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QUARTERLY GROUNDWATER SAMPLING REPORT
(APRIL 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
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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 second quarter 2018 (i.e., April-June 2018) on April 6, 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-54 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 4ºC 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.

During the groundwater sampling event, a replicate groundwater was intended to be collected per NR 716.13(6)(c)(1) as a quality assurance/quality control (QA/QC) sample. The replicate sample was errantly not collected. DAI will ensure that a replicate sample is collected beginning with the July 2018 quarterly groundwater sampling event. Other QA/QC samples listed in NR 716.13(6)(c) were omitted as not applicable consistent with previously sampling protocol.

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 2018 groundwater sampling event. The static water level elevations were collected from all monitoring wells on April 8, 2018. Table A.6 in Attachment A provides a historical summary of groundwater elevation information. The potentiometric surface map generated from the April 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 April 2018 are generally consistent with those measured in February 2018. Figure B.3.c.5 indicates a northwesterly groundwater flow direction along the southern half of the Site, and a north-northeasterly groundwater flow direction along the northern half of the Site. This atypical change in groundwater flow direction results from several local factors including the presence of former tank excavations that have been backfilled with permeable materials, the influence of the Ace Hardware drainage system, and the non-uniform groundwater infiltration rates in paved and unpaved areas. Based upon a review of the area topographic map and the direction of Oak Creek (nearest body of surface water), the north-northeasterly groundwater flow direction is anticipated to be more consistent with the natural flow direction in the general area.

3.2 Groundwater Analytical Results

During the second 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

activities 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, and in April 2018 the Perc concentration of 0.0203-mg/L exceeded the Enforcement Standard (0.005-mg/L). Additionally, the data show an increase from the result of 0.0181-mg/L observed in January 2018, continuing the increasing trend noted during each sampling event since January 2015. None of the other monitoring wells indicate detectable concentrations of Perc. 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 April 2018 show Benzo(a)pyrene, Benzo(b)fluoranthene, and Chrysene groundwater concentrations above the Enforcement Standards and are generally consistent with the concentrations observed earlier in May 2017. The April results are an increase from the January 2018 sampling results, where concentrations were only above PALs (January 2018 results were consistent with January 2015 result).

In contrast to the results observed in MW-3, the April 2018 sampling results at MW-4 (installed to the rear of the 2414B tenant space in the approximate location of a former heating oil UST) have decreased from those observed in January 2018. The April 2018 results indicate only Benzo(b)fluoranthene at a concentration (0.000031-mg/L) marginally above the associated PAL (0.00002-mg/L). Two (2) PAH constituents were identified with an exceedance of the associated

PAL in January 2018, and two (2) PAH constituents were identified with an exceedance of the associated Enforcement Standard. Further, a trend of declining contaminant concentration is observed in MW-4 during the three (3) sample events performed between May 30, 2017, and April 8, 2018. 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 and the Enforcement Standards are exceeded, then a new approach 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 these contaminant concentrations have increased with time. The former Sunbrite Cleaners tenant space and the area behind the space where MW-5 is located will undergo remediation.

- The most recent round of groundwater samples indicate several PAH constituents in MW-3 at concentrations exceeding the Enforcement Standards, although the groundwater sample collected in January 2018 only identified PAH concentrations exceeding the PALs. Additional quarterly samples will be needed to see if this result indicates a trend.

- The groundwater sampling results from MW-4 indicate only one (1) PAH constituent at a concentration above the PAL, and overall the PAH concentrations in MW-4 are lower than observed in January 2018.

- The next groundwater sampling event is scheduled for July 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)		
Benzene	<0.0005	<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	<0.00023	NL	NL
Bromochloromethane	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	<0.00034	NL	NL
Bromodichloromethane	<0.0005*	<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*	<0.0005*	0.00044	0.0044
Bromomethane	<0.0024*	<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	<0.0005	NL	NL
sec-Butylbenzene	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	NL	NL
tert-Butylbenzene	<0.00018	<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	0.0005	0.005
Chlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NL	NL
Chloroethane	<0.00037	<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*	<0.0025*	0.0006	0.006
Chloromethane	<0.0005	<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	<0.0005	NL	NL
4-Chlorotoluene	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	NL	NL
Dibromochloromethane	<0.0005	<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*	<0.0022*	0.00002	0.0002
1,2-Dibromoethane (EDB)	<0.00016*	<0.00018*	<0.00018*	<0.00018*	<0.00018*	<0.00018*	0.000005	0.00005
Dibromomethane	<0.00043	<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	<0.0005	0.06	0.6
1,3-Dichlorobenzene	<0.0005	<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	<0.0005	0.015	0.075
Dichlorodifluoromethane	<0.0002	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	0.2	1
1,1-Dichloroethane	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	0.085	0.85
1,2-Dichloroethane	<0.00017	<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	<0.00041	0.0007	0.007
cis-1,2-Dichloroethene	<0.00026	<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	<0.00026	0.02	0.1
1,2-Dichloropropane	<0.00023	<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	<0.0005	NL	NL
2,2-Dichloropropane	<0.00048	<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	<0.00044	NL	NL
1,3-Dichloropropene (c & t)	<0.00073*	<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	<0.0005	NL	NL
Ethylbenzene	<0.0005	<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	<0.0021	NL	NL
Isopropyl benzene	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	<0.00014	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)		
p-Isopropyltoluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NL	NL
Methylene chloride	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	0.0005	0.005
Methyl tertiary-butyl ether	<0.00017	<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	<0.0025	0.01	0.1
n-Propylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NL	NL
Styrene	<0.0005	<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	<0.00018	0.007	0.07
1,1,2,2-Tetrachloroethane	<0.00025*	<0.00025*	<0.00025*	<0.00025*	<0.00025*	<0.00025*	0.00002	0.0002
Tetrachloroethene	**0.0026**	**0.0026**	**0.0083**	**0.0124**	**0.0181**	**0.0203**	0.0005	0.005
Toluene	<0.0005	<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	<0.0021	NL	NL
1,2,4-Trichlorobenzene	<0.0022	<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	0.000897	0.04	0.2
1,1,2-Trichloroethane	<0.00016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0005	0.005
Trichloroethene	<0.00033	<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	<0.00018	0.7	3.5
1,2,3-Trichloropropane	<0.0005	<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	<0.0005	0.096	0.48
1,3,5-Trimethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
Vinyl chloride	<0.00018	<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	<0.0015	3.96	260

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

Table A.1.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)		
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	**0.0006**	0.000011 (J)	**0.001**	<0.0000096	**0.0019**	0.00002	0.0002
Benzo(b)fluoranthene	**0.00077**	0.00002 (J)	**0.002**	**0.000037**	**0.0039**	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	**0.00084**	**0.000028 (J)**	**0.0015**	**0.000047 (J)**	**0.003**	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

