorobenzene | <0.0021 | <0.0021 | <0.0021 | <0.0021 | <0.0021 | NL | NL |
| 1,2,4-Trichlorobenzene | <0.0022 | <0.0022 | <0.0022 | <0.0022 | <0.0022 | 0.014 | 0.07 |
| 1,1,1-Trichloroethane | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00057 | 0.04 | 0.2 |
| 1,1,2-Trichloroethane | <0.00016 | <0.0002 | <0.0002 | <0.0002 | <0.0002 | 0.0005 | 0.005 |
| Trichloroethene | <0.00033 | <0.00033 | <0.00033 | <0.00033 | <0.00033 | 0.0005 | 0.005 |
| Trichlorofluoromethane | <0.00017 | <0.00018 | <0.00018 | <0.00018 | <0.00018 | 0.7 | 3.5 |
| 1,2,3-Trichloropropane | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.012 | 0.06 |
| 1,2,4-Trimethylbenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | 0.096 | 0.48 |
| 1,3,5-Trimethylbenzene | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | | |
| Vinyl chloride | <0.00018 | <0.00018 | <0.00018 | <0.00018 | <0.00018 | 0.4 | 2 |
| Xylenes (total) | <0.0015 | <0.0015 | <0.0015 | <0.0015 | <0.0015 | 3.96 | 260 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
* – Limit of detection reported greater than most stringent applicable standard; "non-detect" concentration not taken as exceedance per NR140.14(3)(a)
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in NR 140
VOCs via USEPA Method SW8260
NOTE – MW-5 generally duplicated TW-2

## Table A.1.A (Continued). Groundwater Analytical Table for Volatile Organic Compounds (mg/L) (Quarterly Groundwater Sampling Wells)

| Volatile Organic Compound | Sample Location (Sample Date) | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|
| | MW-5 (04/07/18) | MW-5 (07/30/18) | MW-5 (10/11/18) | MW-5 (01/25/19) | | |
| Benzene | <0.0005 | <0.00025 | <0.00025 | <0.00025 | 0.0005 | 0.005 |
| Bromobenzene | <0.00023 | <0.00024 | <0.00024 | <0.00024 | NL | NL |
| Bromochloromethane | <0.00034 | <0.00036 | <0.00036 | <0.00036 | NL | NL |
| Bromodichloromethane | <0.0005* | <0.00036* | <0.00036* | <0.00036* | 0.00006 | 0.0006 |
| Bromoform | <0.0005* | <0.004* | <0.004* | <0.004* | 0.00044 | 0.0044 |
| Bromomethane | <0.0024* | <0.00097 | <0.00097 | <0.00097 | 0.001 | 0.01 |
| n-Butylbenzene | <0.0005 | <0.00071 | <0.00071 | <0.00071 | NL | NL |
| sec-Butylbenzene | <0.0022 | <0.00085 | <0.00085 | <0.00085 | NL | NL |
| tert-Butylbenzene | <0.00018 | <0.0003 | <0.0003 | <0.0003 | NL | NL |
| Carbon tetrachloride | <0.0005 | <0.00017 | <0.00017 | <0.00017 | 0.0005 | 0.005 |
| Chlorobenzene | <0.0005 | <0.00071 | <0.00071 | <0.00071 | NL | NL |
| Chloroethane | <0.00037 | <0.0013 | <0.0013 | <0.0013 | 0.08 | 0.4 |
| Chloroform | <0.0025* | <0.0013* | <0.0013* | <0.0013* | 0.0006 | 0.006 |
| Chloromethane | <0.0005 | <0.0022 | <0.0022 | <0.0022 | 0.003 | 0.03 |
| 2-Chlorotoluene | <0.0005 | <0.00093 | <0.00093 | <0.00093 | NL | NL |
| 4-Chlorotoluene | <0.00021 | <0.00076 | <0.00076 | <0.0018 | NL | NL |
| Dibromochloromethane | <0.0005 | <0.0026 | <0.0026 | <0.0026 | 0.006 | 0.006 |
| 1,2-Dibromo-3-chloropropane | <0.0022* | <0.0018* | <0.0018* | <0.0018* | 0.00002 | 0.0002 |
| 1,2-Dibromoethane (EDB) | <0.00018* | <0.00083* | <0.00083* | <0.00083* | 0.000005 | 0.00005 |
| Dibromomethane | <0.00043 | <0.00094 | <0.00094 | <0.00094 | NL | NL |
| 1,2-Dichlorobenzene | <0.0005 | <0.00071 | <0.00071 | <0.00071 | 0.06 | 0.6 |
| 1,3-Dichlorobenzene | <0.0005 | <0.00063 | <0.00063 | <0.00063 | 0.12 | 0.6 |
| 1,4-Dichlorobenzene | <0.0005 | <0.00094 | <0.00094 | <0.00094 | 0.015 | 0.075 |
| Dichlorodifluoromethane | <0.00022 | <0.0005 | <0.0005 | <0.0005 | 0.2 | 1 |
| 1,1-Dichloroethane | <0.00024 | <0.00027 | <0.00027 | 0.0016 | 0.085 | 0.85 |
| 1,2-Dichloroethane | <0.00017 | <0.00028 | <0.00028 | <0.00028 | 0.0005 | 0.005 |
| 1,1-Dichloroethene | <0.00041 | <0.00024 | <0.00024 | <0.00024 | 0.0007 | 0.007 |
| cis-1,2-Dichloroethene | <0.00026 | <0.00027 | <0.00027 | <0.00027 | 0.007 | 0.07 |
| trans-1,2-Dichoroethene | <0.00026 | <0.0011 | <0.0011 | <0.0011 | 0.02 | 0.1 |
| 1,2-Dichloropropane | <0.00023 | <0.00028 | <0.00028 | <0.00028 | 0.0005 | 0.005 |
| 1,3-Dichloropropane | <0.0005 | <0.00083 | <0.00083 | <0.00083 | NL | NL |
| 2,2-Dichloropropane | <0.00048 | <0.0023 | <0.0023 | <0.0023 | NL | NL |
| 1,1-Dichloropropene | <0.00044 | <0.00054 | <0.00054 | <0.00054 | NL | NL |
| 1,3-Dichloropropene (c & t) | <0.00073* | <0.008* | <0.008* | <0.008* | 0.00004 | 0.0004 |
| Diisopropyl ether | <0.0005 | <0.0019 | <0.0019 | <0.0019 | NL | NL |
| Ethylbenzene | <0.0005 | <0.00022 | <0.00022 | 0.00037 (J) | 0.14 | 0.7 |
| Hexachloro-1,3-butadiene | <0.0021 | <0.0012 | <0.0012 | <0.0012 | NL | NL |
| Isopropyl benzene | <0.00014 | <0.00039 | <0.00039 | <0.00039 | NL | NL |
| p-Isopropyltoluene | <0.0005 | <0.0008 | <0.0008 | <0.0008 | NL | NL |
| Methylene chloride | <0.00023 | <0.00058* | <0.00058* | <0.00058* | 0.0005 | 0.005 |
| Methyl tertiary-butyl ether | <0.00017 | <0.0012 | <0.0012 | <0.0012 | 0.012 | 0.06 |
| Naphthalene | <0.0025 | <0.0012 | <0.0012 | <0.0012 | 0.01 | 0.1 |
| n-Propylbenzene | <0.0005 | <0.00081 | <0.00081 | <0.00081 | NL | NL |
| Styrene | <0.0005 | <0.00047 | <0.00047 | <0.00047 | 0.01 | 0.1 |
| 1,1,1,2-Tetrachloroethane | <0.00018 | <0.00027 | <0.00027 | <0.00027 | 0.007 | 0.07 |

## Table A.1.A (Continued). Groundwater Analytical Table for Volatile Organic Compounds (mg/L) (Quarterly Groundwater Sampling Wells)

| Volatile Organic Compound | Sample Location (Sample Date) | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|
| | MW-5 (04/07/18) | MW-5 (07/30/18) | MW-5 (10/11/18) | MW-5 (01/25/19) | | |
| 1,1,2,2-Tetrachloroethane | <0.00025* | <0.00028* | <0.00028* | <0.00028* | 0.00002 | 0.0002 |
| Tetrachloroethene | **0.0203** | **0.0086** | **0.021** | **0.0065** | 0.0005 | 0.005 |
| Toluene | <0.0005 | <0.00017 | <0.00017 | <0.00017 | 0.16 | 0.8 |
| 1,2,3-Trichlorobenzene | <0.0021 | <0.00063 | <0.00063 | <0.00063 | NL | NL |
| 1,2,4-Trichlorobenzene | <0.0022 | <0.00095 | <0.00095 | <0.00095 | 0.014 | 0.07 |
| 1,1,1-Trichloroethane | 0.000897 | 0.00088 | 0.00095 (J) | 0.0003 (J) | 0.04 | 0.2 |
| 1,1,2-Trichloroethane | <0.0002 | <0.00055* | <0.00055* | <0.00055* | 0.0005 | 0.005 |
| Trichloroethene | <0.00033 | <0.00026 | 0.00027 (J) | **0.0027** | 0.0005 | 0.005 |
| Trichlorofluoromethane | <0.00018 | <0.00021 | <0.00021 | <0.00021 | 0.7 | 3.5 |
| 1,2,3-Trichloropropane | <0.0005 | <0.00059 | <0.00059 | <0.00059 | 0.012 | 0.06 |
| 1,2,4-Trimethylbenzene | <0.0005 | <0.00084 | <0.00084 | <0.00084 | 0.096 | 0.48 |
| 1,3,5-Trimethylbenzene | <0.0005 | <0.00087 | <0.00087 | <0.00087 | | |
| Vinyl chloride | <0.00018 | <0.00017 | <0.00017 | <0.00017 | 0.4 | 2 |
| Xylenes (total) | <0.0015 | <0.00073 | <0.00073 | 0.0039 | 3.96 | 260 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
* – Limit of detection reported greater than most stringent applicable standard; "non-detect" concentration not taken as exceedance per NR140.14(3)(a)
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in NR 140
VOCs via USEPA Method SW8260
NOTE – MW-5 generally duplicated TW-2

## Table A.1.B. Groundwater Analytical Table for Polynuclear Aromatics (mg/L)
## (Quarterly Groundwater Sampling Wells)

| Polynuclear Aromatic | Sample Location (Sample Date) | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|
| | TW-5 (11/13/14) | MW-3 (01/27/15) | MW-3 (05/30/17) | MW-3 (01/05/18) | | |
| Acenaphthene | 0.00076 | 0.0000043 (J) | 0.000026 (J) | 0.0000077 (J) | NL | NL |
| Acenaphthylene | 0.00013 | 0.0000036 (J) | 0.000016 (J) | <0.0000045 | NL | NL |
| Anthracene | 0.00056 | <0.0000023 | 0.00013 | 0.000031 (J) | 0.6 | 3 |
| Benzo(a)anthracene | 0.00069 | <0.0000031 | 0.00073 | 0.0000069 (J) | NL | NL |
| Benzo(a)pyrene | **0.0006** | 0.000011 (J) | **0.001** | <0.0000096 | 0.00002 | 0.0002 |
| Benzo(b)fluoranthene | **0.00077** | 0.00002 (J) | **0.002** | **0.000037** | 0.00002 | 0.0002 |
| Benzo(g,h,i)perylene | 0.0004 | 0.000016 (J) | 0.0011 | 0.00018 (J) | NL | NL |
| Benzo(k)fluoranthene | 0.00029 | 0.00001 (J) | 0.00068 | 0.000014 (J) | NL | NL |
| Chrysene | **0.00084** | **0.000028 (J)** | **0.0015** | **0.000047 (J)** | 0.00002 | 0.0002 |
| Dibenzo(a,h)anthracene | 0.000091 | <0.0000032 | 0.00022 | <0.0000091 | NL | NL |
| Fluoranthene | 0.0024 | 0.000041 (J) | 0.0031 | 0.00021 | 0.08 | 0.4 |
| Fluorene | 0.0011 | 0.0000035 (J) | 0.000052 | 0.000022 (J) | 0.08 | 0.4 |
| Indeno(1,2,3-cd)pyrene | 0.0003 | 0.0000081 (J) | 0.00086 | <0.000016 | NL | NL |
| 1-Methylnaphthalene | 0.002 | 0.0000091 (J) | 0.00018 | 0.00016 | NL | NL |
| 2-Methylnaphthalene | 0.00017 | 0.0000084 (J) | 0.00013 | 0.00016 | NL | NL |
| Naphthalene | 0.00016 | <0.0000056 | 0.00012 | 0.00046 | 0.017 | 0.1 |
| Phenanthrene | 0.0021 | 0.000043 (J) | 0.00071 | 0.000085 | NL | NL |
| Pyrene | 0.0025 | 0.000059 | 0.002 | 0.00011 | 0.05 | 0.25 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in Wisconsin Administrative Code
PNAs via USEPA Method SW8270SIM
NOTE – MW-3 installed to duplicate TW-5

## Table A.1.B (Continued). Groundwater Analytical Table for Polynuclear Aromatics (mg/L) (Quarterly Groundwater Sampling Wells)

| Polynuclear Aromatic | Sample Location (Sample Date) | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|
| | MW-3 (04/07/18) | MW-3 (07/30/18) | MW-3 (10/11/18) | MW-3 (01/25/19) | | |
| Acenaphthene | 0.000029 | 0.000014 (J) | 0.00001 (J) | 0.0000068 (J) | NL | NL |
| Acenaphthylene | 0.000053 | 0.000023 | <0.0000045 | <0.0000047 | NL | NL |
| Anthracene | 0.00015 | 0.000073 | 0.00002 (J) | 0.000027 (J) | 0.6 | 3 |
| Benzo(a)anthracene | 0.001 | 0.00043 | 0.000017 (J) | 0.000053 | NL | NL |
| Benzo(a)pyrene | **0.0019** | **0.00068** | **0.000024 (J)** | **0.00017** | 0.00002 | 0.0002 |
| Benzo(b)fluoranthene | **0.0039** | **0.0013** | **0.000074** | **0.00034** | 0.00002 | 0.0002 |
| Benzo(g,h,i)perylene | 0.0025 | 0.00082 | 0.000037 | 0.00023 | NL | NL |
| Benzo(k)fluoranthene | 0.0014 | 0.00041 | 0.000026 (J) | 0.00012 | NL | NL |
| Chrysene | **0.003** | **0.00095** | **0.000079** | **0.00028** | 0.00002 | 0.0002 |
| Dibenzo(a,h)anthracene | 0.00034 | 0.00015 | <0.000009 | 0.000034 (J) | NL | NL |
| Fluoranthene | 0.0052 | 0.0019 | 0.00026 | 0.00043 | 0.08 | 0.4 |
| Fluorene | 0.000048 | 0.00004 | 0.000031 (J) | 0.000014 (J) | 0.08 | 0.4 |
| Indeno(1,2,3-cd)pyrene | 0.0021 | 0.00089 | 0.000027 (J) | 0.00016 | NL | NL |
| 1-Methylnaphthalene | 0.000033 | 0.000033 | 0.000019 (J) | 0.000013 (J) | NL | NL |
| 2-Methylnaphthalene | 0.000024 | 0.000031 | 0.000015 (J) | 0.000012 (J) | NL | NL |
| Naphthalene | 0.000051 | 0.000053 (J) | 0.000032 (J) | 0.000022 (J) | 0.017 | 0.1 |
| Phenanthrene | 0.0013 | 0.00047 | 0.000093 | 0.00011 | NL | NL |
| Pyrene | 0.0037 | 0.0012 | 0.0002 | 0.00031 | 0.05 | 0.25 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in Wisconsin Administrative Code
PNAs via USEPA Method SW8270SIM
NOTE – MW-3 installed to duplicate TW-5

## Table A.1.B (Continued). Groundwater Analytical Table for Polynuclear Aromatics (mg/L) (Quarterly Groundwater Sampling Wells)

| Polynuclear Aromatic | Sample Location (Sample Date) | | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|---|
| | TW-6 (11/13/14) | MW-4 (01/27/15) | MW-4 (02/23/16) | MW-4 (05/30/17) | MW-4 (01/05/18) | | |
| Acenaphthene | 0.00049 | 0.0000039 (J) | 0.00056 | 0.0386 | 0.0246 | NL | NL |
| Acenaphthylene | 0.00012 | 0.000084 | 0.000073 | 0.0166 | 0.0083 | NL | NL |
| Anthracene | 0.00006 | 0.00006 | 0.00011 | 0.0018 (J) | 0.0019 | 0.6 | 3 |
| Benzo(a)anthracene | 0.000013 (J) | <0.0000032 | 0.0000082 (J) | 0.00044 (J) | <0.00014 | NL | NL |
| Benzo(a)pyrene | 0.0000053 (J) | 0.000017 (J) | 0.000006 (J) | **<0.00049** | **<0.0002** | 0.00002 | 0.0002 |
| Benzo(b)fluoranthene | 0.0000093 (J) | **0.000043 (J)** | 0.000014 (J) | **<0.00027** | **0.00022 (J)** | 0.00002 | 0.0002 |
| Benzo(g,h,i)perylene | 0.0000071 (J) | 0.000025 (J) | 0.0000081 (J) | <0.00031 | <0.00013 | NL | NL |
| Benzo(k)fluoranthene | <0.000005 | 0.000021 (J) | <0.0000051 | <0.00035 | <0.00014 | NL | NL |
| Chrysene | **0.000021 (J)** | **0.000042 (J)** | 0.000017 (J) | **0.0018 (J)** | **0.001 (J)** | 0.00002 | 0.0002 |
| Dibenzo(a,h)anthracene | <0.0000035 | <0.0000033 | <0.0000051 | <0.00046 | <0.00019 | NL | NL |
| Fluoranthene | 0.00004 (J) | 0.000049 | 0.00003 (J) | 0.0037 | 0.0046 | 0.08 | 0.4 |
| Fluorene | 0.00061 | 0.000031 (J) | 0.00051 | 0.0759 | 0.0504 | 0.08 | 0.4 |
| Indeno(1,2,3-cd)pyrene | 0.0000044 (J) | 0.000017 (J) | 0.0000056 (J) | <0.00082 | <0.00033 | NL | NL |
| 1-Methylnaphthalene | 0.0087 | 0.000076 | 0.0041 | 0.357 | 0.183 | NL | NL |
| 2-Methylnaphthalene | 0.0065 | 0.000066 | 0.000037 (J) | 0.0747 | 0.0126 | NL | NL |
| Naphthalene | 0.0022 | 0.00027 | 0.00017 | **0.0243** | **0.0151** | 0.01 | 0.1 |
| Phenanthrene | 0.00062 | 0.000033 (J) | 0.00029 | 0.165 | 0.102 | NL | NL |
| Pyrene | 0.00006 | 0.0001 | 0.000081 | 0.0165 | 0.0102 | 0.05 | 0.25 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in Wisconsin Administrative Code
PNAs via USEPA Method SW8270SIM
NOTE – MW-4 installed to duplicate TW-6

