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**QUARTERLY GROUNDWATER SAMPLING REPORT
(JULY 2018 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**

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1.0 INTRODUCTION

As discussed in the December 28, 2017, *Site Investigation Work Plan* (SIWP), quarterly groundwater sampling is being conducted by DAI Environmental, Inc., (DAI) at the Sunrise Shopping Center addressed as 2410-2424 10th Avenue and 1009 Marquette Avenue in South Milwaukee, WI (Site). Figure B.1.b.1 in Attachment B provides an aerial view of the Site and surrounding property. The groundwater sampling is being performed to obtain the additional data needed to determine the most appropriate method for addressing Polynuclear Aromatic Hydrocarbon (PAH) groundwater contamination and to monitor for changes in Tetrachloroethene (Perc) groundwater concentration. A brief discussion of the quarterly sampling protocol and results are provided below.

2.0 QUARTERLY GROUNDWATER SAMPLING PROGRAM

As described in the December 2017 SIWP, a complete round of groundwater sampling was performed on January 5, 2018. Groundwater samples were collected from each of the six (6) permanent monitoring wells (MW-1 to MW-5 and MW-201) installed at the Sunrise Shopping Center Site. The groundwater samples were submitted to an independent commercial laboratory for analysis of PAHs. Figure B.3.d provides the locations of the monitoring wells. A sample was also collected from monitoring well MW-5 for analysis of Volatile Organic Compounds (VOCs), primarily for the purpose of evaluating the Perc groundwater concentration. Results of the January 2018 groundwater sampling were provided to Wisconsin Department of Natural Resources (WDNR) in the *Site Investigation Report Amendment Addendum* dated February 28, 2018.

2.1 Quarterly Sampling Protocol

Based upon the January 2018 sampling results, quarterly groundwater sampling throughout 2018 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.

No additional PAH sampling is to be performed from monitoring wells MW-1, MW-2, MW-5, or MW-201. January 2018 sampling results verified that no groundwater concentrations in any of the four (4) monitoring wells exceeds the Preventative Action Limits (PALs) listed in Table 1 of NR 140.

2.2 Groundwater Sampling Procedures and Chemical Analysis

Groundwater samples were collected for the third quarter 2018 (i.e., July-September 2018) on July 30, 2018. Consistent with sampling protocol followed during Site Investigation activities, the three (3) monitoring wells were purged prior to sample collected, 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 third quarter 2018 groundwater sampling event. The static water level elevations were collected from all monitoring wells on July 30, 2018. Table A.6 in Attachment A provides a historical summary of groundwater elevation information. The potentiometric surface map generated from the July 2018 data is included as Figure B.3.c.5 (see Attachment B).

Review of Table A.6 shows that the groundwater elevations observed in February and April 2018 were generally consistent, although some variation in static water elevations were noted in MW-1 through MW-4 in July 2018. (The static water elevations in monitoring wells MW-5 and MW-201 were consistent with previous quarterly measurements.) Variations in groundwater elevations in monitoring wells MW-1 through MW-4 are somewhat expected as these wells are located within areas of known subsurface disturbance where the change in static water elevation is more quickly influenced by a precipitation event. It is anticipated that additional averaged static water elevation data will indicate a stable groundwater flow direction. The groundwater flow direction along the southern half of the Site remains northwesterly and a north-northeasterly groundwater flow direction is indicated along the northern half of the Site (see Figure B.3.c.6) from the July 2018 data.

3.2 Groundwater Analytical Results

During the third quarter 2018, groundwater samples were collected for VOC analyses from MW-5, and for PAHs from MW-3 and MW-4. 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 PALs and Enforcement Standards listed in Table 1 of NR 140. A copy of the laboratory analytical report is 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. As a result of these Enforcement Standard exceedances, the area around MW-5 received chemical injection of RemOx® during the pilot-scale injection testing performed on July 19, 2018. The Perc concentration observed on July 30, 2018, (0.0086-mg/L) is a decrease from the April 2018 observed Perc concentration of 0.0203-mg/L. Further reduction is expected as the chemical injectate has additional time to spread in the subsurface. The groundwater Perc concentration at MW-5 will continue to be monitored, and additional chemical may be injected to further reduce concentrations if the concentrations do not fall below the Enforcement Standard. Figure B.3.b.1 provides a historical summary of Perc groundwater concentrations and the estimated extent of Perc groundwater contamination.

Polynuclear Aromatic Hydrocarbons

Table A.1.B summarizes the results of the PAH analyses for MW-3 and MW-4. 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. However, the fluctuations in PAH concentrations do not indicate a discernable trend. The most recent sampling results collected in July 2018 show Benzo(a)pyrene, Benzo(b)fluoranthene, and Chrysene groundwater concentrations in MW-3 at concentrations above the Enforcement Standards for the second consecutive sampling event. However, the July 2018 contaminant concentrations are less than those observed in April 2018.

The July 2018 sampling results from MW-4 (installed to the rear of the 2414B tenant space in the approximate location of a former heating oil UST) indicate several PAH constituents at concentrations above the Limit of Detection (LOD), but no observed concentrations are above the PAL for any PAH constituents. Three (3) PAH concentrations were reported below the LOD, but where the LOD was above the PALs. These concentrations are not considered exceedances

per NR140.14(3)(a). The trend of declining contaminant concentration observed in MW-4 since May 30, 2017, continues. The pilot-study chemical injection activities performed within the area of MW-4 on July 19, 2018, are expected to help reduce the PAH contaminant mass in this area.

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. Quarterly sampling of PAH groundwater concentrations will continue until it can be established that all PAH groundwater concentrations remain safely below the Enforcement Standards. If the PAH concentrations increase in MW-4 and/or continue to exceed the Enforcement Standards in MW-3, then additional corrective actions for addressing PAHs in groundwater will be proposed.

4.0 SUMMARY AND SCHEDULE

- Perc has been observed in monitoring well MW-5 at concentrations exceeding the Enforcement Standards and increasing in magnitude each quarter since February 2016. On July 19, 2018 pilot-scale chemical injections were conducted within the area of MW-5. The July 30, 2018, Perc concentration measured in MW-5 is 0.0086-mg/L, which indicates a reduction from the 0.0203-mg/L Perc concentration observed in April 2018. While a trend of declining concentration cannot be determined at this time, the initial results do indicate that the chemical injection activities performed in July 2018 within the vicinity of MW-5 were successful and have helped reduce the Perc concentration in this area.
- The most recent round of groundwater samples indicate that the Benzo(a)pyrene, Benzo(b)fluoranthene, and Chrysene groundwater concentrations in MW-3 exceed the Enforcement Standards. However, the July 2018 observed concentrations are a decrease from the April 2018 results. The observed concentrations in MW-3 continue to fluctuate and are not yet indicative of any trend; therefore, the results of a fourth quarterly sampling event will be evaluated before proposing any further remedial actions at MW-3.
- The groundwater sampling results from MW-4 continue to indicate a decline in concentration following the pilot-scale chemical injection testing. No exceedances of the PALs for any PAH constituent were observed. The PAH concentrations in MW-4 will continue to be monitored as part of the fourth quarterly sampling event.
- The next groundwater sampling event is scheduled for October 2018.

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)	MW-5 (04/07/18)	MW-5 (07/30/18)		
Benzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00025	0.0005	0.005
Bromobenzene	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00024	NL	NL
Bromo-chloromethane	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00036	NL	NL
Bromo-dichloromethane	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.00036*	0.00006	0.0006
Bromoform	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.0005*	<0.004*	0.00044	0.0044
Bromomethane	<0.0024*	<0.0024*	<0.0024*	<0.0024*	<0.0024*	<0.0024*	<0.00097	0.001	0.01
n-Butylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00071	NL	NL
sec-Butylbenzene	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.00085	NL	NL
tert-Butylbenzene	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.0003	NL	NL
Carbon tetrachloride	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00017	0.0005	0.005
Chlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00071	NL	NL
Chloroethane	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.0013	0.08	0.4
Chloroform	<0.0025*	<0.0025*	<0.0025*	<0.0025*	<0.0025*	<0.0025*	<0.0013*	0.0006	0.006
Chloromethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0022	0.003	0.03
2-Chlorotoluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00093	NL	NL
4-Chlorotoluene	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00076	NL	NL
Dibromo-chloromethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0026	0.006	0.006
1,2-Dibromo-3-chloropropane	<0.0022*	<0.0022*	<0.0022*	<0.0022*	<0.0022*	<0.0022*	<0.0018*	0.00002	0.0002
1,2-Dibromoethane (EDB)	<0.00016*	<0.00018*	<0.00018*	<0.00018*	<0.00018*	<0.00018*	<0.00083*	0.000005	0.00005
Dibromomethane	<0.00043	<0.00043	<0.00043	<0.00043	<0.00043	<0.00043	<0.00094	NL	NL
1,2-Dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00071	0.06	0.6
1,3-Dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00063	0.12	0.6
1,4-Dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00094	0.015	0.075
Dichlorodifluoromethane	<0.0002	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.0005	0.2	1
1,1-Dichloroethane	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00027	0.085	0.85
1,2-Dichloroethane	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00028	0.0005	0.005
1,1-Dichloroethene	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00024	0.0007	0.007
cis-1,2-Dichloroethene	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00027	0.007	0.07
trans-1,2-Dichoroethene	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.0011	0.02	0.1
1,2-Dichloropropane	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00028	0.0005	0.005
1,3-Dichloropropane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00083	NL	NL
2,2-Dichloropropane	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.0023	NL	NL
1,1-Dichloropropene	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00054	NL	NL
1,3-Dichloropropene (c & t)	<0.00073*	<0.00073*	<0.00073*	<0.00073*	<0.00073*	<0.00073*	<0.008*	0.00004	0.0004
Diisopropyl ether	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0019	NL	NL
Ethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00022	0.14	0.7
Hexachloro-1,3-butadiene	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0012	NL	NL