[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)		
Acenaphthene	0.00049	0.0000039 (J)	0.00056	0.0386	0.0246	0.0031	NL	NL
Acenaphthylene	0.00012	0.000084	0.000073	0.0166	0.0083	0.00073	NL	NL
Anthracene	0.00006	0.00006	0.00011	0.0018 (J)	0.0019	0.00051	0.6	3
Benzo(a)anthracene	0.000013 (J)	<0.0000032	0.0000082 (J)	0.00044 (J)	<0.00014	0.000012 (J)	NL	NL
Benzo(a)pyrene	0.0000053 (J)	0.000017 (J)	0.000006 (J)	**<0.00049**	**<0.0002**	<0.0000095	0.00002	0.0002
Benzo(b)fluoranthene	0.0000093 (J)	**0.000043 (J)**	0.000014 (J)	**<0.00027**	**0.00022 (J)**	0.0000096 (J)	0.00002	0.0002
Benzo(g,h,i)perylene	0.0000071 (J)	0.000025 (J)	0.0000081 (J)	<0.00031	<0.00013	<0.0000061	NL	NL
Benzo(k)fluoranthene	<0.000005	0.000021 (J)	<0.0000051	<0.00035	<0.00014	<0.0000068	NL	NL
Chrysene	**0.000021 (J)**	**0.000042 (J)**	0.000017 (J)	**0.0018 (J)**	**0.001 (J)**	**0.000031 (J)**	0.00002	0.0002
Dibenzo(a,h)anthracene	<0.0000035	<0.0000033	<0.0000051	<0.00046	<0.00019	<0.000009	NL	NL
Fluoranthene	0.00004 (J)	0.000049	0.00003 (J)	0.0037	0.0046	0.0001	0.08	0.4
Fluorene	0.00061	0.000031 (J)	0.00051	0.0759	0.0504	0.0053	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	NL	NL
1-Methylnaphthalene	0.0087	0.000076	0.0041	0.357	0.183	0.0109	NL	NL
2-Methylnaphthalene	0.0065	0.000066	0.000037 (J)	0.0747	0.0126	0.00026	NL	NL
Naphthalene	0.0022	0.00027	0.00017	**0.0243**	**0.0151**	0.0022	0.01	0.1
Phenanthrene	0.00062	0.000033 (J)	0.00029	0.165	0.102	0.0033	NL	NL
Pyrene	0.00006	0.0001	0.000081	0.0165	0.0102	0.00032	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	4/08/18	2.24	14.49	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	4/08/18	8.36	14.41	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	4/08/18	2.53	14.46	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	4/08/18	7.26	14.57	93.34
		2/27/18	7.23		94.19
		5/30/17	6.38		94.63
		4/24/15	5.94		93.53
		3/30/15	7.04		94.04
		1/27/15	6.53		
MW-5	100.24	4/08/18	6.27	14.60	93.31
		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		93.82
MW-201	100.10	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

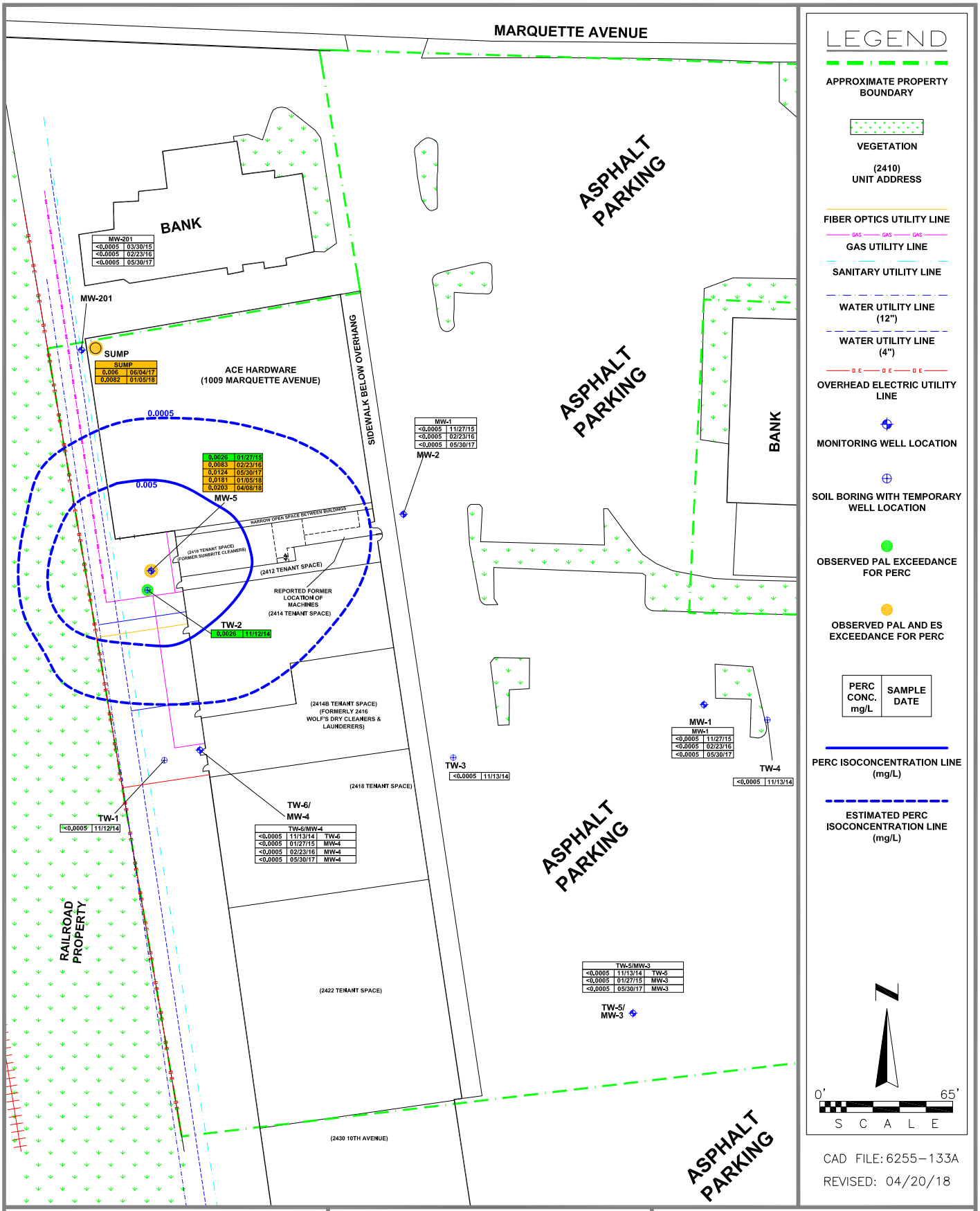
* – Relative Elevation based upon generic 100-ft on-site datum and survey data collected on January 27, 2015, and March 30, 2015.

