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02-30-000327

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60597994

Shelly Billingsley, MBA, P.E.
Director of Public Works
City of Kenosha
625 52nd Street
Kenosha, WI 53140

October 2019 Semi-annual Perimeter Groundwater Monitoring Report
Former Kenosha Engine Plant, 5555 30th Avenue, Kenosha, Wisconsin

Dear Ms. Billingsley

AECOM conducted a semi-annual groundwater sampling event on October 8 and 9, 2019, under Task Order 134-011519 for the City of Kenosha, at the former Kenosha Engine Plant (KEP). Seventeen perimeter groundwater monitoring wells (MW-31, MW-44, MW-101, MW-102, MW-103, MW-105, MW-107, MW-108 through MW-117), three piezometers (PZ-116, PZ-117 and PZ-118) and four wells at the Jockey site (MW-79 through MW-82) were sampled during the October 2019 event.

Prior to sample collection, groundwater elevation measurements were collected from the sampled monitoring wells and piezometers plus an additional monitoring well, MW-206. Depth to groundwater measurements and calculated elevations are provided in Table 1. The monitoring well and piezometer locations are depicted in Figure 1.

Groundwater flow at the KEP generally flows to the east-northeast and east-southeast across the site at the water table and to the northeast at the clay-till interface, based on the groundwater elevations using only the perimeter wells. These flow directions are consistent with the data provided in the KEP *Site Investigation Report* (AECOM, February 2015) and subsequent groundwater measurement events. Contoured groundwater elevations for October 2019, depicting groundwater flow, are shown in Figure 2 for the water table potentiometric surface and in Figure 3 for the potentiometric surface measured in the piezometers.

Groundwater samples were collected from the selected monitoring wells and piezometers using a low-flow sampling technique with a peristaltic pump and dedicated tubing for each well. Sampling procedures were consistent with those provided in the *KEP Groundwater Monitoring Plan – Revision 1* (AECOM July 22, 2015). Field parameters, including pH, conductivity, oxygen reducing potential, dissolved oxygen, and temperature, were measured during well purging and recorded following stabilization of each parameter. The field parameter measurements are included in Table 2.

Groundwater samples from the 24 monitoring wells or piezometers were submitted to Pace Analytical Services, Inc. (Pace), in Green Bay, Wisconsin, and analyzed for VOCs (SW846 Method 8260B). The groundwater analytical results were compared to the Wisconsin Administrative Code Ch. NR 140.10, Table 1, Public Heath Groundwater Quality Standards, enforcement standards (ES) and preventive action limit (PAL). The PAL is a concentration that is 10% (for carcinogenic, mutagenic or teratogenic compounds) to 20% of the enforcement standard. The PAL has been established as the concentration at which notification to the WDNR is required. The ES is a health-risk based concentration and is generally equal

to the US EPA's maximum contaminant level (MCL) where established. The groundwater VOC analytical results are included in Table 3. ES exceedances for VOCs are depicted in bold on Table 3 and on the site map in Figure 4. PAL exceedances for VOCs are shown in underlined italics. The laboratory analytical report is also attached.

Quality control samples were collected to assess laboratory precision and accuracy. A trip blank was submitted for analysis and VOCs were not detected. Field duplicate samples were collected at monitoring wells MW-108 and MW-114 and submitted for analysis. MW-108 had no detects in both the original and the duplicate sample. MW-114 and the duplicate were in good agreement with relative percent difference (RPD) less than 20% between the detected analytes.

VOCs were generally not detected in the perimeter wells except for MW-31, MW-101, MW-102, MW-114, MW-115, PZ-116, and PZ-118 as well as MW-81 and MW-82 at the Jockey site. The following groundwater quality exceedances were identified in the groundwater samples analyzed in October 2019:

Enforcement standard (ES) exceedances

KEP

MW-31 – trichloroethene (TCE)
MW-114 – TCE
MW-114 – vinyl chloride (VC)
PZ-116 – VC
PZ-118 – VC

Enforcement standard (ES) exceedances	**Preventive action limit (PAL) exceedances**
Jockey	
MW-82 – TCE	MW-82 – trans-1,2-Dichloroethene
MW-82 – cis-1,2-dichloroethene	
MW-81 – VC	
MW-82 – VC	