**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)	MW-5 (04/07/18)	MW-5 (07/30/18)		
Isopropyl benzene	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00039	NL	NL
p-Isopropyltoluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0008	NL	NL
Methylene chloride	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00058*	0.0005	0.005
Methyl tertiary-butyl ether	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.0012	0.012	0.06
Naphthalene	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0012	0.01	0.1
n-Propylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00081	NL	NL
Styrene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00047	0.01	0.1
1,1,1,2-Tetrachloroethane	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00027	0.007	0.07
1,1,2,2-Tetrachloroethane	<0.00025*	<0.00025*	<0.00025*	<0.00025*	<0.00025*	<0.00025*	<0.00028*	0.00002	0.0002
Tetrachloroethene	0.0026	0.0026	0.0083	0.0124	0.0181	0.0203	0.0086	0.0005	0.005
Toluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00017	0.16	0.8
1,2,3-Trichlorobenzene	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.00063	NL	NL
1,2,4-Trichlorobenzene	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.00095	0.014	0.07
1,1,1-Trichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.00057	0.000897	0.00088	0.04	0.2
1,1,2-Trichloroethane	<0.00016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.00055*	0.0005	0.005
Trichloroethene	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00026	0.0005	0.005
Trichlorofluoromethane	<0.00017	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00021	0.7	3.5
1,2,3-Trichloropropane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00059	0.012	0.06
1,2,4-Trimethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00084	0.096	0.48
1,3,5-Trimethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00087		
Vinyl chloride	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00017	0.4	2
Xylenes (total)	<0.0015	<0.0015	<0.0015	<0.0015	<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; “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)	MW-3 (04/07/18)	MW-3 (07/30/18)		
Acenaphthene	0.00076	0.0000043 (J)	0.000026 (J)	0.0000077 (J)	0.000029	0.000014 (J)	NL	NL
Acenaphthylene	0.00013	0.0000036 (J)	0.000016 (J)	<0.0000045	0.000053	0.000023	NL	NL
Anthracene	0.00056	<0.0000023	0.00013	0.000031 (J)	0.00015	0.000073	0.6	3
Benzo(a)anthracene	0.00069	<0.0000031	0.00073	0.000069 (J)	0.001	0.00043	NL	NL
Benzo(a)pyrene	0.0006	0.000011 (J)	0.001	<0.0000096	0.0019	0.00068	0.00002	0.0002
Benzo(b)fluoranthene	0.00077	0.00002 (J)	0.002	0.000037	0.0039	0.0013	0.00002	0.0002
Benzo(g,h,i)perylene	0.0004	0.000016 (J)	0.0011	0.00018 (J)	0.0025	0.00082	NL	NL
Benzo(k)fluoranthene	0.00029	0.00001 (J)	0.00068	0.000014 (J)	0.0014	0.00041	NL	NL
Chrysene	0.00084	0.000028 (J)	0.0015	0.000047 (J)	0.003	0.00095	0.00002	0.0002
Dibenzo(a,h)anthracene	0.000091	<0.0000032	0.00022	<0.0000091	0.00034	0.00015	NL	NL
Fluoranthene	0.0024	0.000041 (J)	0.0031	0.00021	0.0052	0.0019	0.08	0.4
Fluorene	0.0011	0.0000035 (J)	0.000052	0.000022 (J)	0.000048	0.00004	0.08	0.4
Indeno(1,2,3-cd)pyrene	0.0003	0.0000081 (J)	0.00086	<0.000016	0.0021	0.00089	NL	NL
1-Methylnaphthalene	0.002	0.0000091 (J)	0.00018	0.00016	0.000033	0.000033	NL	NL
2-Methylnaphthalene	0.00017	0.0000084 (J)	0.00013	0.00016	0.000024	0.000031	NL	NL
Naphthalene	0.00016	<0.0000056	0.00012	0.00046	0.000051	0.000053 (J)	0.017	0.1
Phenanthrene	0.0021	0.000043 (J)	0.00071	0.000085	0.0013	0.00047	NL	NL
Pyrene	0.0025	0.000059	0.002	0.00011	0.0037	0.0012	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)	MW-4 (04/07/18)	MW-4 (07/30/18)		
Acenaphthene	0.00049	0.0000039 (J)	0.00056	0.0386	0.0246	0.0031	0.0021	NL	NL
Acenaphthylene	0.00012	0.000084	0.000073	0.0166	0.0083	0.00073	0.00064	NL	NL
Anthracene	0.00006	0.00006	0.00011	0.0018 (J)	0.0019	0.00051	0.00024	0.6	3
Benzo(a)anthracene	0.000013 (J)	<0.0000032	0.0000082 (J)	0.00044 (J)	<0.00014	0.000012 (J)	<0.000035	NL	NL
Benzo(a)pyrene	0.0000053 (J)	0.000017 (J)	0.000006 (J)	<0.00049	<0.0002	<0.0000095	<0.000048	0.00002	0.0002
Benzo(b)fluoranthene	0.0000093 (J)	0.000043 (J)	0.000014 (J)	<0.00027	0.00022 (J)	0.0000096 (J)	<0.000026	0.00002	0.0002
Benzo(g,h,i)perylene	0.0000071 (J)	0.000025 (J)	0.0000081 (J)	<0.00031	<0.00013	<0.0000061	<0.000031	NL	NL
Benzo(k)fluoranthene	<0.000005	0.000021 (J)	<0.0000051	<0.00035	<0.00014	<0.0000068	<0.000035	NL	NL
Chrysene	0.000021 (J)	0.000042 (J)	0.000017 (J)	0.0018 (J)	0.001 (J)	0.000031 (J)	<0.00006	0.00002	0.0002
Dibenzo(a,h)anthracene	<0.0000035	<0.0000033	<0.0000051	<0.00046	<0.00019	<0.000009	<0.000046	NL	NL
Fluoranthene	0.00004 (J)	0.000049	0.00003 (J)	0.0037	0.0046	0.0001	0.000061 (J)	0.08	0.4
Fluorene	0.00061	0.000031 (J)	0.00051	0.0759	0.0504	0.0053	0.0035	0.08	0.4
Indeno(1,2,3-cd)pyrene	0.0000044 (J)	0.000017 (J)	0.0000056 (J)	<0.00082	<0.00033	<0.000016	<0.000081	NL	NL
1-Methylnaphthalene	0.0087	0.000076	0.0041	0.357	0.183	0.0109	0.0395	NL	NL
2-Methylnaphthalene	0.0065	0.000066	0.000037 (J)	0.0747	0.0126	0.00026	0.00051	NL	NL
Naphthalene	0.0022	0.00027	0.00017	0.0243	0.0151	0.0022	0.0015	0.01	0.1
Phenanthrene	0.00062	0.000033 (J)	0.00029	0.165	0.102	0.0033	0.0031	NL	NL
Pyrene	0.00006	0.0001	0.000081	0.0165	0.0102	0.00032	0.00017 (J)	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.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	7/30/18	3.32	14.49	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	7/30/18	7.45	14.41	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	7/30/18	3.62	14.46	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	7/30/18	6.91	14.57	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	7/30/18	6.19	14.60	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
MW-201	100.10	7/30/18	6.69	14.57	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