APPENDIX B
FIGURES

ENVIRONMENTAL DAI

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

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



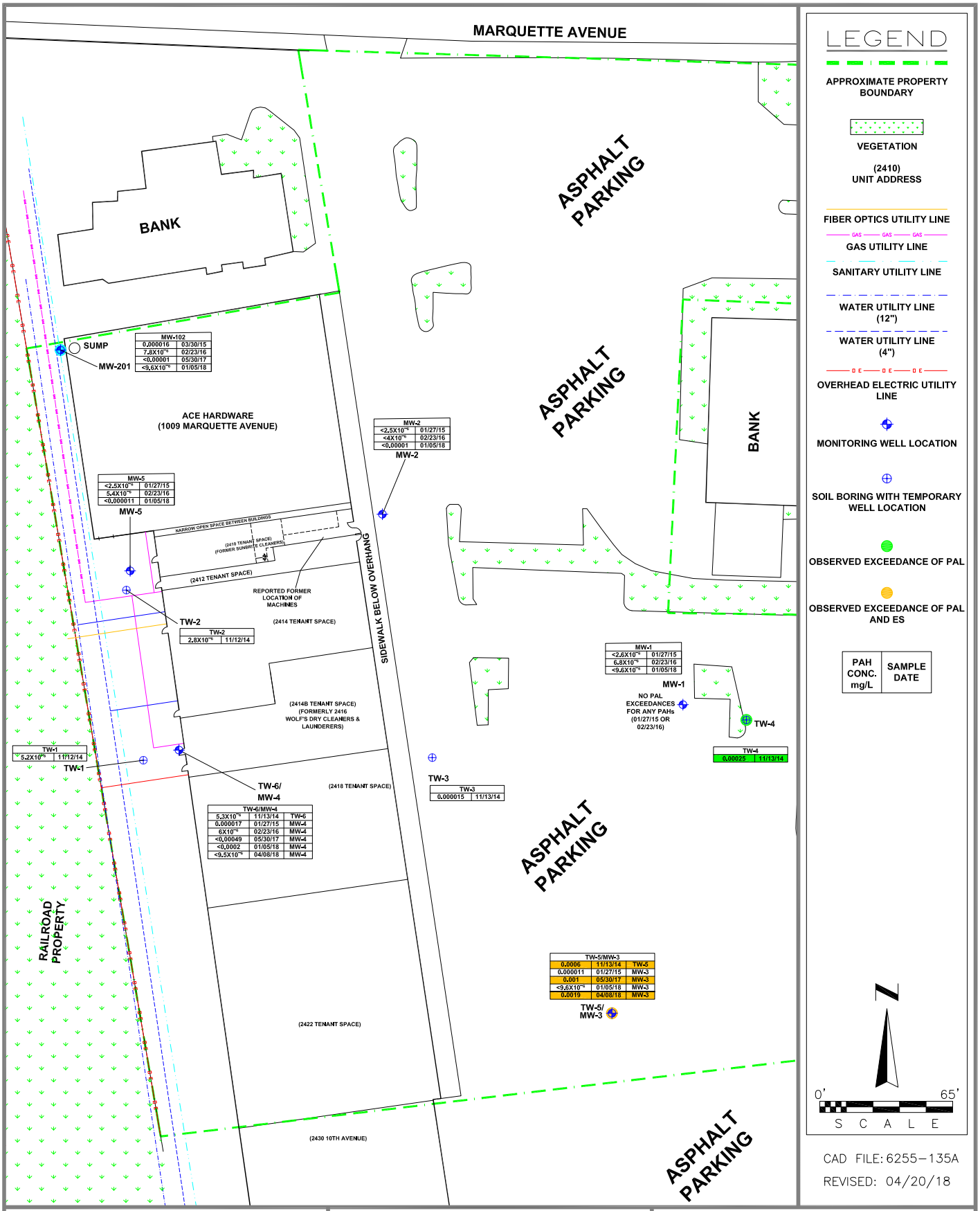
CAD FILE: 6255-133A

REVISED: 04/20/18

ENVIRONMENTAL

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

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



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- VEGETATION
- (2410) UNIT ADDRESS
- FIBER OPTICS UTILITY LINE
- GAS UTILITY LINE
- SANITARY UTILITY LINE
- WATER UTILITY LINE (12")
- WATER UTILITY LINE (4")
- OVERHEAD ELECTRIC UTILITY LINE
- MONITORING WELL LOCATION
- SOIL BORING WITH TEMPORARY WELL LOCATION
- OBSERVED EXCEEDANCE OF PAL
- OBSERVED EXCEEDANCE OF PAL AND ES

PAH CONC. mg/L	SAMPLE DATE

N

0' 65'