## Table A.1.B (Continued). Groundwater Analytical Table for Polynuclear Aromatics (mg/L) (Quarterly Groundwater Sampling Wells)

| Polynuclear Aromatic | Sample Location (Sample Date) | | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|---|
| | MW-4 (04/07/18) | MW-4 (07/30/18) | MW-4 (10/11/18) | MW-4 (01/25/19) | | |
| Acenaphthene | 0.0031 | 0.0021 | 0.004 | 0.0016 | NL | NL |
| Acenaphthylene | 0.00073 | 0.00064 | 0.00091 | 0.00024 | NL | NL |
| Anthracene | 0.00051 | 0.00024 | 0.001 | 0.000093 | 0.6 | 3 |
| Benzo(a)anthracene | 0.000012 (J) | <0.000035 | 0.00004 (J) | 0.0000076 (J) | NL | NL |
| Benzo(a)pyrene | <0.0000095 | **<0.000048** | **<0.000029** | <0.0000095 | 0.00002 | 0.0002 |
| Benzo(b)fluoranthene | 0.0000096 (J) | **<0.000026** | **0.000022** | 0.000012 (J) | 0.00002 | 0.0002 |
| Benzo(g,h,i)perylene | <0.0000061 | <0.000031 | <0.000018 | <0.0000061 | NL | NL |
| Benzo(k)fluoranthene | <0.0000068 | <0.000035 | <0.000021 | 0.000016 (J) | NL | NL |
| Chrysene | **0.000031 (J)** | **<0.00006** | **0.000084 (J)** | **0.000033 (J)** | 0.00002 | 0.0002 |
| Dibenzo(a,h)anthracene | <0.000009 | <0.000046 | <0.000027 | <0.000009 | NL | NL |
| Fluoranthene | 0.0001 | 0.000061 (J) | 0.00019 | 0.000091 | 0.08 | 0.4 |
| Fluorene | 0.0053 | 0.0035 | 0.0067 | 0.0022 | 0.08 | 0.4 |
| Indeno(1,2,3-cd)pyrene | <0.000016 | <0.000081 | <0.000048 | <0.000016 | NL | NL |
| 1-Methylnaphthalene | 0.0109 | 0.0395 | 0.0268 | 0.006 | NL | NL |
| 2-Methylnaphthalene | 0.00026 | 0.00051 | 0.00021 | 0.000048 | NL | NL |
| Naphthalene | 0.0022 | 0.0015 | 0.00081 | 0.00078 | 0.01 | 0.1 |
| Phenanthrene | 0.0033 | 0.0031 | 0.0059 | 0.00077 | NL | NL |
| Pyrene | 0.00032 | 0.00017 (J) | 0.0001 | 0.00021 | 0.05 | 0.25 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in Wisconsin Administrative Code
PNAs via USEPA Method SW8270SIM
NOTE – MW-4 installed to duplicate TW-6

## Table A.5. Sump Water Analytical Table for Volatile Organic Compounds (mg/L)

| Volatile Organic Compound | Sample Location (Sample Date) | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|
| | ACE Sump (06/04/17) | ACE Sump (01/05/18) | ACE Sump (02/04/19) | | |
| Benzene | <0.0005 | <0.0005 | <0.00025 | 0.0005 | 0.005 |
| Bromobenzene | <0.00023 | <0.00023 | <0.00024 | NL | NL |
| Bromochloromethane | <0.00034 | <0.00034 | <0.00036 | NL | NL |
| Bromodichloromethane | <0.0005* | <0.0005* | <0.00036 | 0.00006 | 0.0006 |
| Bromoform | <0.0005* | <0.0005* | <0.004* | 0.00044 | 0.0044 |
| Bromomethane | <0.0024* | <0.0024* | <0.00097 | 0.001 | 0.01 |
| n-Butylbenzene | <0.0005 | <0.0005 | <0.00071 | NL | NL |
| sec-Butylbenzene | <0.0022 | <0.0022 | <0.00085 | NL | NL |
| tert-Butylbenzene | <0.00018 | <0.00018 | <0.0003 | NL | NL |
| Carbon tetrachloride | <0.0005* | <0.0005* | <0.00017 | 0.0005 | 0.005 |
| Chlorobenzene | <0.0005 | <0.0005 | <0.00071 | NL | NL |
| Chloroethane | <0.00037 | <0.00037 | <0.0013 | 0.08 | 0.4 |
| Chloroform | <0.0025* | <0.0025* | <0.0013* | 0.0006 | 0.006 |
| Chloromethane | 0.00051 (J) | <0.0005 | <0.0022 | 0.003 | 0.03 |
| 2-Chlorotoluene | <0.0005 | <0.0005 | <0.00093 | NL | NL |
| 4-Chlorotoluene | <0.00021 | <0.00021 | <0.00076 | NL | NL |
| Dibromochloromethane | <0.0022* | <0.0005* | <0.0018 | 0.006 | 0.006 |
| 1,2-Dibromo-3-chloropropane | <0.0005* | <0.0022* | <0.00026* | 0.00002 | 0.0002 |
| 1,2-Dibromoethane (EDB) | <0.00018* | <0.00018* | <0.00083* | 0.000005 | 0.00005 |
| Dibromomethane | <0.00043 | <0.00043 | <0.00094 | NL | NL |
| 1,2-Dichlorobenzene | <0.0005 | <0.0005 | <0.00071 | 0.06 | 0.6 |
| 1,3-Dichlorobenzene | <0.0005 | <0.0005 | <0.00063 | 0.12 | 0.6 |
| 1,4-Dichlorobenzene | <0.0005 | <0.0005 | <0.00094 | 0.015 | 0.075 |
| Dichlorodifluoromethane | <0.00022 | <0.00022 | <0.0005 | 0.2 | 1 |
| 1,1-Dichloroethane | <0.00024 | <0.00024 | <0.00027 | 0.085 | 0.85 |
| 1,2-Dichloroethane | <0.00017 | <0.00017 | <0.00028 | 0.0005 | 0.005 |
| 1,1-Dichloroethene | <0.00041 | <0.00041 | <0.00024 | 0.0007 | 0.007 |
| cis-1,2-Dichloroethene | <0.00026 | <0.00026 | <0.00027 | 0.007 | 0.07 |
| trans-1,2-Dichoroethene | <0.00026 | <0.00026 | <0.0011 | 0.02 | 0.1 |
| 1,2-Dichloropropane | <0.00023 | <0.00023 | <0.00028 | 0.0005 | 0.005 |
| 1,3-Dichloropropane | <0.0005 | <0.0005 | <0.00083 | NL | NL |
| 2,2-Dichloropropane | <0.00048 | <0.00048 | <0.0023 | NL | NL |
| 1,1-Dichloropropene | <0.00044 | <0.00044 | <0.00054 | NL | NL |
| 1,3-Dichloropropene (c & t) | <0.00073* | <0.00073* | <0.008* | 0.00004 | 0.0004 |
| Diisopropyl ether | <0.0005 | <0.0005 | <0.0019 | NL | NL |
| Ethylbenzene | <0.0005 | <0.0005 | <0.00022 | 0.14 | 0.7 |
| Hexachloro-1,3-butadiene | <0.0021 | <0.0021 | <0.0012 | NL | NL |
| Isopropyl benzene | <0.00014 | <0.00014 | <0.00039 | NL | NL |
| p-Isopropyltoluene | <0.0005 | <0.0005 | <0.0008 | NL | NL |
| Methylene chloride | <0.00023 | <0.00023 | <0.00058* | 0.0005 | 0.005 |
| Methyl tertiary-butyl ether | <0.00017 | <0.00017 | <0.0012 | 0.012 | 0.06 |
| Naphthalene | <0.0025 | <0.0025 | <0.0012 | 0.01 | 0.1 |
| n-Propylbenzene | <0.0005 | <0.0005 | <0.00081 | NL | NL |
| Styrene | <0.0005 | <0.0005 | <0.00047 | 0.01 | 0.1 |
| 1,1,1,2-Tetrachloroethane | <0.00018 | <0.00018 | <0.00027 | 0.007 | 0.07 |
| 1,1,2,2-Tetrachloroethane | <0.00025* | <0.00025* | <0.00028* | 0.00002 | 0.0002 |
| Tetrachloroethene | **0.006** | **0.0082** | **0.0064** | 0.0005 | 0.005 |
| Toluene | <0.0005 | <0.0005 | <0.00017 | 0.16 | 0.8 |

## Table A.5 (Continued). Sump Water Analytical Table for Volatile Organic Compounds (mg/L)

| Volatile Organic Compound | Sample Location (Sample Date) | | | PAL[1] | ES[2] |
|---|---|---|---|---|---|
| | ACE Sump (06/04/17) | ACE Sump (01/05/18) | ACE Sump (02/04/19) | | |
| 1,2,3-Trichlorobenzene | <0.0021 | <0.0021 | <0.00063 | NL | NL |
| 1,2,4-Trichlorobenzene | <0.0022 | <0.0022 | <0.00095 | 0.014 | 0.07 |
| 1,1,1-Trichloroethane | <0.0005 | <0.0005 | <0.00024 | 0.04 | 0.2 |
| 1,1,2-Trichloroethane | <0.0002 | <0.0002 | <0.00055* | 0.0005 | 0.005 |
| Trichloroethene | <0.00033 | <0.00033 | <0.00026 | 0.0005 | 0.005 |
| Trichlorofluoromethane | <0.00018 | <0.00018 | <0.00021 | 0.7 | 3.5 |
| 1,2,3-Trichloropropane | <0.0005 | <0.0005 | <0.00059 | 0.012 | 0.06 |
| 1,2,4-Trimethylbenzene | <0.0005 | <0.0005 | <0.00084 | 0.096 | 0.48 |
| 1,3,5-Trimethylbenzene | <0.0005 | <0.0005 | <0.00087 | | |
| Vinyl chloride | <0.00018 | <0.00018 | <0.00017 | 0.4 | 2 |
| Xylenes (total) | <0.0015 | <0.0015 | <0.00073 | 3.96 | 260 |

[1] – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
[2] – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1
**Bold** – Concentration exceeds the PAL
Underlined – Concentration exceeds the PAL and the ES
* – Limit of detection reported greater than most stringent applicable standard in an undiluted sample (i.e., lowest achievable limit); "non-detect" concentration not taken as exceedance per NR140.14(3)(a)
(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification
NL – Not Listed in Wisconsin Administrative Code
VOCs via USEPA Method SW8260

## Table A.6. Water Level Elevations

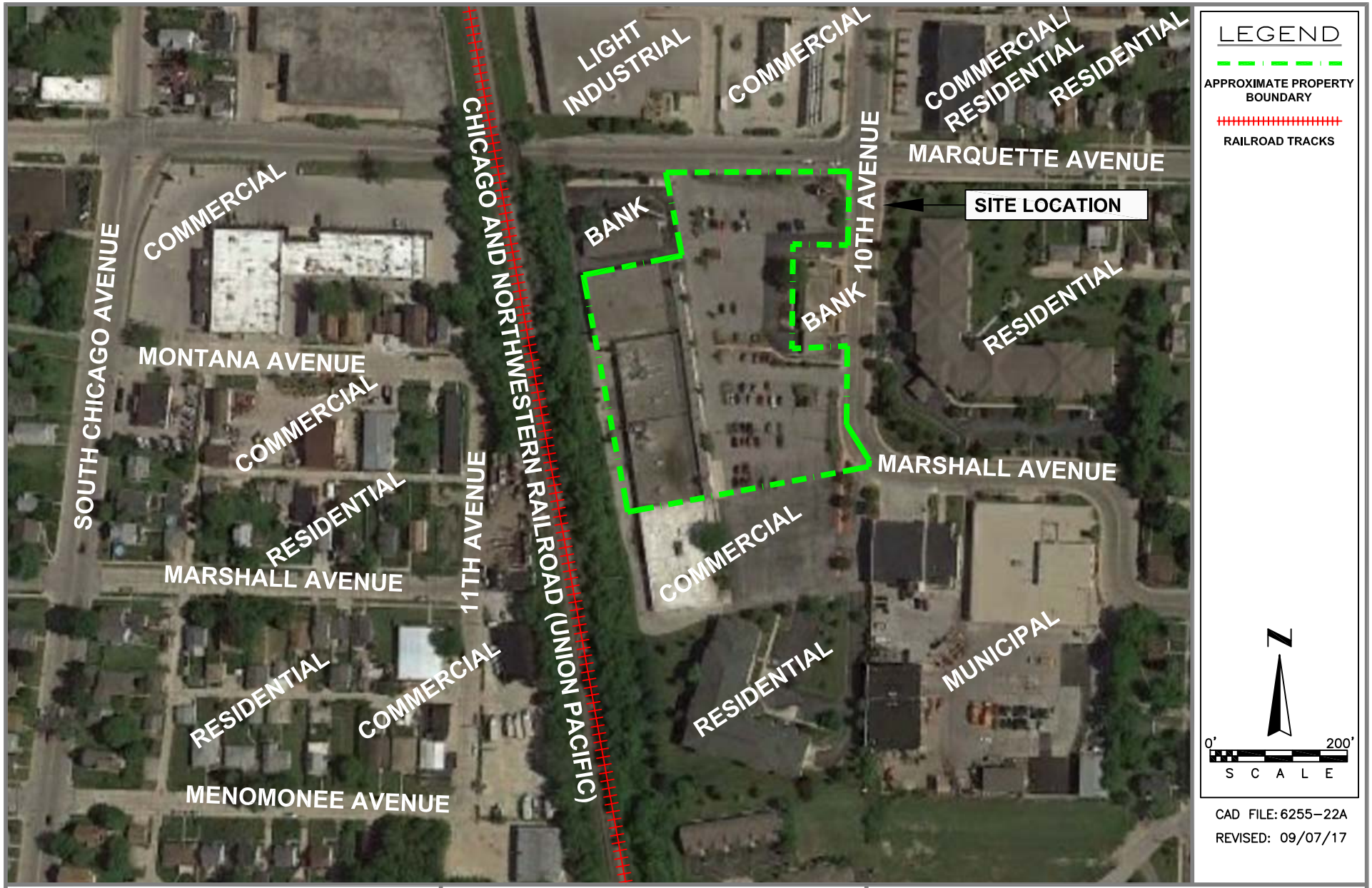
| Monitoring Well | Top of Casing Elevation* | Date | Measured Depth to Groundwater (ft) | Measured Depth to Well Bottom (ft) | Relative Groundwater Elevation (ft) |
|---|---|---|---|---|---|
| MW-1 | 99.13 | 1/25/19 | 4.65 | 14.49 | 94.48 |
| | | 10/11/18 | 1.66 | | 97.47 |
| | | 7/30/18 | 3.32 | | 95.81 |
| | | 4/08/18 | 2.24 | | 96.89 |
| | | 2/27/18 | 1.58 | | 97.55 |
| | | 5/30/17 | 2.17 | | 96.96 |
| | | 4/24/15 | 1.46 | | 97.67 |
| | | 3/30/15 | 1.98 | | 97.15 |
| | | 1/27/15 | 3.93 | | 95.20 |
| MW-2 | 100.75 | 1/25/19 | 8.42 | 14.41 | 92.33 |
| | | 10/11/18 | 6.45 | | 94.30 |
| | | 7/30/18 | 7.45 | | 93.30 |
| | | 4/08/18 | 8.36 | | 92.39 |
| | | 2/27/18 | 8.54 | | 92.21 |
| | | 5/30/17 | 7.95 | | 92.80 |
| | | 4/24/15 | 7.21 | | 93.54 |
| | | 3/30/15 | 8.01 | | 92.74 |
| | | 1/27/15 | 8.60 | | 92.15 |
| MW-3 | 100.05 | 1/25/19 | 4.44 | 14.46 | 95.61 |
| | | 10/11/18 | 2.35 | | 97.70 |
| | | 7/30/18 | 3.62 | | 96.43 |
| | | 4/08/18 | 2.53 | | 97.52 |
| | | 2/27/18 | 2.43 | | 97.62 |
| | | 5/30/17 | 2.45 | | 97.60 |
| | | 4/24/15 | 2.27 | | 97.78 |
| | | 3/30/15 | 2.73 | | 97.32 |
| | | 1/27/15 | 4.46 | | 95.59 |
| MW-4 | 100.57 | 1/25/19 | 6.88 | 14.57 | 93.69 |
| | | 10/11/18 | 5.43 | | 95.14 |
| | | 7/30/18 | 6.91 | | 93.66 |
| | | 4/08/18 | 7.26 | | 93.31 |
| | | 2/27/18 | 7.23 | | 93.34 |
| | | 5/30/17 | 6.38 | | 94.19 |
| | | 4/24/15 | 5.94 | | 94.63 |
| | | 3/30/15 | 7.04 | | 93.53 |
| | | 1/27/15 | 6.53 | | 94.04 |
| MW-5 | 100.24 | 1/25/19 | 6.35 | 14.60 | 93.89 |
| | | 10/11/18 | 5.85 | | 94.39 |
| | | 7/30/18 | 6.19 | | 94.05 |
| | | 4/08/18 | 6.27 | | 93.97 |
| | | 2/27/18 | 6.15 | | 94.09 |
| | | 5/30/17 | 5.96 | | 94.28 |
| | | 4/24/15 | 5.92 | | 94.32 |
| | | 3/30/15 | 6.26 | | 93.98 |
| | | 1/27/15 | 6.50 | | 93.74 |

## Table A.6. Water Level Elevations

| Monitoring Well | Top of Casing Elevation* | Date | Measured Depth to Groundwater (ft) | Measured Depth to Well Bottom (ft) | Relative Groundwater Elevation (ft) |
|---|---|---|---|---|---|
| MW-201 | 100.10 | 1/25/19 | 6.88 | 14.57 | 93.22 |
| | | 10/11/18 | 6.22 | | 93.88 |
| | | 7/30/18 | 6.69 | | 93.41 |
| | | 4/08/18 | 6.79 | | 93.34 |
| | | 2/27/18 | 6.46 | | 93.64 |
| | | 5/30/17 | 6.26 | | 93.84 |
| | | 4/24/15 | 5.91 | | 94.19 |
| | | 3/30/15 | 6.28 | | 93.82 |
| | | 1/27/15 | Not Installed | | Not Installed |

* – Relative Elevation based upon generic 100-ft on-site datum and survey data collected on January 27, 2015, and March 30, 2015.