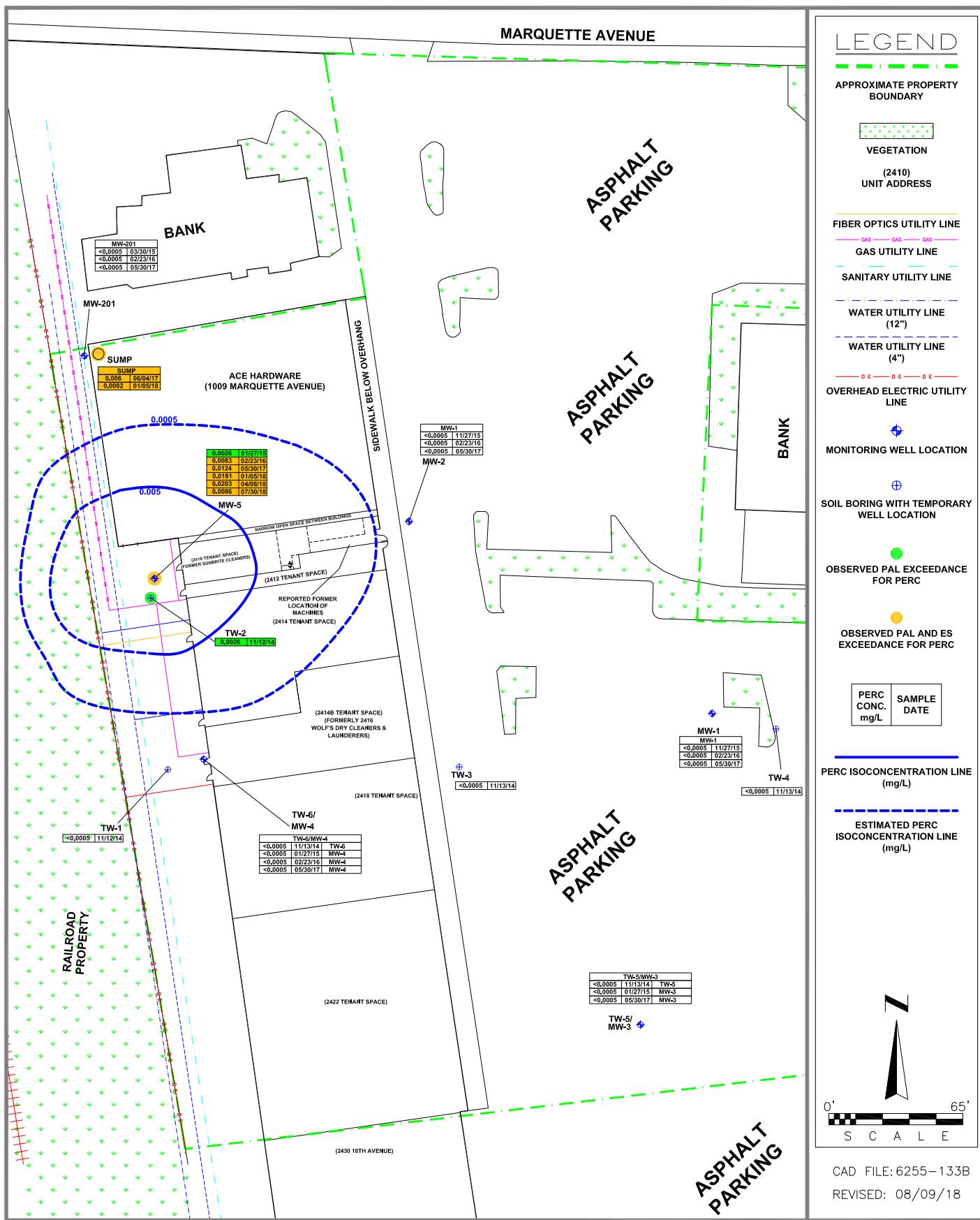


DAI
ENVIRONMENTAL

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



DAM
ENVIRONMENTAL

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

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

CAD FILE: 6255-133B
REVISED: 08/09/18

LEGEND

APPROXIMATE PROPERTY BOUNDARY



(2410)
UNIT ADDRESS

FIBER OPTICS UTILITY LINE

GAS GAS GAS

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 PAL EXCEDENCE FOR PERC

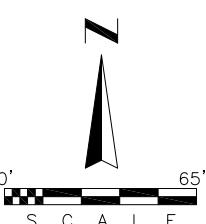


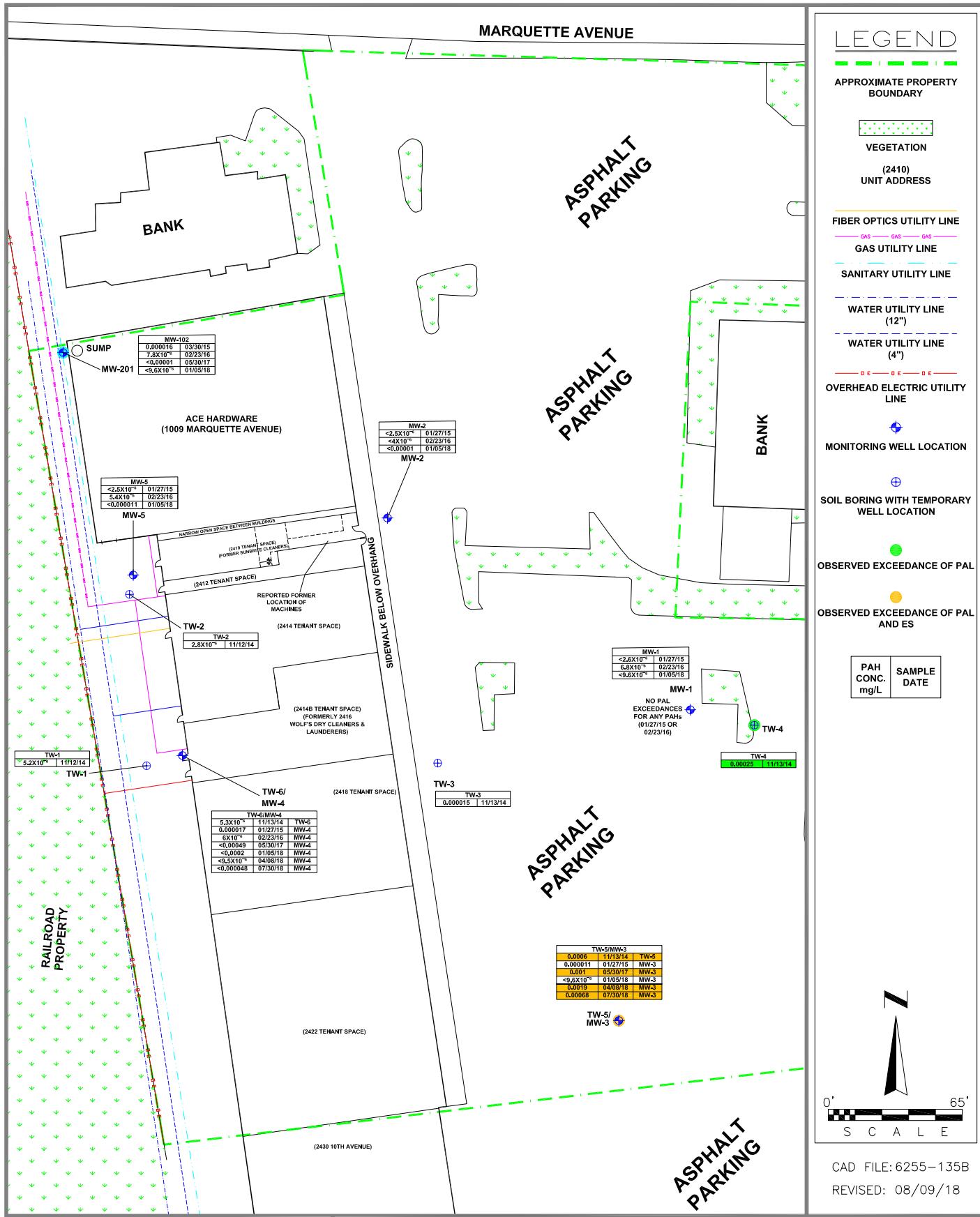
OBSERVED PAL AND ES EXCEDANCE FOR PERC

PERC CONC. mg/L
SAMPLE DATE

PERC ISOCONCENTRATION LINE (mg/L)

ESTIMATED PERC ISOCONCENTRATION LINE (mg/L)