S C A L E

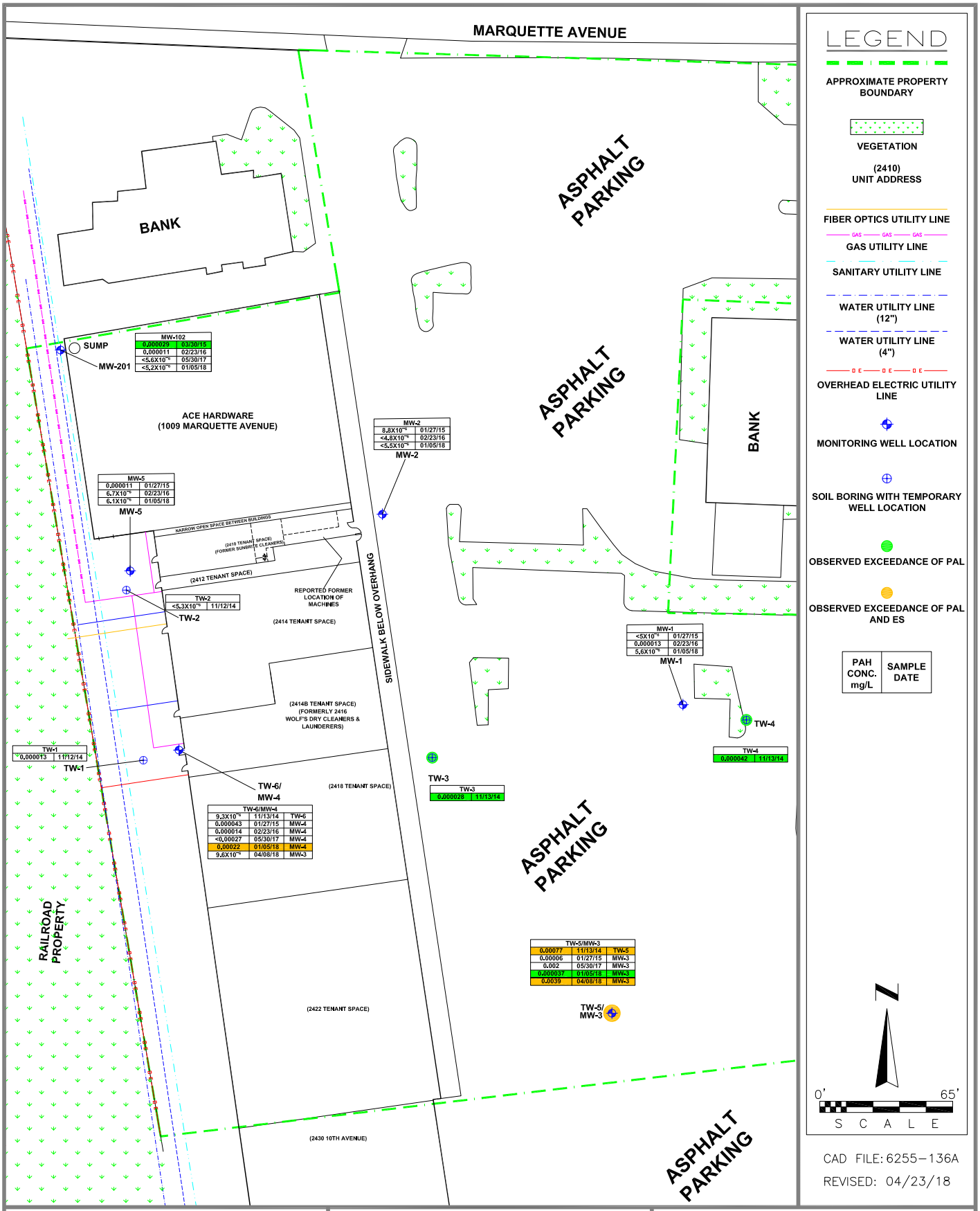
CAD FILE: 6255-135A

REVISED: 04/20/18

ENVIRONMENTAL DAI

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

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



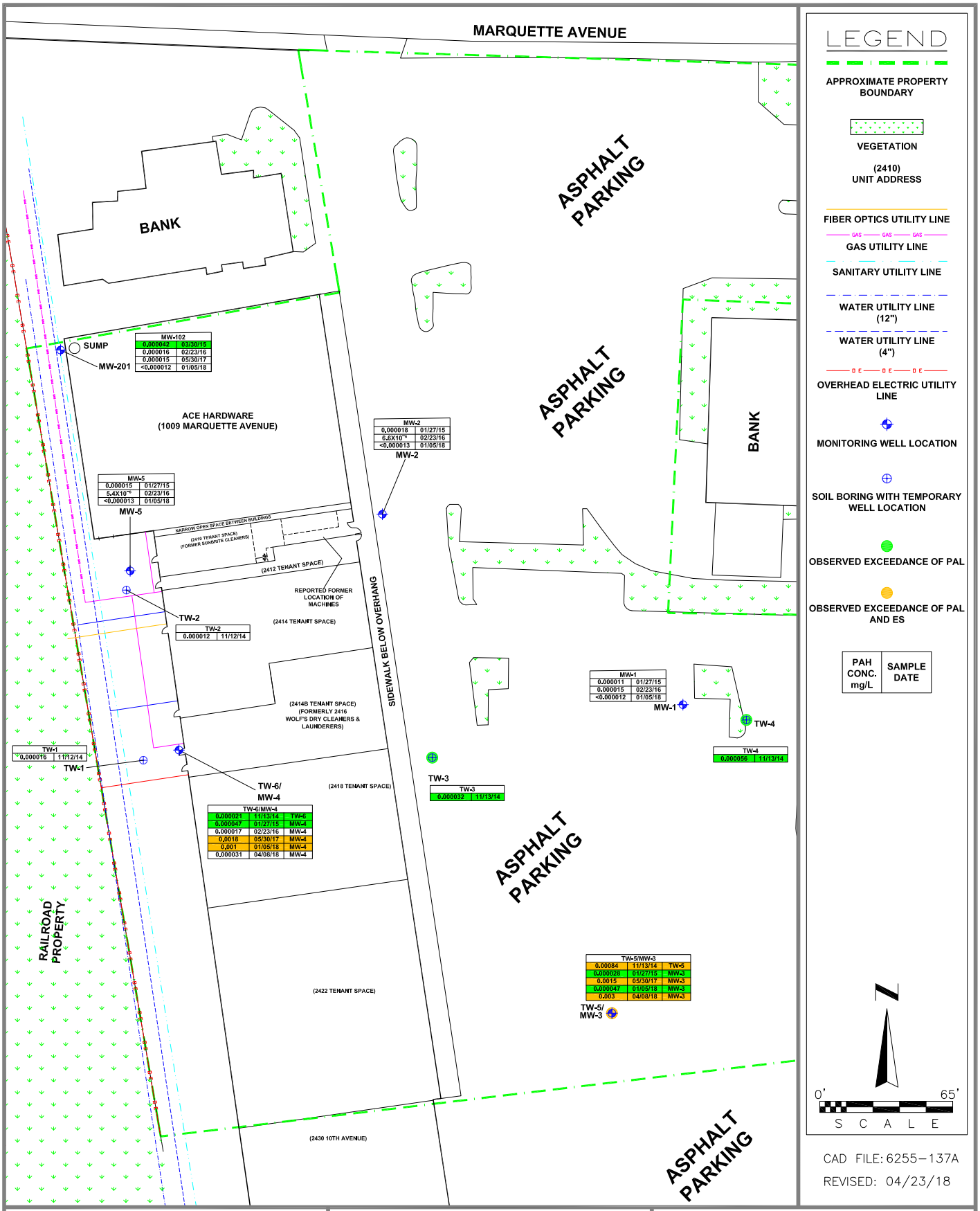
CAD FILE: 6255-136A

REVISED: 04/23/18

ENVIRONMENTAL DAI

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

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



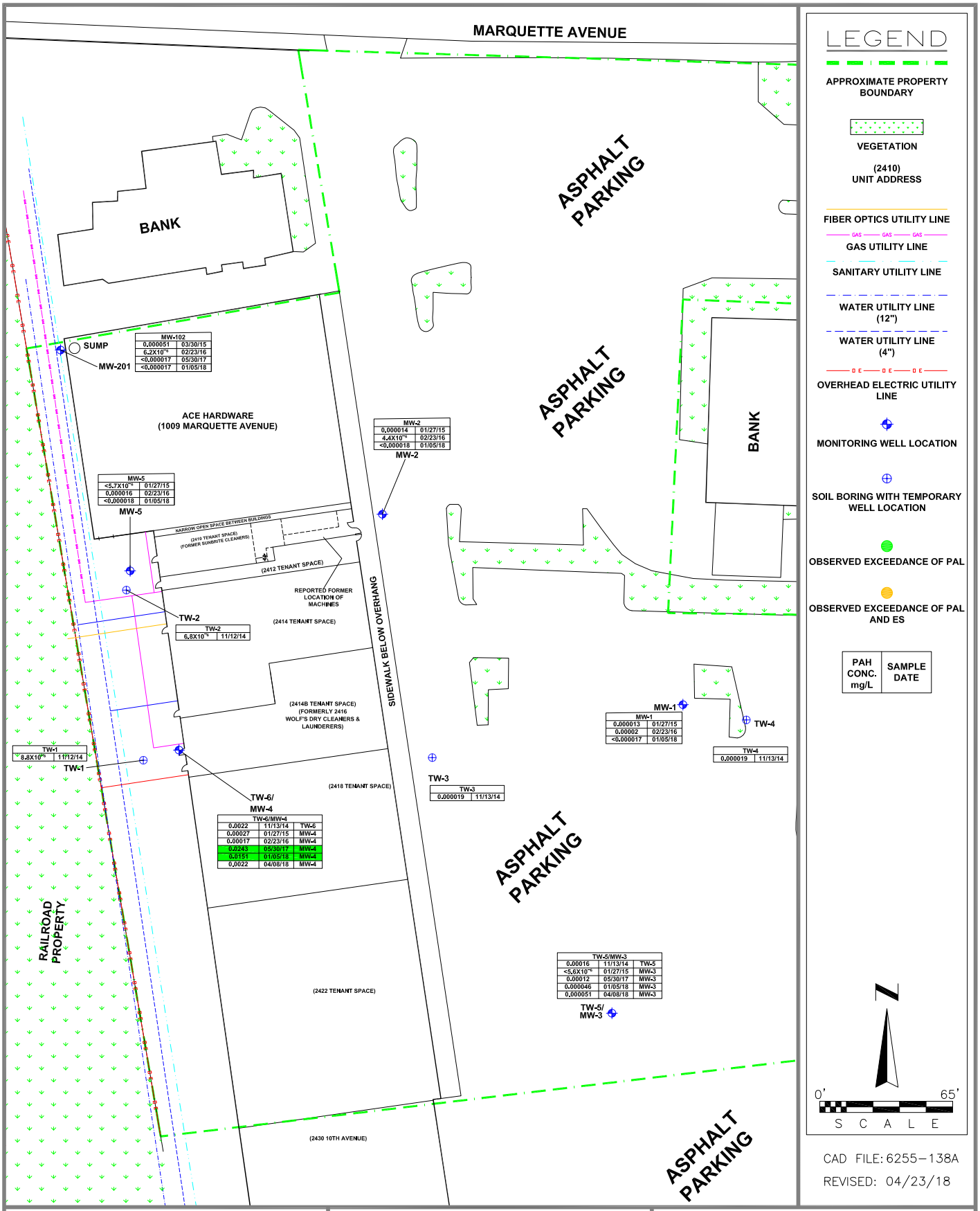
CAD FILE: 6255-137A

REVISED: 04/23/18

ENVIRONMENTAL DAI

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

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



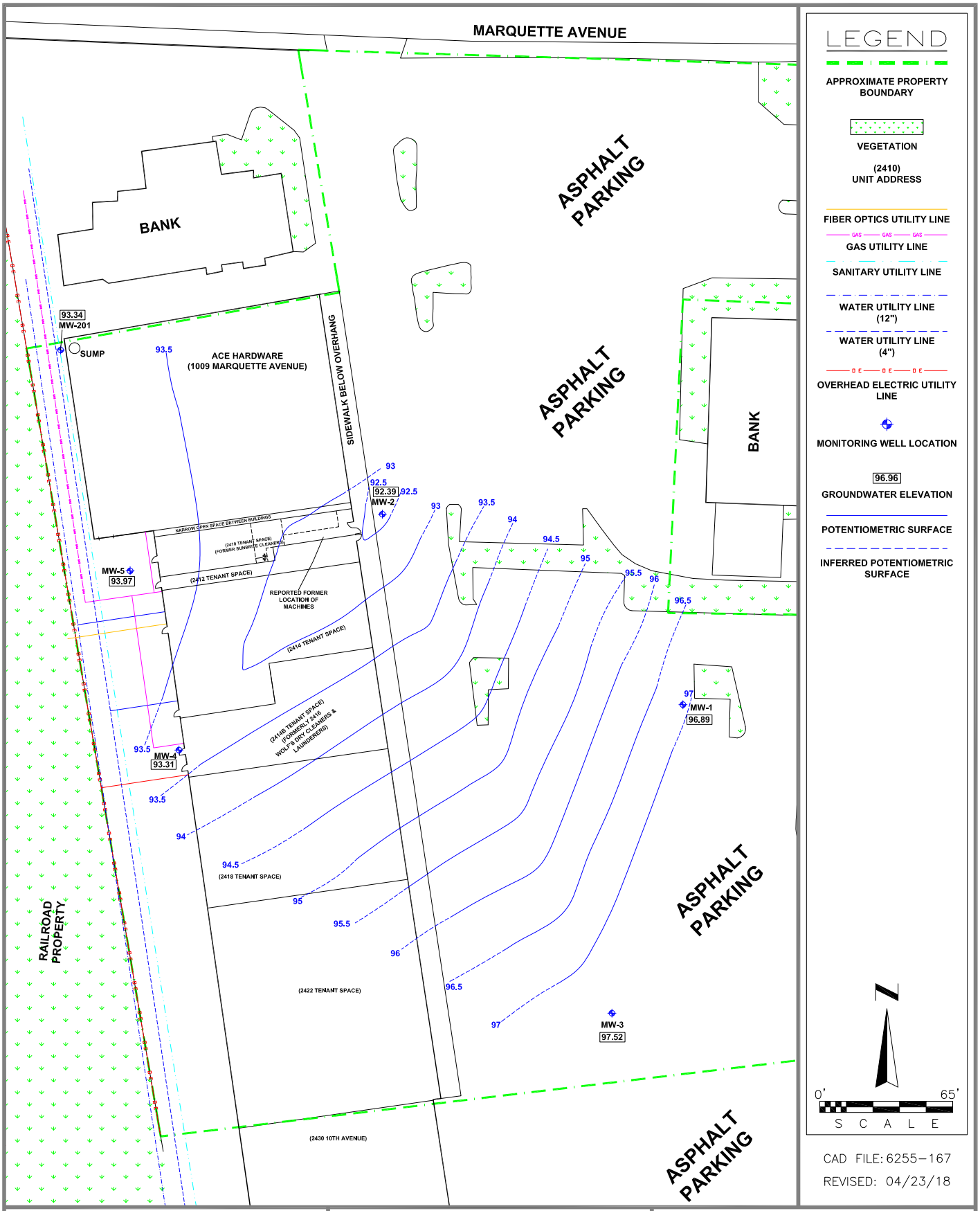
CAD FILE: 6255-138A

REVISED: 04/23/18

ENVIRONMENTAL DAI

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

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



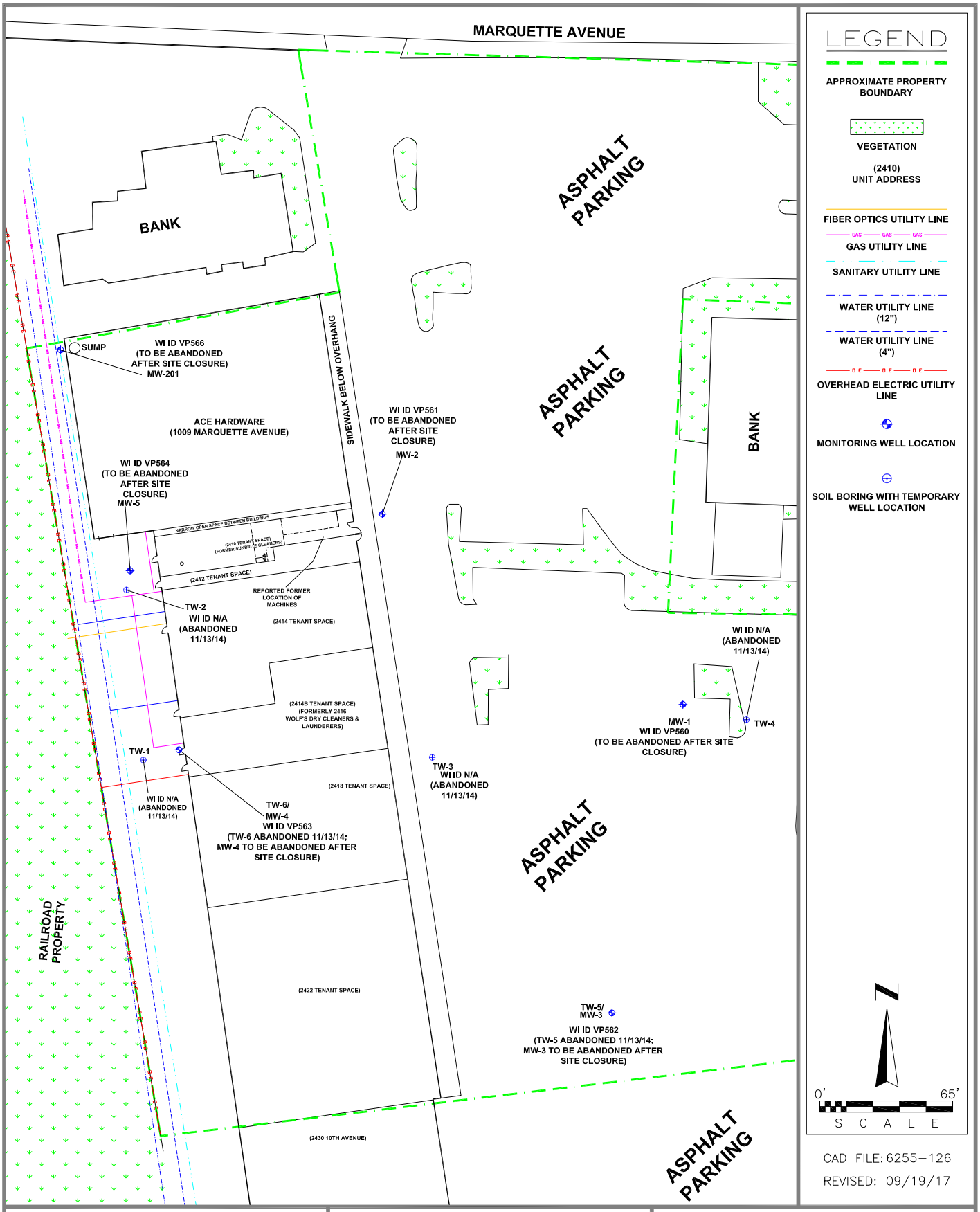
CAD FILE: 6255-167

REVISED: 04/23/18

ENVIRONMENTAL

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

FIGURE B.3.c.5
GROUNDWATER FLOW DIRECTION
(APRIL 8, 2018)



CAD FILE: 6255-126

REVISED: 09/19/17

DAI ENVIRONMENTAL

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 2018)

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

April 12, 2018

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

RE: Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Dear Chris Cailles:
Enclosed are the analytical results for sample(s) received by the laboratory on April 07, 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
laurie.woelfel@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jenny Rovzar, DAI

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

CERTIFICATIONS

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

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

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

SAMPLE SUMMARY

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40167146001	**MW-3**	Water	04/06/18 13:00	04/07/18 07:50
40167146002	**MW-4**	Water	04/06/18 14:00	04/07/18 07:50
40167146003	**MW-5**	Water	04/06/18 14:50	04/07/18 07:50

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

SAMPLE ANALYTE COUNT

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40167146001	**MW-3**	EPA 8270 by HVI	TPO	20
40167146002	**MW-4**	EPA 8270 by HVI	TPO	20
40167146003	**MW-5**	EPA 8260	HNW	64

