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

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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 10<sup>th</sup> 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  $\pm 0.01$  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°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 second quarter 2019 groundwater sampling event. The static water level elevations were collected from all monitoring wells on April 29, 2019. Table A.6 in Attachment A provides a historical summary of groundwater elevation information.

Review of Table A.6 shows that the April 29, 2019, groundwater elevations in MW-1 and MW-3 are nearly 2-ft higher than observed in January 2019, while the other four (4) monitoring wells show groundwater elevations generally consistent with those observed in January 2019. In general, monitoring wells MW-1 through MW-4 indicate the highest quarterly variability, while MW-5 and MW-201 fluctuate less 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 April 2019, MW-1 and MW-3 show a difference in elevation of 3.19-ft and 2.19-ft, respectively. The elevation range difference for MW-2 and MW-4 is 1.39-ft and 1.32-ft, respectively. Monitoring wells 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 April 2019 data is included as Figure B.3.c.9 (see Attachment B).

### **3.2 Groundwater Analytical Results**

Groundwater samples for the second quarter 2019 (i.e., April-June 2019) were collected on April 29, 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. 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 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. The April 2019 sampling results indicate that the Perc concentration in MW-5 increased from January 2019 (0.0065-mg/L) to a 0.0114-mg/L, but remain lower than the highest concentration of 0.0201-mg/L observed in October 2018. In addition to Perc, Trichloroethene (TCE), a breakdown product of Perc, has been detected at concentrations exceeding the PAL in MW-5 beginning in January 2019, although the April 2019 concentration of 0.00071-mg/L is less than the 0.0027-mg/L concentration observed in January. 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.

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. Chemical injections are planned for the area around MW-5 for the second quarter of 2019. The chemical injections are expected to reduce the groundwater contaminant concentrations.

### **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 was observed in MW-3. Additionally Fluoranthene and Pyrene were observed at concentrations above the PALs, which were not previously reported. The April 2019 results in MW-3 indicate a large concentration spike, beyond the variability observed historically. This spike coincides with an increase in groundwater elevation of over 2-ft, which may have “flushed” some petroleum soil contamination from the fringe zone into the monitoring well. However, monitoring well MW-3 has been damaged, assumingly from snow plowing, which may be contributing to the unusual measurements. MW-3 will be repaired or replaced and then re-sampled to determine whether the latest measurements are accurate. The results will be reported in the next quarterly report.

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). During the April 2019 sampling event, Benzo(a)pyrene, Benzo(b)fluoranthene, and Chrysene were observed at concentrations above the PALs. As noted with MW-3, the recent heavy rainfall and rise in groundwater elevation may be contributing to the noted increase in contaminant levels. The next round of quarterly sampling should better establish the trend in groundwater contaminant concentrations.

## **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 until 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. Because the current Perc concentrations are still above the Enforcement Standard, further chemical injections within this area will be performed during the second quarter 2019.
- The PAH concentrations in MW-3 and MW-4 increased between January 2019 and April 2019. However, the increase in concentration is not expected to represent an increasing trend, rather the increase is believed to be associated with the recent heavy rainfall and rise in groundwater elevations that likely flushed some residual petroleum from within the fringe or smear zone, into the monitoring well. Further, MW-3 has been damaged by snow plow operations, and needs to be repaired or replaced. The next round of quarterly groundwater samples will better establish a sustained trend in groundwater contaminant concentrations.
- The next quarterly sampling event is scheduled for July 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 <sup>1</sup>	ES <sup>2</sup>
	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	<b>0.0026</b>	<b>0.0026</b>	<b>0.0083</b>	<b>0.0124</b>	<b>0.0181</b>	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 <sup>1</sup>	ES <sup>2</sup>
	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
Trichloroethylene	<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

<sup>1</sup> – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

<sup>2</sup> – 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 <sup>1</sup>	ES <sup>2</sup>
	MW-5 (04/07/18)	MW-5 (07/30/18)	MW-5 (10/11/18)	MW-5 (01/25/19)	MW-5 (04/29/19)		
Benzene	<0.0005	<0.00025	<0.00025	<0.00025	<0.00025	0.0005	0.005
Bromobenzene	<0.00023	<0.00024	<0.00024	<0.00024	<0.00024	NL	NL
Bromochloromethane	<0.00034	<0.00036	<0.00036	<0.00036	<0.00036	NL	NL
Bromodichloromethane	<0.0005*	<0.00036*	<0.00036*	<0.00036*	<0.00036*	0.00006	0.0006
Bromoform	<0.0005*	<0.004*	<0.004*	<0.004*	<0.004*	0.00044	0.0044
Bromomethane	<0.0024*	<0.00097	<0.00097	<0.00097	<0.00097	0.001	0.01
n-Butylbenzene	<0.0005	<0.00071	<0.00071	<0.00071	<0.00071	NL	NL
sec-Butylbenzene	<0.0022	<0.00085	<0.00085	<0.00085	<0.00085	NL	NL
tert-Butylbenzene	<0.00018	<0.0003	<0.0003	<0.0003	<0.0003	NL	NL
Carbon tetrachloride	<0.0005	<0.00017	<0.00017	<0.00017	<0.00017	0.0005	0.005
Chlorobenzene	<0.0005	<0.00071	<0.00071	<0.00071	<0.00071	NL	NL
Chloroethane	<0.00037	<0.0013	<0.0013	<0.0013	0.0036 (J)	0.08	0.4
Chloroform	<0.0025*	<0.0013*	<0.0013*	<0.0013*	<0.0013*	0.0006	0.006
Chloromethane	<0.0005	<0.0022	<0.0022	<0.0022	<0.0022	0.003	0.03
2-Chlorotoluene	<0.0005	<0.00093	<0.00093	<0.00093	<0.00093	NL	NL
4-Chlorotoluene	<0.00021	<0.00076	<0.00076	<0.00076	<0.00076	NL	NL
Dibromochloromethane	<0.0005	<0.0026	<0.0026	<0.0026	<0.0026	0.006	0.006
1,2-Dibromo-3-chloropropane	<0.0022*	<0.0018*	<0.0018*	<0.0018*	<0.0018*	0.00002	0.0002
1,2-Dibromoethane (EDB)	<0.00018*	<0.00083*	<0.00083*	<0.00083*	<0.00083*	0.000005	0.00005
Dibromomethane	<0.00043	<0.00094	<0.00094	<0.00094	<0.00094	NL	NL
1,2-Dichlorobenzene	<0.0005	<0.00071	<0.00071	<0.00071	<0.00071	0.06	0.6
1,3-Dichlorobenzene	<0.0005	<0.00063	<0.00063	<0.00063	<0.00063	0.12	0.6
1,4-Dichlorobenzene	<0.0005	<0.00094	<0.00094	<0.00094	<0.00094	0.015	0.075
Dichlorodifluoromethane	<0.00022	<0.0005	<0.0005	<0.0005	<0.0005	0.2	1
1,1-Dichloroethane	<0.00024	<0.00027	<0.00027	0.0016	<0.00027	0.085	0.85
1,2-Dichloroethane	<0.00017	<0.00028	<0.00028	<0.00028	<0.00028	0.0005	0.005
1,1-Dichloroethene	<0.00041	<0.00024	<0.00024	<0.00024	<0.00024	0.0007	0.007
cis-1,2-Dichloroethene	<0.00026	<0.00027	<0.00027	<0.00027	<0.00027	0.007	0.07
trans-1,2-Dichloroethene	<0.00026	<0.0011	<0.0011	<0.0011	<0.0011	0.02	0.1
1,2-Dichloropropane	<0.00023	<0.00028	<0.00028	<0.00028	<0.00028	0.0005	0.005
1,3-Dichloropropane	<0.0005	<0.00083	<0.00083	<0.00083	<0.00083	NL	NL
2,2-Dichloropropane	<0.00048	<0.0023	<0.0023	<0.0023	<0.0023	NL	NL
1,1-Dichloropropene	<0.00044	<0.00054	<0.00054	<0.00054	<0.00054	NL	NL
1,3-Dichloropropene (c & t)	<0.00073*	<0.008*	<0.008*	<0.008*	<0.008*	0.00004	0.0004
Diisopropyl ether	<0.0005	<0.0019	<0.0019	<0.0019	<0.0019	NL	NL
Ethylbenzene	<0.0005	<0.00022	<0.00022	0.00037 (J)	<0.00022	0.14	0.7
Hexachloro-1,3-butadiene	<0.0021	<0.0012	<0.0012	<0.0012	<0.0012	NL	NL
Isopropyl benzene	<0.00014	<0.00039	<0.00039	<0.00039	<0.00039	NL	NL
p-Isopropyltoluene	<0.0005	<0.0008	<0.0008	<0.0008	<0.0008	NL	NL
Methylene chloride	<0.00023	<0.00058*	<0.00058*	<0.00058*	<0.00058*	0.0005	0.005
Methyl tertiary-butyl ether	<0.00017	<0.0012	<0.0012	<0.0012	<0.0012	0.012	0.06
Naphthalene	<0.0025	<0.0012	<0.0012	<0.0012	<0.0012	0.01	0.1
n-Propylbenzene	<0.0005	<0.00081	<0.00081	<0.00081	<0.00081	NL	NL
Styrene	<0.0005	<0.00047	<0.00047	<0.00047	<0.00047	0.01	0.1
1,1,1,2-Tetrachloroethane	<0.00018	<0.00027	<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 <sup>1</sup>	ES <sup>2</sup>
	MW-5 (04/07/18)	MW-5 (07/30/18)	MW-5 (10/11/18)	MW-5 (01/25/19)	MW-5 (04/29/19)		
1,1,2,2-Tetrachloroethane	<0.00025*	<0.00028*	<0.00028*	<0.00028*	<0.00028*	0.00002	0.0002
Tetrachloroethene	<b>0.0203</b>	<b>0.0086</b>	<b>0.021</b>	<b>0.0065</b>	<b>0.0114</b>	0.0005	0.005
Toluene	<0.0005	<0.00017	<0.00017	<0.00017	<0.00017	0.16	0.8
1,2,3-Trichlorobenzene	<0.0021	<0.00063	<0.00063	<0.00063	<0.00063	NL	NL
1,2,4-Trichlorobenzene	<0.0022	<0.00095	<0.00095	<0.00095	<0.00095	0.014	0.07
1,1,1-Trichloroethane	0.000897	0.00088	0.00095 (J)	0.0003 (J)	0.00041 (J)	0.04	0.2
1,1,2-Trichloroethane	<0.0002	<0.00055*	<0.00055*	<0.00055*	<0.00055*	0.0005	0.005
Trichloroethene	<0.00033	<0.00026	0.00027 (J)	<b>0.0027</b>	<b>0.00071 (J)</b>	0.0005	0.005
Trichlorofluoromethane	<0.00018	<0.00021	<0.00021	<0.00021	<0.00021	0.7	3.5
1,2,3-Trichloroproppane	<0.0005	<0.00059	<0.00059	<0.00059	<0.00059	0.012	0.06
1,2,4-Trimethylbenzene	<0.0005	<0.00084	<0.00084	<0.00084	<0.00084	0.096	0.48
1,3,5-Trimethylbenzene	<0.0005	<0.00087	<0.00087	<0.00087	<0.00087		
Vinyl chloride	<0.00018	<0.00017	<0.00017	<0.00017	<0.00017	0.4	2
Xylenes (total)	<0.0015	<0.00073	<0.00073	0.0039	<0.00073	3.96	260