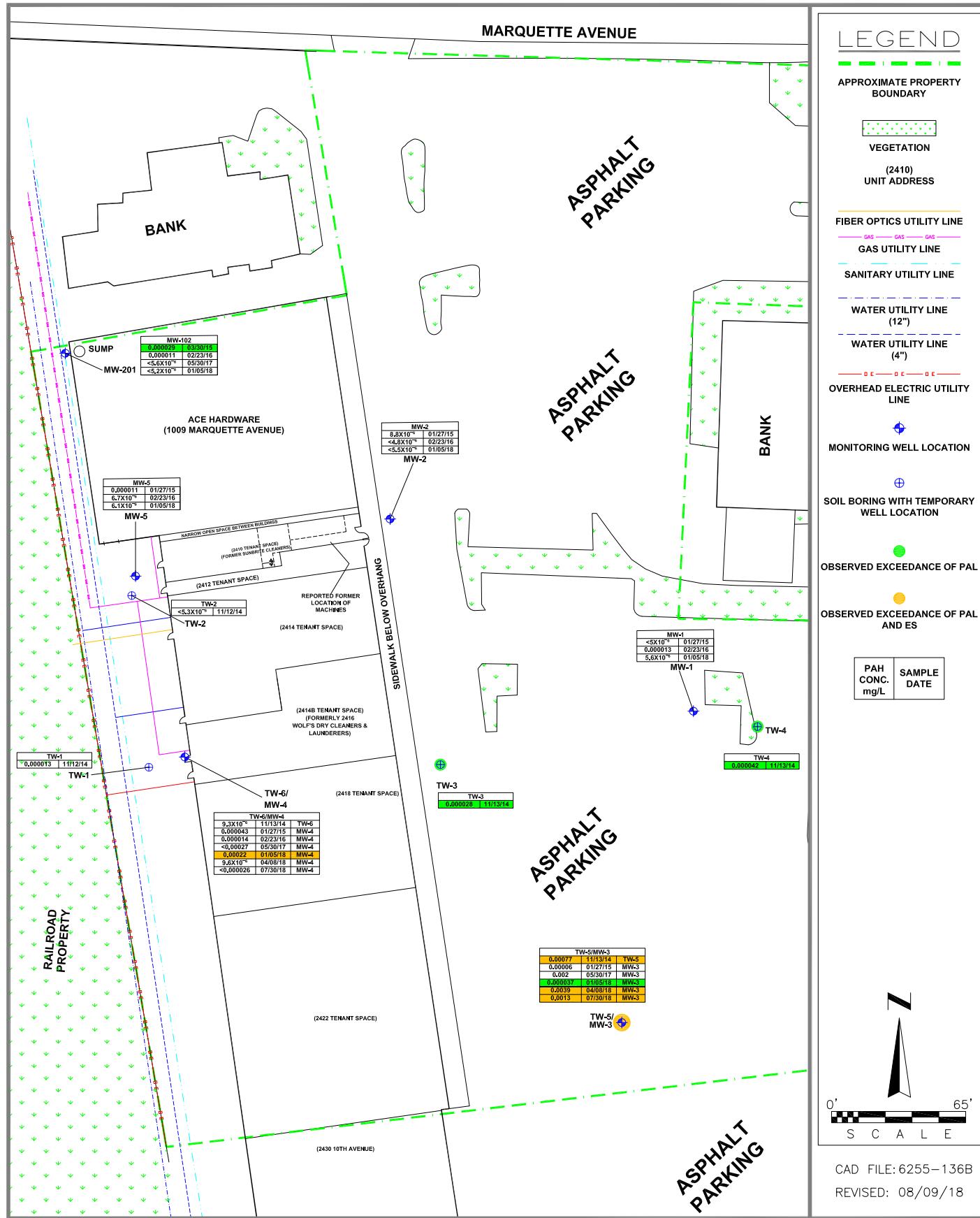


DAI ENVIRONMENTAL

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



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

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

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



OBSERVED EXCEEDANCE OF PAL



OBSERVED EXCEEDANCE OF PAL AND ES

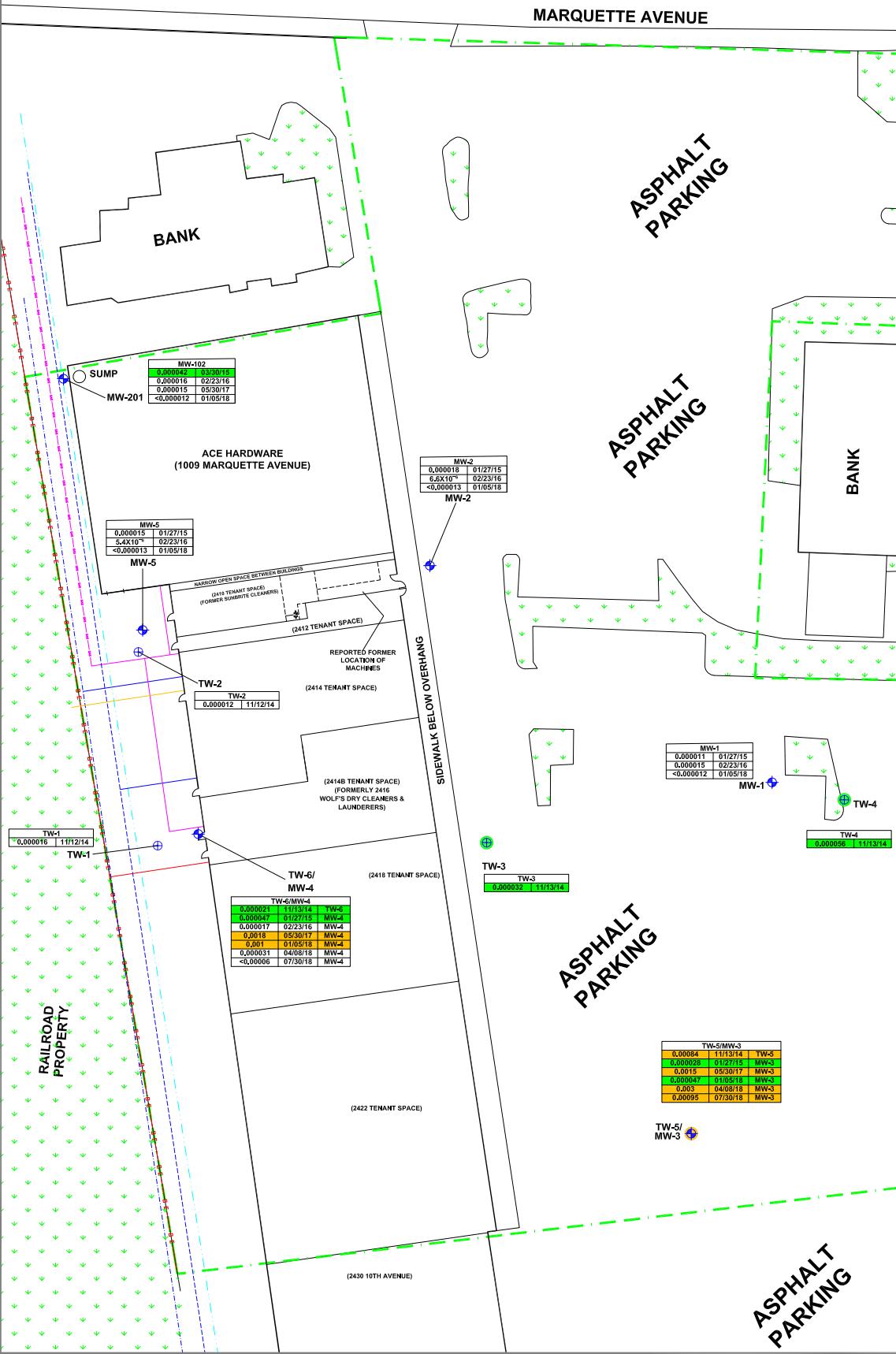
PAH CONC. mg/L

SAMPLE DATE

0' S C A L E 65'

CAD FILE: 6255-137B

REVISED: 07/30/18



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



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

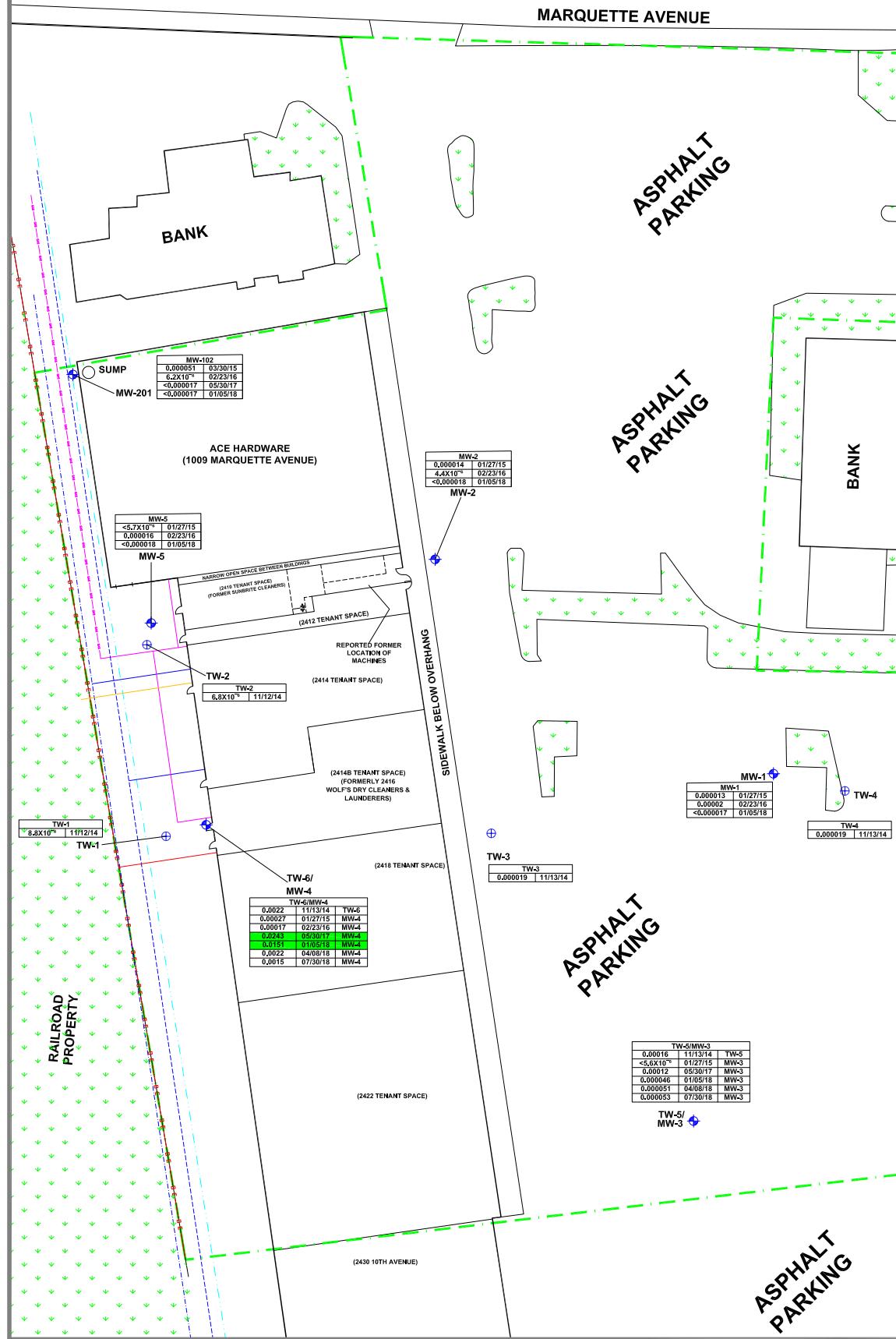


OBSERVED EXCEEDANCE OF PAL



OBSERVED EXCEEDANCE OF PAL AND ES

PAH CONC.	SAMPLE DATE
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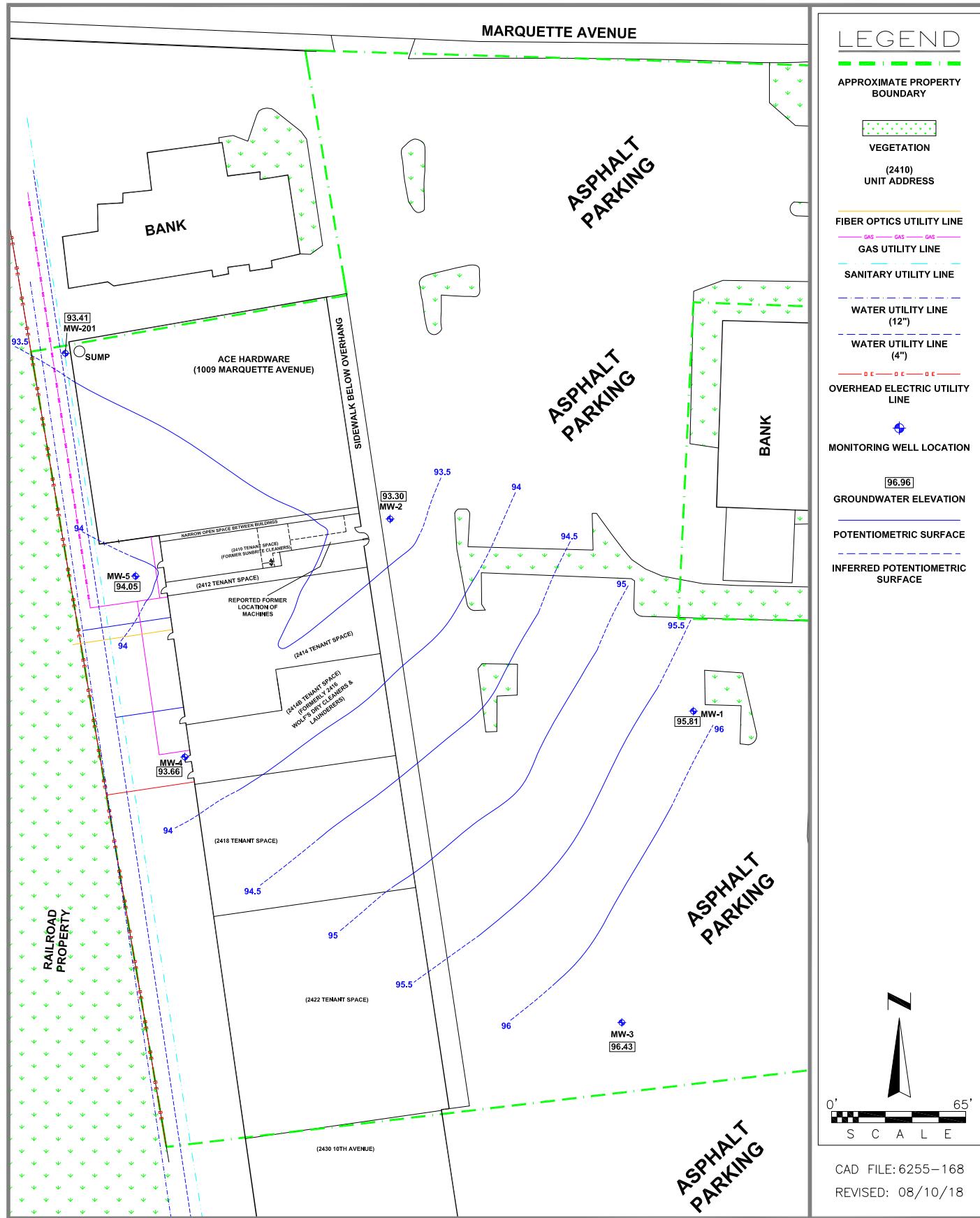
CAD FILE: 6255-138B
REVISED: 08/10/18