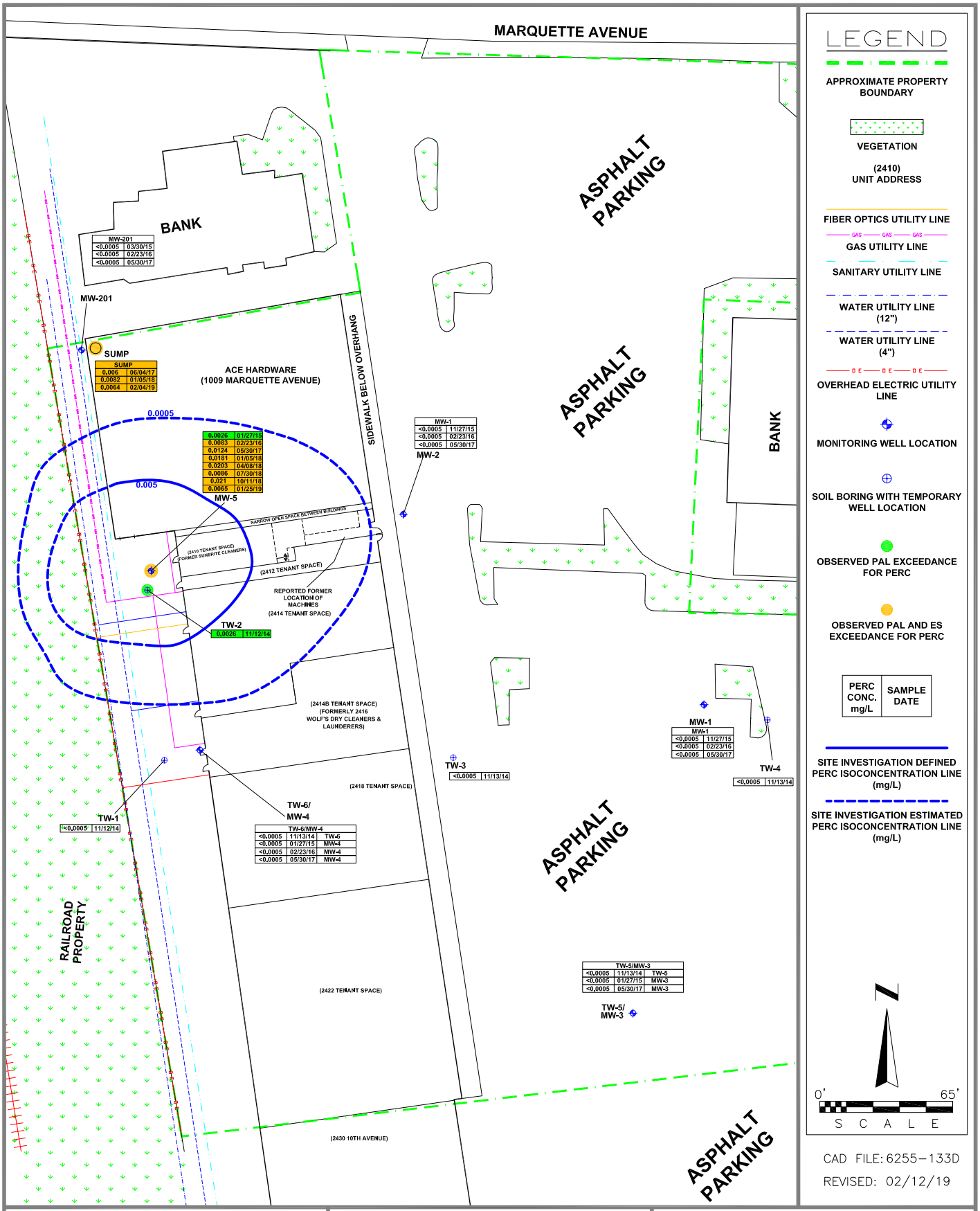
**APPENDIX B**
**FIGURES**




ENVIRONMENTAL DAI

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.1.b.1**
**DETAILED SITE MAP WITH AERIAL VIEW**
**OF SITE AND SURROUNDING PROPERTY**
**(2015 AERIAL TAKEN FROM GOOGLE EARTH)**



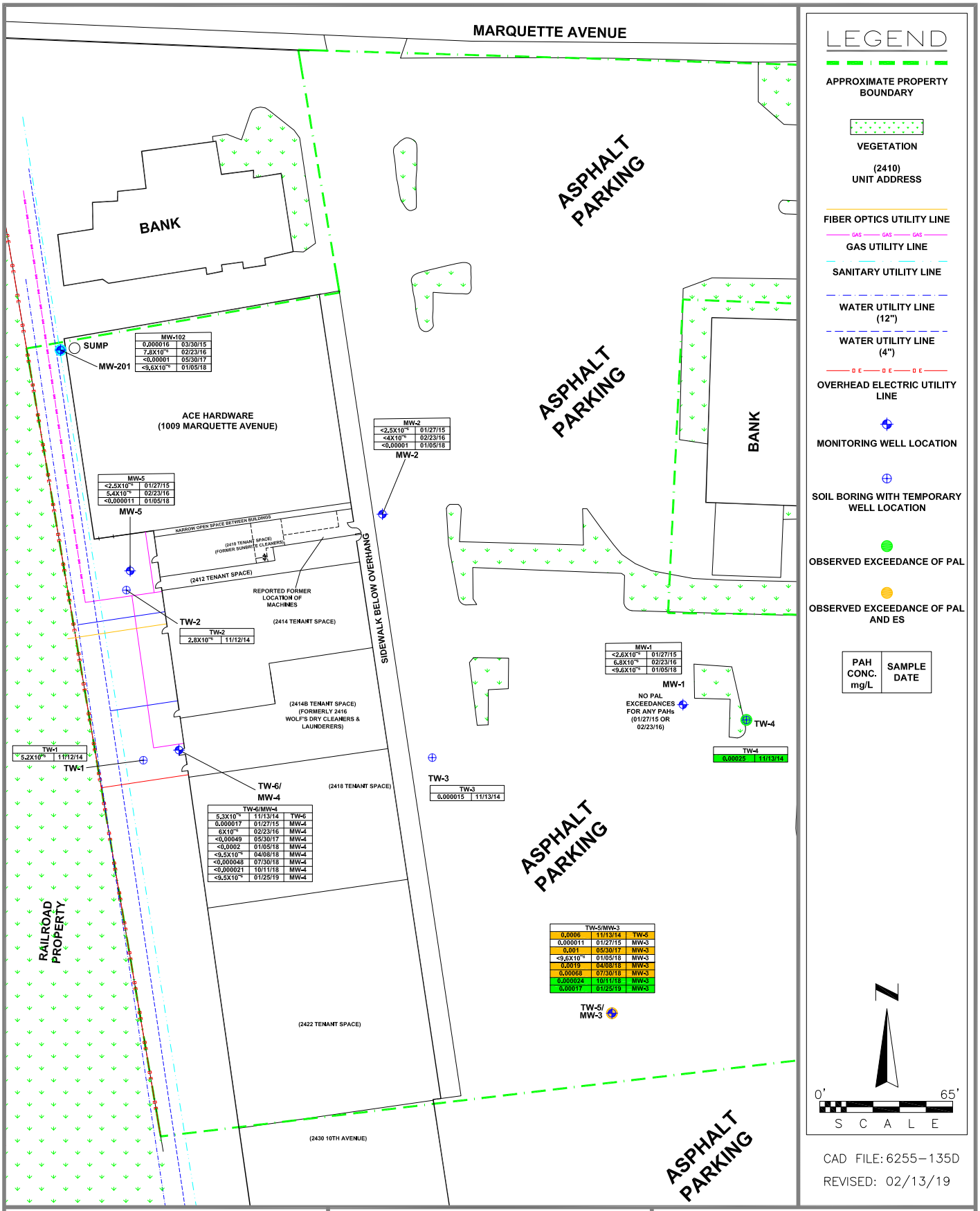

CAD FILE: 6255-133D

REVISED: 02/12/19

ENVIRONMENTAL DAI

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.b.1**
**GROUNDWATER ISOCONCENTRATION (PERC)**




LEGEND

APPROXIMATE PROPERTY BOUNDARY

VEGETATION

(2410) UNIT ADDRESS

FIBER OPTICS UTILITY LINE

GAS UTILITY LINE

SANITARY UTILITY LINE

WATER UTILITY LINE (12")

WATER UTILITY LINE (4")

OVERHEAD ELECTRIC UTILITY LINE

MONITORING WELL LOCATION

SOIL BORING WITH TEMPORARY WELL LOCATION

OBSERVED EXCEEDANCE OF PAL

OBSERVED EXCEEDANCE OF PAL AND ES

| PAH CONC. mg/L | SAMPLE DATE |
|---|---|

N

0' 65'

S C A L E

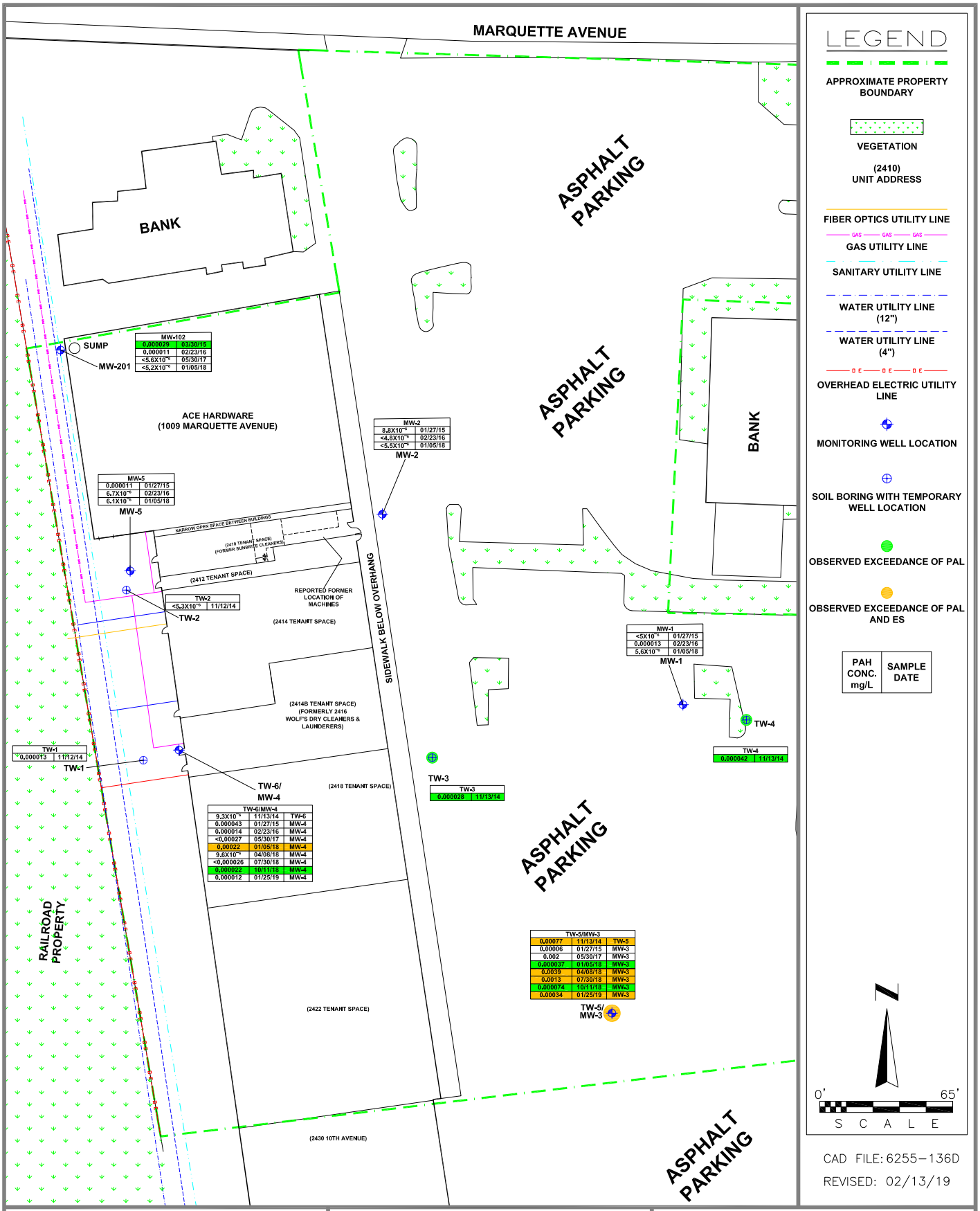
CAD FILE: 6255-135D

REVISED: 02/13/19

ENVIRONMENTAL DAI

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.b.2a**
**GROUNDWATER ISOCONCENTRATION (BENZO(A)PYRENE)**



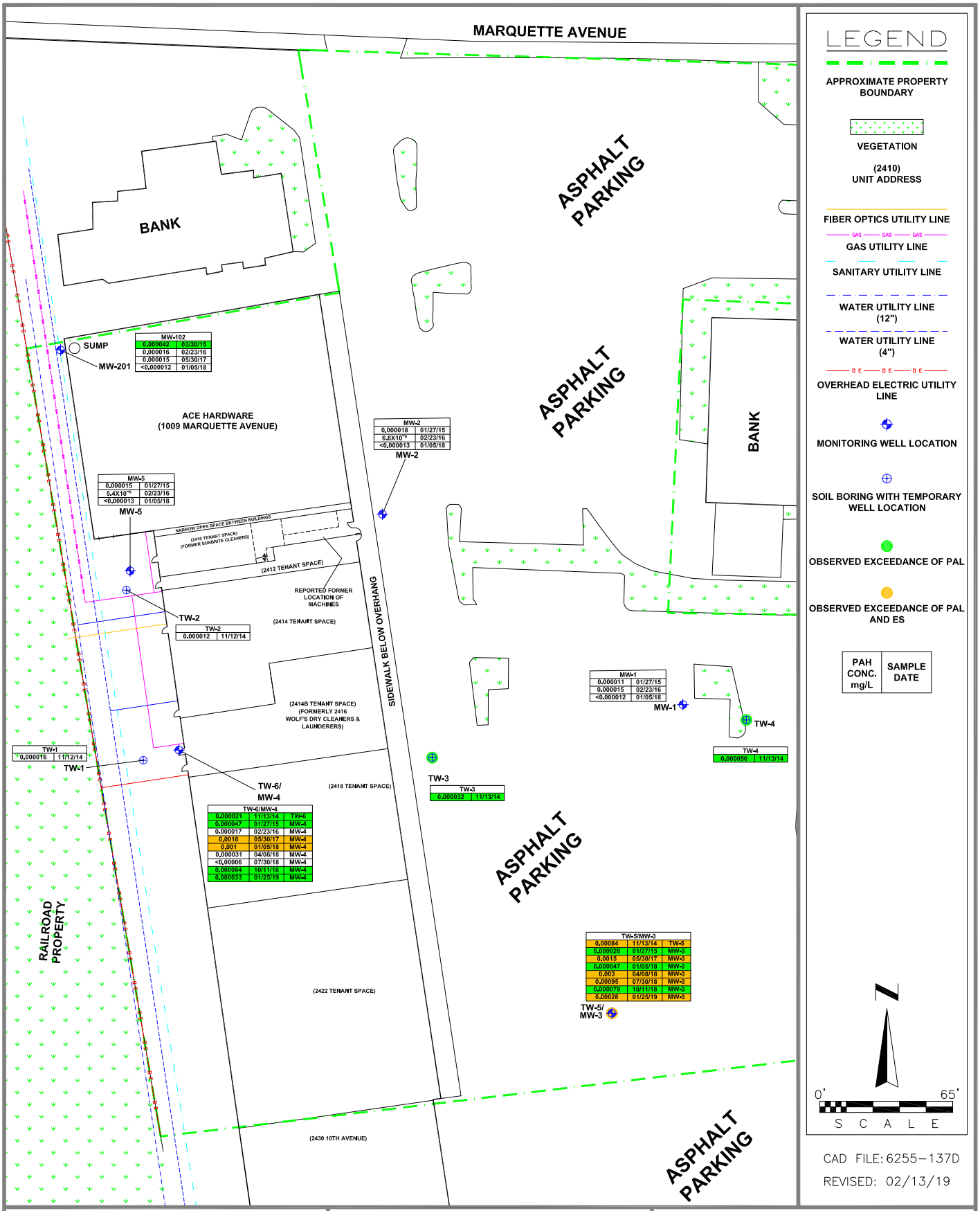

CAD FILE: 6255-136D

REVISED: 02/13/19

ENVIRONMENTAL

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.b.2b**
**GROUNDWATER ISOCONCENTRATION (BENZO(B)FLUORANTHENE)**



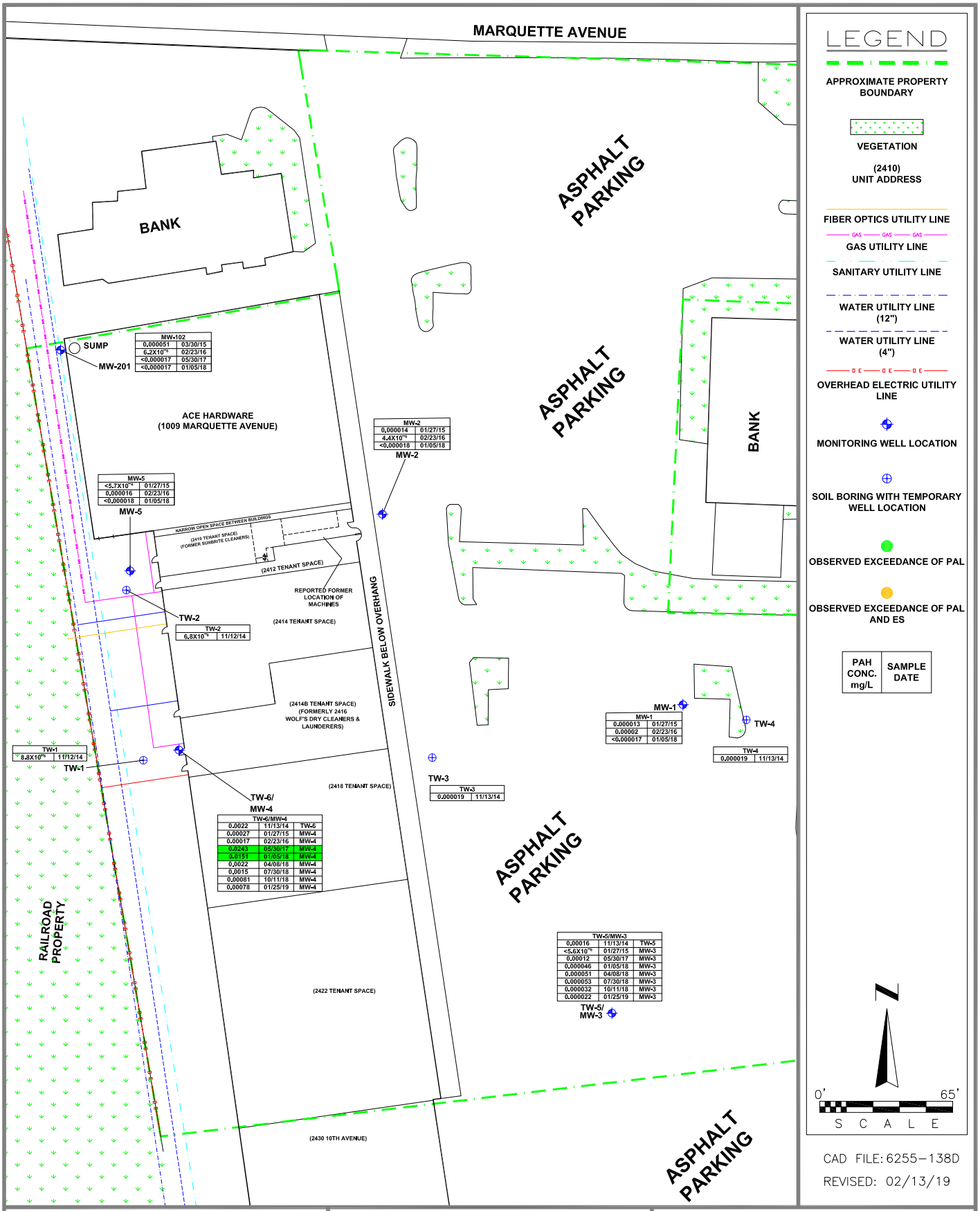

CAD FILE: 6255-137D

REVISED: 02/13/19

ENVIRONMENTAL

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.b.2c**
**GROUNDWATER ISOCONCENTRATION (CHRYSENE)**