<sup>1</sup> – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

<sup>2</sup> – 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 <sup>1</sup>	ES <sup>2</sup>
	TW-5 (11/13/14)	MW-3 (01/27/15)	MW-3 (05/30/17)	MW-3 (01/05/18)	MW-3 (04/07/18)		
Acenaphthene	0.00076	0.0000043 (J)	0.000026 (J)	0.0000077 (J)	0.000029	NL	NL
Acenaphthylene	0.00013	0.0000036 (J)	0.000016 (J)	<0.0000045	0.000053	NL	NL
Anthracene	0.00056	<0.0000023	0.00013	0.000031 (J)	0.00015	0.6	3
Benzo(a)anthracene	0.00069	<0.0000031	0.00073	0.0000069 (J)	0.001	NL	NL
Benzo(a)pyrene	<b>0.0006</b>	0.000011 (J)	<b>0.001</b>	<0.0000096	<b>0.0019</b>	0.00002	0.0002
Benzo(b)fluoranthene	<b>0.00077</b>	0.00002 (J)	<b>0.002</b>	<b>0.000037</b>	<b>0.0039</b>	0.00002	0.0002
Benzo(g,h,i)perylene	0.0004	0.000016 (J)	0.0011	0.00018 (J)	0.0025	NL	NL
Benzo(k)fluoranthene	0.00029	0.00001 (J)	0.00068	0.000014 (J)	0.0014	NL	NL
Chrysene	<b>0.00084</b>	<b>0.000028 (J)</b>	<b>0.0015</b>	<b>0.000047 (J)</b>	<b>0.003</b>	0.00002	0.0002
Dibenzo(a,h)anthracene	0.000091	<0.0000032	0.00022	<0.0000091	0.00034	NL	NL
Fluoranthene	0.0024	0.000041 (J)	0.0031	0.00021	0.0052	0.08	0.4
Fluorene	0.0011	0.0000035 (J)	0.000052	0.000022 (J)	0.000048	0.08	0.4
Indeno(1,2,3-cd)pyrene	0.0003	0.0000081 (J)	0.00086	<0.000016	0.0021	NL	NL
1-Methylnaphthalene	0.002	0.0000091 (J)	0.00018	0.00016	0.000033	NL	NL
2-Methylnaphthalene	0.00017	0.0000084 (J)	0.00013	0.00016	0.000024	NL	NL
Naphthalene	0.00016	<0.0000056	0.00012	0.00046	0.000051	0.017	0.1
Phenanthrene	0.0021	0.000043 (J)	0.00071	0.000085	0.0013	NL	NL
Pyrene	0.0025	0.000059	0.002	0.00011	0.0037	0.05	0.25

<sup>1</sup> – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

<sup>2</sup> – 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 <sup>1</sup>	ES <sup>2</sup>
	MW-3 (07/30/18)	MW-3 (10/11/18)	MW-3 (01/25/19)	MW-3 (04/29/19)		
Acenaphthene	0.000014 (J)	0.00001 (J)	0.0000068 (J)	0.0015	NL	NL
Acenaphthylene	0.000023	<0.0000045	<0.0000047	0.0027	NL	NL
Anthracene	0.000073	0.00002 (J)	0.000027 (J)	0.0089	0.6	3
Benzo(a)anthracene	0.00043	0.000017 (J)	0.000053	0.11	NL	NL
Benzo(a)pyrene	<b>0.00068</b>	<b>0.000024 (J)</b>	<b>0.00017</b>	<b>0.115</b>	0.00002	0.0002
Benzo(b)fluoranthene	<b>0.0013</b>	<b>0.000074</b>	<b>0.00034</b>	<b>0.209</b>	0.00002	0.0002
Benzo(g,h,i)perylene	0.00082	0.000037	0.00023	0.132	NL	NL
Benzo(k)fluoranthene	0.00041	0.000026 (J)	0.00012	0.0643	NL	NL
Chrysene	<b>0.00095</b>	<b>0.000079</b>	<b>0.00028</b>	<b>0.13</b>	0.00002	0.0002
Dibenzo(a,h)anthracene	0.00015	<0.000009	0.000034 (J)	0.0258	NL	NL
Fluoranthene	0.0019	0.00026	0.00043	<b>0.248</b>	0.08	0.4
Fluorene	0.00004	0.000031 (J)	0.000014 (J)	0.0028	0.08	0.4
Indeno(1,2,3-cd)pyrene	0.00089	0.000027 (J)	0.00016	0.108	NL	NL
1-Methylnaphthalene	0.000033	0.000019 (J)	0.000013 (J)	0.0003	NL	NL
2-Methylnaphthalene	0.000031	0.000015 (J)	0.000012 (J)	0.00025	NL	NL
Naphthalene	0.000053 (J)	0.000032 (J)	0.000022 (J)	0.00035	0.017	0.1
Phenanthrene	0.00047	0.000093	0.00011	0.066	NL	NL
Pyrene	0.0012	0.0002	0.00031	<b>0.21</b>	0.05	0.25

<sup>1</sup> – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

<sup>2</sup> – 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 <sup>1</sup>	ES <sup>2</sup>
	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)	< <b>0.00049</b>	< <b>0.0002</b>	0.00002	0.0002
Benzo(b)fluoranthene	0.0000093 (J)	<b>0.000043 (J)</b>	0.000014 (J)	< <b>0.00027</b>	<b>0.00022 (J)</b>	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	<b>0.000021 (J)</b>	<b>0.000042 (J)</b>	0.000017 (J)	<b>0.0018 (J)</b>	<b>0.001 (J)</b>	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	<b>0.0243</b>	<b>0.0151</b>	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

<sup>1</sup> – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

<sup>2</sup> – 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 <sup>1</sup>	ES <sup>2</sup>
	MW-4 (04/07/18)	MW-4 (07/30/18)	MW-4 (10/11/18)	MW-4 (01/25/19)	MW-4 (04/29/19)		
Acenaphthene	0.0031	0.0021	0.004	0.0016	0.0033	NL	NL
Acenaphthylene	0.00073	0.00064	0.00091	0.00024	0.00059	NL	NL
Anthracene	0.00051	0.00024	0.001	0.000093	0.00033	0.6	3
Benzo(a)anthracene	0.000012 (J)	<0.000035	0.00004 (J)	0.0000076 (J)	0.000061	NL	NL
Benzo(a)pyrene	<0.0000095	<b>&lt;0.000048</b>	<b>&lt;0.000029</b>	<0.0000095	<b>0.000041 (J)</b>	0.00002	0.0002
Benzo(b)fluoranthene	0.0000096 (J)	<b>&lt;0.000026</b>	<b>0.000022</b>	0.000012 (J)	<b>0.000093</b>	0.00002	0.0002
Benzo(g,h,i)perylene	<0.0000061	<0.000031	<0.000018	<0.0000061	0.000045	NL	NL
Benzo(k)fluoranthene	<0.0000068	<0.000035	<0.000021	0.000016 (J)	0.00005	NL	NL
Chrysene	<b>0.000031 (J)</b>	<b>&lt;0.00006</b>	<b>0.000084 (J)</b>	<b>0.000033 (J)</b>	<b>0.00017</b>	0.00002	0.0002
Dibenzo(a,h)anthracene	<0.000009	<0.000046	<0.000027	<0.000009	0.0000091 (J)	NL	NL
Fluoranthene	0.0001	0.000061 (J)	0.00019	0.000091	0.0004	0.08	0.4
Fluorene	0.0053	0.0035	0.0067	0.0022	0.0046	0.08	0.4
Indeno(1,2,3-cd)pyrene	<0.000016	<0.000081	<0.000048	<0.000016	0.00004 (J)	NL	NL
1-Methylnaphthalene	0.0109	0.0395	0.0268	0.006	0.0151	NL	NL
2-Methylnaphthalene	0.00026	0.00051	0.00021	0.000048	0.00026	NL	NL
Naphthalene	0.0022	0.0015	0.00081	0.00078	0.0014	0.01	0.1
Phenanthrene	0.0033	0.0031	0.0059	0.00077	0.0037	NL	NL
Pyrene	0.00032	0.00017 (J)	0.0001	0.00021	0.0014	0.05	0.25

<sup>1</sup> – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

<sup>2</sup> – 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.6. Water Level Elevations**