Concentration trends were evaluated for MW-31, MW-114 and PZ-118 on the northern property boundary. There is no discernable trend in MW-31 and the contaminant concentration fluctuations moderately correlate with water level fluctuations, as shown on Figure 5. The concentrations in MW-114 in 2015/2016 appeared to mirror the water level fluctuations with a spike in TCE concentrations in April 2016, however in 2018 a second spike of the water table did not result in a similar spike in TCE concentrations. Continued monitoring is needed to evaluate if the lower level of TCE is the result of the contaminated soil removal that took place in 2016. Figure 6 shows MW-114 VOC concentrations over time. The concentration trends for cis-1,2-dichloroethene and vinyl chloride in PZ-118 show a reduction since 2014 (Figure 7) and the concentrations do not appear to have any correlation with groundwater elevations nor the soil remediation activities.

Concentration trends were also evaluated for the groundwater from MW-82 on the Jockey property (Figure 8). The last several sampling events have shown some correlation between TCE and cisDCE concentrations and groundwater levels.

In conclusion, the groundwater recovery systems are maintaining the groundwater contaminant plume on-site. Groundwater monitoring will continue on a semi-annual basis. Please contact us if you have questions.

Yours sincerely,

In conformance with NR 712.09 submittal certification requirements: "I, Lanette Altenbach, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

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Enclosures:

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Laboratory Analytical Report

cc: Paul Grittner, WDNR Project Manager with Attachments

Table 1
Groundwater Measurements and Elevations
KEP Perimeter Wells
Kenosha, Wisconsin

Well Number	MW-31		MW-44		MW-70		MW-71		MW-101		MW-102		MW-103	
Ground Elevation (ft)	624.45		624.49		623.49		623.57		624.01		624.18		625.74	
Top of PVC Casing (TOC) Elevation (ft)	627.42		624.194		623.17		623.35		623.46		623.66		625.33	
Top of Screen Elevation (ft)	615.72		619.724		616.19		616.25		620.56		621.06		622.04	
Screen Length (ft)	10		10		10		10		10		10		10	
TOC to Bottom of Well (ft)[A]	21.7		14.47		16.98		17.1		12.9		12.6		13.29	
Date	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)
5/8 - 5/20/2014	11.41	616.01	10.19	614.00	6.54	616.63	7.02	616.33	5.40	618.06	4.92	618.74	5.10	620.23
9/22/2014	13.17	614.25	10.95	613.24	7.48	615.69	7.95	615.40	5.96	617.50	5.33	618.33	5.41	619.92
12/1/2014	13.13	614.29	11.20	612.99	7.64	615.53	8.06	615.29	6.07	617.39	5.38	618.28	5.45	619.88
3/20/2015	12.49	614.93	11.15	613.04	7.95	615.22	8.02	615.33	5.75	617.71	5.51	618.15	5.56	619.77
6/23/2015	12.18	615.24	NM	--	NM	--	7.19	616.16	5.44	618.02	5.06	618.60	5.25	620.08
9/21/2015	12.24	615.18	10.37	613.82	NM	--	NM	--	5.16	618.30	4.94	618.72	5.12	620.21
4/13/2016	9.89	617.53	9.51	614.68	NM	--	NM	--	5.24	618.22	4.83	618.83	5.05	620.28
11/28/2016	12.51	614.91	10.80	613.39	NM	--	8.10	615.25	6.50	616.96	4.80	618.86	NM	--
5/16/2018	9.50	617.92	9.71	614.48	NM	--	NM	--	4.85	618.61	3.41	620.25	3.59	621.74
10/17/2018	11.71	615.71	9.92	614.27	NM	--	NM	--	5.58	617.88	4.48	619.18	4.77	620.56
4/16/2019	12.18	615.24	10.16	614.03	NM	--	NM	--	5.74	617.72	4.70	618.96	4.81	620.52
10/8/2019	9.76	617.66	8.96	615.23	NM	--	NM	--	4.72	618.74	4.35	619.31	4.60	620.73

ft = feet
[A] = as measured inside well
NI = Not Installed
NM = Not Measured
-- no elevation

Note: MW-70 and MW-71 were damaged during soil remediation activities and were abandoned.