LEGEND

APPROXIMATE PROPERTY BOUNDARY

VEGETATION

(2410) UNIT ADDRESS

FIBER OPTICS UTILITY LINE

GAS UTILITY LINE

SANITARY UTILITY LINE

WATER UTILITY LINE (12")

WATER UTILITY LINE (4")

OVERHEAD ELECTRIC UTILITY LINE

MONITORING WELL LOCATION

SOIL BORING WITH TEMPORARY WELL LOCATION

OBSERVED EXCEEDANCE OF PAL

OBSERVED EXCEEDANCE OF PAL AND ES

| PAH CONC. mg/L | SAMPLE DATE |
|---|---|

N

0' 65'

S C A L E

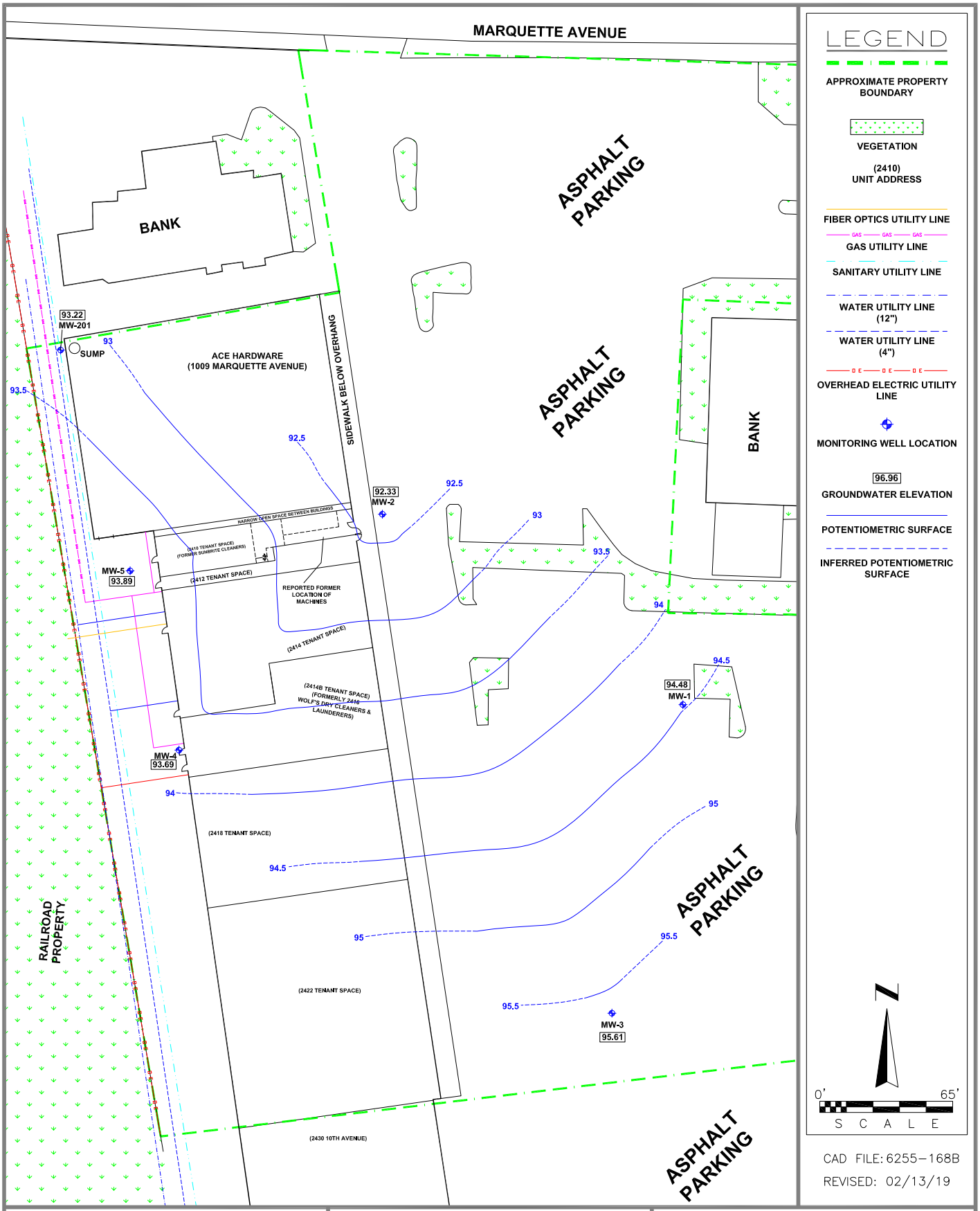
CAD FILE: 6255-138D

REVISED: 02/13/19

ENVIRONMENTAL DAI

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.b.2d**
**GROUNDWATER ISOCONCENTRATION (NAPHTHALENE)**



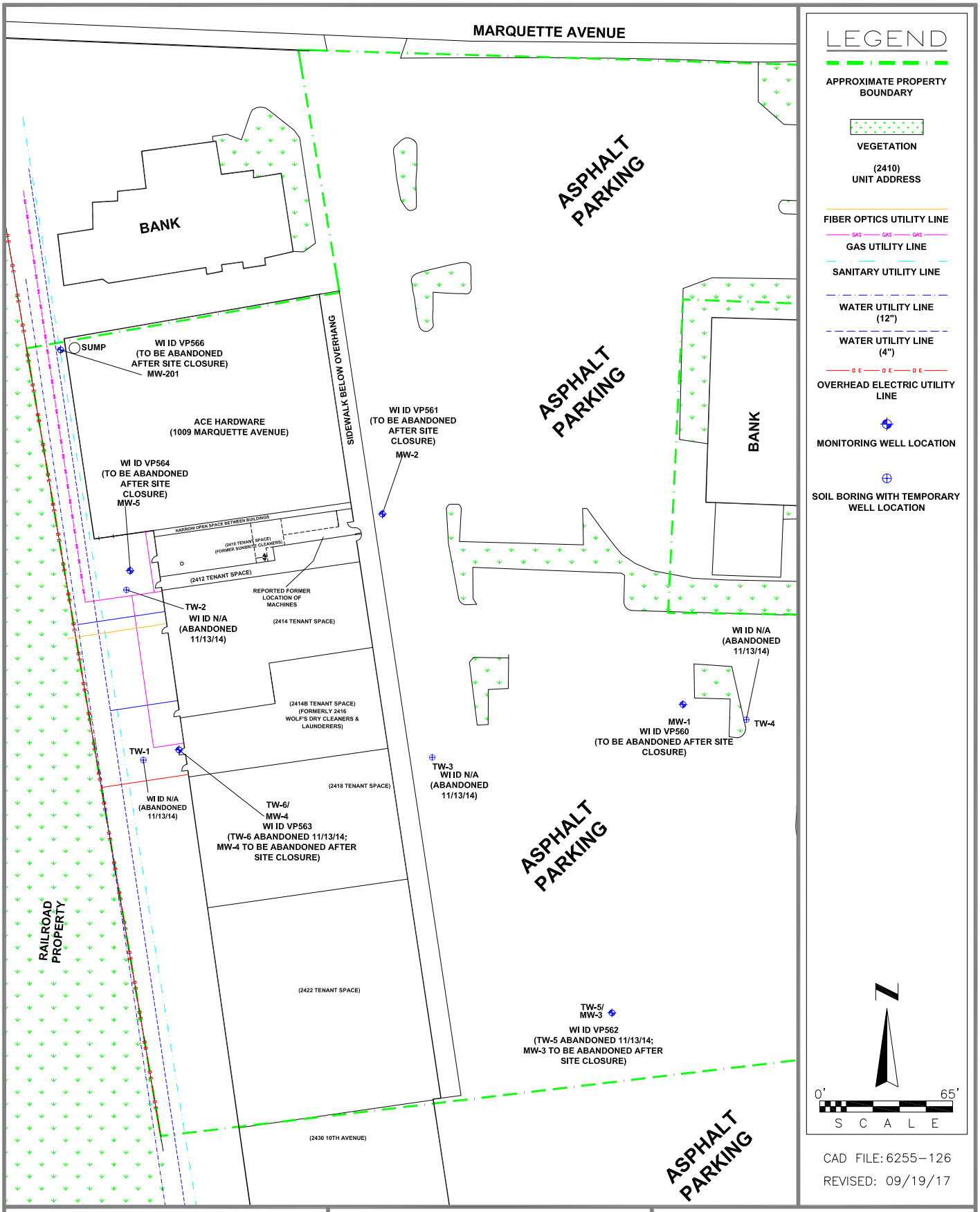

CAD FILE: 6255-168B

REVISED: 02/13/19

ENVIRONMENTAL DAI

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.c.8**
**GROUNDWATER FLOW DIRECTION**
**(JANUARY 25, 2019)**




CAD FILE: 6255-126

REVISED: 09/19/17

ENVIRONMENTAL DAI

**SUNRISE SHOPPING CENTER**
**2410-2424 10TH AVENUE**
**1009 MARQUETTE AVENUE**
**SOUTH MILWAUKEE, WISCONSIN**

**FIGURE B.3.d**
**MONITORING WELLS**

**APPENDIX C.1.E**
**LABORATORY ANALYTICAL REPORTS**
**(FIRST QUARTER 2019)**

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

February 01, 2019

Chris Cailles
DAI Environmental
Polo Park Business Center
27834 Irma Lee Circle
Lake Forest, IL 60045

RE: Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

Dear Chris Cailles:
Enclosed are the analytical results for sample(s) received by the laboratory on January 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC 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,

Laurie Woelfel

Laurie Woelfel
laurie.woelfel@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jenny Rovzar, DAI

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## CERTIFICATIONS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

**Green Bay Certification IDs**

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## SAMPLE SUMMARY

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **40182545001** | **MW-3** | Water | 01/25/19 09:00 | 01/29/19 10:00 |
| **40182545002** | **MW-4** | Water | 01/25/19 11:00 | 01/29/19 10:00 |
| **40182545003** | **MW-5** | Water | 01/25/19 14:00 | 01/29/19 10:00 |

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## SAMPLE ANALYTE COUNT

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **40182545001** | **MW-3** | EPA 8270 by HVI | TPO | 20 |
| **40182545002** | **MW-4** | EPA 8270 by HVI | TPO | 20 |
| **40182545003** | **MW-5** | EPA 8260 | LAP | 64 |

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

**Sample: MW-3** **Lab ID: 40182545001** Collected: 01/25/19 09:00 Received: 01/29/19 10:00 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8270 MSSV PAH by HVI** | Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | **0.0068J** | ug/L | 0.029 | 0.0058 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 83-32-9 | |
| Acenaphthylene | **<0.0047** | ug/L | 0.024 | 0.0047 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 208-96-8 | |
| Anthracene | **0.027J** | ug/L | 0.050 | 0.010 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 120-12-7 | |
| Benzo(a)anthracene | **0.053** | ug/L | 0.036 | 0.0072 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 56-55-3 | |
| Benzo(a)pyrene | **0.17** | ug/L | 0.050 | 0.010 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 50-32-8 | |
| Benzo(b)fluoranthene | **0.34** | ug/L | 0.027 | 0.0055 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 205-99-2 | |
| Benzo(g,h,i)perylene | **0.23** | ug/L | 0.032 | 0.0065 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 191-24-2 | |
| Benzo(k)fluoranthene | **0.12** | ug/L | 0.036 | 0.0072 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 207-08-9 | |
| Chrysene | **0.28** | ug/L | 0.062 | 0.012 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 218-01-9 | |
| Dibenz(a,h)anthracene | **0.034J** | ug/L | 0.048 | 0.0095 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 53-70-3 | |
| Fluoranthene | **0.43** | ug/L | 0.051 | 0.010 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 206-44-0 | |
| Fluorene | **0.014J** | ug/L | 0.038 | 0.0076 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | **0.16** | ug/L | 0.084 | 0.017 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 193-39-5 | |
| 1-Methylnaphthalene | **0.013J** | ug/L | 0.028 | 0.0056 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 90-12-0 | |
| 2-Methylnaphthalene | **0.012J** | ug/L | 0.023 | 0.0047 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 91-57-6 | |
| Naphthalene | **0.022J** | ug/L | 0.087 | 0.017 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 91-20-3 | |
| Phenanthrene | **0.11** | ug/L | 0.066 | 0.013 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 85-01-8 | |
| Pyrene | **0.31** | ug/L | 0.036 | 0.0073 | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 129-00-0 | |
| ***Surrogates*** | | | | | | | | | |
| 2-Fluorobiphenyl (S) | 61 | % | 29-80 | | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 321-60-8 | |
| Terphenyl-d14 (S) | 58 | % | 10-123 | | 1 | 01/30/19 09:08 | 01/30/19 17:33 | 1718-51-0 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

**Sample: MW-4** **Lab ID: 40182545002** Collected: 01/25/19 11:00 Received: 01/29/19 10:00 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8270 MSSV PAH by HVI** | Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | **1.6** | ug/L | 0.027 | 0.0055 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 83-32-9 | |
| Acenaphthylene | **0.24** | ug/L | 0.022 | 0.0045 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 208-96-8 | |
| Anthracene | **0.093** | ug/L | 0.047 | 0.0094 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 120-12-7 | |
| Benzo(a)anthracene | **0.0076J** | ug/L | 0.034 | 0.0068 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 56-55-3 | |
| Benzo(a)pyrene | **<0.0095** | ug/L | 0.047 | 0.0095 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 50-32-8 | |
| Benzo(b)fluoranthene | **0.012J** | ug/L | 0.026 | 0.0052 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 205-99-2 | B |
| Benzo(g,h,i)perylene | **<0.0061** | ug/L | 0.031 | 0.0061 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 191-24-2 | |
| Benzo(k)fluoranthene | **0.016J** | ug/L | 0.034 | 0.0068 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 207-08-9 | |
| Chrysene | **0.033J** | ug/L | 0.059 | 0.012 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 218-01-9 | |
| Dibenz(a,h)anthracene | **<0.0090** | ug/L | 0.045 | 0.0090 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 53-70-3 | |
| Fluoranthene | **0.091** | ug/L | 0.048 | 0.0096 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 206-44-0 | B |
| Fluorene | **2.2** | ug/L | 0.036 | 0.0072 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | **<0.016** | ug/L | 0.079 | 0.016 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 193-39-5 | |
| 1-Methylnaphthalene | **6.0** | ug/L | 0.027 | 0.0053 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 90-12-0 | |
| 2-Methylnaphthalene | **0.048** | ug/L | 0.022 | 0.0044 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 91-57-6 | |
| Naphthalene | **0.78** | ug/L | 0.083 | 0.017 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 91-20-3 | |
| Phenanthrene | **0.77** | ug/L | 0.062 | 0.012 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 85-01-8 | |
| Pyrene | **0.21** | ug/L | 0.034 | 0.0069 | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 129-00-0 | |
| ***Surrogates*** | | | | | | | | | |
| 2-Fluorobiphenyl (S) | 50 | % | 29-80 | | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 321-60-8 | |
| Terphenyl-d14 (S) | 38 | % | 10-123 | | 1 | 01/30/19 09:08 | 01/30/19 18:06 | 1718-51-0 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

**Sample: MW-5** **Lab ID: 40182545003** Collected: 01/25/19 14:00 Received: 01/29/19 10:00 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | | |
| Benzene | **<0.25** | ug/L | 1.0 | 0.25 | 1 | | 01/30/19 13:57 | 71-43-2 | |
| Bromobenzene | **<0.24** | ug/L | 1.0 | 0.24 | 1 | | 01/30/19 13:57 | 108-86-1 | |
| Bromochloromethane | **<0.36** | ug/L | 5.0 | 0.36 | 1 | | 01/30/19 13:57 | 74-97-5 | |
| Bromodichloromethane | **<0.36** | ug/L | 1.2 | 0.36 | 1 | | 01/30/19 13:57 | 75-27-4 | |
| Bromoform | **<4.0** | ug/L | 13.2 | 4.0 | 1 | | 01/30/19 13:57 | 75-25-2 | |
| Bromomethane | **<0.97** | ug/L | 5.0 | 0.97 | 1 | | 01/30/19 13:57 | 74-83-9 | |
| n-Butylbenzene | **<0.71** | ug/L | 2.4 | 0.71 | 1 | | 01/30/19 13:57 | 104-51-8 | |
| sec-Butylbenzene | **<0.85** | ug/L | 5.0 | 0.85 | 1 | | 01/30/19 13:57 | 135-98-8 | |
| tert-Butylbenzene | **<0.30** | ug/L | 1.0 | 0.30 | 1 | | 01/30/19 13:57 | 98-06-6 | |
| Carbon tetrachloride | **<0.17** | ug/L | 1.0 | 0.17 | 1 | | 01/30/19 13:57 | 56-23-5 | |
| Chlorobenzene | **<0.71** | ug/L | 2.4 | 0.71 | 1 | | 01/30/19 13:57 | 108-90-7 | |
| Chloroethane | **<1.3** | ug/L | 5.0 | 1.3 | 1 | | 01/30/19 13:57 | 75-00-3 | |
| Chloroform | **<1.3** | ug/L | 5.0 | 1.3 | 1 | | 01/30/19 13:57 | 67-66-3 | |
| Chloromethane | **<2.2** | ug/L | 7.3 | 2.2 | 1 | | 01/30/19 13:57 | 74-87-3 | |
| 2-Chlorotoluene | **<0.93** | ug/L | 5.0 | 0.93 | 1 | | 01/30/19 13:57 | 95-49-8 | |
| 4-Chlorotoluene | **<0.76** | ug/L | 2.5 | 0.76 | 1 | | 01/30/19 13:57 | 106-43-4 | |
| 1,2-Dibromo-3-chloropropane | **<1.8** | ug/L | 5.9 | 1.8 | 1 | | 01/30/19 13:57 | 96-12-8 | |
| Dibromochloromethane | **<2.6** | ug/L | 8.7 | 2.6 | 1 | | 01/30/19 13:57 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | **<0.83** | ug/L | 2.8 | 0.83 | 1 | | 01/30/19 13:57 | 106-93-4 | |
| Dibromomethane | **<0.94** | ug/L | 3.1 | 0.94 | 1 | | 01/30/19 13:57 | 74-95-3 | |
| 1,2-Dichlorobenzene | **<0.71** | ug/L | 2.4 | 0.71 | 1 | | 01/30/19 13:57 | 95-50-1 | |
| 1,3-Dichlorobenzene | **<0.63** | ug/L | 2.1 | 0.63 | 1 | | 01/30/19 13:57 | 541-73-1 | |
| 1,4-Dichlorobenzene | **<0.94** | ug/L | 3.1 | 0.94 | 1 | | 01/30/19 13:57 | 106-46-7 | |
| Dichlorodifluoromethane | **<0.50** | ug/L | 5.0 | 0.50 | 1 | | 01/30/19 13:57 | 75-71-8 | |
| 1,1-Dichloroethane | **1.6** | ug/L | 1.0 | 0.27 | 1 | | 01/30/19 13:57 | 75-34-3 | |
| 1,2-Dichloroethane | **<0.28** | ug/L | 1.0 | 0.28 | 1 | | 01/30/19 13:57 | 107-06-2 | |
| 1,1-Dichloroethene | **<0.24** | ug/L | 1.0 | 0.24 | 1 | | 01/30/19 13:57 | 75-35-4 | |
| cis-1,2-Dichloroethene | **<0.27** | ug/L | 1.0 | 0.27 | 1 | | 01/30/19 13:57 | 156-59-2 | |
| trans-1,2-Dichloroethene | **<1.1** | ug/L | 3.6 | 1.1 | 1 | | 01/30/19 13:57 | 156-60-5 | |
| 1,2-Dichloropropane | **<0.28** | ug/L | 1.0 | 0.28 | 1 | | 01/30/19 13:57 | 78-87-5 | |
| 1,3-Dichloropropane | **<0.83** | ug/L | 2.8 | 0.83 | 1 | | 01/30/19 13:57 | 142-28-9 | |
| 2,2-Dichloropropane | **<2.3** | ug/L | 7.6 | 2.3 | 1 | | 01/30/19 13:57 | 594-20-7 | |
| 1,1-Dichloropropene | **<0.54** | ug/L | 1.8 | 0.54 | 1 | | 01/30/19 13:57 | 563-58-6 | |
| cis-1,3-Dichloropropene | **<3.6** | ug/L | 12.1 | 3.6 | 1 | | 01/30/19 13:57 | 10061-01-5 | |
| trans-1,3-Dichloropropene | **<4.4** | ug/L | 14.6 | 4.4 | 1 | | 01/30/19 13:57 | 10061-02-6 | |
| Diisopropyl ether | **<1.9** | ug/L | 6.3 | 1.9 | 1 | | 01/30/19 13:57 | 108-20-3 | |
| Ethylbenzene | **0.37J** | ug/L | 1.0 | 0.22 | 1 | | 01/30/19 13:57 | 100-41-4 | |
| Hexachloro-1,3-butadiene | **<1.2** | ug/L | 5.0 | 1.2 | 1 | | 01/30/19 13:57 | 87-68-3 | |
| Isopropylbenzene (Cumene) | **<0.39** | ug/L | 5.0 | 0.39 | 1 | | 01/30/19 13:57 | 98-82-8 | |
| p-Isopropyltoluene | **<0.80** | ug/L | 2.7 | 0.80 | 1 | | 01/30/19 13:57 | 99-87-6 | |
| Methylene Chloride | **<0.58** | ug/L | 5.0 | 0.58 | 1 | | 01/30/19 13:57 | 75-09-2 | |
| Methyl-tert-butyl ether | **<1.2** | ug/L | 4.2 | 1.2 | 1 | | 01/30/19 13:57 | 1634-04-4 | |
| Naphthalene | **<1.2** | ug/L | 5.0 | 1.2 | 1 | | 01/30/19 13:57 | 91-20-3 | |
| n-Propylbenzene | **<0.81** | ug/L | 5.0 | 0.81 | 1 | | 01/30/19 13:57 | 103-65-1 | |
| Styrene | **<0.47** | ug/L | 1.6 | 0.47 | 1 | | 01/30/19 13:57 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | **<0.27** | ug/L | 1.0 | 0.27 | 1 | | 01/30/19 13:57 | 630-20-6 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