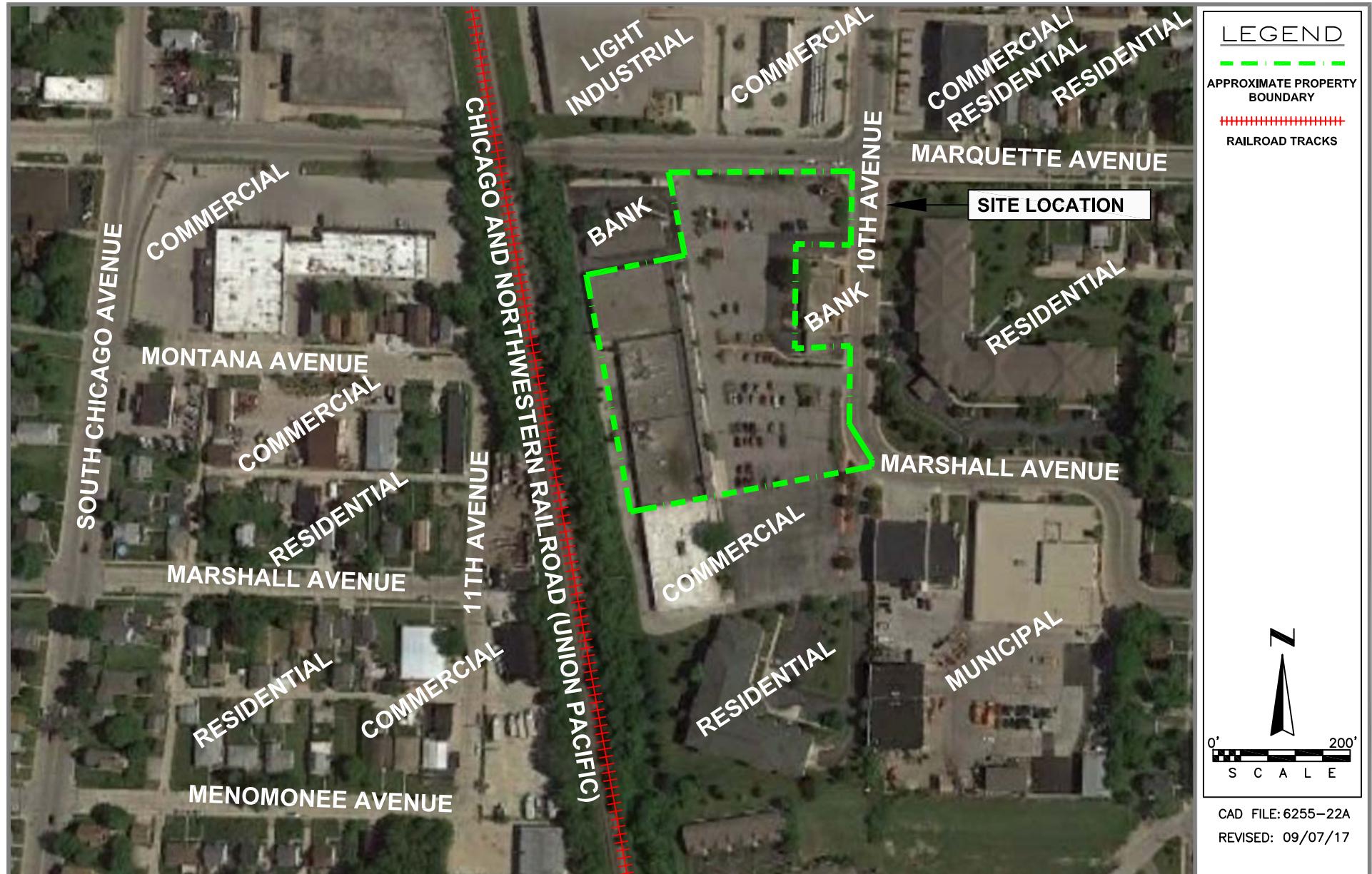
Monitoring Well	Top of Casing Elevation*	Date	Measured Depth to Groundwater (ft)	Measured Depth to Well Bottom (ft)	Relative Groundwater Elevation (ft)
MW-1	99.13	4/29/19	2.35	14.49	96.78
		1/25/19	4.65		94.48
		10/11/18	1.66		97.47
		7/30/18	3.32		95.81
		4/08/18	2.24		96.89
		2/27/18	1.58		97.55
		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	4/29/19	8.47	14.41	92.28
		1/25/19	8.42		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	4/29/19	2.61	14.46	97.44
		1/25/19	4.44		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	4/29/19	7.30	14.57	93.27
		1/25/19	6.88		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	4/29/19	6.33	14.60	93.91
		1/25/19	6.35		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**

<b>Monitoring Well</b>	<b>Top of Casing Elevation*</b>	<b>Date</b>	<b>Measured Depth to Groundwater (ft)</b>	<b>Measured Depth to Well Bottom (ft)</b>	<b>Relative Groundwater Elevation (ft)</b>
MW-201	100.10	4/29/19	6.82		93.28
		1/25/19	6.88		93.22
		10/11/18	6.22		93.88
		7/30/18	6.69		93.41
		4/08/18	6.79	14.57	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**

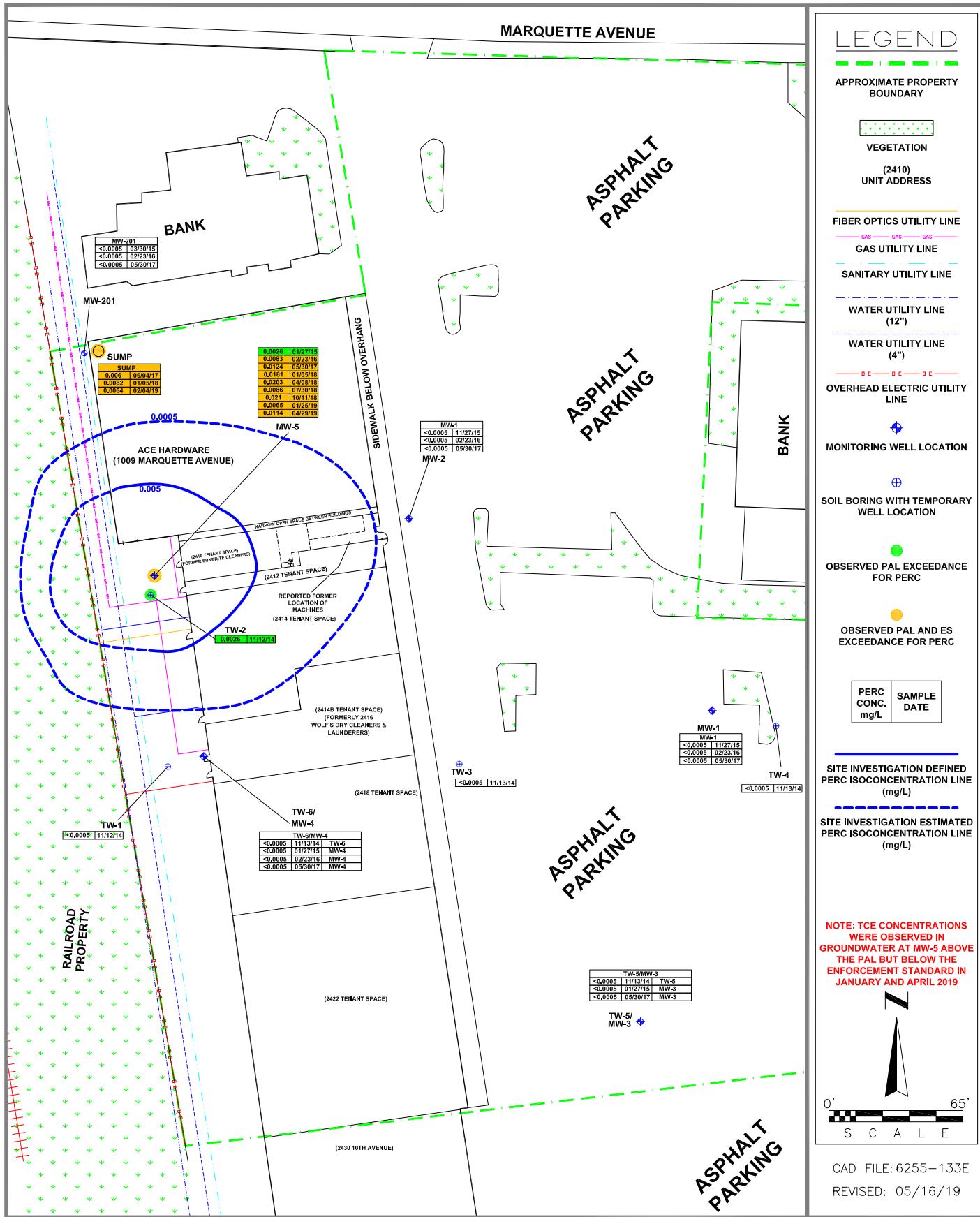


**DAI**  
ENVIRONMENTAL

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)