Table 1
Groundwater Measurements and Elevations
KEP Perimeter Wells
Kenosha, Wisconsin

Well Number	MW-105		MW-107		MW-108		MW-109		MW-110		MW-111		MW-112	
Ground Elevation (ft)	623.87		625.74		623.742		625.19		622.88		621.41		621.61	
Top of PVC Casing (TOC) Elevation (ft)	623.35		624.59		623.262		624.62		622.42		621.04		621.18	
Top of Screen Elevation (ft)	619.65		620.19		619.162		618.37		618.42		618.44		617	
Screen Length (ft)	10		10		10		10		10		10		10	
TOC to Bottom of Well (ft)[A]	13.7		14.4		14.1		16.25		14		12.6		14.18	
Date	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)
5/8 - 5/20/2014	8.20	615.15	NM	--	4.38	618.88	13.71	610.91	5.69	616.73	6.71	614.33	4.36	616.82
9/22/2014	8.46	614.89	10.74	613.85	7.74	615.52	13.88	610.74	7.20	615.22	7.56	613.48	5.41	615.77
12/1/2014	8.58	614.77	8.36	616.23	7.10	616.16	13.86	610.76	7.18	615.24	7.31	613.73	4.91	616.27
3/20/2015	8.42	614.93	10.94	613.65	3.53	619.73	13.96	610.66	5.48	616.94	7.24	613.80	4.41	616.77
6/23/2015	7.83	615.52	9.73	614.86	5.62	617.64	13.73	610.89	6.14	616.28	6.88	614.16	4.42	616.76
9/21/2015	6.92	616.43	9.77	614.82	6.60	616.66	13.73	610.89	6.67	615.75	7.04	614.00	4.18	617.00
4/13/2016	7.61	615.74	9.13	615.46	3.49	619.77	13.61	611.01	4.93	617.49	6.26	614.78	3.72	617.46
11/28/2016	8.54	614.81	NM	--	7.20	616.06	13.88	610.74	7.20	615.22	7.69	613.35	4.78	616.40
5/16/2018	7.86	615.49	9.26	615.33	2.92	620.34	13.52	611.10	3.24	619.18	5.39	615.65	2.04	619.14
10/17/2018	7.64	615.71	9.35	615.24	4.69	618.57	13.65	610.97	5.43	616.99	6.79	614.25	3.72	617.46
4/16/2019	8.17	615.18	9.92	614.67	3.64	619.62	13.73	610.89	5.78	616.64	6.67	614.37	4.10	617.08
10/8/2019	7.50	615.85	8.97	615.62	3.48	619.78	13.29	611.33	4.81	617.61	6.26	614.78	3.23	617.95

ft = feet
[A] = as measured inside well
NI = Not Installed
NM = Not Measured
-- no elevation

Table 1
Groundwater Measurements and Elevations
KEP Perimeter Wells
Kenosha, Wisconsin

Well Number	MW-113		MW-114		MW-115		MW-116		PZ-116		MW-117		PZ-117	
Ground Elevation (ft)	623.17		622.82		623.71		623.29		623.27		621.89		621.95	
Top of PVC Casing (TOC) Elevation (ft)	622.81		622.28		623.39		622.73		622.87		621.59		621.51	
Top of Screen Elevation (ft)	619.3		618.85		619.23		619.69		596.45		616.67		600.92	
Screen Length (ft)	10		10		10		10		2.5		10		2.5	
TOC to Bottom of Well (ft)[A]	13.51		13.43		14.16		13.04		28.92		14.92		23.09	
Date	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)
5/8 - 5/20/2014	9.60	613.21	6.41	615.87	5.21	618.18	6.61	616.12	7.15	615.72	7.22	614.37	6.49	615.02
9/22/2014	10.78	612.03	8.54	613.74	6.98	616.41	8.27	614.46	8.13	614.74	8.44	613.15	8.11	613.40
12/1/2014	10.61	612.20	8.44	613.84	6.84	616.55	7.94	614.79	8.11	614.76	8.18	613.41	8.10	613.41
3/20/2015	10.50	612.31	8.53	613.75	5.78	617.61	6.75	615.98	7.72	615.15	7.85	613.74	7.65	613.86
6/23/2015	NM	--	8.36	613.92	5.82	617.57	7.16	615.57	7.45	615.42	7.82	613.77	7.59	613.92
9/21/2015	9.93	612.88	8.40	613.88	5.90	617.49	7.05	615.68	7.91	614.96	7.80	613.79	7.95	613.56
4/13/2016	8.95	613.86	5.45	616.83	4.98	618.41	4.99	617.74	6.32	616.55	7.10	614.49	6.33	615.18
11/28/2016	11.15	611.66	8.34	613.94	6.28	617.11	8.05	614.68	8.32	614.55	8.19	613.40	8.32	613.19
5/16/2018	8.61	614.20	5.60	616.68	4.86	618.53	3.11	619.62	5.07	617.80	5.88	615.71	5.78	615.73
10/17/2018	10.16	612.65	8.12	614.16	5.09	618.30	6.23	616.50	7.00	615.87	7.71	613.88	7.37	614.14
4/16/2019	10.42	612.39	8.37	613.91	5.60	617.79	6.12	616.61	7.16	615.71	7.23	614.36	7.17	614.34
10/8/2019	9.01	613.80	6.33	615.95	5.01	618.38	4.16	618.57	6.04	616.83	6.96	614.63	6.93	614.58