**Sample: MW-5** **Lab ID: 40182545003** Collected: 01/25/19 14:00 Received: 01/29/19 10:00 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | **<0.28** | ug/L | 1.0 | 0.28 | 1 | | 01/30/19 13:57 | 79-34-5 | |
| Tetrachloroethene | **6.5** | ug/L | 1.1 | 0.33 | 1 | | 01/30/19 13:57 | 127-18-4 | |
| Toluene | **<0.17** | ug/L | 5.0 | 0.17 | 1 | | 01/30/19 13:57 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | **<0.63** | ug/L | 5.0 | 0.63 | 1 | | 01/30/19 13:57 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | **<0.95** | ug/L | 5.0 | 0.95 | 1 | | 01/30/19 13:57 | 120-82-1 | |
| 1,1,1-Trichloroethane | **0.30J** | ug/L | 1.0 | 0.24 | 1 | | 01/30/19 13:57 | 71-55-6 | |
| 1,1,2-Trichloroethane | **<0.55** | ug/L | 5.0 | 0.55 | 1 | | 01/30/19 13:57 | 79-00-5 | |
| Trichloroethene | **2.7** | ug/L | 1.0 | 0.26 | 1 | | 01/30/19 13:57 | 79-01-6 | |
| Trichlorofluoromethane | **<0.21** | ug/L | 1.0 | 0.21 | 1 | | 01/30/19 13:57 | 75-69-4 | |
| 1,2,3-Trichloropropane | **<0.59** | ug/L | 5.0 | 0.59 | 1 | | 01/30/19 13:57 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | **<0.84** | ug/L | 2.8 | 0.84 | 1 | | 01/30/19 13:57 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | **<0.87** | ug/L | 2.9 | 0.87 | 1 | | 01/30/19 13:57 | 108-67-8 | |
| Vinyl chloride | **<0.17** | ug/L | 1.0 | 0.17 | 1 | | 01/30/19 13:57 | 75-01-4 | |
| m&p-Xylene | **2.8** | ug/L | 2.0 | 0.47 | 1 | | 01/30/19 13:57 | 179601-23-1 | |
| o-Xylene | **1.1** | ug/L | 1.0 | 0.26 | 1 | | 01/30/19 13:57 | 95-47-6 | |
| ***Surrogates*** | | | | | | | | | |
| 4-Bromofluorobenzene (S) | 87 | % | 70-130 | | 1 | | 01/30/19 13:57 | 460-00-4 | |
| Dibromofluoromethane (S) | 104 | % | 70-130 | | 1 | | 01/30/19 13:57 | 1868-53-7 | |
| Toluene-d8 (S) | 97 | % | 70-130 | | 1 | | 01/30/19 13:57 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

QC Batch: 312477 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40182545003

METHOD BLANK: 1821520 Matrix: Water
Associated Lab Samples: 40182545003

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | <0.27 | 1.0 | 01/30/19 08:28 | |
| 1,1,1-Trichloroethane | ug/L | <0.24 | 1.0 | 01/30/19 08:28 | |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.28 | 1.0 | 01/30/19 08:28 | |
| 1,1,2-Trichloroethane | ug/L | <0.55 | 5.0 | 01/30/19 08:28 | |
| 1,1-Dichloroethane | ug/L | <0.27 | 1.0 | 01/30/19 08:28 | |
| 1,1-Dichloroethene | ug/L | <0.24 | 1.0 | 01/30/19 08:28 | |
| 1,1-Dichloropropene | ug/L | <0.54 | 1.8 | 01/30/19 08:28 | |
| 1,2,3-Trichlorobenzene | ug/L | <0.63 | 5.0 | 01/30/19 08:28 | |
| 1,2,3-Trichloropropane | ug/L | <0.59 | 5.0 | 01/30/19 08:28 | |
| 1,2,4-Trichlorobenzene | ug/L | <0.95 | 5.0 | 01/30/19 08:28 | |
| 1,2,4-Trimethylbenzene | ug/L | <0.84 | 2.8 | 01/30/19 08:28 | |
| 1,2-Dibromo-3-chloropropane | ug/L | <1.8 | 5.9 | 01/30/19 08:28 | |
| 1,2-Dibromoethane (EDB) | ug/L | <0.83 | 2.8 | 01/30/19 08:28 | |
| 1,2-Dichlorobenzene | ug/L | <0.71 | 2.4 | 01/30/19 08:28 | |
| 1,2-Dichloroethane | ug/L | <0.28 | 1.0 | 01/30/19 08:28 | |
| 1,2-Dichloropropane | ug/L | <0.28 | 1.0 | 01/30/19 08:28 | |
| 1,3,5-Trimethylbenzene | ug/L | <0.87 | 2.9 | 01/30/19 08:28 | |
| 1,3-Dichlorobenzene | ug/L | <0.63 | 2.1 | 01/30/19 08:28 | |
| 1,3-Dichloropropane | ug/L | <0.83 | 2.8 | 01/30/19 08:28 | |
| 1,4-Dichlorobenzene | ug/L | <0.94 | 3.1 | 01/30/19 08:28 | |
| 2,2-Dichloropropane | ug/L | <2.3 | 7.6 | 01/30/19 08:28 | |
| 2-Chlorotoluene | ug/L | <0.93 | 5.0 | 01/30/19 08:28 | |
| 4-Chlorotoluene | ug/L | <0.76 | 2.5 | 01/30/19 08:28 | |
| Benzene | ug/L | <0.25 | 1.0 | 01/30/19 08:28 | |
| Bromobenzene | ug/L | <0.24 | 1.0 | 01/30/19 08:28 | |
| Bromochloromethane | ug/L | <0.36 | 5.0 | 01/30/19 08:28 | |
| Bromodichloromethane | ug/L | <0.36 | 1.2 | 01/30/19 08:28 | |
| Bromoform | ug/L | <4.0 | 13.2 | 01/30/19 08:28 | |
| Bromomethane | ug/L | <0.97 | 5.0 | 01/30/19 08:28 | |
| Carbon tetrachloride | ug/L | <0.17 | 1.0 | 01/30/19 08:28 | |
| Chlorobenzene | ug/L | <0.71 | 2.4 | 01/30/19 08:28 | |
| Chloroethane | ug/L | <1.3 | 5.0 | 01/30/19 08:28 | |
| Chloroform | ug/L | <1.3 | 5.0 | 01/30/19 08:28 | |
| Chloromethane | ug/L | <2.2 | 7.3 | 01/30/19 08:28 | |
| cis-1,2-Dichloroethene | ug/L | <0.27 | 1.0 | 01/30/19 08:28 | |
| cis-1,3-Dichloropropene | ug/L | <3.6 | 12.1 | 01/30/19 08:28 | |
| Dibromochloromethane | ug/L | <2.6 | 8.7 | 01/30/19 08:28 | |
| Dibromomethane | ug/L | <0.94 | 3.1 | 01/30/19 08:28 | |
| Dichlorodifluoromethane | ug/L | <0.50 | 5.0 | 01/30/19 08:28 | |
| Diisopropyl ether | ug/L | <1.9 | 6.3 | 01/30/19 08:28 | |
| Ethylbenzene | ug/L | <0.22 | 1.0 | 01/30/19 08:28 | |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

METHOD BLANK: 1821520 Matrix: Water
Associated Lab Samples: 40182545003

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ug/L | <1.2 | 5.0 | 01/30/19 08:28 | |
| Isopropylbenzene (Cumene) | ug/L | <0.39 | 5.0 | 01/30/19 08:28 | |
| m&p-Xylene | ug/L | <0.47 | 2.0 | 01/30/19 08:28 | |
| Methyl-tert-butyl ether | ug/L | <1.2 | 4.2 | 01/30/19 08:28 | |
| Methylene Chloride | ug/L | <0.58 | 5.0 | 01/30/19 08:28 | |
| n-Butylbenzene | ug/L | <0.71 | 2.4 | 01/30/19 08:28 | |
| n-Propylbenzene | ug/L | <0.81 | 5.0 | 01/30/19 08:28 | |
| Naphthalene | ug/L | <1.2 | 5.0 | 01/30/19 08:28 | |
| o-Xylene | ug/L | <0.26 | 1.0 | 01/30/19 08:28 | |
| p-Isopropyltoluene | ug/L | <0.80 | 2.7 | 01/30/19 08:28 | |
| sec-Butylbenzene | ug/L | <0.85 | 5.0 | 01/30/19 08:28 | |
| Styrene | ug/L | <0.47 | 1.6 | 01/30/19 08:28 | |
| tert-Butylbenzene | ug/L | <0.30 | 1.0 | 01/30/19 08:28 | |
| Tetrachloroethene | ug/L | <0.33 | 1.1 | 01/30/19 08:28 | |
| Toluene | ug/L | <0.17 | 5.0 | 01/30/19 08:28 | |
| trans-1,2-Dichloroethene | ug/L | <1.1 | 3.6 | 01/30/19 08:28 | |
| trans-1,3-Dichloropropene | ug/L | <4.4 | 14.6 | 01/30/19 08:28 | |
| Trichloroethene | ug/L | <0.26 | 1.0 | 01/30/19 08:28 | |
| Trichlorofluoromethane | ug/L | <0.21 | 1.0 | 01/30/19 08:28 | |
| Vinyl chloride | ug/L | <0.17 | 1.0 | 01/30/19 08:28 | |
| 4-Bromofluorobenzene (S) | % | 93 | 70-130 | 01/30/19 08:28 | |
| Dibromofluoromethane (S) | % | 92 | 70-130 | 01/30/19 08:28 | |
| Toluene-d8 (S) | % | 101 | 70-130 | 01/30/19 08:28 | |

LABORATORY CONTROL SAMPLE: 1821521

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 43.7 | 87 | 70-130 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 38.9 | 78 | 70-133 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 46.4 | 93 | 67-130 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 44.8 | 90 | 70-130 | |
| 1,1-Dichloroethane | ug/L | 50 | 40.9 | 82 | 70-134 | |
| 1,1-Dichloroethene | ug/L | 50 | 37.9 | 76 | 75-132 | |
| 1,1-Dichloropropene | ug/L | 50 | 40.7 | 81 | 70-130 | |
| 1,2,3-Trichlorobenzene | ug/L | 50 | 45.2 | 90 | 70-130 | |
| 1,2,3-Trichloropropane | ug/L | 50 | 45.1 | 90 | 70-130 | |
| 1,2,4-Trichlorobenzene | ug/L | 50 | 44.3 | 89 | 68-130 | |
| 1,2,4-Trimethylbenzene | ug/L | 50 | 46.5 | 93 | 70-130 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 46.1 | 92 | 60-126 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 44.1 | 88 | 70-130 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 46.3 | 93 | 70-130 | |
| 1,2-Dichloroethane | ug/L | 50 | 43.5 | 87 | 73-134 | |
| 1,2-Dichloropropane | ug/L | 50 | 46.0 | 92 | 79-128 | |
| 1,3,5-Trimethylbenzene | ug/L | 50 | 47.0 | 94 | 70-130 | |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

LABORATORY CONTROL SAMPLE: 1821521

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | ug/L | 50 | 46.1 | 92 | 70-130 | |
| 1,3-Dichloropropane | ug/L | 50 | 46.4 | 93 | 70-130 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 45.5 | 91 | 70-130 | |
| 2,2-Dichloropropane | ug/L | 50 | 39.5 | 79 | 70-130 | |
| 2-Chlorotoluene | ug/L | 50 | 45.8 | 92 | 70-130 | |
| 4-Chlorotoluene | ug/L | 50 | 44.3 | 89 | 70-130 | |
| Benzene | ug/L | 50 | 43.0 | 86 | 69-137 | |
| Bromobenzene | ug/L | 50 | 44.1 | 88 | 70-130 | |
| Bromochloromethane | ug/L | 50 | 41.5 | 83 | 70-130 | |
| Bromodichloromethane | ug/L | 50 | 43.1 | 86 | 70-130 | |
| Bromoform | ug/L | 50 | 41.0 | 82 | 64-133 | |
| Bromomethane | ug/L | 50 | 52.2 | 104 | 29-123 | |
| Carbon tetrachloride | ug/L | 50 | 39.7 | 79 | 73-142 | |
| Chlorobenzene | ug/L | 50 | 43.9 | 88 | 70-130 | |
| Chloroethane | ug/L | 50 | 42.7 | 85 | 59-133 | |
| Chloroform | ug/L | 50 | 40.3 | 81 | 80-129 | |
| Chloromethane | ug/L | 50 | 44.1 | 88 | 27-125 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 39.9 | 80 | 70-134 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 45.7 | 91 | 70-130 | |
| Dibromochloromethane | ug/L | 50 | 44.3 | 89 | 70-130 | |
| Dibromomethane | ug/L | 50 | 44.2 | 88 | 70-130 | |
| Dichlorodifluoromethane | ug/L | 50 | 34.2 | 68 | 12-127 | |
| Diisopropyl ether | ug/L | 50 | 40.4 | 81 | 70-130 | |
| Ethylbenzene | ug/L | 50 | 45.7 | 91 | 86-127 | |
| Hexachloro-1,3-butadiene | ug/L | 50 | 45.7 | 91 | 70-130 | |
| Isopropylbenzene (Cumene) | ug/L | 50 | 47.6 | 95 | 70-130 | |
| m&p-Xylene | ug/L | 100 | 95.8 | 96 | 70-131 | |
| Methyl-tert-butyl ether | ug/L | 50 | 40.3 | 81 | 65-136 | |
| Methylene Chloride | ug/L | 50 | 38.0 | 76 | 72-133 | |
| n-Butylbenzene | ug/L | 50 | 46.9 | 94 | 70-130 | |
| n-Propylbenzene | ug/L | 50 | 48.7 | 97 | 70-130 | |
| Naphthalene | ug/L | 50 | 45.8 | 92 | 70-130 | |
| o-Xylene | ug/L | 50 | 47.4 | 95 | 70-130 | |
| p-Isopropyltoluene | ug/L | 50 | 46.7 | 93 | 70-130 | |
| sec-Butylbenzene | ug/L | 50 | 48.3 | 97 | 70-130 | |
| Styrene | ug/L | 50 | 46.0 | 92 | 70-130 | |
| tert-Butylbenzene | ug/L | 50 | 47.8 | 96 | 70-130 | |
| Tetrachloroethene | ug/L | 50 | 43.5 | 87 | 70-130 | |
| Toluene | ug/L | 50 | 45.0 | 90 | 84-124 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 39.4 | 79 | 70-133 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 45.6 | 91 | 67-130 | |
| Trichloroethene | ug/L | 50 | 42.9 | 86 | 70-130 | |
| Trichlorofluoromethane | ug/L | 50 | 37.9 | 76 | 69-147 | |
| Vinyl chloride | ug/L | 50 | 45.2 | 90 | 48-134 | |
| 4-Bromofluorobenzene (S) | % | | | 99 | 70-130 | |
| Dibromofluoromethane (S) | % | | | 90 | 70-130 | |
| Toluene-d8 (S) | % | | | 100 | 70-130 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1821583 1821584