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



DAM
ENVIRONMENTAL

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

FIGURE B.3.c.6
GROUNDWATER FLOW DIRECTION
(JULY 30, 2018)

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")

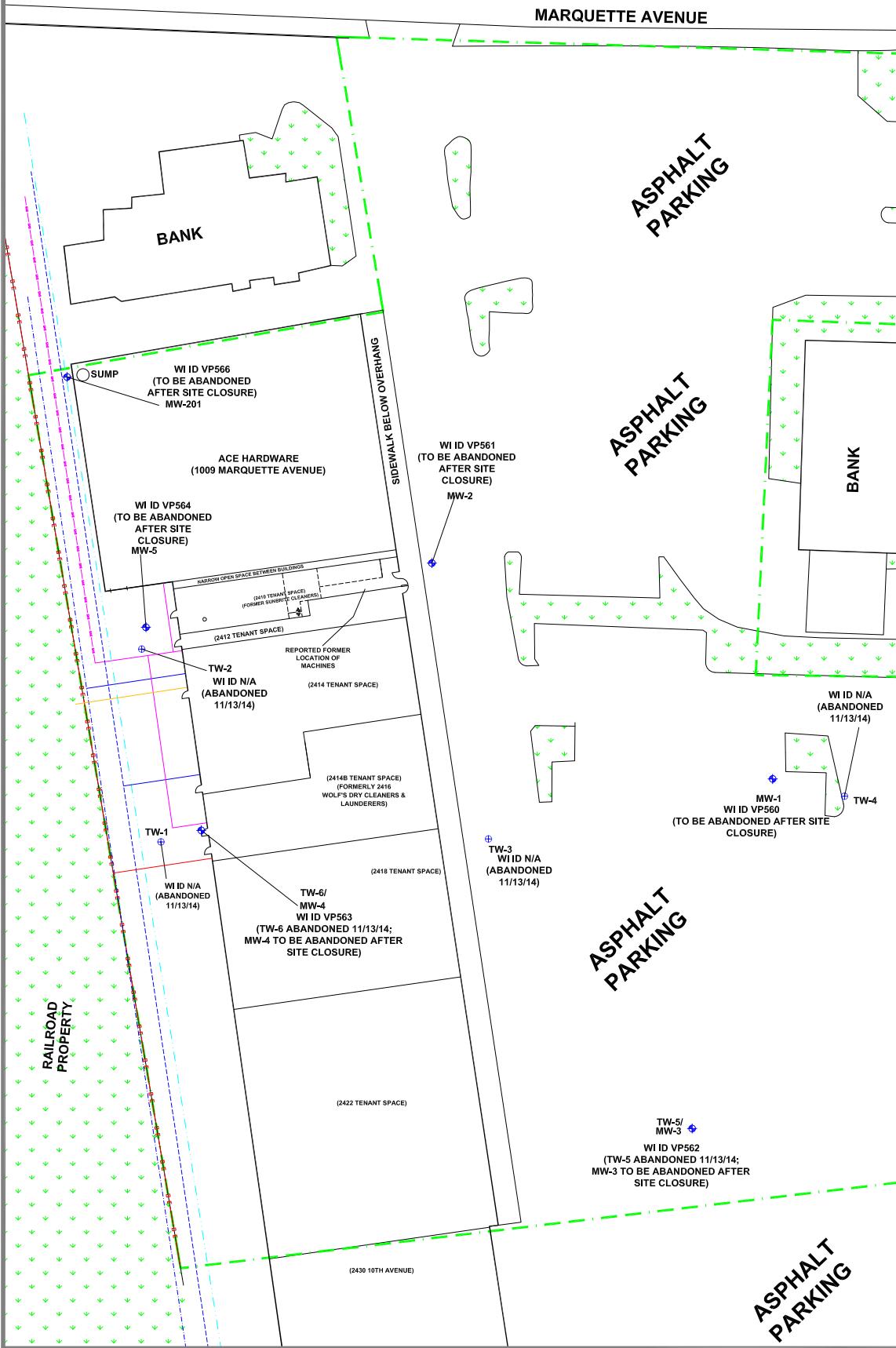
OVERHEAD ELECTRIC UTILITY LINE



MONITORING WELL LOCATION



SOIL BORING WITH TEMPORARY WELL LOCATION



0' 65'
S C A L E

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
(THIRD QUARTER 2018)**

August 07, 2018

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

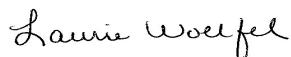
RE: Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

Dear Chris Cailles:

Enclosed are the analytical results for sample(s) received by the laboratory on August 01, 2018. 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.: 40173368

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

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

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40173368

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40173368001	MW-3	Water	07/30/18 12:20	08/01/18 10:40
40173368002	MW-4	Water	07/30/18 13:40	08/01/18 10:40
40173368003	MW-5	Water	07/30/18 14:30	08/01/18 10:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40173368001	MW-3	EPA 8270 by HVI	TPO	20
40173368002	MW-4	EPA 8270 by HVI	TPO	20
40173368003	MW-5	EPA 8260	HNW	64

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

Sample: MW-3 Lab ID: 40173368001 Collected: 07/30/18 12:20 Received: 08/01/18 10:40 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	0.014J	ug/L	0.028	0.0055	1	08/02/18 08:54	08/03/18 11:35	83-32-9	
Acenaphthylene	0.023	ug/L	0.023	0.0045	1	08/02/18 08:54	08/03/18 11:35	208-96-8	
Anthracene	0.073	ug/L	0.048	0.0095	1	08/02/18 08:54	08/03/18 11:35	120-12-7	
Benzo(a)anthracene	0.43	ug/L	0.034	0.0069	1	08/02/18 08:54	08/03/18 11:35	56-55-3	
Benzo(a)pyrene	0.68	ug/L	0.048	0.0096	1	08/02/18 08:54	08/03/18 11:35	50-32-8	
Benzo(b)fluoranthene	1.3	ug/L	0.026	0.0052	1	08/02/18 08:54	08/03/18 11:35	205-99-2	
Benzo(g,h,i)perylene	0.82	ug/L	0.031	0.0062	1	08/02/18 08:54	08/03/18 11:35	191-24-2	
Benzo(k)fluoranthene	0.41	ug/L	0.034	0.0069	1	08/02/18 08:54	08/03/18 11:35	207-08-9	
Chrysene	0.95	ug/L	0.059	0.012	1	08/02/18 08:54	08/03/18 11:35	218-01-9	
Dibenz(a,h)anthracene	0.15	ug/L	0.046	0.0091	1	08/02/18 08:54	08/03/18 11:35	53-70-3	
Fluoranthene	1.9	ug/L	0.048	0.0097	1	08/02/18 08:54	08/03/18 11:35	206-44-0	
Fluorene	0.040	ug/L	0.036	0.0072	1	08/02/18 08:54	08/03/18 11:35	86-73-7	
Indeno(1,2,3-cd)pyrene	0.89	ug/L	0.080	0.016	1	08/02/18 08:54	08/03/18 11:35	193-39-5	
1-Methylnaphthalene	0.033	ug/L	0.027	0.0054	1	08/02/18 08:54	08/03/18 11:35	90-12-0	
2-Methylnaphthalene	0.031	ug/L	0.022	0.0045	1	08/02/18 08:54	08/03/18 11:35	91-57-6	
Naphthalene	0.053J	ug/L	0.083	0.017	1	08/02/18 08:54	08/03/18 11:35	91-20-3	
Phenanthrene	0.47	ug/L	0.063	0.013	1	08/02/18 08:54	08/03/18 11:35	85-01-8	
Pyrene	1.2	ug/L	0.035	0.0070	1	08/02/18 08:54	08/03/18 11:35	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	39	%	29-80		1	08/02/18 08:54	08/03/18 11:35	321-60-8	
Terphenyl-d14 (S)	30	%	10-123		1	08/02/18 08:54	08/03/18 11:35	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