ft = feet
[A] = as measured inside well
NI = Not Installed
NM = Not Measured
-- no elevation

Table 1
Groundwater Measurements and Elevations
KEP Perimeter Wells
Kenosha, Wisconsin

Well Number	PZ-118		MW-206	
Ground Elevation (ft)	622.33		625.52	
Top of PVC Casing (TOC) Elevation (ft)	622.05		627.88	
Top of Screen Elevation (ft)	602.71		620.89	
Screen Length (ft)	2.5		10	
TOC to Bottom of Well (ft)[A]	21.84		16.99	
Date	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)
5/8 - 5/20/2014	6.30	615.75	10.80	617.08
9/22/2014	8.21	613.84	10.99	616.89
12/1/2014	8.29	613.76	11.12	616.76
3/20/2015	7.82	614.23	11.08	616.80
6/23/2015	6.96	615.09	10.46	617.42
9/21/2015	7.24	614.81	9.99	617.89
4/13/2016	5.44	616.61	5.33	622.55
11/28/2016	8.19	613.86	NM	--
5/16/2018	5.41	616.64	5.28	622.60
10/17/2018	7.20	614.85	4.98	622.90
4/16/2019	7.49	614.56	NM	--
10/8/2019	5.59	616.46	5.22	622.66

ft = feet
[A] = as measured inside well
NI = Not Installed
NM = Not Measured
-- no elevation

Table 1
Groundwater Measurements and Elevations
KEP Perimeter Wells
Kenosha, Wisconsin

Well Number	MW-79		MW-80		MW-81		MW-82	
Ground Elevation (ft)	624.55		623.7		624.05		624.7	
Top of PVC Casing (TOC) Elevation (ft)	624.39		623.5		623.89		624.5	
Top of Screen Elevation (ft)	617.89		617		617.39		618	
Screen Length (ft)	10		10		10		10	
TOC to Bottom of Well (ft)[A]	16.5		16.5		16.5		16.5	
Date	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)	Depth to GW from TOC (ft)	Groundwater Elevation (ft)
9/30/2014	8.50	615.89	4.78	618.72	9.50	614.39	10.60	613.90
12/9/2014	9.19	615.20	5.70	617.80	9.39	614.50	10.65	613.85
3/20/2015	9.18	615.21	5.54	617.96	7.49	616.40	9.90	614.60
9/21/2015	8.95	615.44	6.05	617.45	9.14	614.75	10.61	613.89
4/13/2016	8.03	616.36	5.85	617.65	8.04	615.85	9.81	614.69
12/5/2016	9.75	614.64	7.65	615.85	10.25	613.64	11.20	613.30
5/17/2018	7.34	617.05	3.76	619.74	7.81	616.08	9.81	614.69
10/18/2018	9.59	614.80	6.39	617.11	10.27	613.62	11.80	612.70
4/17/2019	8.73	615.66	4.37	619.13	7.78	616.11	10.51	613.99
10/9/2019	8.79	615.60	5.50	618.00	8.48	615.41	10.26	614.24

ft = feet
[A] = as measured inside well
NI = Not Installed
NM = Not Measured
-- no elevation
Note: 5-17-18 the cap on MW-80 was loose and asphalt/gravel was obtained during purging.