| Parameter | Units | 40182544004 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | <0.27 | 50 | 50 | 52.1 | 53.2 | 104 | 106 | 70-130 | 2 | 20 | |
| 1,1,1-Trichloroethane | ug/L | <0.24 | 50 | 50 | 47.6 | 51.6 | 95 | 103 | 70-136 | 8 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.28 | 50 | 50 | 50.6 | 48.9 | 101 | 98 | 67-133 | 3 | 20 | |
| 1,1,2-Trichloroethane | ug/L | <0.55 | 50 | 50 | 51.7 | 51.0 | 103 | 102 | 70-130 | 1 | 20 | |
| 1,1-Dichloroethane | ug/L | <0.27 | 50 | 50 | 47.4 | 51.8 | 95 | 104 | 70-139 | 9 | 20 | |
| 1,1-Dichloroethene | ug/L | <0.24 | 50 | 50 | 46.4 | 48.5 | 93 | 97 | 72-137 | 5 | 20 | |
| 1,1-Dichloropropene | ug/L | <0.54 | 50 | 50 | 51.9 | 49.2 | 104 | 98 | 70-130 | 5 | 20 | |
| 1,2,3-Trichlorobenzene | ug/L | <0.63 | 50 | 50 | 52.7 | 51.2 | 105 | 102 | 70-130 | 3 | 20 | |
| 1,2,3-Trichloropropane | ug/L | <0.59 | 50 | 50 | 49.8 | 47.6 | 100 | 95 | 70-130 | 5 | 20 | |
| 1,2,4-Trichlorobenzene | ug/L | <0.95 | 50 | 50 | 55.2 | 52.5 | 110 | 105 | 68-130 | 5 | 20 | |
| 1,2,4-Trimethylbenzene | ug/L | <0.84 | 50 | 50 | 55.3 | 52.8 | 111 | 106 | 70-130 | 4 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | <1.8 | 50 | 50 | 51.7 | 46.6 | 103 | 93 | 60-130 | 10 | 21 | |
| 1,2-Dibromoethane (EDB) | ug/L | <0.83 | 50 | 50 | 52.6 | 52.1 | 105 | 104 | 70-130 | 1 | 20 | |
| 1,2-Dichlorobenzene | ug/L | <0.71 | 50 | 50 | 50.9 | 49.3 | 102 | 99 | 70-130 | 3 | 20 | |
| 1,2-Dichloroethane | ug/L | <0.28 | 50 | 50 | 50.8 | 50.5 | 102 | 101 | 71-137 | 1 | 20 | |
| 1,2-Dichloropropane | ug/L | <0.28 | 50 | 50 | 47.9 | 48.6 | 96 | 97 | 78-130 | 2 | 20 | |
| 1,3,5-Trimethylbenzene | ug/L | <0.87 | 50 | 50 | 56.3 | 53.9 | 113 | 108 | 70-130 | 4 | 20 | |
| 1,3-Dichlorobenzene | ug/L | <0.63 | 50 | 50 | 52.1 | 49.8 | 104 | 100 | 70-130 | 5 | 20 | |
| 1,3-Dichloropropane | ug/L | <0.83 | 50 | 50 | 51.4 | 51.0 | 103 | 102 | 70-130 | 1 | 20 | |
| 1,4-Dichlorobenzene | ug/L | <0.94 | 50 | 50 | 50.1 | 48.1 | 100 | 96 | 70-130 | 4 | 20 | |
| 2,2-Dichloropropane | ug/L | <2.3 | 50 | 50 | 48.1 | 49.8 | 96 | 100 | 70-130 | 3 | 20 | |
| 2-Chlorotoluene | ug/L | <0.93 | 50 | 50 | 54.1 | 52.8 | 108 | 106 | 70-130 | 2 | 20 | |
| 4-Chlorotoluene | ug/L | <0.76 | 50 | 50 | 53.0 | 50.4 | 106 | 101 | 70-130 | 5 | 20 | |
| Benzene | ug/L | <0.25 | 50 | 50 | 51.2 | 49.6 | 102 | 99 | 66-143 | 3 | 20 | |
| Bromobenzene | ug/L | <0.24 | 50 | 50 | 51.6 | 49.7 | 103 | 99 | 70-130 | 4 | 20 | |
| Bromochloromethane | ug/L | <0.36 | 50 | 50 | 44.9 | 48.5 | 90 | 97 | 70-130 | 8 | 20 | |
| Bromodichloromethane | ug/L | <0.36 | 50 | 50 | 48.6 | 49.8 | 97 | 100 | 70-130 | 2 | 20 | |
| Bromoform | ug/L | <4.0 | 50 | 50 | 48.0 | 47.7 | 96 | 95 | 64-134 | 1 | 20 | |
| Bromomethane | ug/L | <0.97 | 50 | 50 | 62.1 | 65.9 | 124 | 132 | 29-136 | 6 | 25 | |
| Carbon tetrachloride | ug/L | <0.17 | 50 | 50 | 50.1 | 48.1 | 100 | 96 | 73-142 | 4 | 20 | |
| Chlorobenzene | ug/L | <0.71 | 50 | 50 | 51.7 | 51.8 | 103 | 104 | 70-130 | 0 | 20 | |
| Chloroethane | ug/L | <1.3 | 50 | 50 | 52.7 | 56.9 | 105 | 114 | 58-138 | 8 | 20 | |
| Chloroform | ug/L | <1.3 | 50 | 50 | 45.8 | 50.1 | 92 | 100 | 80-131 | 9 | 20 | |
| Chloromethane | ug/L | <2.2 | 50 | 50 | 49.5 | 43.8 | 99 | 88 | 24-125 | 12 | 20 | |
| cis-1,2-Dichloroethene | ug/L | 0.50J | 50 | 50 | 47.1 | 48.8 | 93 | 97 | 68-137 | 4 | 22 | |
| cis-1,3-Dichloropropene | ug/L | <3.6 | 50 | 50 | 51.2 | 52.8 | 102 | 106 | 70-130 | 3 | 20 | |
| Dibromochloromethane | ug/L | <2.6 | 50 | 50 | 51.5 | 52.3 | 103 | 105 | 70-131 | 1 | 20 | |
| Dibromomethane | ug/L | <0.94 | 50 | 50 | 47.9 | 50.5 | 96 | 101 | 70-130 | 5 | 20 | |
| Dichlorodifluoromethane | ug/L | <0.50 | 50 | 50 | 41.9 | 41.4 | 84 | 83 | 10-127 | 1 | 20 | |
| Diisopropyl ether | ug/L | <1.9 | 50 | 50 | 45.6 | 47.3 | 91 | 95 | 70-130 | 4 | 20 | |
| Ethylbenzene | ug/L | <0.22 | 50 | 50 | 55.7 | 55.8 | 111 | 112 | 81-136 | 0 | 20 | |
| Hexachloro-1,3-butadiene | ug/L | <1.2 | 50 | 50 | 57.8 | 57.0 | 116 | 114 | 70-130 | 1 | 20 | |
| Isopropylbenzene (Cumene) | ug/L | <0.39 | 50 | 50 | 57.3 | 57.8 | 115 | 116 | 70-132 | 1 | 20 | |
| m&p-Xylene | ug/L | <0.47 | 100 | 100 | 114 | 112 | 114 | 112 | 70-135 | 1 | 20 | |
| Methyl-tert-butyl ether | ug/L | <1.2 | 50 | 50 | 47.8 | 51.8 | 96 | 104 | 58-142 | 8 | 23 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1821583 1821584

| Parameter | Units | 40182544004 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | ug/L | <0.58 | 50 | 50 | 45.3 | 46.9 | 91 | 94 | 69-137 | 4 | 20 | |
| n-Butylbenzene | ug/L | <0.71 | 50 | 50 | 56.0 | 53.5 | 112 | 107 | 64-153 | 5 | 20 | |
| n-Propylbenzene | ug/L | <0.81 | 50 | 50 | 57.5 | 55.2 | 115 | 110 | 70-139 | 4 | 20 | |
| Naphthalene | ug/L | <1.2 | 50 | 50 | 53.9 | 51.6 | 108 | 103 | 62-152 | 4 | 20 | |
| o-Xylene | ug/L | <0.26 | 50 | 50 | 57.8 | 57.6 | 116 | 115 | 70-132 | 0 | 20 | |
| p-Isopropyltoluene | ug/L | <0.80 | 50 | 50 | 56.9 | 54.0 | 114 | 108 | 70-130 | 5 | 20 | |
| sec-Butylbenzene | ug/L | <0.85 | 50 | 50 | 58.5 | 55.7 | 117 | 111 | 70-132 | 5 | 20 | |
| Styrene | ug/L | <0.47 | 50 | 50 | 55.1 | 54.9 | 110 | 110 | 70-130 | 0 | 20 | |
| tert-Butylbenzene | ug/L | <0.30 | 50 | 50 | 57.7 | 55.9 | 115 | 112 | 70-130 | 3 | 20 | |
| Tetrachloroethene | ug/L | <0.33 | 50 | 50 | 53.9 | 53.7 | 108 | 107 | 70-132 | 0 | 20 | |
| Toluene | ug/L | <0.17 | 50 | 50 | 53.0 | 52.7 | 106 | 105 | 81-130 | 1 | 20 | |
| trans-1,2-Dichloroethene | ug/L | <1.1 | 50 | 50 | 48.7 | 54.6 | 97 | 109 | 70-136 | 11 | 20 | |
| trans-1,3-Dichloropropene | ug/L | <4.4 | 50 | 50 | 52.1 | 52.9 | 104 | 106 | 67-130 | 2 | 20 | |
| Trichloroethene | ug/L | 0.43J | 50 | 50 | 50.3 | 50.9 | 100 | 101 | 70-131 | 1 | 20 | |
| Trichlorofluoromethane | ug/L | <0.21 | 50 | 50 | 48.9 | 52.5 | 98 | 105 | 66-150 | 7 | 20 | |
| Vinyl chloride | ug/L | <0.17 | 50 | 50 | 53.0 | 45.2 | 106 | 90 | 46-134 | 16 | 20 | |
| 4-Bromofluorobenzene (S) | % | | | | | | 100 | 102 | 70-130 | | | |
| Dibromofluoromethane (S) | % | | | | | | 99 | 100 | 70-130 | | | |
| Toluene-d8 (S) | % | | | | | | 100 | 100 | 70-130 | | | |

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## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

QC Batch: 312502 Analysis Method: EPA 8270 by HVI
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40182545001, 40182545002

METHOD BLANK: 1821587 Matrix: Water
Associated Lab Samples: 40182545001, 40182545002

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1-Methylnaphthalene | ug/L | <0.0059 | 0.030 | 01/30/19 13:57 | |
| 2-Methylnaphthalene | ug/L | <0.0049 | 0.024 | 01/30/19 13:57 | |
| Acenaphthene | ug/L | <0.0061 | 0.030 | 01/30/19 13:57 | |
| Acenaphthylene | ug/L | <0.0050 | 0.025 | 01/30/19 13:57 | |
| Anthracene | ug/L | <0.010 | 0.052 | 01/30/19 13:57 | |
| Benzo(a)anthracene | ug/L | <0.0076 | 0.038 | 01/30/19 13:57 | |
| Benzo(a)pyrene | ug/L | <0.011 | 0.053 | 01/30/19 13:57 | |
| Benzo(b)fluoranthene | ug/L | 0.0064J | 0.029 | 01/30/19 13:57 | |
| Benzo(g,h,i)perylene | ug/L | <0.0068 | 0.034 | 01/30/19 13:57 | |
| Benzo(k)fluoranthene | ug/L | <0.0076 | 0.038 | 01/30/19 13:57 | |
| Chrysene | ug/L | <0.013 | 0.065 | 01/30/19 13:57 | |
| Dibenz(a,h)anthracene | ug/L | <0.010 | 0.050 | 01/30/19 13:57 | |
| Fluoranthene | ug/L | 0.013J | 0.053 | 01/30/19 13:57 | |
| Fluorene | ug/L | <0.0080 | 0.040 | 01/30/19 13:57 | |
| Indeno(1,2,3-cd)pyrene | ug/L | <0.018 | 0.088 | 01/30/19 13:57 | |
| Naphthalene | ug/L | <0.018 | 0.092 | 01/30/19 13:57 | |
| Phenanthrene | ug/L | <0.014 | 0.069 | 01/30/19 13:57 | |
| Pyrene | ug/L | 0.020J | 0.038 | 01/30/19 13:57 | |
| 2-Fluorobiphenyl (S) | % | 77 | 29-80 | 01/30/19 13:57 | |
| Terphenyl-d14 (S) | % | 85 | 10-123 | 01/30/19 13:57 | |

LABORATORY CONTROL SAMPLE & LCSD: 1821588 1821589

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-Methylnaphthalene | ug/L | 2 | 1.4 | 1.4 | 68 | 70 | 50-91 | 3 | 20 | |
| 2-Methylnaphthalene | ug/L | 2 | 1.4 | 1.4 | 71 | 71 | 48-89 | 0 | 20 | |
| Acenaphthene | ug/L | 2 | 1.6 | 1.6 | 79 | 82 | 48-120 | 3 | 20 | |
| Acenaphthylene | ug/L | 2 | 1.5 | 1.6 | 77 | 78 | 44-84 | 1 | 20 | |
| Anthracene | ug/L | 2 | 1.4 | 1.5 | 71 | 76 | 57-120 | 6 | 27 | |
| Benzo(a)anthracene | ug/L | 2 | 1.4 | 1.3 | 69 | 64 | 33-108 | 7 | 23 | |
| Benzo(a)pyrene | ug/L | 2 | 1.9 | 1.8 | 93 | 91 | 55-108 | 2 | 20 | |
| Benzo(b)fluoranthene | ug/L | 2 | 1.7 | 1.7 | 87 | 84 | 47-106 | 4 | 20 | |
| Benzo(g,h,i)perylene | ug/L | 2 | 1.1 | 1.0 | 56 | 52 | 20-75 | 8 | 33 | |
| Benzo(k)fluoranthene | ug/L | 2 | 1.8 | 1.7 | 90 | 87 | 50-116 | 3 | 22 | |
| Chrysene | ug/L | 2 | 2.1 | 2.1 | 106 | 105 | 64-140 | 1 | 20 | |
| Dibenz(a,h)anthracene | ug/L | 2 | 1.1 | 1.0 | 57 | 51 | 14-70 | 12 | 39 | |
| Fluoranthene | ug/L | 2 | 1.7 | 1.7 | 86 | 84 | 61-112 | 3 | 24 | |
| Fluorene | ug/L | 2 | 1.9 | 1.9 | 93 | 95 | 53-120 | 2 | 21 | |
| Indeno(1,2,3-cd)pyrene | ug/L | 2 | 1.6 | 1.5 | 81 | 75 | 43-105 | 8 | 26 | |
| Naphthalene | ug/L | 2 | 1.3 | 1.4 | 67 | 70 | 38-90 | 4 | 21 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

LABORATORY CONTROL SAMPLE & LCSD: 1821588 1821589

| Parameter | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD | Max RPD | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | ug/L | 2 | 1.6 | 1.6 | 81 | 82 | 47-105 | 1 | 20 | |
| Pyrene | ug/L | 2 | 1.6 | 1.6 | 82 | 79 | 62-119 | 4 | 24 | |
| 2-Fluorobiphenyl (S) | % | | | | 77 | 81 | 29-80 | | | S0 |
| Terphenyl-d14 (S) | % | | | | 92 | 91 | 10-123 | | | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

# QUALIFIERS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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 at or above the adjusted LOD.

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.

## BATCH QUALIFIERS

Batch: 312550

| | |
|---|---|
| [M5] | A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. |

## ANALYTE QUALIFIERS

| | |
|---|---|
| B | Analyte was detected in the associated method blank. |
| S0 | Surrogate recovery outside laboratory control limits. |

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182545

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **40182545001** | **MW-3** | EPA 3510 | 312502 | EPA 8270 by HVI | 312550 |
| **40182545002** | **MW-4** | EPA 3510 | 312502 | EPA 8270 by HVI | 312550 |
| **40182545003** | **MW-5** | EPA 8260 | 312477 | | |

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

40182545

# CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

| (Please Print Clearly) | |
|---|---|
| Company Name: | DAI |
| Branch/Location: | LAKEFOREST |
| Project Contact: | CHRIS CAILLES |
| Phone: | 847 573 8900 |
| Project Number: | 0255 |
| Project Name: | SUNRISE SHOPPING CENTER |
| Project State: | WI |
| Sampled By (Print): | DAN TRAED |
| Sampled By (Sign): | |
| PO #: | Regulatory Program: |

| Quote #: | |
|---|---|
| Mail To Contact: | |
| Mail To Company: | |
| Mail To Address: | |
| Invoice To Contact: | |
| Invoice To Company: | |
| Invoice To Address: | |
| Invoice To Phone: | |

**Data Package Options** (billable)
☐ EPA Level III
☐ EPA Level IV

**MS/MSD**
☐ On your sample (billable)
☐ NOT needed on your sample

**Matrix Codes**

| | |
|---|---|
| A = Air | W = Water |
| B = Biota | DW = Drinking Water |
| C = Charcoal | GW = Ground Water |
| O = Oil | SW = Surface Water |
| S = Soil | WW = Waste Water |
| SI = Sludge | WP = Wipe |

| PACE LAB # | CLIENT FIELD ID | COLLECTION DATE | COLLECTION TIME | MATRIX | FILTERED? (YES/NO) | PRESERVATION (CODE)* | Analyses Requested | CLIENT COMMENTS | LAB COMMENTS (Lab Use Only) | Profile # |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y/N | Pick Letter | | | | |
| 001 | MW-3 | 1/24/19 | 0940 | GW | N | B | VOCs | | | |
| 002 | MW-4 | ↓ | 1100 | ↓ | N | A | GWP | | | |
| 003 | MW-5 | ↓ | 1400 | ↓ | | | X | | | |
| | | | | | | | X | | | |

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

| | |
|---|---|
| Email #1: | |
| Email #2: | |
| Telephone: | |
| Fax: | |

Samples on HOLD are subject to special pricing and release of liability

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| | 1537 1/25/19 | Kevin Arnold | 1/26/19 1537 |
| Kevin Arnold | 1/25/19 1700 | CS Logistics | 1/25/19 |
| CS Logistics | 1/29/19 1000 | | 1/29/19 1000 |
| | | | |
| | | | |

PACE Project No.: 40182545
Receipt Temp = 1.2 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Pace Analytical Services, LL
1241 Bellevue Street, Suite
Green Bay, WI 5430



# Sample Preservation Receipt Form

Client Name: DAI  Project # 40182545

All containers needing preservation have been checked and noted below: □Yes □No ☑N/A  Initial when completed:  Date/ Time:

Lab Lot# of pH paper:  Lab Std #ID of preservation (if pH adjusted):

| Pace Lab # | Glass | | | | | | | Plastic | | | | | | | Vials | | | | | | Jars | | | General | | | VOA Vials (>6mm) * | H2SO4 pH ≤2 | NaOH+Zn Act pH ≥9 | NaOH pH ≥12 | HNO3 pH ≤2 | pH after adjusted | Volume (mL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AG1U | AG1H | AG4S | AG4U | AG5U | AG2S | BG3U | BP1U | BP2N | BP2Z | BP3U | BP3C | BP3N | BP3S | DG9A | DG9T | VG9U | VG9H | VG9M | VG9D | JGFU | WGFU | WPFU | SP5T | ZPLC | GN | | | | | | | |
| 001 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 002 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 003 | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 008 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 016 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes ☑No □N/A *If yes look in headspace column