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Sample: MW-3 **Lab ID: 40167146001** Collected: 04/06/18 13:00 Received: 04/07/18 07:50 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	**0.029**	ug/L	0.027	0.0055	1	04/11/18 06:54	04/11/18 13:32	83-32-9	
Acenaphthylene	**0.053**	ug/L	0.022	0.0045	1	04/11/18 06:54	04/11/18 13:32	208-96-8	
Anthracene	**0.15**	ug/L	0.047	0.0094	1	04/11/18 06:54	04/11/18 13:32	120-12-7	
Benzo(a)anthracene	**1.0**	ug/L	0.034	0.0068	1	04/11/18 06:54	04/11/18 13:32	56-55-3	
Benzo(a)pyrene	**1.9**	ug/L	0.047	0.0095	1	04/11/18 06:54	04/11/18 13:32	50-32-8	
Benzo(b)fluoranthene	**3.9**	ug/L	0.026	0.0052	1	04/11/18 06:54	04/11/18 13:32	205-99-2	
Benzo(g,h,i)perylene	**2.5**	ug/L	0.031	0.0061	1	04/11/18 06:54	04/11/18 13:32	191-24-2	
Benzo(k)fluoranthene	**1.4**	ug/L	0.034	0.0068	1	04/11/18 06:54	04/11/18 13:32	207-08-9	
Chrysene	**3.0**	ug/L	0.059	0.012	1	04/11/18 06:54	04/11/18 13:32	218-01-9	
Dibenz(a,h)anthracene	**0.34**	ug/L	0.045	0.0090	1	04/11/18 06:54	04/11/18 13:32	53-70-3	
Fluoranthene	**5.2**	ug/L	0.048	0.0096	1	04/11/18 06:54	04/11/18 13:32	206-44-0	
Fluorene	**0.048**	ug/L	0.036	0.0072	1	04/11/18 06:54	04/11/18 13:32	86-73-7	B
Indeno(1,2,3-cd)pyrene	**2.1**	ug/L	0.079	0.016	1	04/11/18 06:54	04/11/18 13:32	193-39-5	
1-Methylnaphthalene	**0.033**	ug/L	0.027	0.0053	1	04/11/18 06:54	04/11/18 13:32	90-12-0	
2-Methylnaphthalene	**0.024**	ug/L	0.022	0.0044	1	04/11/18 06:54	04/11/18 13:32	91-57-6	
Naphthalene	**0.051J**	ug/L	0.083	0.017	1	04/11/18 06:54	04/11/18 13:32	91-20-3	
Phenanthrene	**1.3**	ug/L	0.062	0.012	1	04/11/18 06:54	04/11/18 13:32	85-01-8	
Pyrene	**3.7**	ug/L	0.034	0.0069	1	04/11/18 06:54	04/11/18 13:32	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	36	%	29-80		1	04/11/18 06:54	04/11/18 13:32	321-60-8	
Terphenyl-d14 (S)	21	%	10-123		1	04/11/18 06:54	04/11/18 13:32	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Sample: MW-4 **Lab ID: 40167146002** Collected: 04/06/18 14:00 Received: 04/07/18 07:50 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	**3.1**	ug/L	0.027	0.0055	1	04/11/18 06:54	04/11/18 17:14	83-32-9	
Acenaphthylene	**0.73**	ug/L	0.022	0.0045	1	04/11/18 06:54	04/11/18 17:14	208-96-8	
Anthracene	**0.51**	ug/L	0.047	0.0094	1	04/11/18 06:54	04/11/18 17:14	120-12-7	
Benzo(a)anthracene	**0.012J**	ug/L	0.034	0.0068	1	04/11/18 06:54	04/11/18 17:14	56-55-3	B
Benzo(a)pyrene	**<0.0095**	ug/L	0.047	0.0095	1	04/11/18 06:54	04/11/18 17:14	50-32-8	
Benzo(b)fluoranthene	**0.0096J**	ug/L	0.026	0.0052	1	04/11/18 06:54	04/11/18 17:14	205-99-2	
Benzo(g,h,i)perylene	**<0.0061**	ug/L	0.031	0.0061	1	04/11/18 06:54	04/11/18 17:14	191-24-2	
Benzo(k)fluoranthene	**<0.0068**	ug/L	0.034	0.0068	1	04/11/18 06:54	04/11/18 17:14	207-08-9	
Chrysene	**0.031J**	ug/L	0.059	0.012	1	04/11/18 06:54	04/11/18 17:14	218-01-9	
Dibenz(a,h)anthracene	**<0.0090**	ug/L	0.045	0.0090	1	04/11/18 06:54	04/11/18 17:14	53-70-3	
Fluoranthene	**0.10**	ug/L	0.048	0.0096	1	04/11/18 06:54	04/11/18 17:14	206-44-0	B
Fluorene	**5.3**	ug/L	0.036	0.0072	1	04/11/18 06:54	04/11/18 17:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.016**	ug/L	0.079	0.016	1	04/11/18 06:54	04/11/18 17:14	193-39-5	
1-Methylnaphthalene	**10.9**	ug/L	0.027	0.0053	1	04/11/18 06:54	04/11/18 17:14	90-12-0	
2-Methylnaphthalene	**0.26**	ug/L	0.022	0.0044	1	04/11/18 06:54	04/11/18 17:14	91-57-6	
Naphthalene	**2.2**	ug/L	0.083	0.017	1	04/11/18 06:54	04/11/18 17:14	91-20-3	
Phenanthrene	**3.3**	ug/L	0.062	0.012	1	04/11/18 06:54	04/11/18 17:14	85-01-8	
Pyrene	**0.32**	ug/L	0.034	0.0069	1	04/11/18 06:54	04/11/18 17:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	44	%	29-80		1	04/11/18 06:54	04/11/18 17:14	321-60-8	
Terphenyl-d14 (S)	37	%	10-123		1	04/11/18 06:54	04/11/18 17:14	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Sample: MW-5 **Lab ID: 40167146003** Collected: 04/06/18 14:50 Received: 04/07/18 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		04/10/18 12:19	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		04/10/18 12:19	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/10/18 12:19	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		04/10/18 12:19	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		04/10/18 12:19	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/10/18 12:19	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/10/18 12:19	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		04/10/18 12:19	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/10/18 12:19	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/10/18 12:19	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/10/18 12:19	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/10/18 12:19	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/10/18 12:19	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/10/18 12:19	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/10/18 12:19	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/10/18 12:19	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/10/18 12:19	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/10/18 12:19	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		04/10/18 12:19	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		04/10/18 12:19	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/10/18 12:19	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		04/10/18 12:19	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		04/10/18 12:19	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/10/18 12:19	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/10/18 12:19	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/10/18 12:19	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		04/10/18 12:19	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Sample: MW-5 **Lab ID: 40167146003** Collected: 04/06/18 14:50 Received: 04/07/18 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		04/10/18 12:19	79-34-5	
Tetrachloroethene	**20.3**	ug/L	1.0	0.50	1		04/10/18 12:19	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		04/10/18 12:19	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		04/10/18 12:19	120-82-1	
1,1,1-Trichloroethane	**0.89J**	ug/L	1.0	0.50	1		04/10/18 12:19	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/10/18 12:19	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/10/18 12:19	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/10/18 12:19	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/10/18 12:19	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/10/18 12:19	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/10/18 12:19	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	61-130		1		04/10/18 12:19	460-00-4	
Dibromofluoromethane (S)	104	%	67-130		1		04/10/18 12:19	1868-53-7	
Toluene-d8 (S)	109	%	70-130		1		04/10/18 12:19	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

QC Batch: 285566 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40167146003

METHOD BLANK: 1671056 Matrix: Water
Associated Lab Samples: 40167146003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	04/10/18 07:50	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	04/10/18 07:50	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	04/10/18 07:50	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	04/10/18 07:50	
1,1-Dichloroethane	ug/L	<0.24	1.0	04/10/18 07:50	
1,1-Dichloroethene	ug/L	<0.41	1.0	04/10/18 07:50	
1,1-Dichloropropene	ug/L	<0.44	1.0	04/10/18 07:50	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	04/10/18 07:50	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	04/10/18 07:50	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	04/10/18 07:50	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	04/10/18 07:50	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	04/10/18 07:50	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	04/10/18 07:50	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	04/10/18 07:50	
1,2-Dichloroethane	ug/L	<0.17	1.0	04/10/18 07:50	
1,2-Dichloropropane	ug/L	<0.23	1.0	04/10/18 07:50	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	04/10/18 07:50	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	04/10/18 07:50	
1,3-Dichloropropane	ug/L	<0.50	1.0	04/10/18 07:50	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	04/10/18 07:50	
2,2-Dichloropropane	ug/L	<0.48	1.0	04/10/18 07:50	
2-Chlorotoluene	ug/L	<0.50	1.0	04/10/18 07:50	
4-Chlorotoluene	ug/L	<0.21	1.0	04/10/18 07:50	
Benzene	ug/L	<0.50	1.0	04/10/18 07:50	
Bromobenzene	ug/L	<0.23	1.0	04/10/18 07:50	
Bromochloromethane	ug/L	<0.34	1.0	04/10/18 07:50	
Bromodichloromethane	ug/L	<0.50	1.0	04/10/18 07:50	
Bromoform	ug/L	<0.50	1.0	04/10/18 07:50	
Bromomethane	ug/L	<2.4	5.0	04/10/18 07:50	
Carbon tetrachloride	ug/L	<0.50	1.0	04/10/18 07:50	
Chlorobenzene	ug/L	<0.50	1.0	04/10/18 07:50	
Chloroethane	ug/L	<0.37	1.0	04/10/18 07:50	
Chloroform	ug/L	<2.5	5.0	04/10/18 07:50	
Chloromethane	ug/L	<0.50	1.0	04/10/18 07:50	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	04/10/18 07:50	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	04/10/18 07:50	
Dibromochloromethane	ug/L	<0.50	1.0	04/10/18 07:50	
Dibromomethane	ug/L	<0.43	1.0	04/10/18 07:50	
Dichlorodifluoromethane	ug/L	<0.22	1.0	04/10/18 07:50	
Diisopropyl ether	ug/L	<0.50	1.0	04/10/18 07:50	
Ethylbenzene	ug/L	<0.50	1.0	04/10/18 07:50	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