Table 2
Measured Field Parameters
KEP Perimeter Wells

Well Name	Sample Date	pH Units	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (mS/cm)	Temperature (°C)
MW-31	5/28/2014	5.87	2.61	-148.3	1.507	9.14
	9/25/2014	6.87	0.49	30.0	1.525	14.78
	11/30/2016	7.52	1.23	79.9	1.287	11.47
	5/16/2018	7.06	6.82	37.30	1.473	13.58
	10/18/2018	6.91	2.37	42.4	1.879	15.09
	4/16/2019	6.81	0.33	150.3	1.924	12.89
	10/9/2019	6.79	4.16	39.0	1.34	17.09
MW-44	5/21/2012	7.33	0.42	-71.2	2.068	12.98
	5/22/2014	6.73	1.06	188.3	4.129	11.33
	10/18/2018	7.90	0.16	-102.7	2.562	19.61
	9/30/2014	6.89	0.35	95.5	4.158	16.27
	12/4/2014	7.03	0.89	-8.2	2.586	12.29
	9/23/2015	6.97	0.86	16.9	4.675	18.05
	4/14/2016	7.05	4.92	57.1	4.846	9.2
	11/30/2016	7.56	1.19	-6.5	1.789	12.01
	5/17/2018	7.13	1.98	25.0	2.627	12.28
	10/18/2018	7.22	0.87	63.9	5.294	17.35
	4/16/2019	6.86	1.13	176.4	4.491	11.21
	10/9/2019	7.01	4.75	266.9	3.664	17.55
MW-101	1/23/2012	7.68	4.28	3.50	0.756	8.8
	5/20/2014	6.95	2.8	-156.30	1.454	14.07
	9/29/2014	7.27	0.81	34.80	1.34	20.46
	12/5/2014	7.3	1.22	-19	1.26	12.1
	9/22/2015	7.29	2.19	29.2	1.411	20.62
	4/15/2016	7.51	4.75	2.8	1.383	9.73
	11/28/2016	7.26	1.23	11.2	1.481	13.14
	5/16/2018	8.98	4.3	-75.4	1.514	12.75
	10/17/2018	7.18	2.41	82.6	1.289	15.61
	4/16/2019	7.15	4.74	168.07	1.490	11.26
	10/8/2019	7.37	2.15	193.9	1.218	18.83
MW-102	1/26/2012	7.09	0.67	-74.20	1.214	9.09
	5/16/2014	6.98	3.56	-48.50	2.320	8.98
	9/29/2014	7.01	0.14	-77.10	1.345	19.52
	12/4/2014	7.29	0.39	-56.3	1.509	11.35
	3/25/2015	7.23	0.54	-23.3	1.38	5.87
	9/24/2015	7.05	0.71	-47.2	1.617	18.76
	4/15/2016	7.31	0.47	38.2	2.414	9.28
	11/29/2016	7.53	0.54	148	1.245	15.01
	5/16/2018	7.35	7.36	38.10	1.829	11.87
	10/17/2018	7.19	0.68	13.80	0.891	15.21
	4/16/2019	8.09	2.10	60.6	3.176	9.61
	10/8/2019	7.08	2.20	141.7	0.801	19.11
MW-103	5/16/2018	9.15	2.35	-83.60	1.221	12.20
	10/17/2018	NM	0.4	439.60	1.463	17.21
	4/16/2019	8.31	1.44	39.40	0.828	8.61
	10/8/2019	6.94	0.61	64.20	1.145	19.79