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AG1U | 1 liter amber glass | BP1U | 1 liter plastic unpres | DG9A | 40 mL amber ascorbic | JGFU | 4 oz amber jar unpres |
| AG1H | 1 liter amber glass HCL | BP2N | 500 mL plastic HNO3 | DG9T | 40 mL amber Na Thio | WGFU | 4 oz clear jar unpres |
| AG4S | 125 mL amber glass H2SO4 | BP2Z | 500 mL plastic NaOH, Znact | VG9U | 40 mL clear vial unpres | WPFU | 4 oz plastic jar unpres |
| AG4U | 120 mL amber glass unpres | BP3U | 250 mL plastic unpres | VG9H | 40 mL clear vial HCL | | |
| AG5U | 100 mL amber glass unpres | BP3C | 250 mL plastic NaOH | VG9M | 40 mL clear vial MeOH | SP5T | 120 mL plastic Na Thiosulfate |
| AG2S | 500 mL amber glass H2SO4 | BP3N | 250 mL plastic HNO3 | VG9D | 40 mL clear vial DI | ZPLC | ziploc bag |
| BG3U | 250 mL clear glass unpres | BP3S | 250 mL plastic H2SO4 | | | GN: | |

# Sample Condition Upon Receipt Form (SCUR)

Project #: WO#: 40182545

**Client Name:** DAI

**Courier:** ☐ FCS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other: _____

**Tracking #:** _____

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

**Custody Seal on Samples Present:** ☐ yes ☒ no Seals intact: ☐ yes ☐ no

**Packing Material:** ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

**Thermometer Used** SR - N/A **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

**Cooler Temperature** Uncorr: 20\ /Corr: _____

**Temp Blank Present:** ☑ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

**Person examining contents:**
Date: 11/29/19
Initials: JM

| | | |
|---|---|---|
| Chain of Custody Present: | ☑Yes ☐No ☐N/A | 1. |
| Chain of Custody Filled Out: | ☐Yes ☒No ☐N/A | 2. no mail/invoice JM 11/29/19 |
| Chain of Custody Relinquished: | ☑Yes ☐No ☐N/A | 3. |
| Sampler Name & Signature on COC: | ☑Yes ☐No ☐N/A | 4. |
| Samples Arrived within Hold Time: | ☑Yes ☐No | 5. |
| - VOA Samples frozen upon receipt | ☐Yes ☐No | Date/Time: |
| **Short Hold Time Analysis (<72hr):** | ☒Yes ☐No | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes ☒No | 7. |
| Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A | | 8. |
| Correct Containers Used: | ☑Yes ☐No | 9. |
| -Pace Containers Used: | ☒Yes ☐No ☐N/A | |
| -Pace IR Containers Used: | ☐Yes ☐No ☒N/A | |
| Containers Intact: | ☑Yes ☐No | 10. |
| Filtered volume received for Dissolved tests | ☐Yes ☐No ☒N/A | 11. |
| Sample Labels match COC: | ☐Yes ☒No ☐N/A | 12. no collect times |
| -Includes date/time/ID/Analysis Matrix: W | | JM 11/29/19 |
| Trip Blank Present: | ☐Yes ☐No ☒N/A | 13. |
| Trip Blank Custody Seals Present | ☐Yes ☐No ☒N/A | |
| Pace Trip Blank Lot # (if purchased): _____ | | |

**Client Notification/ Resolution:** If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

**Project Manager Review:** CW **Date:** 11/29/19

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

February 08, 2019

Chris Cailles
DAI Environmental
Polo Park Business Center
27834 Irma Lee Circle
Lake Forest, IL 60045

RE: Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

Dear Chris Cailles:
Enclosed are the analytical results for sample(s) received by the laboratory on February 06, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC 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,

Laurie Woelfel

Laurie Woelfel
laurie.woelfel@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jenny Rovzar, DAI

**Pace Analytical Services, LLC**
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## CERTIFICATIONS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

**Green Bay Certification IDs**

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

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## SAMPLE SUMMARY

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| **40182787001** | **SUMP WATER** | Water | 02/04/19 10:00 | 02/06/19 10:10 |

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## SAMPLE ANALYTE COUNT

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|---|---|---|---|---|
| **40182787001** | **SUMP WATER** | EPA 8260 | HNW | 64 |

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## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

**Sample: SUMP WATER** **Lab ID: 40182787001** Collected: 02/04/19 10:00 Received: 02/06/19 10:10 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | | |
| Benzene | **<0.25** | ug/L | 1.0 | 0.25 | 1 | | 02/07/19 16:37 | 71-43-2 | |
| Bromobenzene | **<0.24** | ug/L | 1.0 | 0.24 | 1 | | 02/07/19 16:37 | 108-86-1 | |
| Bromochloromethane | **<0.36** | ug/L | 5.0 | 0.36 | 1 | | 02/07/19 16:37 | 74-97-5 | |
| Bromodichloromethane | **<0.36** | ug/L | 1.2 | 0.36 | 1 | | 02/07/19 16:37 | 75-27-4 | |
| Bromoform | **<4.0** | ug/L | 13.2 | 4.0 | 1 | | 02/07/19 16:37 | 75-25-2 | |
| Bromomethane | **<0.97** | ug/L | 5.0 | 0.97 | 1 | | 02/07/19 16:37 | 74-83-9 | |
| n-Butylbenzene | **<0.71** | ug/L | 2.4 | 0.71 | 1 | | 02/07/19 16:37 | 104-51-8 | |
| sec-Butylbenzene | **<0.85** | ug/L | 5.0 | 0.85 | 1 | | 02/07/19 16:37 | 135-98-8 | |
| tert-Butylbenzene | **<0.30** | ug/L | 1.0 | 0.30 | 1 | | 02/07/19 16:37 | 98-06-6 | |
| Carbon tetrachloride | **<0.17** | ug/L | 1.0 | 0.17 | 1 | | 02/07/19 16:37 | 56-23-5 | |
| Chlorobenzene | **<0.71** | ug/L | 2.4 | 0.71 | 1 | | 02/07/19 16:37 | 108-90-7 | |
| Chloroethane | **<1.3** | ug/L | 5.0 | 1.3 | 1 | | 02/07/19 16:37 | 75-00-3 | |
| Chloroform | **<1.3** | ug/L | 5.0 | 1.3 | 1 | | 02/07/19 16:37 | 67-66-3 | |
| Chloromethane | **<2.2** | ug/L | 7.3 | 2.2 | 1 | | 02/07/19 16:37 | 74-87-3 | |
| 2-Chlorotoluene | **<0.93** | ug/L | 5.0 | 0.93 | 1 | | 02/07/19 16:37 | 95-49-8 | |
| 4-Chlorotoluene | **<0.76** | ug/L | 2.5 | 0.76 | 1 | | 02/07/19 16:37 | 106-43-4 | |
| 1,2-Dibromo-3-chloropropane | **<1.8** | ug/L | 5.9 | 1.8 | 1 | | 02/07/19 16:37 | 96-12-8 | |
| Dibromochloromethane | **<2.6** | ug/L | 8.7 | 2.6 | 1 | | 02/07/19 16:37 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | **<0.83** | ug/L | 2.8 | 0.83 | 1 | | 02/07/19 16:37 | 106-93-4 | |
| Dibromomethane | **<0.94** | ug/L | 3.1 | 0.94 | 1 | | 02/07/19 16:37 | 74-95-3 | |
| 1,2-Dichlorobenzene | **<0.71** | ug/L | 2.4 | 0.71 | 1 | | 02/07/19 16:37 | 95-50-1 | |
| 1,3-Dichlorobenzene | **<0.63** | ug/L | 2.1 | 0.63 | 1 | | 02/07/19 16:37 | 541-73-1 | |
| 1,4-Dichlorobenzene | **<0.94** | ug/L | 3.1 | 0.94 | 1 | | 02/07/19 16:37 | 106-46-7 | |
| Dichlorodifluoromethane | **<0.50** | ug/L | 5.0 | 0.50 | 1 | | 02/07/19 16:37 | 75-71-8 | |
| 1,1-Dichloroethane | **<0.27** | ug/L | 1.0 | 0.27 | 1 | | 02/07/19 16:37 | 75-34-3 | |
| 1,2-Dichloroethane | **<0.28** | ug/L | 1.0 | 0.28 | 1 | | 02/07/19 16:37 | 107-06-2 | |
| 1,1-Dichloroethene | **<0.24** | ug/L | 1.0 | 0.24 | 1 | | 02/07/19 16:37 | 75-35-4 | |
| cis-1,2-Dichloroethene | **<0.27** | ug/L | 1.0 | 0.27 | 1 | | 02/07/19 16:37 | 156-59-2 | |
| trans-1,2-Dichloroethene | **<1.1** | ug/L | 3.6 | 1.1 | 1 | | 02/07/19 16:37 | 156-60-5 | |
| 1,2-Dichloropropane | **<0.28** | ug/L | 1.0 | 0.28 | 1 | | 02/07/19 16:37 | 78-87-5 | |
| 1,3-Dichloropropane | **<0.83** | ug/L | 2.8 | 0.83 | 1 | | 02/07/19 16:37 | 142-28-9 | |
| 2,2-Dichloropropane | **<2.3** | ug/L | 7.6 | 2.3 | 1 | | 02/07/19 16:37 | 594-20-7 | |
| 1,1-Dichloropropene | **<0.54** | ug/L | 1.8 | 0.54 | 1 | | 02/07/19 16:37 | 563-58-6 | |
| cis-1,3-Dichloropropene | **<3.6** | ug/L | 12.1 | 3.6 | 1 | | 02/07/19 16:37 | 10061-01-5 | |
| trans-1,3-Dichloropropene | **<4.4** | ug/L | 14.6 | 4.4 | 1 | | 02/07/19 16:37 | 10061-02-6 | |
| Diisopropyl ether | **<1.9** | ug/L | 6.3 | 1.9 | 1 | | 02/07/19 16:37 | 108-20-3 | |
| Ethylbenzene | **<0.22** | ug/L | 1.0 | 0.22 | 1 | | 02/07/19 16:37 | 100-41-4 | |
| Hexachloro-1,3-butadiene | **<1.2** | ug/L | 5.0 | 1.2 | 1 | | 02/07/19 16:37 | 87-68-3 | |
| Isopropylbenzene (Cumene) | **<0.39** | ug/L | 5.0 | 0.39 | 1 | | 02/07/19 16:37 | 98-82-8 | |
| p-Isopropyltoluene | **<0.80** | ug/L | 2.7 | 0.80 | 1 | | 02/07/19 16:37 | 99-87-6 | |
| Methylene Chloride | **<0.58** | ug/L | 5.0 | 0.58 | 1 | | 02/07/19 16:37 | 75-09-2 | |
| Methyl-tert-butyl ether | **<1.2** | ug/L | 4.2 | 1.2 | 1 | | 02/07/19 16:37 | 1634-04-4 | |
| Naphthalene | **<1.2** | ug/L | 5.0 | 1.2 | 1 | | 02/07/19 16:37 | 91-20-3 | |
| n-Propylbenzene | **<0.81** | ug/L | 5.0 | 0.81 | 1 | | 02/07/19 16:37 | 103-65-1 | |
| Styrene | **<0.47** | ug/L | 1.6 | 0.47 | 1 | | 02/07/19 16:37 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | **<0.27** | ug/L | 1.0 | 0.27 | 1 | | 02/07/19 16:37 | 630-20-6 | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

**Sample: SUMP WATER** **Lab ID: 40182787001** Collected: 02/04/19 10:00 Received: 02/06/19 10:10 Matrix: Water

| Parameters | Results | Units | LOQ | LOD | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---|---|---|---|---|---|---|---|---|
| **8260 MSV** | Analytical Method: EPA 8260 | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | **<0.28** | ug/L | 1.0 | 0.28 | 1 | | 02/07/19 16:37 | 79-34-5 | |
| Tetrachloroethene | **6.4** | ug/L | 1.1 | 0.33 | 1 | | 02/07/19 16:37 | 127-18-4 | |
| Toluene | **<0.17** | ug/L | 5.0 | 0.17 | 1 | | 02/07/19 16:37 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | **<0.63** | ug/L | 5.0 | 0.63 | 1 | | 02/07/19 16:37 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | **<0.95** | ug/L | 5.0 | 0.95 | 1 | | 02/07/19 16:37 | 120-82-1 | |
| 1,1,1-Trichloroethane | **<0.24** | ug/L | 1.0 | 0.24 | 1 | | 02/07/19 16:37 | 71-55-6 | |
| 1,1,2-Trichloroethane | **<0.55** | ug/L | 5.0 | 0.55 | 1 | | 02/07/19 16:37 | 79-00-5 | |
| Trichloroethene | **<0.26** | ug/L | 1.0 | 0.26 | 1 | | 02/07/19 16:37 | 79-01-6 | |
| Trichlorofluoromethane | **<0.21** | ug/L | 1.0 | 0.21 | 1 | | 02/07/19 16:37 | 75-69-4 | |
| 1,2,3-Trichloropropane | **<0.59** | ug/L | 5.0 | 0.59 | 1 | | 02/07/19 16:37 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | **<0.84** | ug/L | 2.8 | 0.84 | 1 | | 02/07/19 16:37 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | **<0.87** | ug/L | 2.9 | 0.87 | 1 | | 02/07/19 16:37 | 108-67-8 | |
| Vinyl chloride | **<0.17** | ug/L | 1.0 | 0.17 | 1 | | 02/07/19 16:37 | 75-01-4 | |
| m&p-Xylene | **<0.47** | ug/L | 2.0 | 0.47 | 1 | | 02/07/19 16:37 | 179601-23-1 | |
| o-Xylene | **<0.26** | ug/L | 1.0 | 0.26 | 1 | | 02/07/19 16:37 | 95-47-6 | |
| ***Surrogates*** | | | | | | | | | |
| 4-Bromofluorobenzene (S) | 93 | % | 70-130 | | 1 | | 02/07/19 16:37 | 460-00-4 | |
| Dibromofluoromethane (S) | 109 | % | 70-130 | | 1 | | 02/07/19 16:37 | 1868-53-7 | |
| Toluene-d8 (S) | 105 | % | 70-130 | | 1 | | 02/07/19 16:37 | 2037-26-5 | |

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

QC Batch: 313035 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40182787001

METHOD BLANK: 1823605 Matrix: Water
Associated Lab Samples: 40182787001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ug/L | <0.27 | 1.0 | 02/07/19 10:31 | |
| 1,1,1-Trichloroethane | ug/L | <0.24 | 1.0 | 02/07/19 10:31 | |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.28 | 1.0 | 02/07/19 10:31 | |
| 1,1,2-Trichloroethane | ug/L | <0.55 | 5.0 | 02/07/19 10:31 | |
| 1,1-Dichloroethane | ug/L | <0.27 | 1.0 | 02/07/19 10:31 | |
| 1,1-Dichloroethene | ug/L | <0.24 | 1.0 | 02/07/19 10:31 | |
| 1,1-Dichloropropene | ug/L | <0.54 | 1.8 | 02/07/19 10:31 | |
| 1,2,3-Trichlorobenzene | ug/L | <0.63 | 5.0 | 02/07/19 10:31 | |
| 1,2,3-Trichloropropane | ug/L | <0.59 | 5.0 | 02/07/19 10:31 | |
| 1,2,4-Trichlorobenzene | ug/L | <0.95 | 5.0 | 02/07/19 10:31 | |
| 1,2,4-Trimethylbenzene | ug/L | <0.84 | 2.8 | 02/07/19 10:31 | |
| 1,2-Dibromo-3-chloropropane | ug/L | <1.8 | 5.9 | 02/07/19 10:31 | |
| 1,2-Dibromoethane (EDB) | ug/L | <0.83 | 2.8 | 02/07/19 10:31 | |
| 1,2-Dichlorobenzene | ug/L | <0.71 | 2.4 | 02/07/19 10:31 | |
| 1,2-Dichloroethane | ug/L | <0.28 | 1.0 | 02/07/19 10:31 | |
| 1,2-Dichloropropane | ug/L | <0.28 | 1.0 | 02/07/19 10:31 | |
| 1,3,5-Trimethylbenzene | ug/L | <0.87 | 2.9 | 02/07/19 10:31 | |
| 1,3-Dichlorobenzene | ug/L | <0.63 | 2.1 | 02/07/19 10:31 | |
| 1,3-Dichloropropane | ug/L | <0.83 | 2.8 | 02/07/19 10:31 | |
| 1,4-Dichlorobenzene | ug/L | <0.94 | 3.1 | 02/07/19 10:31 | |
| 2,2-Dichloropropane | ug/L | <2.3 | 7.6 | 02/07/19 10:31 | |
| 2-Chlorotoluene | ug/L | <0.93 | 5.0 | 02/07/19 10:31 | |
| 4-Chlorotoluene | ug/L | <0.76 | 2.5 | 02/07/19 10:31 | |
| Benzene | ug/L | <0.25 | 1.0 | 02/07/19 10:31 | |
| Bromobenzene | ug/L | <0.24 | 1.0 | 02/07/19 10:31 | |
| Bromochloromethane | ug/L | <0.36 | 5.0 | 02/07/19 10:31 | |
| Bromodichloromethane | ug/L | <0.36 | 1.2 | 02/07/19 10:31 | |
| Bromoform | ug/L | <4.0 | 13.2 | 02/07/19 10:31 | |
| Bromomethane | ug/L | <0.97 | 5.0 | 02/07/19 10:31 | |
| Carbon tetrachloride | ug/L | <0.17 | 1.0 | 02/07/19 10:31 | |
| Chlorobenzene | ug/L | <0.71 | 2.4 | 02/07/19 10:31 | |
| Chloroethane | ug/L | <1.3 | 5.0 | 02/07/19 10:31 | |
| Chloroform | ug/L | <1.3 | 5.0 | 02/07/19 10:31 | |
| Chloromethane | ug/L | <2.2 | 7.3 | 02/07/19 10:31 | |
| cis-1,2-Dichloroethene | ug/L | <0.27 | 1.0 | 02/07/19 10:31 | |
| cis-1,3-Dichloropropene | ug/L | <3.6 | 12.1 | 02/07/19 10:31 | |
| Dibromochloromethane | ug/L | <2.6 | 8.7 | 02/07/19 10:31 | |
| Dibromomethane | ug/L | <0.94 | 3.1 | 02/07/19 10:31 | |
| Dichlorodifluoromethane | ug/L | <0.50 | 5.0 | 02/07/19 10:31 | |
| Diisopropyl ether | ug/L | <1.9 | 6.3 | 02/07/19 10:31 | |
| Ethylbenzene | ug/L | <0.22 | 1.0 | 02/07/19 10:31 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