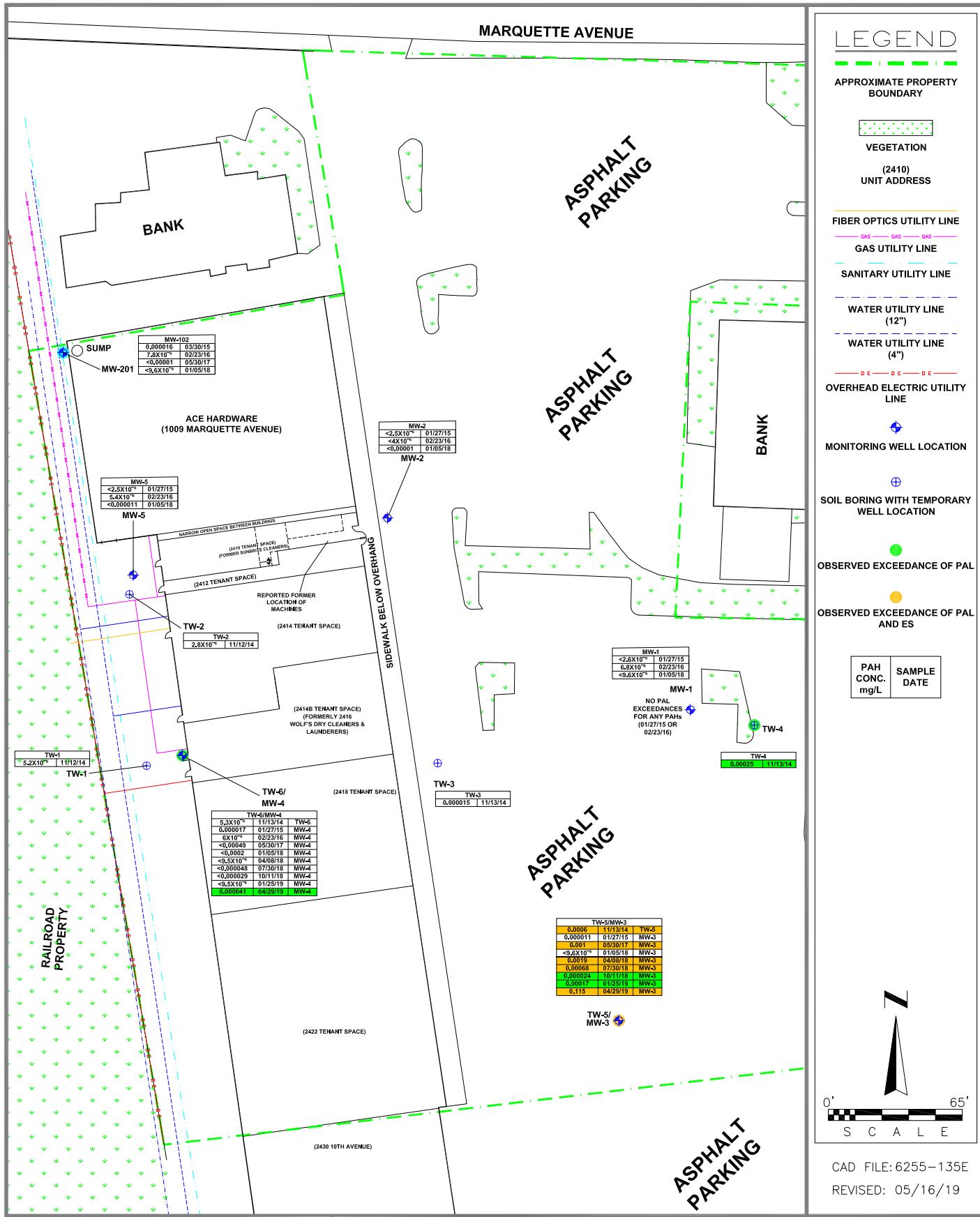
## MARQUETTE AVENUE



**D**  
**ENVIRONMENTAL**

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

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

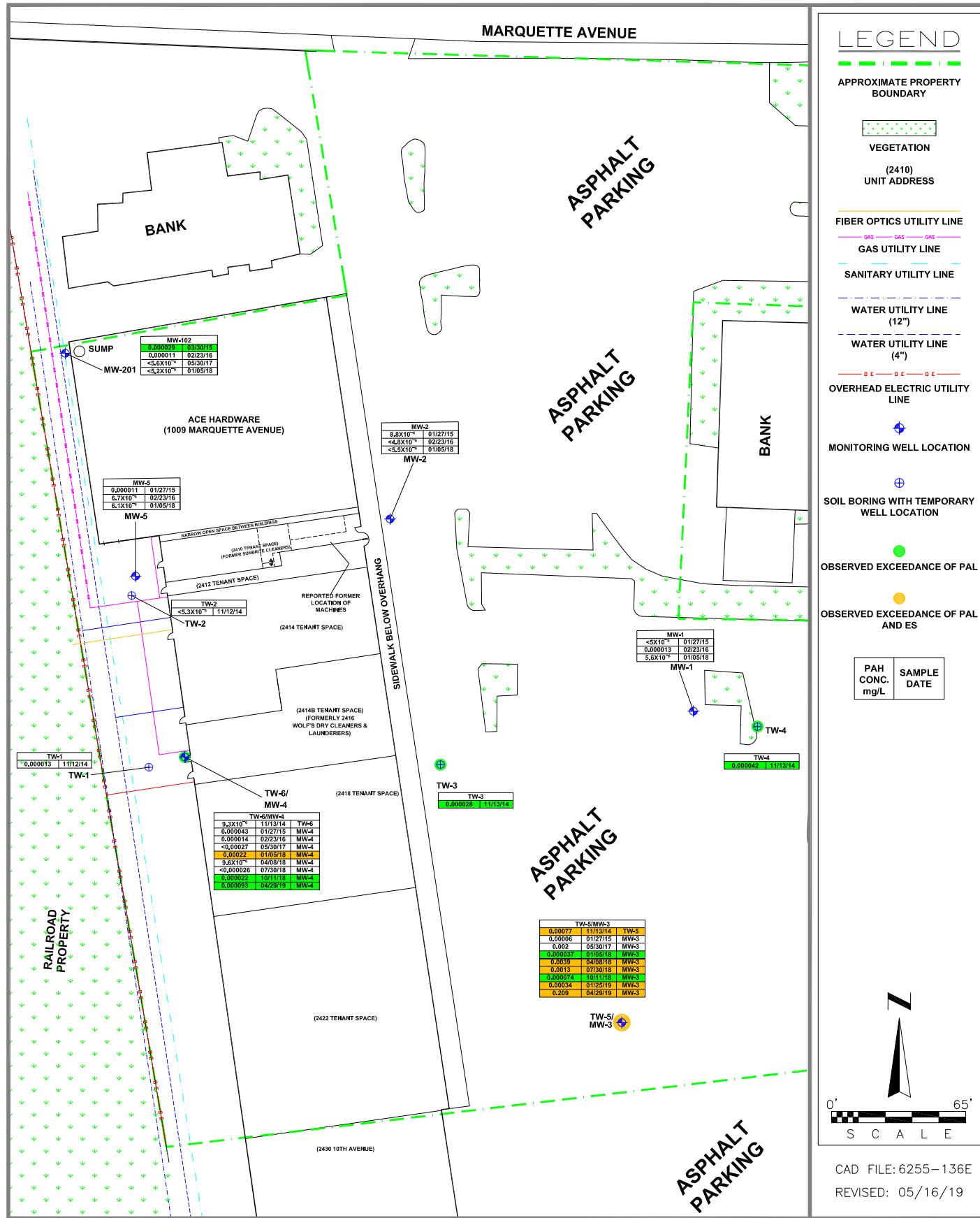


# DAI ENVIRONMENTAL

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

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

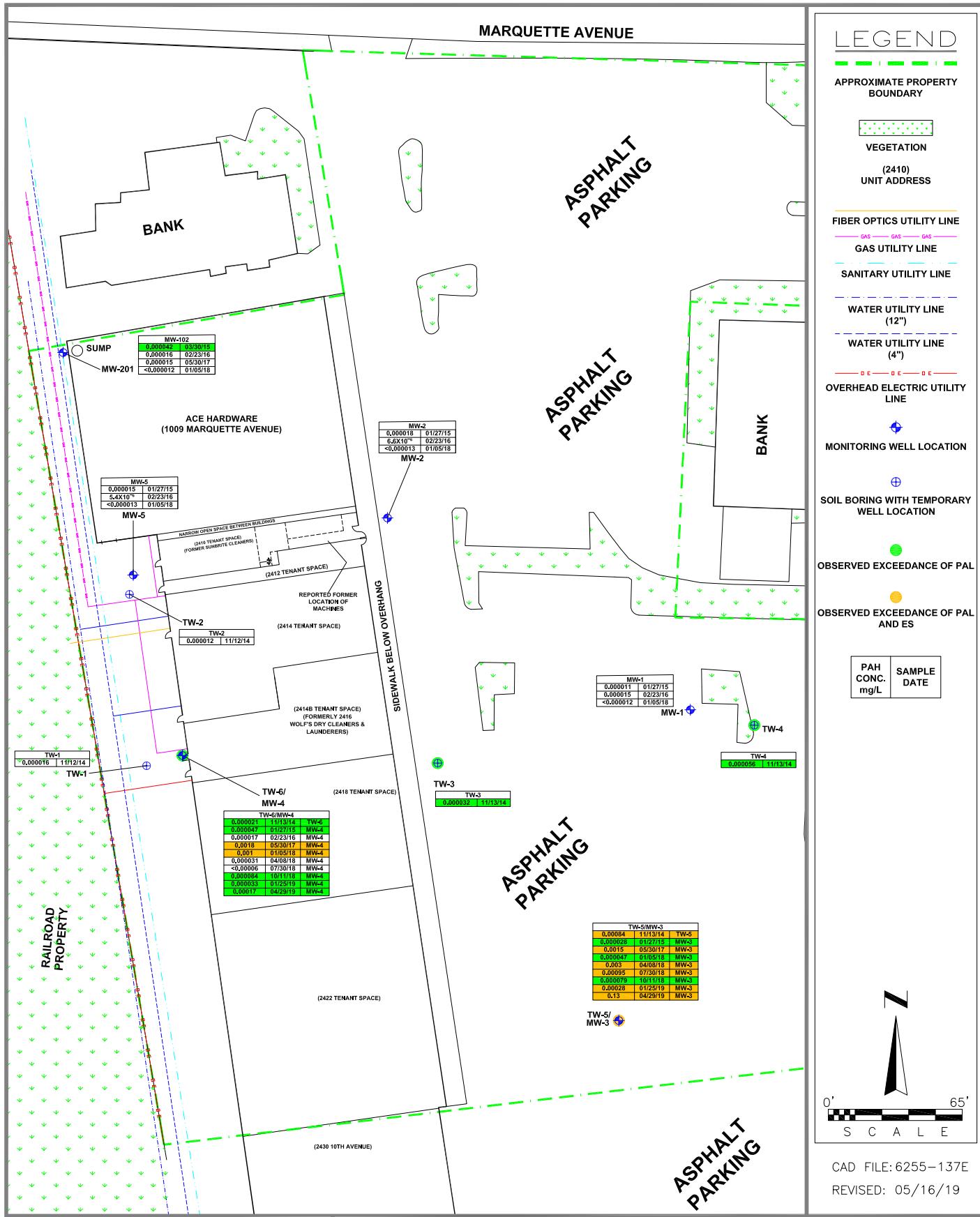
MARQUETTE AVENUE



**DAM**  
ENVIRONMENTAL

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

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



# DAM ENVIRONMENTAL

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

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

MARQUETTE AVENUE

LEGEND

APPROXIMATE PROPERTY BOUNDARY



(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

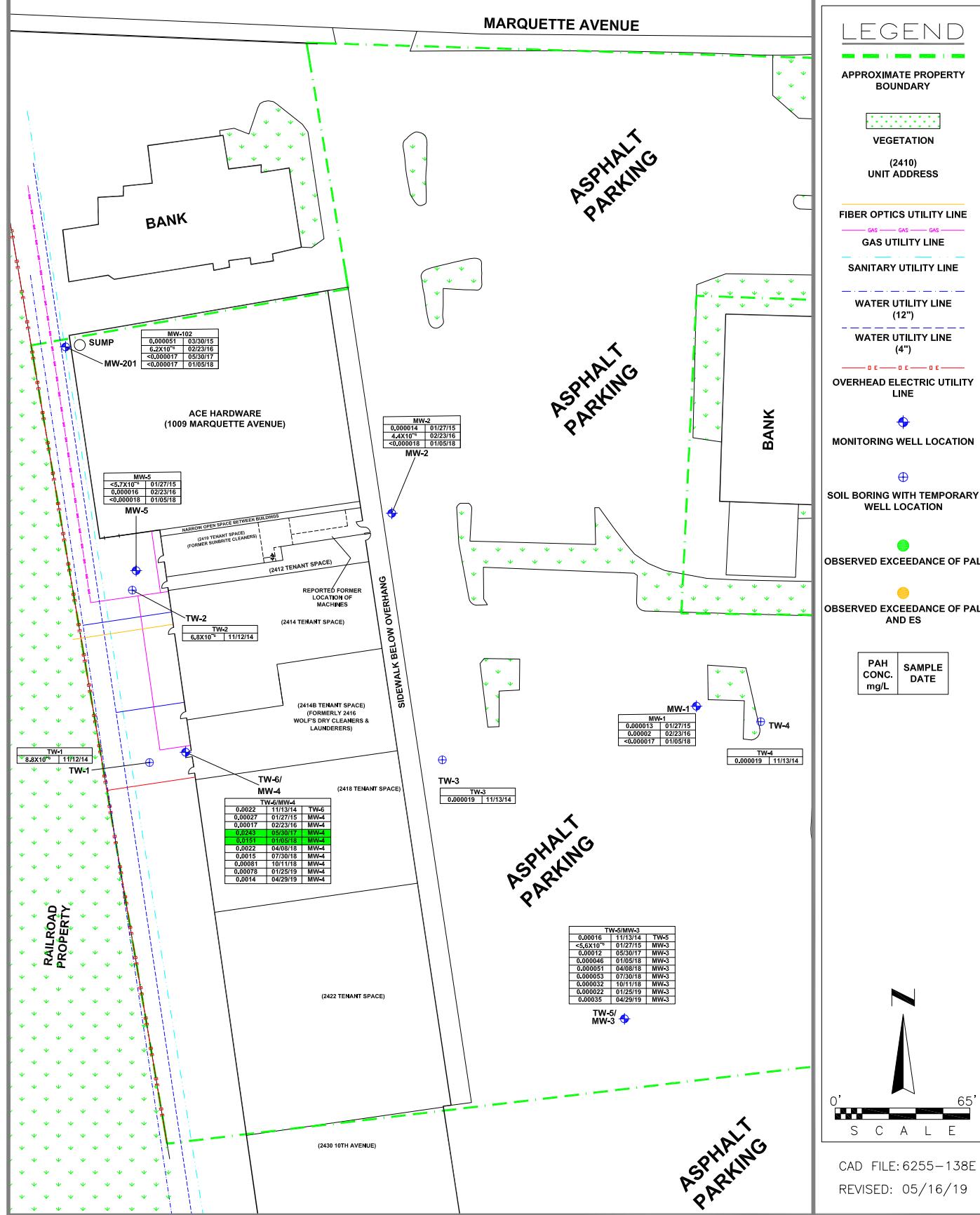


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DAM  