Table 2
Measured Field Parameters
KEP Perimeter Wells

Well Name	Sample Date	pH Units	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (mS/cm)	Temperature (°C)
MW-105	1/24/2012	6.89	0.38	-87.00	2.997	11.06
	5/20/2019	6.48	0.47	-237.20	3.898	13.43
	9/30/2014	7.08	0.14	-62.10	2.787	16.75
	12/5/2014	6.70	0.6	-53.10	2.368	12.78
	9/22/2015	7.09	0.7	-9.10	0.899	18.25
	4/14/2016	6.91	2.68	-23.10	2.731	9.42
	11/28/2016	6.79	0.61	-90.50	1.845	13.23
	5/16/2018	7.02	1.19	-96.70	1.893	13.72
	10/17/2018	6.71	0.11	-41.00	2.254	15.18
	4/16/2019	9.10	0.3	-20.30	1.408	9.23
	10/8/2019	6.84	0.08	-56.80	1.978	16.63
MW-107	5/16/2018	9.36	1.43	-84.40	0.940	11.84
	10/17/2018	6.63	0.3	-31.20	1.488	16.73
	4/16/2019	8.39	0.61	31.10	0.914	9.70
	10/8/2019	6.89	0.49	-29.50	1.176	17.99
MW-108	5/21/2012	7.16	1.73	-65.00	4.583	13.19
	5/23/2014	6.67	4.39	188.30	6.796	11.73
	9/30/2014	6.85	0.36	80.90	4.932	16.16
	12/4/2014	6.94	1.66	-3	4.386	10.4
	9/23/2015	6.87	0.96	27.8	4.504	18.23
	4/14/2016	7.33	4.65	90.8	4.674	8.53
	11/30/2016	7.19	0.87	172.3	3.341	13.4
	5/17/2018	6.97	4.42	108.9	3.831	12.57
	10/17/2018	7.08	0.64	43.7	3.751	16.91
	4/16/2019	6.9	6.00	170.53	4.499	13.09
	10/9/2019	7.03	0.21	232.3	3.335	16.89
MW-109	6/5/2014	6.23	0.44	-26.20	0.831	11.59
	9/23/2014	7.01	0.45	151.00	1.244	15.00
	12/5/2014	6.7	0.75	-63.70	1.303	12.41
	9/23/2015	7.05	0.34	-89.00	1.737	15.13
	4/15/2016	7.21	0.64	11.40	1.641	10.83
	11/29/2016	7.39	0.82	-1.80	1.326	13.82
	5/17/2018	7.04	0.41	-35.20	0.924	12.05
	10/18/2018	7.03	0.38	-100.10	0.895	14.03
	4/16/2019	8.66	0.12	4.30	0.597	9.96
	10/8/2019	6.90	1.34	-43.40	1.195	14.89
MW-110	5/22/2014	7.02	9.23	59.00	0.538	10.15
	9/23/2014	7.25	0.6	165.00	0.755	17.50
	12/5/2014	7.26	2.7	-2.00	0.639	11.57
	9/23/2015	7.05	0.68	239.00	0.557	23.82
	4/14/2016	7.51	9.57	21.10	0.598	8.69
	11/29/2016	7.59	1.95	108.00	0.498	14.39
	5/17/2018	7.26	9.19	105.60	0.436	10.90
	10/18/2018	7.99	6.51	55.60	0.762	16.60
	4/16/2019	8.46	4.26	55.50	1.956	8.05
	10/8/2019	7.05	5.53	158.50	1.739	17.42