METHOD BLANK: 1671056 Matrix: Water
Associated Lab Samples: 40167146003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	04/10/18 07:50	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	04/10/18 07:50	
m&p-Xylene	ug/L	<1.0	2.0	04/10/18 07:50	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	04/10/18 07:50	
Methylene Chloride	ug/L	<0.23	1.0	04/10/18 07:50	
n-Butylbenzene	ug/L	<0.50	1.0	04/10/18 07:50	
n-Propylbenzene	ug/L	<0.50	1.0	04/10/18 07:50	
Naphthalene	ug/L	<2.5	5.0	04/10/18 07:50	
o-Xylene	ug/L	<0.50	1.0	04/10/18 07:50	
p-Isopropyltoluene	ug/L	<0.50	1.0	04/10/18 07:50	
sec-Butylbenzene	ug/L	<2.2	5.0	04/10/18 07:50	
Styrene	ug/L	<0.50	1.0	04/10/18 07:50	
tert-Butylbenzene	ug/L	<0.18	1.0	04/10/18 07:50	
Tetrachloroethene	ug/L	<0.50	1.0	04/10/18 07:50	
Toluene	ug/L	<0.50	1.0	04/10/18 07:50	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	04/10/18 07:50	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	04/10/18 07:50	
Trichloroethene	ug/L	<0.33	1.0	04/10/18 07:50	
Trichlorofluoromethane	ug/L	<0.18	1.0	04/10/18 07:50	
Vinyl chloride	ug/L	<0.18	1.0	04/10/18 07:50	
4-Bromofluorobenzene (S)	%	104	61-130	04/10/18 07:50	
Dibromofluoromethane (S)	%	103	67-130	04/10/18 07:50	
Toluene-d8 (S)	%	110	70-130	04/10/18 07:50	

LABORATORY CONTROL SAMPLE: 1671057

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.0	110	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	23.3	117	70-130	
1,1,2-Trichloroethane	ug/L	20	23.9	119	70-130	
1,1-Dichloroethane	ug/L	20	21.1	106	71-132	
1,1-Dichloroethene	ug/L	20	21.9	110	75-130	
1,2,4-Trichlorobenzene	ug/L	20	20.2	101	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	20.8	104	63-123	
1,2-Dibromoethane (EDB)	ug/L	20	21.2	106	70-130	
1,2-Dichlorobenzene	ug/L	20	20.3	102	70-130	
1,2-Dichloroethane	ug/L	20	20.6	103	70-131	
1,2-Dichloropropane	ug/L	20	21.2	106	80-120	
1,3-Dichlorobenzene	ug/L	20	20.0	100	70-130	
1,4-Dichlorobenzene	ug/L	20	21.3	107	70-130	
Benzene	ug/L	20	23.9	119	73-145	
Bromodichloromethane	ug/L	20	22.9	114	70-130	
Bromoform	ug/L	20	19.7	98	67-130	
Bromomethane	ug/L	20	18.1	90	26-128	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

LABORATORY CONTROL SAMPLE: 1671057

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	20	21.3	106	70-133	
Chlorobenzene	ug/L	20	21.0	105	70-130	
Chloroethane	ug/L	20	18.3	92	58-120	
Chloroform	ug/L	20	22.3	112	80-121	
Chloromethane	ug/L	20	10.5	52	40-127	
cis-1,2-Dichloroethene	ug/L	20	21.5	108	70-130	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	70-130	
Dibromochloromethane	ug/L	20	19.1	96	70-130	
Dichlorodifluoromethane	ug/L	20	15.0	75	20-135	
Ethylbenzene	ug/L	20	22.5	113	87-129	
Isopropylbenzene (Cumene)	ug/L	20	21.9	109	70-130	
m&p-Xylene	ug/L	40	45.0	112	70-130	
Methyl-tert-butyl ether	ug/L	20	21.9	109	66-143	
Methylene Chloride	ug/L	20	23.5	117	70-130	
o-Xylene	ug/L	20	21.9	110	70-130	
Styrene	ug/L	20	22.8	114	70-130	
Tetrachloroethene	ug/L	20	20.1	100	70-130	
Toluene	ug/L	20	23.1	116	82-130	
trans-1,2-Dichloroethene	ug/L	20	21.7	109	75-132	
trans-1,3-Dichloropropene	ug/L	20	21.9	109	70-130	
Trichloroethene	ug/L	20	21.9	110	70-130	
Trichlorofluoromethane	ug/L	20	20.7	103	76-133	
Vinyl chloride	ug/L	20	16.0	80	57-136	
4-Bromofluorobenzene (S)	%			110	61-130	
Dibromofluoromethane (S)	%			102	67-130	
Toluene-d8 (S)	%			109	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1671067 1671068

Parameter	Units	40167192003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	56.0	55.5	112	111	70-134	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	55.2	55.4	110	111	70-130	0	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	58.8	58.7	118	117	70-130	0	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	52.2	51.9	104	104	71-133	1	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	54.8	54.3	110	109	75-136	1	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	51.0	51.8	102	103	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	50.9	52.7	102	105	63-123	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	52.8	52.5	106	105	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	49.5	49.5	99	99	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	49.2	48.8	98	98	70-131	1	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	50.4	50.9	101	102	80-120	1	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	49.8	49.8	100	100	70-130	0	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	50.4	50.4	101	101	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1671067 1671068

Parameter	Units	40167192003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.50	50	50	60.1	59.0	120	118	73-145	2	20	
Bromodichloromethane	ug/L	<0.50	50	50	56.1	56.7	112	113	70-130	1	20	
Bromoform	ug/L	<0.50	50	50	45.6	45.5	91	91	67-130	0	20	
Bromomethane	ug/L	<2.4	50	50	50.9	53.5	100	105	26-129	5	20	
Carbon tetrachloride	ug/L	<0.50	50	50	51.3	50.6	103	101	70-134	1	20	
Chlorobenzene	ug/L	<0.50	50	50	52.2	51.6	104	103	70-130	1	20	
Chloroethane	ug/L	<0.37	50	50	46.7	45.8	93	92	58-120	2	20	
Chloroform	ug/L	<2.5	50	50	55.2	54.5	110	109	80-121	1	20	
Chloromethane	ug/L	4.4	50	50	34.7	31.3	61	54	40-128	10	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	54.1	53.3	108	107	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	50.0	50.7	100	101	70-130	1	20	
Dibromochloromethane	ug/L	<0.50	50	50	46.6	45.9	93	92	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	37.0	36.7	74	73	20-146	1	20	
Ethylbenzene	ug/L	<0.50	50	50	58.0	57.7	116	115	87-129	1	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	56.8	56.0	114	112	70-130	1	20	
m&p-Xylene	ug/L	<1.0	100	100	113	112	113	112	70-130	1	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	53.4	53.0	107	106	66-143	1	20	
Methylene Chloride	ug/L	<0.23	50	50	57.5	56.5	115	113	70-130	2	20	
o-Xylene	ug/L	<0.50	50	50	56.6	55.9	113	112	70-130	1	20	
Styrene	ug/L	<0.50	50	50	57.2	56.6	114	113	70-130	1	20	
Tetrachloroethene	ug/L	<0.50	50	50	51.1	50.3	102	101	70-130	2	20	
Toluene	ug/L	<0.50	50	50	58.3	57.4	117	115	82-131	2	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	55.6	54.2	111	108	75-135	2	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	52.0	51.5	104	103	70-130	1	20	
Trichloroethene	ug/L	<0.33	50	50	54.0	54.8	108	110	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	51.7	51.1	103	102	76-150	1	20	
Vinyl chloride	ug/L	<0.18	50	50	40.3	40.5	81	81	56-143	0	20	
4-Bromofluorobenzene (S)	%						109	108	61-130			
Dibromofluoromethane (S)	%						102	102	67-130			
Toluene-d8 (S)	%						111	111	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