ENVIRONMENTAL

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

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

MARQUETTE AVENUE

LEGEND

APPROXIMATE PROPERTY BOUNDARY



VEGETATION  
(2410) UNIT ADDRESS

FIBER OPTICS UTILITY LINE

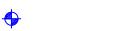
GAS UTILITY LINE

SANITARY UTILITY LINE

WATER UTILITY LINE (12")

WATER UTILITY LINE (4")

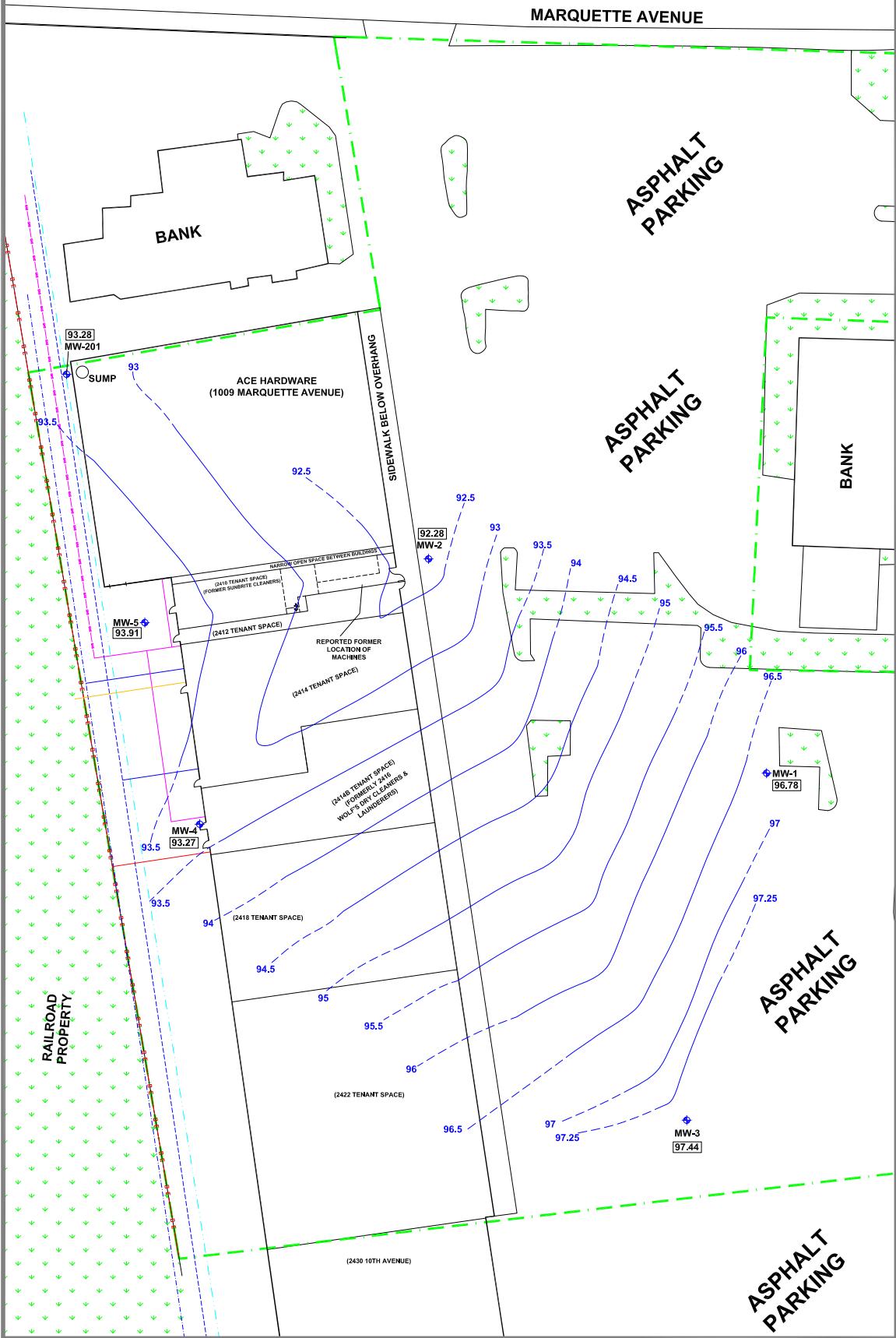
OVERHEAD ELECTRIC UTILITY LINE



MONITORING WELL LOCATION  
96.78 GROUNDWATER ELEVATION

POTENIOMETRIC SURFACE

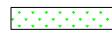
INFERRED POTENIOMETRIC SURFACE



MARQUETTE AVENUE

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")

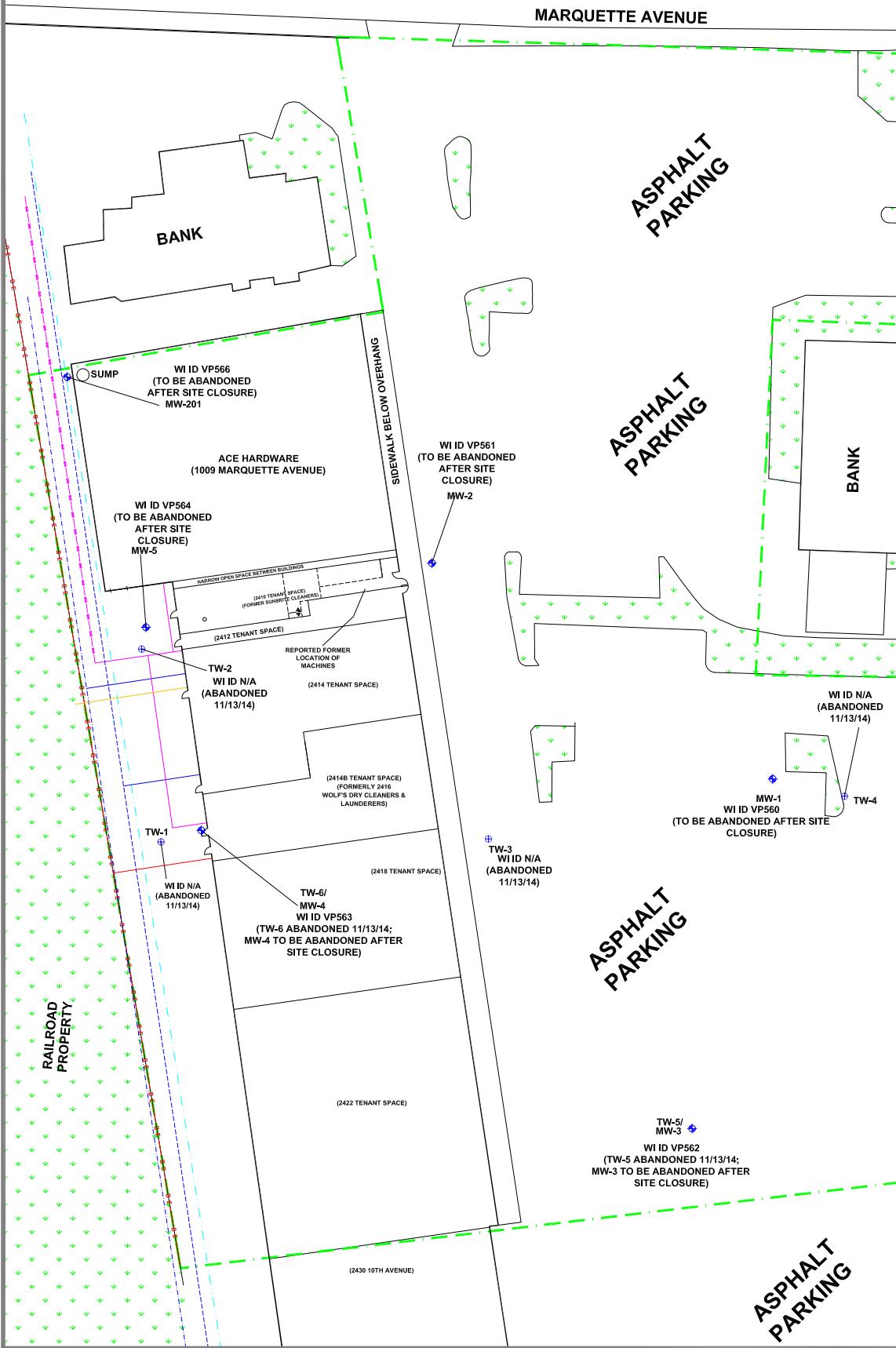
OVERHEAD ELECTRIC UTILITY LINE



MONITORING WELL LOCATION



SOIL BORING WITH TEMPORARY WELL LOCATION



0' 65'  
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CAD FILE: 6255-126  
REVISED: 09/19/17