Table 2
Measured Field Parameters
KEP Perimeter Wells

Well Name	Sample Date	pH Units	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (mS/cm)	Temperature (°C)
MW-111	5/21/2014	7.05	1.81	74.30	0.977	10.83
	9/23/2014	7.29	0.69	180.00	0.634	18.10
	12/5/2014	7.3	1.38	-7.80	0.605	12.12
	9/23/2015	7.88	0.75	169.00	0.449	22.68
	4/14/2016	7.74	2.02	22.00	0.527	9.06
	11/29/2016	7.23	3.82	64.70	0.34	14.16
	5/17/2018	7.15	0.76	153.90	0.686	11.63
	10/18/2018	6.9	0.2	-111.00	0.930	14.47
	4/16/2019	8.31	3.64	59.20	1.977	8.28
	10/8/2019	7.00	0.13	-23.60	1.038	17.86
MW-112	11/3/2011	6.85	0.5	-2.50	2.661	15.52
	5/21/2014	7.19	0.74	43.10	2.699	11.28
	9/24/2014	7.05	0.5	68.40	2.26	17.78
	12/5/2014	7.25	3.69	-11.3	1.124	10.85
	9/22/2015	7.18	3.55	4	1.482	17.92
	4/15/2016	7.41	3.08	-13.7	1.49	9.07
	11/29/2016	7.36	4	59.7	0.73	13.97
	5/17/2018	7.11	2.29	174.1	1.208	12.15
	10/18/2018	7.08	1.13	-13.6	1.676	14.94
	4/16/2019	7.01	2.41	207.0	1.381	10.28
	10/8/2019	7.06	2.37	27.9	1.790	18.24
MW-113	8/18/2011	7.27	0.73	-7.10	2.699	16.82
	5/28/2014	7.11	1.73	-208.70	1.586	11.29
	9/25/2014	7.7	0.24	283.00	3.400	16.40
	12/5/2014	7.18	2.1	-24.9	1.992	11.72
	3/25/2015	7.24	2.03	52.3	2.812	8.32
	9/22/2015	7.23	0.8	-24.5	1.755	17.19
	4/15/2016	7.45	3.55	187.9	1.459	9.01
	11/29/2016	7.42	1.06	175.6	1.296	13.98
	5/16/2018	7.25	6.33	37.3	1.144	11.1
	10/18/2018	7.85	0.44	73.6	1.449	15.44
	4/16/2019	7.16	3.07	170.13	1.939	11.00
	10/9/2019	7.11	1.14	32.6	1.681	16.70
MW-114	8/18/2011	7.44	0.32	-97.10	1.159	15.69
	5/28/2014	6.95	4.13	-188.70	1.241	10.72
	9/29/2014	7.21	0.18	-109.40	0.180	15.73
	12/4/2014	7.29	0.23	-89.5	0.911	11.28
	3/25/2015	7.34	0.32	-79.4	1.192	7.05
	9/22/2015	7.13	0.3	-113.6	1.177	16.35
	4/15/2016	6.94	4.24	-3.3	1.464	8.12
	11/28/2016	7.22	0.75	-110.9	0.81	12.68
	5/16/2018	7.3	NM	-36.5	1.102	11.99
	10/17/2018	7.16	0.2	-109.6	1.115	14.22
	4/16/2019	7.09	0.14	-79.59	1.041	9.66
	10/9/2019	6.93	1.93	-9.4	1.103	16.84

Table 2
Measured Field Parameters
KEP Perimeter Wells

Well Name	Sample Date	pH Units	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (mS/cm)	Temperature (°C)
MW-115	8/18/2011	7.48	1.61	-14.00	0.985	17.97
	5/28/2014	6.37	6.38	-144.70	1.191	9.94
	9/29/2014	7.07	1.17	105.10	0.808	17.44
	12/4/2014	7.21	3.55	-15.7	0.715	10.84
	9/22/2015	7.08	1.98	71.8	0.941	18.06
	4/15/2016	7.57	5.24	180.7	0.731	8.16
	11/28/2016	7.17	3.66	85.7	0.731	12.9
	5/16/2018	7.16	5.67	48.9	0.861	11.56
	10/17/2018	6.96	3.8	24.3	0.888	15.73
	4/16/2019	7.13	6.04	26.45	1.089	8.79
	10/9/2019	6.81	2.16	195	0.977	18.17
MW-116	11/8/2011	6.41	1.44	-25.80	0.776	13.67
	5/22/2014	6.77	3.18	67.30	0.649	9.32
	9/23/2014	7.07	0.39	151.00	0.808	15.20
	12/2/2014	7	0.88	11.1	0.642	10.45
	9/23/2015	6.86	2.06	45.9	0.993	15.79
	4/14/2016	7.32	6.16	64.7	0.761	9.11
	11/29/2016	7.23	1.59	156.2	0.682	13.25
	5/17/2018	6.97	7.18	124.9	0.529	10.84
	10/18/2018	6.85	1.99	-39.9	0.884	14.62
	4/17/2019	7.56	4.46	68.4	0.537	7.49
	10/8/2019	6.95	2.78	128.9	0.861	15.96
PZ-116	11/8/2011	6.23	0.4	-58.50	1.808	12.23
	5/22/2014	6.98	0.29	38.50	2.01	11.63
	9/23/2014	7.11	0.25	165.00	2.05	14.40
	12/2/2014	7.06	0.24	-79.6	1.714	10.36
	9/23/2015	6.96	0.26	-104.8	2.46	13.68
	4/14/2016	7.03	0.99	-41.1	2.564	10.74
	11/29/2016	6.97	0.75	-102.8	0.792	12.47
	5/17/2018	6.97	0.4	-27.2	1.838	11.62
	10/18/2018	6.93	0.8	-98.8	2.338	14.22
	4/17/2019	8.00	0.38	-2.4	1.865	10.23
	10/8/2019	6.97	0.1	-66.3	2.387	13.38
MW-117	5/21/2014	6.91	2.73	42.30	1.237	12.10
	9/24/2014	7.09	0.61	51.80	1.253	15.94
	12/4/2014	6.81	0.28	-48.30	1.202	12.6
	3/24/2015	7.15	2.69	-9.40	1.033	7.71
	9/23/2015	6.99	0.5	-102.60	1.276	16.55
	4/14/2016	7.15	1.3	-44.70	1.065	9.52
	11/29/2016	7.13	0.7	-67.60	0.887	14.58
	5/17/2018	7.05	3.02	34.20	0.849	11.74
	10/18/2018	7.86	0.18	-51.40	0.892	14.93
	4/17/2019	6.93	2.80	35.96	1.413	8.30
	10/8/2019	7.04	0.10	-52.40	0.936	15.62