Sample: MW-4 **Lab ID: 40173368002** Collected: 07/30/18 13:40 Received: 08/01/18 10:40 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	2.1	ug/L	0.14	0.028	5	08/02/18 08:54	08/03/18 11:53	83-32-9	
Acenaphthylene	0.64	ug/L	0.11	0.023	5	08/02/18 08:54	08/03/18 11:53	208-96-8	
Anthracene	0.24	ug/L	0.24	0.048	5	08/02/18 08:54	08/03/18 11:53	120-12-7	
Benzo(a)anthracene	<0.035	ug/L	0.17	0.035	5	08/02/18 08:54	08/03/18 11:53	56-55-3	
Benzo(a)pyrene	<0.048	ug/L	0.24	0.048	5	08/02/18 08:54	08/03/18 11:53	50-32-8	
Benzo(b)fluoranthene	<0.026	ug/L	0.13	0.026	5	08/02/18 08:54	08/03/18 11:53	205-99-2	
Benzo(g,h,i)perylene	<0.031	ug/L	0.16	0.031	5	08/02/18 08:54	08/03/18 11:53	191-24-2	
Benzo(k)fluoranthene	<0.035	ug/L	0.17	0.035	5	08/02/18 08:54	08/03/18 11:53	207-08-9	
Chrysene	<0.060	ug/L	0.30	0.060	5	08/02/18 08:54	08/03/18 11:53	218-01-9	
Dibenz(a,h)anthracene	<0.046	ug/L	0.23	0.046	5	08/02/18 08:54	08/03/18 11:53	53-70-3	
Fluoranthene	0.061J	ug/L	0.24	0.049	5	08/02/18 08:54	08/03/18 11:53	206-44-0	
Fluorene	3.5	ug/L	0.18	0.037	5	08/02/18 08:54	08/03/18 11:53	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.081	ug/L	0.40	0.081	5	08/02/18 08:54	08/03/18 11:53	193-39-5	
1-Methylnaphthalene	39.5	ug/L	0.14	0.027	5	08/02/18 08:54	08/03/18 11:53	90-12-0	
2-Methylnaphthalene	0.51	ug/L	0.11	0.022	5	08/02/18 08:54	08/03/18 11:53	91-57-6	
Naphthalene	1.5	ug/L	0.42	0.084	5	08/02/18 08:54	08/03/18 11:53	91-20-3	
Phenanthrene	3.1	ug/L	0.32	0.063	5	08/02/18 08:54	08/03/18 11:53	85-01-8	
Pyrene	0.17J	ug/L	0.18	0.035	5	08/02/18 08:54	08/03/18 11:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	48	%	29-80		5	08/02/18 08:54	08/03/18 11:53	321-60-8	
Terphenyl-d14 (S)	42	%	10-123		5	08/02/18 08:54	08/03/18 11:53	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

Sample: MW-5	Lab ID: 40173368003	Collected: 07/30/18 14:30	Received: 08/01/18 10:40	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	<0.25	ug/L	0.82	0.25	1		08/02/18 10:46	71-43-2	
Bromobenzene	<0.24	ug/L	0.80	0.24	1		08/02/18 10:46	108-86-1	
Bromo(chloromethane)	<0.36	ug/L	1.2	0.36	1		08/02/18 10:46	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		08/02/18 10:46	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		08/02/18 10:46	75-25-2	
Bromomethane	<0.97	ug/L	3.2	0.97	1		08/02/18 10:46	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		08/02/18 10:46	104-51-8	
sec-Butylbenzene	<0.85	ug/L	2.8	0.85	1		08/02/18 10:46	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		08/02/18 10:46	98-06-6	
Carbon tetrachloride	<0.17	ug/L	0.55	0.17	1		08/02/18 10:46	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		08/02/18 10:46	108-90-7	
Chloroethane	<1.3	ug/L	4.5	1.3	1		08/02/18 10:46	75-00-3	
Chloroform	<1.3	ug/L	4.2	1.3	1		08/02/18 10:46	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		08/02/18 10:46	74-87-3	
2-Chlorotoluene	<0.93	ug/L	3.1	0.93	1		08/02/18 10:46	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		08/02/18 10:46	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		08/02/18 10:46	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		08/02/18 10:46	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		08/02/18 10:46	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		08/02/18 10:46	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		08/02/18 10:46	95-50-1	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		08/02/18 10:46	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		08/02/18 10:46	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	1.7	0.50	1		08/02/18 10:46	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	0.91	0.27	1		08/02/18 10:46	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	0.93	0.28	1		08/02/18 10:46	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	0.82	0.24	1		08/02/18 10:46	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	0.90	0.27	1		08/02/18 10:46	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		08/02/18 10:46	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	0.94	0.28	1		08/02/18 10:46	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		08/02/18 10:46	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		08/02/18 10:46	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		08/02/18 10:46	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		08/02/18 10:46	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		08/02/18 10:46	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		08/02/18 10:46	108-20-3	
Ethylbenzene	<0.22	ug/L	0.73	0.22	1		08/02/18 10:46	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	3.9	1.2	1		08/02/18 10:46	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	1.3	0.39	1		08/02/18 10:46	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		08/02/18 10:46	99-87-6	
Methylene Chloride	<0.58	ug/L	1.9	0.58	1		08/02/18 10:46	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		08/02/18 10:46	1634-04-4	
Naphthalene	<1.2	ug/L	3.9	1.2	1		08/02/18 10:46	91-20-3	
n-Propylbenzene	<0.81	ug/L	2.7	0.81	1		08/02/18 10:46	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		08/02/18 10:46	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	0.90	0.27	1		08/02/18 10:46	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

Sample: MW-5 Lab ID: 40173368003 Collected: 07/30/18 14:30 Received: 08/01/18 10:40 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	0.92	0.28	1		08/02/18 10:46	79-34-5	
Tetrachloroethene	8.6	ug/L	1.1	0.33	1		08/02/18 10:46	127-18-4	
Toluene	<0.17	ug/L	0.57	0.17	1		08/02/18 10:46	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	2.1	0.63	1		08/02/18 10:46	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	3.2	0.95	1		08/02/18 10:46	120-82-1	
1,1,1-Trichloroethane	0.88	ug/L	0.82	0.24	1		08/02/18 10:46	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	1.8	0.55	1		08/02/18 10:46	79-00-5	
Trichloroethene	<0.26	ug/L	0.85	0.26	1		08/02/18 10:46	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	0.72	0.21	1		08/02/18 10:46	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	2.0	0.59	1		08/02/18 10:46	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		08/02/18 10:46	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		08/02/18 10:46	108-67-8	
Vinyl chloride	<0.17	ug/L	0.58	0.17	1		08/02/18 10:46	75-01-4	
m&p-Xylene	<0.47	ug/L	1.6	0.47	1		08/02/18 10:46	179601-23-1	
o-Xylene	<0.26	ug/L	0.87	0.26	1		08/02/18 10:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		08/02/18 10:46	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		1		08/02/18 10:46	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		08/02/18 10:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40173368

QC Batch:	296161	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	40173368003		

METHOD BLANK: 1730312 Matrix: Water

Associated Lab Samples: 40173368003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	0.90	08/02/18 08:37	
1,1,1-Trichloroethane	ug/L	<0.24	0.82	08/02/18 08:37	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	0.92	08/02/18 08:37	
1,1,2-Trichloroethane	ug/L	<0.55	1.8	08/02/18 08:37	
1,1-Dichloroethane	ug/L	<0.27	0.91	08/02/18 08:37	
1,1-Dichloroethene	ug/L	<0.24	0.82	08/02/18 08:37	
1,1-Dichloropropene	ug/L	<0.54	1.8	08/02/18 08:37	
1,2,3-Trichlorobenzene	ug/L	<0.63	2.1	08/02/18 08:37	
1,2,3-Trichloropropane	ug/L	<0.59	2.0	08/02/18 08:37	
1,2,4-Trichlorobenzene	ug/L	<0.95	3.2	08/02/18 08:37	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	08/02/18 08:37	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	08/02/18 08:37	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	08/02/18 08:37	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	08/02/18 08:37	
1,2-Dichloroethane	ug/L	<0.28	0.93	08/02/18 08:37	
1,2-Dichloropropane	ug/L	<0.28	0.94	08/02/18 08:37	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	08/02/18 08:37	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	08/02/18 08:37	
1,3-Dichloropropane	ug/L	<0.83	2.8	08/02/18 08:37	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	08/02/18 08:37	
2,2-Dichloropropane	ug/L	<2.3	7.6	08/02/18 08:37	
2-Chlorotoluene	ug/L	<0.93	3.1	08/02/18 08:37	
4-Chlorotoluene	ug/L	<0.76	2.5	08/02/18 08:37	
Benzene	ug/L	<0.25	0.82	08/02/18 08:37	
Bromobenzene	ug/L	<0.24	0.80	08/02/18 08:37	
Bromochloromethane	ug/L	<0.36	1.2	08/02/18 08:37	
Bromodichloromethane	ug/L	<0.36	1.2	08/02/18 08:37	
Bromoform	ug/L	<4.0	13.2	08/02/18 08:37	
Bromomethane	ug/L	<0.97	3.2	08/02/18 08:37	
Carbon tetrachloride	ug/L	<0.17	0.55	08/02/18 08:37	
Chlorobenzene	ug/L	<0.71	2.4	08/02/18 08:37	
Chloroethane	ug/L	<1.3	4.5	08/02/18 08:37	
Chloroform	ug/L	<1.3	4.2	08/02/18 08:37	
Chloromethane	ug/L	<2.2	7.3	08/02/18 08:37	
cis-1,2-Dichloroethene	ug/L	<0.27	0.90	08/02/18 08:37	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	08/02/18 08:37	
Dibromochloromethane	ug/L	<2.6	8.7	08/02/18 08:37	
Dibromomethane	ug/L	<0.94	3.1	08/02/18 08:37	
Dichlorodifluoromethane	ug/L	<0.50	1.7	08/02/18 08:37	
Diisopropyl ether	ug/L	<1.9	6.3	08/02/18 08:37	
Ethylbenzene	ug/L	<0.22	0.73	08/02/18 08:37	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40173368