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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 REPORT  
(SECOND QUARTER 2019)**

May 03, 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.: 40186688

Dear Chris Cailles:

Enclosed are the analytical results for sample(s) received by the laboratory on April 30, 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@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Jenny Rovzar, DAI



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

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### 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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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40186688

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40186688001	MW-3	Water	04/29/19 10:00	04/30/19 09:10
40186688002	MW-4	Water	04/29/19 13:40	04/30/19 09:10
40186688003	MW-5	Water	04/29/19 12:00	04/30/19 09:10

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## SAMPLE ANALYTE COUNT

Project: 6255 SUNRISE SHOPPING CENTER  
 Pace Project No.: 40186688

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40186688001	MW-3	EPA 8270 by HVI	TPO	20
40186688002	MW-4	EPA 8270 by HVI	TPO	20
40186688003	MW-5	EPA 8260	LAP	64

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

Sample: MW-3	Lab ID: 40186688001	Collected: 04/29/19 10:00	Received: 04/30/19 09:10	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by HVI</b>									
			Analytical Method: EPA 8270 by HVI	Preparation Method: EPA 3510					
Acenaphthene	1.5	ug/L	0.028	0.0057	1	05/01/19 08:14	05/01/19 18:47	83-32-9	
Acenaphthylene	2.7	ug/L	0.023	0.0047	1	05/01/19 08:14	05/01/19 18:47	208-96-8	
Anthracene	8.9	ug/L	0.049	0.0098	1	05/01/19 08:14	05/01/19 18:47	120-12-7	
Benzo(a)anthracene	110	ug/L	0.71	0.14	20	05/01/19 08:14	05/01/19 19:06	56-55-3	
Benzo(a)pyrene	115	ug/L	0.98	0.20	20	05/01/19 08:14	05/01/19 19:06	50-32-8	
Benzo(b)fluoranthene	209	ug/L	0.54	0.11	20	05/01/19 08:14	05/01/19 19:06	205-99-2	
Benzo(g,h,i)perylene	132	ug/L	0.63	0.13	20	05/01/19 08:14	05/01/19 19:06	191-24-2	
Benzo(k)fluoranthene	64.3	ug/L	0.71	0.14	20	05/01/19 08:14	05/01/19 19:06	207-08-9	
Chrysene	130	ug/L	1.2	0.24	20	05/01/19 08:14	05/01/19 19:06	218-01-9	
Dibenz(a,h)anthracene	25.8	ug/L	0.94	0.19	20	05/01/19 08:14	05/01/19 19:06	53-70-3	
Fluoranthene	248	ug/L	1.0	0.20	20	05/01/19 08:14	05/01/19 19:06	206-44-0	
Fluorene	2.8	ug/L	0.037	0.0074	1	05/01/19 08:14	05/01/19 18:47	86-73-7	
Indeno(1,2,3-cd)pyrene	108	ug/L	1.6	0.33	20	05/01/19 08:14	05/01/19 19:06	193-39-5	
1-Methylnaphthalene	0.30	ug/L	0.028	0.0055	1	05/01/19 08:14	05/01/19 18:47	90-12-0	
2-Methylnaphthalene	0.25	ug/L	0.023	0.0046	1	05/01/19 08:14	05/01/19 18:47	91-57-6	
Naphthalene	0.35	ug/L	0.086	0.017	1	05/01/19 08:14	05/01/19 18:47	91-20-3	
Phenanthrene	66.0	ug/L	1.3	0.26	20	05/01/19 08:14	05/01/19 19:06	85-01-8	
Pyrene	210	ug/L	0.72	0.14	20	05/01/19 08:14	05/01/19 19:06	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	39	%	30-85		1	05/01/19 08:14	05/01/19 18:47	321-60-8	
Terphenyl-d14 (S)	34	%	10-120		1	05/01/19 08:14	05/01/19 18:47	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

Sample: MW-4      Lab ID: 40186688002      Collected: 04/29/19 13:40      Received: 04/30/19 09:10      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270 MSSV PAH by HVI</b>									
			Analytical Method: EPA 8270 by HVI			Preparation Method: EPA 3510			
Acenaphthene	<b>3.3</b>	ug/L	0.027	0.0054	1	05/01/19 08:14	05/01/19 17:52	83-32-9	
Acenaphthylene	<b>0.59</b>	ug/L	0.022	0.0044	1	05/01/19 08:14	05/01/19 17:52	208-96-8	
Anthracene	<b>0.33</b>	ug/L	0.047	0.0093	1	05/01/19 08:14	05/01/19 17:52	120-12-7	
Benzo(a)anthracene	<b>0.061</b>	ug/L	0.034	0.0067	1	05/01/19 08:14	05/01/19 17:52	56-55-3	
Benzo(a)pyrene	<b>0.041J</b>	ug/L	0.047	0.0094	1	05/01/19 08:14	05/01/19 17:52	50-32-8	
Benzo(b)fluoranthene	<b>0.093</b>	ug/L	0.026	0.0051	1	05/01/19 08:14	05/01/19 17:52	205-99-2	B
Benzo(g,h,i)perylene	<b>0.045</b>	ug/L	0.030	0.0061	1	05/01/19 08:14	05/01/19 17:52	191-24-2	
Benzo(k)fluoranthene	<b>0.050</b>	ug/L	0.034	0.0067	1	05/01/19 08:14	05/01/19 17:52	207-08-9	B
Chrysene	<b>0.17</b>	ug/L	0.058	0.012	1	05/01/19 08:14	05/01/19 17:52	218-01-9	
Dibenz(a,h)anthracene	<b>0.0091J</b>	ug/L	0.045	0.0089	1	05/01/19 08:14	05/01/19 17:52	53-70-3	
Fluoranthene	<b>0.40</b>	ug/L	0.048	0.0095	1	05/01/19 08:14	05/01/19 17:52	206-44-0	
Fluorene	<b>4.6</b>	ug/L	0.036	0.0071	1	05/01/19 08:14	05/01/19 17:52	86-73-7	
Indeno(1,2,3-cd)pyrene	<b>0.040J</b>	ug/L	0.079	0.016	1	05/01/19 08:14	05/01/19 17:52	193-39-5	
1-Methylnaphthalene	<b>15.1</b>	ug/L	0.53	0.11	20	05/01/19 08:14	05/01/19 18:10	90-12-0	
2-Methylnaphthalene	<b>0.26</b>	ug/L	0.022	0.0044	1	05/01/19 08:14	05/01/19 17:52	91-57-6	
Naphthalene	<b>1.4</b>	ug/L	0.082	0.016	1	05/01/19 08:14	05/01/19 17:52	91-20-3	
Phenanthrene	<b>3.7</b>	ug/L	0.062	0.012	1	05/01/19 08:14	05/01/19 17:52	85-01-8	
Pyrene	<b>1.4</b>	ug/L	0.034	0.0068	1	05/01/19 08:14	05/01/19 17:52	129-00-0	
<b>Surrogates</b>									
2-Fluorobiphenyl (S)	42	%	30-85		1	05/01/19 08:14	05/01/19 17:52	321-60-8	
Terphenyl-d14 (S)	37	%	10-120		1	05/01/19 08:14	05/01/19 17:52	1718-51-0	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

Sample: MW-5	Lab ID: 40186688003	Collected: 04/29/19 12:00	Received: 04/30/19 09:10	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	1.0	0.25	1		05/02/19 11:30	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		05/02/19 11:30	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		05/02/19 11:30	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		05/02/19 11:30	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		05/02/19 11:30	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		05/02/19 11:30	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		05/02/19 11:30	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		05/02/19 11:30	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		05/02/19 11:30	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		05/02/19 11:30	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		05/02/19 11:30	108-90-7	
Chloroethane	3.6J	ug/L	5.0	1.3	1		05/02/19 11:30	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		05/02/19 11:30	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		05/02/19 11:30	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		05/02/19 11:30	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		05/02/19 11:30	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		05/02/19 11:30	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		05/02/19 11:30	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		05/02/19 11:30	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		05/02/19 11:30	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		05/02/19 11:30	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		05/02/19 11:30	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		05/02/19 11:30	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		05/02/19 11:30	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		05/02/19 11:30	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		05/02/19 11:30	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		05/02/19 11:30	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		05/02/19 11:30	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		05/02/19 11:30	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		05/02/19 11:30	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		05/02/19 11:30	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		05/02/19 11:30	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		05/02/19 11:30	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		05/02/19 11:30	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		05/02/19 11:30	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		05/02/19 11:30	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		05/02/19 11:30	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		05/02/19 11:30	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		05/02/19 11:30	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		05/02/19 11:30	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		05/02/19 11:30	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		05/02/19 11:30	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		05/02/19 11:30	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		05/02/19 11:30	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		05/02/19 11:30	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		05/02/19 11:30	630-20-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

**Sample: MW-5**      **Lab ID: 40186688003**      Collected: 04/29/19 12:00      Received: 04/30/19 09:10      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		05/02/19 11:30	79-34-5	
Tetrachloroethene	11.4	ug/L	1.1	0.33	1		05/02/19 11:30	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		05/02/19 11:30	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		05/02/19 11:30	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		05/02/19 11:30	120-82-1	
1,1,1-Trichloroethane	0.41J	ug/L	1.0	0.24	1		05/02/19 11:30	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		05/02/19 11:30	79-00-5	
Trichloroethene	0.71J	ug/L	1.0	0.26	1		05/02/19 11:30	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		05/02/19 11:30	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		05/02/19 11:30	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		05/02/19 11:30	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		05/02/19 11:30	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		05/02/19 11:30	75-01-4	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		05/02/19 11:30	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		05/02/19 11:30	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		1		05/02/19 11:30	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		05/02/19 11:30	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		05/02/19 11:30	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40186688

QC Batch:	320088	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	40186688003		