METHOD BLANK: 1823605 Matrix: Water
Associated Lab Samples: 40182787001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---|---|---|---|---|---|
| Hexachloro-1,3-butadiene | ug/L | <1.2 | 5.0 | 02/07/19 10:31 | |
| Isopropylbenzene (Cumene) | ug/L | <0.39 | 5.0 | 02/07/19 10:31 | |
| m&p-Xylene | ug/L | <0.47 | 2.0 | 02/07/19 10:31 | |
| Methyl-tert-butyl ether | ug/L | <1.2 | 4.2 | 02/07/19 10:31 | |
| Methylene Chloride | ug/L | <0.58 | 5.0 | 02/07/19 10:31 | |
| n-Butylbenzene | ug/L | <0.71 | 2.4 | 02/07/19 10:31 | |
| n-Propylbenzene | ug/L | <0.81 | 5.0 | 02/07/19 10:31 | |
| Naphthalene | ug/L | <1.2 | 5.0 | 02/07/19 10:31 | |
| o-Xylene | ug/L | <0.26 | 1.0 | 02/07/19 10:31 | |
| p-Isopropyltoluene | ug/L | <0.80 | 2.7 | 02/07/19 10:31 | |
| sec-Butylbenzene | ug/L | <0.85 | 5.0 | 02/07/19 10:31 | |
| Styrene | ug/L | <0.47 | 1.6 | 02/07/19 10:31 | |
| tert-Butylbenzene | ug/L | <0.30 | 1.0 | 02/07/19 10:31 | |
| Tetrachloroethene | ug/L | <0.33 | 1.1 | 02/07/19 10:31 | |
| Toluene | ug/L | <0.17 | 5.0 | 02/07/19 10:31 | |
| trans-1,2-Dichloroethene | ug/L | <1.1 | 3.6 | 02/07/19 10:31 | |
| trans-1,3-Dichloropropene | ug/L | <4.4 | 14.6 | 02/07/19 10:31 | |
| Trichloroethene | ug/L | <0.26 | 1.0 | 02/07/19 10:31 | |
| Trichlorofluoromethane | ug/L | <0.21 | 1.0 | 02/07/19 10:31 | |
| Vinyl chloride | ug/L | <0.17 | 1.0 | 02/07/19 10:31 | |
| 4-Bromofluorobenzene (S) | % | 95 | 70-130 | 02/07/19 10:31 | |
| Dibromofluoromethane (S) | % | 102 | 70-130 | 02/07/19 10:31 | |
| Toluene-d8 (S) | % | 105 | 70-130 | 02/07/19 10:31 | |

LABORATORY CONTROL SAMPLE: 1823606

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ug/L | 50 | 48.2 | 96 | 70-133 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 47.4 | 95 | 67-130 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 54.9 | 110 | 70-130 | |
| 1,1-Dichloroethane | ug/L | 50 | 57.5 | 115 | 70-134 | |
| 1,1-Dichloroethene | ug/L | 50 | 45.5 | 91 | 75-132 | |
| 1,2,4-Trichlorobenzene | ug/L | 50 | 45.8 | 92 | 68-130 | |
| 1,2-Dibromo-3-chloropropane | ug/L | 50 | 40.0 | 80 | 60-126 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 47.3 | 95 | 70-130 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 47.2 | 94 | 70-130 | |
| 1,2-Dichloroethane | ug/L | 50 | 53.3 | 107 | 73-134 | |
| 1,2-Dichloropropane | ug/L | 50 | 59.5 | 119 | 79-128 | |
| 1,3-Dichlorobenzene | ug/L | 50 | 46.4 | 93 | 70-130 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 49.5 | 99 | 70-130 | |
| Benzene | ug/L | 50 | 52.0 | 104 | 69-137 | |
| Bromodichloromethane | ug/L | 50 | 55.4 | 111 | 70-130 | |
| Bromoform | ug/L | 50 | 53.1 | 106 | 64-133 | |
| Bromomethane | ug/L | 50 | 44.2 | 88 | 29-123 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

LABORATORY CONTROL SAMPLE: 1823606

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---|---|---|---|---|---|---|
| Carbon tetrachloride | ug/L | 50 | 49.8 | 100 | 73-142 | |
| Chlorobenzene | ug/L | 50 | 53.1 | 106 | 70-130 | |
| Chloroethane | ug/L | 50 | 47.8 | 96 | 59-133 | |
| Chloroform | ug/L | 50 | 52.2 | 104 | 80-129 | |
| Chloromethane | ug/L | 50 | 35.3 | 71 | 27-125 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 54.3 | 109 | 70-134 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 49.2 | 98 | 70-130 | |
| Dibromochloromethane | ug/L | 50 | 48.4 | 97 | 70-130 | |
| Dichlorodifluoromethane | ug/L | 50 | 33.1 | 66 | 12-127 | |
| Ethylbenzene | ug/L | 50 | 56.7 | 113 | 86-127 | |
| Isopropylbenzene (Cumene) | ug/L | 50 | 53.4 | 107 | 70-130 | |
| m&p-Xylene | ug/L | 100 | 112 | 112 | 70-131 | |
| Methyl-tert-butyl ether | ug/L | 50 | 40.7 | 81 | 65-136 | |
| Methylene Chloride | ug/L | 50 | 54.7 | 109 | 72-133 | |
| o-Xylene | ug/L | 50 | 52.3 | 105 | 70-130 | |
| Styrene | ug/L | 50 | 53.3 | 107 | 70-130 | |
| Tetrachloroethene | ug/L | 50 | 55.1 | 110 | 70-130 | |
| Toluene | ug/L | 50 | 56.2 | 112 | 84-124 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 55.7 | 111 | 70-133 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 48.8 | 98 | 67-130 | |
| Trichloroethene | ug/L | 50 | 56.5 | 113 | 70-130 | |
| Trichlorofluoromethane | ug/L | 50 | 52.6 | 105 | 69-147 | |
| Vinyl chloride | ug/L | 50 | 41.4 | 83 | 48-134 | |
| 4-Bromofluorobenzene (S) | % | | | 110 | 70-130 | |
| Dibromofluoromethane (S) | % | | | 98 | 70-130 | |
| Toluene-d8 (S) | % | | | 106 | 70-130 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1823721 1823722

| Parameter | Units | 40182843001 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 | <0.24 | 50 | 50 | 49.6 | 49.1 | 99 | 98 | 70-136 | 1 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.28 | 50 | 50 | 48.8 | 49.1 | 98 | 98 | 67-133 | 1 | 20 | |
| 1,1,2-Trichloroethane | ug/L | <0.55 | 50 | 50 | 55.6 | 55.7 | 111 | 111 | 70-130 | 0 | 20 | |
| 1,1-Dichloroethane | ug/L | <0.27 | 50 | 50 | 58.3 | 57.6 | 117 | 115 | 70-139 | 1 | 20 | |
| 1,1-Dichloroethene | ug/L | <0.24 | 50 | 50 | 46.8 | 44.1 | 94 | 88 | 72-137 | 6 | 20 | |
| 1,2,4-Trichlorobenzene | ug/L | <0.95 | 50 | 50 | 47.6 | 48.5 | 95 | 96 | 68-130 | 2 | 20 | |
| 1,2-Dibromo-3-chloropropane | ug/L | <1.8 | 50 | 50 | 42.3 | 42.4 | 85 | 85 | 60-130 | 0 | 21 | |
| 1,2-Dibromoethane (EDB) | ug/L | <0.83 | 50 | 50 | 48.1 | 48.3 | 96 | 97 | 70-130 | 0 | 20 | |
| 1,2-Dichlorobenzene | ug/L | <0.71 | 50 | 50 | 48.8 | 48.8 | 98 | 98 | 70-130 | 0 | 20 | |
| 1,2-Dichloroethane | ug/L | <0.28 | 50 | 50 | 53.8 | 54.0 | 108 | 108 | 71-137 | 0 | 20 | |
| 1,2-Dichloropropane | ug/L | <0.28 | 50 | 50 | 60.7 | 60.8 | 121 | 122 | 78-130 | 0 | 20 | |
| 1,3-Dichlorobenzene | ug/L | <0.63 | 50 | 50 | 48.2 | 48.1 | 96 | 96 | 70-130 | 0 | 20 | |
| 1,4-Dichlorobenzene | ug/L | <0.94 | 50 | 50 | 51.3 | 51.2 | 102 | 102 | 70-130 | 0 | 20 | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1823721 1823722

| Parameter | Units | 40182843001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ug/L | <0.25 | 50 | 50 | 52.3 | 52.2 | 105 | 104 | 66-143 | 0 | 20 | |
| Bromodichloromethane | ug/L | <0.36 | 50 | 50 | 56.7 | 55.6 | 113 | 111 | 70-130 | 2 | 20 | |
| Bromoform | ug/L | <4.0 | 50 | 50 | 53.2 | 53.4 | 106 | 107 | 64-134 | 0 | 20 | |
| Bromomethane | ug/L | <0.97 | 50 | 50 | 30.5 | 29.8 | 61 | 60 | 29-136 | 2 | 25 | |
| Carbon tetrachloride | ug/L | <0.17 | 50 | 50 | 50.8 | 50.7 | 102 | 101 | 73-142 | 0 | 20 | |
| Chlorobenzene | ug/L | <0.71 | 50 | 50 | 53.8 | 54.2 | 108 | 108 | 70-130 | 1 | 20 | |
| Chloroethane | ug/L | <1.3 | 50 | 50 | 45.4 | 43.9 | 91 | 88 | 58-138 | 3 | 20 | |
| Chloroform | ug/L | <1.3 | 50 | 50 | 52.9 | 52.9 | 106 | 106 | 80-131 | 0 | 20 | |
| Chloromethane | ug/L | <2.2 | 50 | 50 | 28.6 | 27.2 | 57 | 54 | 24-125 | 5 | 20 | |
| cis-1,2-Dichloroethene | ug/L | <0.27 | 50 | 50 | 55.2 | 55.0 | 110 | 110 | 68-137 | 0 | 22 | |
| cis-1,3-Dichloropropene | ug/L | <3.6 | 50 | 50 | 50.7 | 50.1 | 101 | 100 | 70-130 | 1 | 20 | |
| Dibromochloromethane | ug/L | <2.6 | 50 | 50 | 48.5 | 48.6 | 97 | 97 | 70-131 | 0 | 20 | |
| Dichlorodifluoromethane | ug/L | <0.50 | 50 | 50 | 19.5 | 19.4 | 39 | 39 | 10-127 | 1 | 20 | |
| Ethylbenzene | ug/L | <0.22 | 50 | 50 | 58.0 | 57.9 | 116 | 116 | 81-136 | 0 | 20 | |
| Isopropylbenzene (Cumene) | ug/L | <0.39 | 50 | 50 | 54.0 | 54.2 | 108 | 108 | 70-132 | 0 | 20 | |
| m&p-Xylene | ug/L | <0.47 | 100 | 100 | 114 | 114 | 114 | 114 | 70-135 | 0 | 20 | |
| Methyl-tert-butyl ether | ug/L | <1.2 | 50 | 50 | 41.5 | 41.6 | 82 | 82 | 58-142 | 0 | 23 | |
| Methylene Chloride | ug/L | <0.58 | 50 | 50 | 48.3 | 47.5 | 97 | 95 | 69-137 | 2 | 20 | |
| o-Xylene | ug/L | <0.26 | 50 | 50 | 53.1 | 53.1 | 106 | 106 | 70-132 | 0 | 20 | |
| Styrene | ug/L | <0.47 | 50 | 50 | 54.0 | 53.8 | 108 | 108 | 70-130 | 0 | 20 | |
| Tetrachloroethene | ug/L | <0.33 | 50 | 50 | 55.6 | 55.3 | 111 | 111 | 70-132 | 1 | 20 | |
| Toluene | ug/L | <0.17 | 50 | 50 | 57.1 | 57.4 | 114 | 115 | 81-130 | 1 | 20 | |
| trans-1,2-Dichloroethene | ug/L | <1.1 | 50 | 50 | 55.8 | 56.2 | 112 | 112 | 70-136 | 1 | 20 | |
| trans-1,3-Dichloropropene | ug/L | <4.4 | 50 | 50 | 50.6 | 50.5 | 101 | 101 | 67-130 | 0 | 20 | |
| Trichloroethene | ug/L | <0.26 | 50 | 50 | 57.5 | 56.7 | 115 | 113 | 70-131 | 1 | 20 | |
| Trichlorofluoromethane | ug/L | <0.21 | 50 | 50 | 50.6 | 49.6 | 101 | 99 | 66-150 | 2 | 20 | |
| Vinyl chloride | ug/L | <0.17 | 50 | 50 | 37.5 | 36.6 | 75 | 73 | 46-134 | 2 | 20 | |
| 4-Bromofluorobenzene (S) | % | | | | | | 109 | 109 | 70-130 | | | |
| Dibromofluoromethane (S) | % | | | | | | 98 | 98 | 70-130 | | | |
| Toluene-d8 (S) | % | | | | | | 105 | 106 | 70-130 | | | |

**Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.**

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

# QUALIFIERS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

**DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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 at or above the adjusted LOD.

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.

**Pace Analytical Services, LLC**
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40182787

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|---|---|---|---|---|---|
| **40182787001** | **SUMP WATER** | EPA 8260 | 313035 | | |

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Pace Analytical®
www.pacelabs.com

# CHAIN OF CUSTODY

4018278?



| (Please Print Clearly) | |
|---|---|
| Company Name: | DAI |
| Branch/Location: | LAKE FOREST |
| Project Contact: | CHRIS CALLES |
| Phone: | 847-573-8900 |
| Project Number: | 60255 |
| Project Name: | SUNRISE SHOPPING CENTER |
| Project State: | WI |
| Sampled By (Print): | DAN IMAN |
| Sampled By (Sign): | |
| PO #: | Regulatory Program: |

***Preservation Codes**
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

**Data Package Options** (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

**MS/MSD**
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

**Matrix Codes**

| | |
|---|---|
| A = Air | W = Water |
| B = Biota | DW = Drinking Water |
| C = Charcoal | GW = Ground Water |
| O = Oil | SW = Surface Water |
| S = Soil | WW = Waste Water |
| SI = Sludge | WP = Wipe |

| Quote #: | |
|---|---|
| Mail To Contact: | |
| Mail To Company: | |
| Mail To Address: | |
| Invoice To Contact: | |
| Invoice To Company: | |
| Invoice To Address: | |
| Invoice To Phone: | |

| PACE LAB # | CLIENT FIELD ID | COLLECTION DATE | COLLECTION TIME | MATRIX | FILTERED? (YES/NO) Y/N | PRESERVATION (CODE)* Pick Letter | Analyses Requested | CLIENT COMMENTS | LAB COMMENTS (Lab Use Only) | Profile # |
|---|---|---|---|---|---|---|---|---|---|---|
| 001 | SUMP WATER | 2/4/19 | 1000 | GW | N | B | VOCs | | | |

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

| | |
|---|---|
| Email #1: | |
| Email #2: | |
| Telephone: | |
| Fax: | |

Samples on HOLD are subject to special pricing and release of liability

| Relinquished By: | Date/Time: | Received By: | Date/Time: |
|---|---|---|---|
| [signature] | 2/5/19 1:32 | [signature] | 2/5/19 1332 |
| [signature] | 2/5/19 1700 | CS Logistics | 2/5/19 |
| CS Logistics | 2-6-19 1010 | [signature] | 2-6-19 1010 |
| | | | |
| | | | |

PACE Project No. 40182787

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present

Intact / Not Intact

C019a(27Jun2006)

Version 6.0 06/14/06

ORIGINAL

Pace Analytical Services, LL
1241 Bellevue Street, Suite
Green Bay, WI 5430



# Sample Preservation Receipt Form

Client Name: DA1 Project # 40182787

All containers needing preservation have been checked and noted below: □Yes □No □N/A

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted): Initial when completed: Date/ Time:

| | Glass | | | | | | | Plastic | | | | | | | Vials | | | | | | Jars | | | General | | | VOA Vials (>6mm) * | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pace Lab # | AG1U | AG1H | AG4S | AG4U | AG5U | AG2S | BG3U | BP1U | BP2N | BP2Z | BP3U | BP3C | BP3N | BP3S | DG9A | DG9T | VG9U | VG9H | VG9M | VG9D | JGFU | WGFU | WPFU | SP5T | ZPLC | GN | | H2SO4 pH ≤2 | NaOH+Zn Act pH ≥9 | NaOH pH ≥12 | HNO3 pH ≤2 | pH after adjusted | Volume (mL) |
| 001 | | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 006 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 008 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 013 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 016 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |
| 020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2.5 / 5 / 10 |

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes □No □N/A ***If yes look in headspace column**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AG1U | 1 liter amber glass | BP1U | 1 liter plastic unpres | DG9A | 40 mL amber ascorbic | JGFU | 4 oz amber jar unpres |
| AG1H | 1 liter amber glass HCL | BP2N | 500 mL plastic HNO3 | DG9T | 40 mL amber Na Thio | WGFU | 4 oz clear jar unpres |
| AG4S | 125 mL amber glass H2SO4 | BP2Z | 500 mL plastic NaOH, Znact | VG9U | 40 mL clear vial unpres | WPFU | 4 oz plastic jar unpres |
| AG4U | 120 mL amber glass unpres | BP3U | 250 mL plastic unpres | VG9H | 40 mL clear vial HCL | | |
| AG5U | 100 mL amber glass unpres | BP3C | 250 mL plastic NaOH | VG9M | 40 mL clear vial MeOH | SP5T | 120 mL plastic Na Thiosulfate |
| AG2S | 500 mL amber glass H2SO4 | BP3N | 250 mL plastic HNO3 | VG9D | 40 mL clear vial DI | ZPLC | ziploc bag |
| BG3U | 250 mL clear glass unpres | BP3S | 250 mL plastic H2SO4 | | | GN: | |



1100

| Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302 | Document Name: Sample Condition Upon Receipt (SCUR) | Document Revised: 25Apr2018 |
|---|---|---|
| | Document No.: F-GB-C-031-Rev.07 | Issuing Authority: Pace Green Bay Quality Office |

# Sample Condition Upon Receipt Form (SCUR)

**Client Name:** DAI

Project #: **WO# : 40182787**

40182787

**Courier:** ☑ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other: _____

**Tracking #:** _____

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

**Custody Seal on Samples Present:** ☐ yes ☑ no Seals intact: ☐ yes ☐ no

**Packing Material:** ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

**Thermometer Used** SR - N/A **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

**Cooler Temperature** Uncorr: ROI Corr: _____

**Temp Blank Present:** ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 2-6-19 Initials: SW

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

| | | |
|---|---|---|
| Chain of Custody Present: | ☑Yes ☐No ☐N/A | 1. |
| Chain of Custody Filled Out: | ☐Yes ☑No ☐N/A | 2. No pg #, Mail, Invoice 2-6-19 SW |
| Chain of Custody Relinquished: | ☑Yes ☐No ☐N/A | 3. |
| Sampler Name & Signature on COC: | ☑Yes ☐No ☐N/A | 4. |
| Samples Arrived within Hold Time: | ☑Yes ☐No | 5. |
| - VOA Samples frozen upon receipt | ☐Yes ☐No | Date/Time: |
| **Short Hold Time Analysis (<72hr):** | ☐Yes ☑No | 6. |
| **Rush Turn Around Time Requested:** | ☐Yes ☑No | 7. |
| Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: | ☐Yes ☑No ☐N/A | 8. |
| Correct Containers Used: | ☑Yes ☐No | 9. |
| -Pace Containers Used: | ☑Yes ☐No ☐N/A | |
| -Pace IR Containers Used: | ☐Yes ☐No ☑N/A | |
| Containers Intact: | ☑Yes ☐No | 10. |
| Filtered volume received for Dissolved tests | ☐Yes ☐No ☑N/A | 11. |
| Sample Labels match COC: 2-6-19 JK | ☑Yes ☐No ☐N/A | 12. No time 2-6-19 JK |
| -Includes date/time/ID/Analysis Matrix: W | | |
| Trip Blank Present: | ☐Yes ☐No ☑N/A | 13. |
| Trip Blank Custody Seals Present | ☐Yes ☐No ☑N/A | |
| Pace Trip Blank Lot # (if purchased): _____ | | |

**Client Notification/ Resolution:** If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

**Project Manager Review:** JW **Date:** 2/6/19