METHOD BLANK: 1730312

Matrix: Water

Associated Lab Samples: 40173368003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	3.9	08/02/18 08:37	
Isopropylbenzene (Cumene)	ug/L	<0.39	1.3	08/02/18 08:37	
m&p-Xylene	ug/L	<0.47	1.6	08/02/18 08:37	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	08/02/18 08:37	
Methylene Chloride	ug/L	<0.58	1.9	08/02/18 08:37	
n-Butylbenzene	ug/L	<0.71	2.4	08/02/18 08:37	
n-Propylbenzene	ug/L	<0.81	2.7	08/02/18 08:37	
Naphthalene	ug/L	<1.2	3.9	08/02/18 08:37	
o-Xylene	ug/L	<0.26	0.87	08/02/18 08:37	
p-Isopropyltoluene	ug/L	<0.80	2.7	08/02/18 08:37	
sec-Butylbenzene	ug/L	<0.85	2.8	08/02/18 08:37	
Styrene	ug/L	<0.47	1.6	08/02/18 08:37	
tert-Butylbenzene	ug/L	<0.30	1.0	08/02/18 08:37	
Tetrachloroethene	ug/L	<0.33	1.1	08/02/18 08:37	
Toluene	ug/L	<0.17	0.57	08/02/18 08:37	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	08/02/18 08:37	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	08/02/18 08:37	
Trichloroethene	ug/L	<0.26	0.85	08/02/18 08:37	
Trichlorofluoromethane	ug/L	<0.21	0.72	08/02/18 08:37	
Vinyl chloride	ug/L	<0.17	0.58	08/02/18 08:37	
4-Bromofluorobenzene (S)	%	91	70-130	08/02/18 08:37	
Dibromofluoromethane (S)	%	96	70-130	08/02/18 08:37	
Toluene-d8 (S)	%	99	70-130	08/02/18 08:37	

LABORATORY CONTROL SAMPLE: 1730313

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.4	103	70-133	
1,1,2,2-Tetrachloroethane	ug/L	50	52.1	104	67-130	
1,1,2-Trichloroethane	ug/L	50	52.5	105	70-130	
1,1-Dichloroethane	ug/L	50	48.7	97	70-134	
1,1-Dichloroethene	ug/L	50	49.6	99	75-132	
1,2,4-Trichlorobenzene	ug/L	50	52.2	104	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.6	101	60-126	
1,2-Dibromoethane (EDB)	ug/L	50	51.1	102	70-130	
1,2-Dichlorobenzene	ug/L	50	51.8	104	70-130	
1,2-Dichloroethane	ug/L	50	52.1	104	73-134	
1,2-Dichloropropane	ug/L	50	51.2	102	79-128	
1,3-Dichlorobenzene	ug/L	50	52.1	104	70-130	
1,4-Dichlorobenzene	ug/L	50	51.8	104	70-130	
Benzene	ug/L	50	51.8	104	69-137	
Bromodichloromethane	ug/L	50	51.3	103	70-130	
Bromoform	ug/L	50	47.5	95	64-133	
Bromomethane	ug/L	50	30.7	61	29-123	

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QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40173368

LABORATORY CONTROL SAMPLE: 1730313

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	52.1	104	73-142	
Chlorobenzene	ug/L	50	52.2	104	70-130	
Chloroethane	ug/L	50	43.2	86	59-133	
Chloroform	ug/L	50	51.6	103	80-129	
Chloromethane	ug/L	50	33.1	66	27-125	
cis-1,2-Dichloroethene	ug/L	50	51.2	102	70-134	
cis-1,3-Dichloropropene	ug/L	50	52.2	104	70-130	
Dibromochloromethane	ug/L	50	51.8	104	70-130	
Dichlorodifluoromethane	ug/L	50	21.6	43	12-127	
Ethylbenzene	ug/L	50	54.7	109	86-127	
Isopropylbenzene (Cumene)	ug/L	50	56.6	113	70-130	
m&p-Xylene	ug/L	100	109	109	70-131	
Methyl-tert-butyl ether	ug/L	50	45.2	90	65-136	
Methylene Chloride	ug/L	50	46.6	93	72-133	
o-Xylene	ug/L	50	55.0	110	70-130	
Styrene	ug/L	50	55.4	111	70-130	
Tetrachloroethene	ug/L	50	51.1	102	70-130	
Toluene	ug/L	50	53.6	107	84-124	
trans-1,2-Dichloroethene	ug/L	50	49.5	99	70-133	
trans-1,3-Dichloropropene	ug/L	50	60.6	121	67-130	
Trichloroethene	ug/L	50	50.8	102	70-130	
Trichlorofluoromethane	ug/L	50	49.4	99	69-147	
Vinyl chloride	ug/L	50	40.6	81	48-134	
4-Bromofluorobenzene (S)	%			97	70-130	
Dibromofluoromethane (S)	%			96	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1730330 1730331

Parameter	Units	MS		MSD		MS Result	% Rec	MSD % Rec	% Rec Limits	RPD RPD	Max Qual
		40173375005 Result	Spike Conc.	Spike Conc.	MS Result						
1,1,1-Trichloroethane	ug/L	<0.24	50	50	49.9	51.1	100	102	70-136	2	20
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	52.6	55.3	105	111	67-133	5	20
1,1,2-Trichloroethane	ug/L	<0.55	50	50	53.7	55.3	107	111	70-130	3	20
1,1-Dichloroethane	ug/L	<0.27	50	50	47.9	49.1	96	98	70-139	3	20
1,1-Dichloroethene	ug/L	<0.24	50	50	47.7	49.4	95	99	72-137	3	20
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	53.5	52.8	107	105	68-130	1	20
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	55.1	58.4	110	117	60-130	6	21
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	52.4	53.4	105	107	70-130	2	20
1,2-Dichlorobenzene	ug/L	<0.71	50	50	52.6	52.9	105	106	70-130	1	20
1,2-Dichloroethane	ug/L	1.4	50	50	52.1	51.8	101	101	71-137	1	20
1,2-Dichloropropene	ug/L	<0.28	50	50	53.2	54.1	106	108	78-130	2	20
1,3-Dichlorobenzene	ug/L	<0.63	50	50	52.5	53.2	105	106	70-130	1	20
1,4-Dichlorobenzene	ug/L	<0.94	50	50	51.5	52.7	103	105	70-130	2	20

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QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40173368

Parameter	Units	40173375005		MS		MSD		MS		MSD		% Rec	MSD % Rec	Limits	Max		
		Result	Conc.	Spike Conc.	50	50	51.2	51.2	102	102	105	106	108	106	108	RPD RPD	Qual
Benzene	ug/L	<0.25	50	50	51.2	51.2	102	102	66-143	102	105	106	108	106	108	0 20	
Bromodichloromethane	ug/L	<0.36	50	50	50.9	52.5	102	102	70-130	102	105	106	108	106	108	3 20	
Bromoform	ug/L	<4.0	50	50	48.2	49.2	96	96	64-134	96	98	99	100	99	100	2 20	
Bromomethane	ug/L	<0.97	50	50	32.4	33.1	65	65	29-136	65	66	67	68	67	68	2 25	
Carbon tetrachloride	ug/L	<0.17	50	50	50.8	53.0	102	102	73-142	102	106	107	108	107	108	4 20	
Chlorobenzene	ug/L	<0.71	50	50	52.9	53.9	106	106	70-130	106	108	109	110	109	110	2 20	
Chloroethane	ug/L	<1.3	50	50	42.2	45.2	84	84	58-138	84	90	92	94	92	94	7 20	
Chloroform	ug/L	<1.3	50	50	49.5	51.5	99	99	80-131	99	103	105	107	105	107	4 20	
Chloromethane	ug/L	<2.2	50	50	32.6	32.9	65	65	24-125	65	66	67	68	67	68	1 20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	50.4	50.5	101	101	68-137	101	101	102	103	101	102	0 22	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	52.0	53.9	104	104	70-130	104	108	109	110	108	110	4 20	
Dibromochloromethane	ug/L	<2.6	50	50	51.9	52.3	104	104	70-131	104	105	106	107	105	107	1 20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	20.9	21.2	42	42	10-127	42	42	43	44	42	44	1 20	
Ethylbenzene	ug/L	<0.22	50	50	55.7	55.9	111	111	81-136	111	112	113	114	112	114	0 20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	57.4	57.7	115	115	70-132	115	115	116	117	115	117	0 20	
m&p-Xylene	ug/L	<0.47	100	100	111	111	111	111	70-135	111	111	112	113	111	112	0 20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	44.9	45.9	90	90	58-142	90	92	94	96	92	94	2 23	
Methylene Chloride	ug/L	<0.58	50	50	47.3	47.5	95	95	69-137	95	95	96	97	95	96	0 20	
o-Xylene	ug/L	<0.26	50	50	55.0	55.7	110	110	70-132	110	111	112	113	111	112	1 20	
Styrene	ug/L	<0.47	50	50	56.0	56.1	112	112	70-130	112	112	113	114	112	113	0 20	
Tetrachloroethene	ug/L	<0.33	50	50	51.9	52.6	104	104	70-132	104	105	106	107	104	106	1 20	
Toluene	ug/L	<0.17	50	50	53.7	54.0	107	107	81-130	107	108	109	110	108	110	1 20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	48.5	49.1	97	97	70-136	97	98	99	100	98	100	1 20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	60.7	61.1	121	121	67-130	121	122	123	124	121	123	1 20	
Trichloroethene	ug/L	<0.26	50	50	52.3	52.6	105	105	70-131	105	105	106	107	105	106	1 20	
Trichlorofluoromethane	ug/L	<0.21	50	50	49.8	50.2	100	100	66-150	100	100	101	102	100	101	1 20	
Vinyl chloride	ug/L	<0.17	50	50	40.1	41.9	80	80	46-134	80	84	85	86	84	85	4 20	
4-Bromofluorobenzene (S)	%						100	100	70-130	100	99	99	100	99	100	HS	
Dibromofluoromethane (S)	%								92	92	92	92	92	92	92	96 70-130	
Toluene-d8 (S)	%								101	101	101	101	101	101	101	100 70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER

Pace Project No.: 40173368

QC Batch:	296164	Analysis Method:	EPA 8270 by HVI
QC Batch Method:	EPA 3510	Analysis Description:	8270 Water PAH by HVI
Associated Lab Samples:	40173368001, 40173368002		