METHOD BLANK: 1859704 Matrix: Water

Associated Lab Samples: 40186688003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	05/02/19 06:42	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	05/02/19 06:42	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	05/02/19 06:42	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	05/02/19 06:42	
1,1-Dichloroethane	ug/L	<0.27	1.0	05/02/19 06:42	
1,1-Dichloroethene	ug/L	<0.24	1.0	05/02/19 06:42	
1,1-Dichloropropene	ug/L	<0.54	1.8	05/02/19 06:42	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	05/02/19 06:42	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	05/02/19 06:42	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	05/02/19 06:42	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	05/02/19 06:42	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	05/02/19 06:42	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	05/02/19 06:42	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	05/02/19 06:42	
1,2-Dichloroethane	ug/L	<0.28	1.0	05/02/19 06:42	
1,2-Dichloropropane	ug/L	<0.28	1.0	05/02/19 06:42	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	05/02/19 06:42	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	05/02/19 06:42	
1,3-Dichloropropane	ug/L	<0.83	2.8	05/02/19 06:42	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	05/02/19 06:42	
2,2-Dichloropropane	ug/L	<2.3	7.6	05/02/19 06:42	
2-Chlorotoluene	ug/L	<0.93	5.0	05/02/19 06:42	
4-Chlorotoluene	ug/L	<0.76	2.5	05/02/19 06:42	
Benzene	ug/L	<0.25	1.0	05/02/19 06:42	
Bromobenzene	ug/L	<0.24	1.0	05/02/19 06:42	
Bromochloromethane	ug/L	<0.36	5.0	05/02/19 06:42	
Bromodichloromethane	ug/L	<0.36	1.2	05/02/19 06:42	
Bromoform	ug/L	<4.0	13.2	05/02/19 06:42	
Bromomethane	ug/L	<0.97	5.0	05/02/19 06:42	
Carbon tetrachloride	ug/L	<0.17	1.0	05/02/19 06:42	
Chlorobenzene	ug/L	<0.71	2.4	05/02/19 06:42	
Chloroethane	ug/L	<1.3	5.0	05/02/19 06:42	
Chloroform	ug/L	<1.3	5.0	05/02/19 06:42	
Chloromethane	ug/L	<2.2	7.3	05/02/19 06:42	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	05/02/19 06:42	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	05/02/19 06:42	
Dibromochloromethane	ug/L	<2.6	8.7	05/02/19 06:42	
Dibromomethane	ug/L	<0.94	3.1	05/02/19 06:42	
Dichlorodifluoromethane	ug/L	<0.50	5.0	05/02/19 06:42	
Diisopropyl ether	ug/L	<1.9	6.3	05/02/19 06:42	
Ethylbenzene	ug/L	<0.22	1.0	05/02/19 06:42	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40186688

METHOD BLANK: 1859704

Matrix: Water

Associated Lab Samples: 40186688003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	05/02/19 06:42	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	05/02/19 06:42	
m&p-Xylene	ug/L	<0.47	2.0	05/02/19 06:42	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	05/02/19 06:42	
Methylene Chloride	ug/L	<0.58	5.0	05/02/19 06:42	
n-Butylbenzene	ug/L	<0.71	2.4	05/02/19 06:42	
n-Propylbenzene	ug/L	<0.81	5.0	05/02/19 06:42	
Naphthalene	ug/L	<1.2	5.0	05/02/19 06:42	
o-Xylene	ug/L	<0.26	1.0	05/02/19 06:42	
p-Isopropyltoluene	ug/L	<0.80	2.7	05/02/19 06:42	
sec-Butylbenzene	ug/L	<0.85	5.0	05/02/19 06:42	
Styrene	ug/L	<0.47	1.6	05/02/19 06:42	
tert-Butylbenzene	ug/L	<0.30	1.0	05/02/19 06:42	
Tetrachloroethene	ug/L	<0.33	1.1	05/02/19 06:42	
Toluene	ug/L	<0.17	5.0	05/02/19 06:42	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	05/02/19 06:42	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	05/02/19 06:42	
Trichloroethene	ug/L	<0.26	1.0	05/02/19 06:42	
Trichlorofluoromethane	ug/L	<0.21	1.0	05/02/19 06:42	
Vinyl chloride	ug/L	<0.17	1.0	05/02/19 06:42	
4-Bromofluorobenzene (S)	%	91	70-130	05/02/19 06:42	
Dibromofluoromethane (S)	%	103	70-130	05/02/19 06:42	
Toluene-d8 (S)	%	99	70-130	05/02/19 06:42	

LABORATORY CONTROL SAMPLE: 1859705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.6	111	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.9	106	70-130	
1,1,2-Trichloroethane	ug/L	50	53.2	106	70-130	
1,1-Dichloroethane	ug/L	50	51.6	103	73-150	
1,1-Dichloroethene	ug/L	50	60.5	121	73-138	
1,2,4-Trichlorobenzene	ug/L	50	51.3	103	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.3	101	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	55.3	111	70-130	
1,2-Dichlorobenzene	ug/L	50	53.6	107	70-130	
1,2-Dichloroethane	ug/L	50	51.9	104	75-140	
1,2-Dichloropropane	ug/L	50	53.1	106	73-135	
1,3-Dichlorobenzene	ug/L	50	55.1	110	70-130	
1,4-Dichlorobenzene	ug/L	50	53.1	106	70-130	
Benzene	ug/L	50	53.0	106	70-130	
Bromodichloromethane	ug/L	50	52.9	106	70-130	
Bromoform	ug/L	50	54.0	108	68-129	
Bromomethane	ug/L	50	32.1	64	18-159	

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40186688

**LABORATORY CONTROL SAMPLE: 1859705**

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	56.9	114	70-130	
Chlorobenzene	ug/L	50	55.1	110	70-130	
Chloroethane	ug/L	50	55.9	112	53-147	
Chloroform	ug/L	50	53.2	106	74-136	
Chloromethane	ug/L	50	29.0	58	29-115	
cis-1,2-Dichloroethene	ug/L	50	51.1	102	70-130	
cis-1,3-Dichloropropene	ug/L	50	52.6	105	70-130	
Dibromochloromethane	ug/L	50	53.9	108	70-130	
Dichlorodifluoromethane	ug/L	50	32.4	65	10-130	
Ethylbenzene	ug/L	50	57.1	114	80-124	
Isopropylbenzene (Cumene)	ug/L	50	58.2	116	70-130	
m&p-Xylene	ug/L	100	116	116	70-130	
Methyl-tert-butyl ether	ug/L	50	63.9	128	54-137	
Methylene Chloride	ug/L	50	58.3	117	73-138	
o-Xylene	ug/L	50	57.7	115	70-130	
Styrene	ug/L	50	57.5	115	70-130	
Tetrachloroethene	ug/L	50	53.8	108	70-130	
Toluene	ug/L	50	54.7	109	80-126	
trans-1,2-Dichloroethene	ug/L	50	59.9	120	73-145	
trans-1,3-Dichloropropene	ug/L	50	49.2	98	70-130	
Trichloroethene	ug/L	50	55.1	110	70-130	
Trichlorofluoromethane	ug/L	50	61.8	124	76-147	
Vinyl chloride	ug/L	50	45.2	90	51-120	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			99	70-130	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1859854      1859855**

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD Result	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40186679004 Result	Spike Conc.	Spike Conc.	MS Result								
1,1,1-Trichloroethane	ug/L	<0.00024 mg/L	50	50	54.3	54.6	109	109	109	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.00028 mg/L	50	50	53.3	54.0	107	108	108	70-130	1	20	
1,1,2-Trichloroethane	ug/L	<0.00055 mg/L	50	50	55.8	53.8	112	108	108	70-137	4	20	
1,1-Dichloroethane	ug/L	<0.00027 mg/L	50	50	51.3	51.3	103	103	103	73-153	0	20	
1,1-Dichloroethene	ug/L	<0.00024 mg/L	50	50	53.1	59.8	106	120	120	73-138	12	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	54.0	54.6	108	109	109	70-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	53.0	52.4	106	105	105	58-129	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	56.2	56.1	112	112	112	70-130	0	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	55.0	56.0	110	112	112	70-130	2	20	

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40186688

Parameter	Units	40186679004		MS Spike		MSD Spike		MS Result		MSD Result		MS % Rec	MSD % Rec	% Rec Limits	Max	
		Result	Conc.	Conc.	Result	Conc.	Result	Result	% Rec	Result	% Rec				RPD	RPD
1,2-Dichloroethane	ug/L	<0.00028 mg/L		50	50	53.3		52.4		107		105		75-140	2	20
1,2-Dichloropropane	ug/L	<0.00028 mg/L		50	50	53.1		54.2		106		108		71-138	2	20
1,3-Dichlorobenzene	ug/L	<0.63 mg/L		50	50	56.0		56.2		112		112		70-130	0	20
1,4-Dichlorobenzene	ug/L	<0.94 mg/L		50	50	55.1		55.7		110		111		70-130	1	20
Benzene	ug/L	<0.00025 mg/L		50	50	52.7		52.7		105		105		70-130	0	20
Bromodichloromethane	ug/L	<0.00036 mg/L		50	50	54.1		54.2		108		108		70-130	0	20
Bromoform	ug/L	<0.0040 mg/L		50	50	52.6		54.1		105		108		68-129	3	20
Bromomethane	ug/L	<0.00097 mg/L		50	50	27.1		44.5		54		89		15-170	49	20 R1
Carbon tetrachloride	ug/L	<0.00017 mg/L		50	50	55.0		55.4		110		111		70-130	1	20
Chlorobenzene	ug/L	<0.00071 mg/L		50	50	56.1		55.7		112		111		70-130	1	20
Chloroethane	ug/L	<0.0013 mg/L		50	50	52.4		57.2		105		114		51-148	9	20
Chloroform	ug/L	<0.0013 mg/L		50	50	53.3		53.0		107		106		74-136	1	20
Chloromethane	ug/L	<0.0022 mg/L		50	50	23.0		27.4		46		55		23-115	17	20
cis-1,2-Dichloroethene	ug/L	<0.00027 mg/L		50	50	51.5		51.6		103		103		70-131	0	20
cis-1,3-Dichloropropene	ug/L	<0.0036 mg/L		50	50	53.2		53.8		106		108		70-130	1	20
Dibromochloromethane	ug/L	<0.0026 mg/L		50	50	54.3		55.0		109		110		70-130	1	20
Dichlorodifluoromethane	ug/L	<0.50 mg/L		50	50	30.1		30.3		60		61		10-132	1	20
Ethylbenzene	ug/L	<0.00022 mg/L		50	50	57.3		57.0		115		114		80-125	0	20
Isopropylbenzene (Cumene)	ug/L	<0.39 mg/L		50	50	59.0		58.5		118		117		70-130	1	20
m&p-Xylene	ug/L	<0.47 mg/L		100	100	115		115		115		115		70-130	0	20
Methyl-tert-butyl ether	ug/L	<0.0012 mg/L		50	50	48.9		63.6		98		127		51-145	26	20 R1
Methylene Chloride	ug/L	<0.00058 mg/L		50	50	52.5		58.8		105		118		73-140	11	20
o-Xylene	ug/L	<0.26 mg/L		50	50	58.8		58.0		118		116		70-130	1	20
Styrene	ug/L	<0.00047 mg/L		50	50	58.8		58.8		118		118		70-130	0	20
Tetrachloroethene	ug/L	<0.00033 mg/L		50	50	54.2		53.5		108		107		70-130	1	20
Toluene	ug/L	<0.00017 mg/L		50	50	54.6		55.2		109		110		80-131	1	20
trans-1,2-Dichloroethene	ug/L	<0.0011 mg/L		50	50	53.0		58.8		106		118		73-148	10	20
trans-1,3-Dichloropropene	ug/L	<0.0044 mg/L		50	50	49.6		50.3		99		101		70-130	1	20
Trichloroethene	ug/L	<0.00026 mg/L		50	50	54.3		54.7		109		109		70-130	1	20