QC Batch: 285702
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by HVI
Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40167146001, 40167146002

METHOD BLANK: 1671696
Matrix: Water
Associated Lab Samples: 40167146001, 40167146002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0059	0.030	04/11/18 09:53	
2-Methylnaphthalene	ug/L	<0.0049	0.024	04/11/18 09:53	
Acenaphthene	ug/L	<0.0061	0.030	04/11/18 09:53	
Acenaphthylene	ug/L	<0.0050	0.025	04/11/18 09:53	
Anthracene	ug/L	<0.010	0.052	04/11/18 09:53	
Benzo(a)anthracene	ug/L	<0.0076	0.038	04/11/18 09:53	
Benzo(a)pyrene	ug/L	<0.011	0.053	04/11/18 09:53	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	04/11/18 09:53	
Benzo(g,h,i)perylene	ug/L	0.0072J	0.034	04/11/18 09:53	
Benzo(k)fluoranthene	ug/L	<0.0076	0.038	04/11/18 09:53	
Chrysene	ug/L	<0.013	0.065	04/11/18 09:53	
Dibenz(a,h)anthracene	ug/L	<0.010	0.050	04/11/18 09:53	
Fluoranthene	ug/L	<0.011	0.053	04/11/18 09:53	
Fluorene	ug/L	0.0090J	0.040	04/11/18 09:53	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	0.088	04/11/18 09:53	
Naphthalene	ug/L	<0.018	0.092	04/11/18 09:53	
Phenanthrene	ug/L	0.017J	0.069	04/11/18 09:53	
Pyrene	ug/L	0.013J	0.038	04/11/18 09:53	
2-Fluorobiphenyl (S)	%	47	29-80	04/11/18 09:53	
Terphenyl-d14 (S)	%	75	10-123	04/11/18 09:53	

LABORATORY CONTROL SAMPLE: 1671697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/L	2	1.4	72	53-92	
2-Methylnaphthalene	ug/L	2	1.4	71	51-87	
Acenaphthene	ug/L	2	1.3	67	49-90	
Acenaphthylene	ug/L	2	1.3	67	50-84	
Anthracene	ug/L	2	1.6	79	49-109	
Benzo(a)anthracene	ug/L	2	1.6	80	42-97	
Benzo(a)pyrene	ug/L	2	1.7	87	61-106	
Benzo(b)fluoranthene	ug/L	2	1.6	81	51-95	
Benzo(g,h,i)perylene	ug/L	2	1.1	54	27-120	
Benzo(k)fluoranthene	ug/L	2	1.8	88	58-103	
Chrysene	ug/L	2	2.0	101	69-125	
Dibenz(a,h)anthracene	ug/L	2	0.98	49	21-120	
Fluoranthene	ug/L	2	1.9	94	68-110	
Fluorene	ug/L	2	1.5	74	54-95	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.6	82	50-94	
Naphthalene	ug/L	2	1.3	65	46-78	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

LABORATORY CONTROL SAMPLE: 1671697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	ug/L	2	1.7	86	51-95	
Pyrene	ug/L	2	1.9	95	66-106	
2-Fluorobiphenyl (S)	%			60	29-80	
Terphenyl-d14 (S)	%			82	10-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1671698 1671699

Parameter	Units	40167088001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/L	<0.0059	2	2	1.3	1.3	65	63	38-92	3	24	
2-Methylnaphthalene	ug/L	<0.0049	2	2	1.3	1.2	64	62	40-87	3	28	
Acenaphthene	ug/L	<0.0061	2	2	1.1	1.1	55	56	23-90	3	23	
Acenaphthylene	ug/L	<0.0050	2	2	1.1	1.1	56	56	31-84	1	25	
Anthracene	ug/L	<0.010	2	2	1.2	1.2	58	58	16-111	1	27	
Benzo(a)anthracene	ug/L	0.0078J	2	2	1.2	1.1	62	56	10-98	9	31	
Benzo(a)pyrene	ug/L	<0.011	2	2	1.2	1.2	60	59	10-106	1	29	
Benzo(b)fluoranthene	ug/L	0.0061J	2	2	1.2	1.2	61	61	10-102	1	27	
Benzo(g,h,i)perylene	ug/L	<0.0068	2	2	0.57	0.55	28	27	10-120	4	33	
Benzo(k)fluoranthene	ug/L	<0.0076	2	2	1.1	1.1	54	57	10-107	5	28	
Chrysene	ug/L	<0.013	2	2	1.5	1.5	75	75	10-137	0	30	
Dibenz(a,h)anthracene	ug/L	<0.010	2	2	0.53	0.48	26	24	10-120	8	40	
Fluoranthene	ug/L	0.012J	2	2	1.4	1.4	70	70	16-127	1	28	
Fluorene	ug/L	0.0080J	2	2	1.2	1.2	59	61	23-95	2	25	
Indeno(1,2,3-cd)pyrene	ug/L	<0.018	2	2	0.93	0.89	46	44	10-94	4	30	
Naphthalene	ug/L	<0.018	2	2	1.2	1.2	60	58	34-78	5	26	
Phenanthrene	ug/L	0.016J	2	2	1.3	1.3	65	64	37-95	2	24	
Pyrene	ug/L	0.013J	2	2	1.5	1.5	72	74	33-113	2	32	
2-Fluorobiphenyl (S)	%						53	52	29-80			
Terphenyl-d14 (S)	%						62	63	10-123			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

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

B Analyte was detected in the associated method blank.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6255 SUNRISE SHOPPING
Pace Project No.: 40167146

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40167146001	**MW-3**	EPA 3510	285702	EPA 8270 by HVI	285735
40167146002	**MW-4**	EPA 3510	285702	EPA 8270 by HVI	285735
40167146003	**MW-5**	EPA 8260	285566		

Pace Analytical®
www.pacelabs.com

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

CHAIN OF CUSTODY

4016/146

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

(Please Print Clearly)	
Company Name:	DAL
Branch/Location:	LAKE FOREST
Project Contact:	CHRIS CAILLES
Phone:	(847)573-8900
Project Number:	6255
Project Name:	SUNRISE SHOPPING
Project State:	WI
Sampled By (Print):	DAN TRAP
Sampled By (Sign):	
PO #:	Regulatory Program:

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

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

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

Matrix Codes

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested: VOC	Analyses Requested: PWSA	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW-3	4/6/18	1300	GW				X			
002	MW-4		1400					X			
003	MW-5		1450				X	X	VOC, ONLY		

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

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

Email #1:	
Email #2:	
Telephone:	
Fax:	

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
	4/6/18 1455	Mary Fannin	4/6/18 1455
Mary Fannin	4/6/18 1540		
CS Logistics	4/7/18 0750		4/7/18 0750

PACE Project No. 40167146

Receipt Temp = ROI °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: DAL Project # 40167146

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

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

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001					1																												2.5 / 5 / 10
002					2																												2.5 / 5 / 10
003																		3															2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
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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:	

Pace Analytical 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 31Jan2018
	Document No.: **F-GB-C-031-rev.06**	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: **WO# : 40167146**

40167146

Client Name: DAI

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

Tracking #: _____

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

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

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

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

Cooler Temperature Uncorr: ROT /Corr: _____

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

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

Person examining contents:
Date: 4/7/18
Initials: SSM

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume: ☐Yes ☒No ☐N/A	MS/MSD ☐Yes ☒No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☐Yes ☒No ☐N/A	12. No collect times SSM 4/7/18
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☐Yes ☒No ☐N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: UW **Date:** 4/9/18