METHOD BLANK: 1730314 Matrix: Water

Associated Lab Samples: 40173368001, 40173368002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	08/03/18 08:31	
2-Methylnaphthalene	ug/L	<0.0049	0.024	08/03/18 08:31	
Acenaphthene	ug/L	<0.0061	0.030	08/03/18 08:31	
Acenaphthylene	ug/L	<0.0050	0.025	08/03/18 08:31	
Anthracene	ug/L	<0.010	0.052	08/03/18 08:31	
Benzo(a)anthracene	ug/L	<0.0076	0.038	08/03/18 08:31	
Benzo(a)pyrene	ug/L	<0.011	0.053	08/03/18 08:31	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	08/03/18 08:31	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	08/03/18 08:31	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	08/03/18 08:31	
Chrysene	ug/L	<0.013	0.065	08/03/18 08:31	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	08/03/18 08:31	
Fluoranthene	ug/L	<0.011	0.053	08/03/18 08:31	
Fluorene	ug/L	<0.0080	0.040	08/03/18 08:31	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	08/03/18 08:31	
Naphthalene	ug/L	<0.018	0.092	08/03/18 08:31	
Phenanthrene	ug/L	<0.014	0.069	08/03/18 08:31	
Pyrene	ug/L	<0.0076	0.038	08/03/18 08:31	
2-Fluorobiphenyl (S)	%	40	29-80	08/03/18 08:31	
Terphenyl-d14 (S)	%	68	10-123	08/03/18 08:31	

LABORATORY CONTROL SAMPLE: 1730315

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.1	56	50-91	
2-Methylnaphthalene	ug/L	2	1.1	55	48-89	
Acenaphthene	ug/L	2	1.1	56	48-120	
Acenaphthylene	ug/L	2	1.2	60	44-84	
Anthracene	ug/L	2	1.5	73	57-120	
Benzo(a)anthracene	ug/L	2	1.8	89	33-108	
Benzo(a)pyrene	ug/L	2	1.7	83	55-108	
Benzo(b)fluoranthene	ug/L	2	1.6	80	47-106	
Benzo(g,h,i)perylene	ug/L	2	1.3	65	20-75	
Benzo(k)fluoranthene	ug/L	2	1.5	73	50-116	
Chrysene	ug/L	2	1.8	88	64-140	
Dibenz(a,h)anthracene	ug/L	2	1.4	69	14-70	
Fluoranthene	ug/L	2	1.8	90	61-112	
Fluorene	ug/L	2	1.3	67	53-120	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.7	86	43-105	
Naphthalene	ug/L	2	0.98	49	38-90	

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QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

LABORATORY CONTROL SAMPLE: 1730315

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.5	77	47-105	
Pyrene	ug/L	2	1.7	84	62-119	
2-Fluorobiphenyl (S)	%			50	29-80	
Terphenyl-d14 (S)	%			76	10-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1730316 1730317

Parameter	Units	MS 50202256001		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		Result	Conc.	Conc.	Result								
1-Methylnaphthalene	ug/L	<0.0058	2	1.9	1.8	1.2	90	65	41-93	36	24	R1	
2-Methylnaphthalene	ug/L	<0.0049	2	1.9	1.8	1.2	90	65	45-120	36	28	R1	
Acenaphthene	ug/L	<0.0060	2	1.9	1.8	1.2	90	62	38-120	41	23	R1	
Acenaphthylene	ug/L	<0.0049	2	1.9	1.9	1.2	94	65	33-84	40	25	M1,R1	
Anthracene	ug/L	<0.010	2	1.9	2.2	1.4	109	72	37-120	45	27	R1	
Benzo(a)anthracene	ug/L	<0.0075	2	1.9	2.6	1.6	129	83	10-108	47	31	M1,R1	
Benzo(a)pyrene	ug/L	<0.010	2	1.9	2.4	1.4	121	75	10-108	50	29	M1,R1	
Benzo(b)fluoranthene	ug/L	<0.0057	2	1.9	2.3	1.4	118	75	10-106	48	27	M1,R1	
Benzo(g,h,i)perylene	ug/L	<0.0067	2	1.9	1.6	0.77	79	40	10-120	68	33	R1	
Benzo(k)fluoranthene	ug/L	<0.0075	2	1.9	2.1	1.2	105	62	10-116	55	28	R1	
Chrysene	ug/L	<0.013	2	1.9	2.5	1.6	128	83	19-140	47	30	R1	
Dibenz(a,h)anthracene	ug/L	<0.0099	2	1.9	1.7	0.80	85	42	10-120	70	40	R1	
Fluoranthene	ug/L	<0.011	2	1.9	2.6	1.7	132	88	38-112	44	28	M1,R1	
Fluorene	ug/L	<0.0079	2	1.9	2.1	1.4	105	71	42-120	42	25	R1	
Indeno(1,2,3-cd)pyrene	ug/L	<0.017	2	1.9	2.4	1.3	119	68	10-105	57	30	M1,R1	
Naphthalene	ug/L	<0.018	2	1.9	1.6	1.1	80	58	38-120	35	26	R1	
Phenanthrene	ug/L	<0.014	2	1.9	2.3	1.5	115	77	39-105	43	24	M1,R1	
Pyrene	ug/L	<0.0076	2	1.9	2.4	1.6	123	83	38-119	43	32	M1,R1	
2-Fluorobiphenyl (S)	%						80	55	29-80				
Terphenyl-d14 (S)	%						111	73	10-123				

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QUALIFIERS

Project: 6255 SUNRISE SHOPPING CENTER
Pace Project No.: 40173368

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

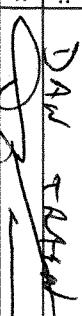
Project: 6255 SUNRISE SHOPPING CENTER
 Pace Project No.: 40173368

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40173368001	MW-3	EPA 3510	296164	EPA 8270 by HVI	296245
40173368002	MW-4	EPA 3510	296164	EPA 8270 by HVI	296245
40173368003	MW-5	EPA 8260	296161		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name: **DAD**
 Branch/Location: **LAKE FOREST**
 Project Contact: **CHRIS CALLES**
 Phone: **847-573-8900**
 Project Name: **SCHWEITZER CENTER**
 Project Number: **6255**
 Project State: **IL**
 Sampled By (Print): **DAD STREHL**
 Sampled By (Sign): 
 PO #:

[Signature]

www.pacelabs.com

CHAIN OF CUSTODY

Preservation Codes	
A=None	B=HCl
C=H ₂ SO ₄	D=HNO ₃
E=DI Water	F=Methanol
G=NaOH	H=Sodium Bisulfate Solution
I=Sodium Thiosulfate	J=Other

FILTERED? (YES/NO)	PICK LETTER	Y/N	-	-
		A	B	

Data Package Options		MS/MSD (billable)	Matrix Codes
<input type="checkbox"/> EPA Level III	<input type="checkbox"/> On your sample (billable)	A = Air B = Biota C = Charcoal O = Oil S = Soil SW = Surface Water WW = Waste Water SL = Sludge WP = Wipe	W = Water DW = Drinking Water GW = Ground Water SW = Surface Water WW = Waste Water
<input type="checkbox"/> EPA Level IV	<input type="checkbox"/> NOT needed on your sample		

Analyses Requested

P N A S
V O C S

PACE LAB #	CLIENT FIELD ID	DATE	TIME	COLLECTION	MATRIX	Comments	
						CLIENT COMMENTS (Lab Use Only)	LAB COMMENTS (Lab Use Only)
001	MW-3	7/30	1220	X			
002	MW-4	7/30	1340	X			
003	MW-5	7/30	1430	X			

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

Page 1 of 1

40173368

Quote #:
 Mail To Contact:
 Mail To Address:

Page 17 of 19

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)	Reinquished By: Johnathon Miller Date/Time: 7/31/18 10:12
Date Needed:	Reinquished By: Johnathon Miller Date/Time: 7/31/18 1700
Transmit Prelim Rush Results by (complete what you want):	Reinquished By: Johnathon Miller Date/Time: 7/31/18 1740
Email #1:	Received By: Johnathon Miller Date/Time: 7/31/18 1740
Email #2:	Received By: Johnathon Miller Date/Time: 7/31/18 1740
Telephone:	Received By: Johnathon Miller Date/Time: 7/31/18 1740
Fax:	Received By: Johnathon Miller Date/Time: 7/31/18 1740
Samples on HOLD are subject to special pricing and release of liability	

Sample Preservation Receipt Form

Client Name: DAD

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

Project #

Y0173368

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
001																									
002																									
003																									
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017																									
018																									
019																									
020																									

Exceptions to preservation check: California, 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	BPIU	1 liter plastic unpres	JGFU	4 oz amber jar unpres	DG9A	40 mL amber ascorbic	WGFU	4 oz clear jar unpres	BP2N	500 mL plastic HNO3	BP2Z	40 mL amber Na Thio	VGSU	40 mL clear vial unpres	BP3U	500 mL plastic NaOH Znact	VGH	40 mL clear vial HCl	BP3C	250 mL plastic unpres	VGM	40 mL clear vial MeOH	BP3N	250 mL plastic HNO3	VGD	40 mL clear vial DI	BP3S	250 mL plastic H2SO4	GN:	
AG1H	1 liter amber glass HCL																														
AG4S	125 mL amber glass H2SO4																														
AG4U	120 mL amber glass unpres																														
AG5U	100 mL amber glass unpres																														
AG2S	500 mL amber glass H2SO4																														
BG3U	250 mL clear glass unpres																														

Sample Condition Upon Receipt Form (SCUR)

Project #: DAB

WO# : **40173368**



40173368

Client Name: DAB

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 - 75 Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 2.5 /Corr: 2.5

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: 8/1/18

Initials: SSM

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>No sample from Ministry/Institute sent 8/1/18</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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. <u>8/1/18</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	8.	
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		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
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 type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input 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: DAB

Date: 8/1/18