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1859854		1859855								
Parameter	Units	40186679004	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
Trichlorofluoromethane	ug/L	<0.21	50	50	59.7	60.0	119	120	74-147	0	20	
Vinyl chloride	ug/L	<0.00017	50	50	41.7	44.6	83	89	41-129	7	20	
4-Bromofluorobenzene (S)	%						95	96	70-130			
Dibromofluoromethane (S)	%						99	100	70-130			
Toluene-d8 (S)	%						100	98	70-130			

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40186688

QC Batch:	319974	Analysis Method:	EPA 8270 by HVI
QC Batch Method:	EPA 3510	Analysis Description:	8270 Water PAH by HVI
Associated Lab Samples:	40186688001, 40186688002		

METHOD BLANK: 1859027                                  Matrix: Water

Associated Lab Samples: 40186688001, 40186688002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	05/01/19 10:54	
2-Methylnaphthalene	ug/L	<0.0049	0.024	05/01/19 10:54	
Acenaphthene	ug/L	<0.0061	0.030	05/01/19 10:54	
Acenaphthylene	ug/L	<0.0050	0.025	05/01/19 10:54	
Anthracene	ug/L	<0.010	0.052	05/01/19 10:54	
Benzo(a)anthracene	ug/L	<0.0076	0.038	05/01/19 10:54	
Benzo(a)pyrene	ug/L	<0.011	0.053	05/01/19 10:54	
Benzo(b)fluoranthene	ug/L	0.0096J	0.029	05/01/19 10:54	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	05/01/19 10:54	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	05/01/19 10:54	
Chrysene	ug/L	<0.013	0.065	05/01/19 10:54	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	05/01/19 10:54	
Fluoranthene	ug/L	<0.011	0.053	05/01/19 10:54	
Fluorene	ug/L	<0.0080	0.040	05/01/19 10:54	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	05/01/19 10:54	
Naphthalene	ug/L	<0.018	0.092	05/01/19 10:54	
Phenanthrene	ug/L	<0.014	0.069	05/01/19 10:54	
Pyrene	ug/L	<0.0076	0.038	05/01/19 10:54	
2-Fluorobiphenyl (S)	%	68	30-85	05/01/19 10:54	
Terphenyl-d14 (S)	%	107	10-120	05/01/19 10:54	

LABORATORY CONTROL SAMPLE: 1859028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.3	63	39-88	
2-Methylnaphthalene	ug/L	2	1.3	65	40-93	
Acenaphthene	ug/L	2	1.4	70	43-102	
Acenaphthylene	ug/L	2	1.4	69	42-103	
Anthracene	ug/L	2	1.7	86	52-105	
Benzo(a)anthracene	ug/L	2	1.6	81	39-120	
Benzo(a)pyrene	ug/L	2	1.7	86	57-117	
Benzo(b)fluoranthene	ug/L	2	1.7	84	54-117	
Benzo(g,h,i)perylene	ug/L	2	1.1	53	32-82	
Benzo(k)fluoranthene	ug/L	2	1.8	90	56-123	
Chrysene	ug/L	2	2.3	114	63-122	
Dibenz(a,h)anthracene	ug/L	2	1.0	51	23-76	
Fluoranthene	ug/L	2	1.7	85	52-112	
Fluorene	ug/L	2	1.5	74	46-116	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.6	82	49-110	
Naphthalene	ug/L	2	1.2	62	37-84	

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## QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

LABORATORY CONTROL SAMPLE: 1859028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.4	71	50-104	
Pyrene	ug/L	2	2.0	98	57-123	
2-Fluorobiphenyl (S)	%			64	30-85	
Terphenyl-d14 (S)	%			106	10-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1859029 1859030

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		50223082001	Spiked Conc.	Spike Conc.	MS Result							
1-Methylnaphthalene	ug/L	<0.0055	1.9	1.9	1.1	1.2	60	63	35-90	1	27	
2-Methylnaphthalene	ug/L	<0.0045	1.9	1.9	1.1	1.2	59	63	40-93	3	26	
Acenaphthene	ug/L	<0.0056	1.9	1.9	1.2	1.2	62	66	30-106	3	30	
Acenaphthylene	ug/L	<0.0046	1.9	1.9	1.1	1.1	59	62	37-103	3	27	
Anthracene	ug/L	<0.0097	1.9	1.9	1.3	1.4	70	73	27-107	2	34	
Benz(a)anthracene	ug/L	<0.0070	1.9	1.9	0.95	0.89	50	48	10-120	6	50	
Benz(a)pyrene	ug/L	<0.0098	1.9	1.9	1.1	1.1	56	60	10-117	4	50	
Benz(b)fluoranthene	ug/L	0.0059J	1.9	1.9	1.2	1.2	63	63	10-121	3	49	
Benz(g,h,i)perylene	ug/L	<0.0063	1.9	1.9	0.49	0.54	26	29	10-82	10	50	
Benz(k)fluoranthene	ug/L	<0.0070	1.9	1.9	1.1	1.1	58	58	10-123	3	50	
Chrysene	ug/L	<0.012	1.9	1.9	1.7	1.8	89	95	17-122	3	36	
Dibenz(a,h)anthracene	ug/L	<0.0093	1.9	1.9	0.46	0.53	24	28	10-76	14	50	
Fluoranthene	ug/L	<0.0099	1.9	1.9	1.3	1.3	66	69	27-112	2	42	
Fluorene	ug/L	<0.0074	1.9	1.9	1.2	1.3	64	69	38-116	4	29	
Indeno(1,2,3-cd)pyrene	ug/L	<0.016	1.9	1.9	0.85	0.90	45	49	10-110	6	50	
Naphthalene	ug/L	<0.017	1.9	1.9	1.2	1.2	60	63	35-85	1	28	
Phenanthrene	ug/L	<0.013	1.9	1.9	1.2	1.1	61	62	31-106	1	42	
Pyrene	ug/L	<0.0071	1.9	1.9	1.5	1.5	80	83	30-123	1	31	
2-Fluorobiphenyl (S)	%						57	62	30-85			
Terphenyl-d14 (S)	%						82	85	10-120			

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

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## QUALIFIERS

Project: 6255 SUNRISE SHOPPING CENTER  
Pace Project No.: 40186688

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### 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.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6255 SUNRISE SHOPPING CENTER  
 Pace Project No.: 40186688

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40186688001	MW-3	EPA 3510	319974	EPA 8270 by HVI	320036
40186688002	MW-4	EPA 3510	319974	EPA 8270 by HVI	320036
40186688003	MW-5	EPA 8260	320088		

## REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)	
Company Name:	DAI
Branch/Location:	LAKE FOREST
Project Contact:	CHRIS CAIRES
Phone:	847-573-8900
Project Number:	6255
Project Name:	SUNRISE SHOPPING CENTER
Project State:	W1
Sampled By (Print):	JAN TRAEN
Sampled By (Sign):	
PO #:	
	Regulatory Program:



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

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## **CHAIN OF CUSTODY**

<b>*Preservation Codes</b>							
A=None	B=HCL	C=H <sub>2</sub> SO <sub>4</sub>	D=HNO <sub>3</sub>	E=DI Water	F=Methanol	G=NaOH	H=Sodium Bisulfate Solution
I=Sodium Thiosulfate	J=Other						

Y / N						
Pick Letter	B	A				
Analyses Requested	VOCs	PAHs				
TIME	1000	6W	X	XX		
TON	340		X	X		
MATRIX	200					

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:	Relinquished By: <i>DAN TATE</i>	Date/Time: <i>4/29/19</i>	Received By: <i>Mary Jann</i>	Date/Time: <i>4/29/19 13:10</i>	PACE Project No. <i>4/29/2019 40186688</i>
Transmit Prelim Rush Results by (complete what you want):	Relinquished By: <i>Mary Jann</i>	Date/Time: <i>4/29/19 16:00</i>	Received By: <i>CS LOGISTICS</i>	Date/Time: <i>4/30/2019 9:00</i>	Receipt Temp = <i>40F</i> °C
Email #1:	Relinquished By: <i>CS LOGISTICS</i>	Date/Time: <i>4/30/2019 9:10</i>	Received By: <i>Jose Vargas</i>	Date/Time: <i>4/30/2019 9:10</i>	Sample Receipt pH OK / Adjusted
Email #2:	Reinquished By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal
Telephone:	Reinquished By:	Date/Time:	Received By:	Date/Time:	Present / Not Present
Fax:	Reinquished By:	Date/Time:	Received By:	Date/Time:	Intact / Not Intact
Samples on HOLD are subject to special pricing and release of liability	Reinquished By:	Date/Time:	Received By:	Date/Time:	

# Sample Preservation Receipt Form

Client Name: DAJ

Project # Y0186688

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:

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			1	2																								2.5 / 5 / 10
002			1	2																								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
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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# : 40186688****Client Name:** DAICourier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco
 Client  Pace  Other: \_\_\_\_\_

Tracking #:

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  noCustody Seal on Samples Present:  yes  no Seals intact:  yes  noPacking Material:  Bubble Wrap  Bubble Bags  None  OtherThermometer Used SR - N/A Type of Ice: Wet Blue Dry None  Samples on ice, cooling process has begunCooler Temperature Uncorr: 20.1 /Corr: \_\_\_\_\_Temp Blank Present:  yes  noBiological 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: 4/30/2019Initials: SV

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out: <u>4/30/2019 SV</u>	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>NO Mail or Invoice Info 4/30/2019 SV</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: <u>W</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: \_\_\_\_\_

LMWDate: 4/30/19