Table 2
Measured Field Parameters
KEP Perimeter Wells

Well Name	Sample Date	pH Units	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (mS/cm)	Temperature (°C)
PZ-117	5/21/2014	6.98	0.11	-12.00	0.882	11.48
	9/24/2014	7.05	0.43	-44.00	1.501	14.53
	12/4/2014	6.9	0.48	-33.10	1.188	12.52
	3/24/2015	7.3	0.54	-44.40	0.443	8.22
	9/23/2015	6.94	0.3	-116.10	1.635	14.52
	4/14/2016	7.31	0.54	-18.90	1.692	11
	11/29/2016	7.49	0.41	-42.70	1.353	13.7
	5/17/2018	7.05	0.51	-13.50	1.042	12.41
	10/18/2018	7.71	0.35	-13.60	1.283	13.66
	4/17/2019	NM	NM	NM	NM	NM
	10/8/2019	7.05	0.09	-13.80	1.387	14.55
PZ-118	5/28/2014	6.73	3.17	-201.00	1.702	11.10
	9/25/2014	7.07	0.11	301.00	5.500	14.80
	12/5/2014	7.1	0.76	-56.20	1.504	12.69
	3/25/2015	7.15	1.03	-37.10	2.089	8.66
	9/22/2015	7	0.24	-95.10	2.050	16.30
	4/15/2016	7.13	2.52	-60.30	2.198	9.50
	11/28/2016	7.08	2.55	-3.10	1.404	12.87
	5/16/2018	7.12	0.88	-59.90	1.292	12.79
	10/17/2018	7.4	0.19	-37.80	1.714	14.34
	4/17/2019	6.99	1.39	33.87	1.742	8.81
	10/9/2019	6.97	0.09	-12.60	1.655	15.62

mg/l = milligrams per liter. mS/cm = microSiemens per centimeter
ft = feet mV = millivolts

Table 2
Measured Field Parameters
Jockey Site Wells

Well Name	Sample Date	pH Units	Dissolved Oxygen (mg/L)	ORP (mV)	Conductivity (mS/cm)	Temperature (°C)
MW-79 Jockey	9/30/2014	7.15	0.28	-70.8	3.903	18.80
	12/5/2016	8.11	0.61	-153.7	3.682	13.15
	5/19/2018	7.13	0.29	-54.6	3.572	14.61
	10/18/2018	6.84	0.27	-109.3	6.524	19.15
	4/17/2019	8.07	0.27	-34.1	5.119	11.31
	10/9/2019	6.88	0.13	-86.3	7.857	20.57
MW-80 Jockey	9/30/2014	7.23	0.17	-115.1	4.412	19.74
	12/5/2016	8.16	0.53	-154.4	3.164	13.67
	5/19/2018	7.51	0.15	-83.2	0.182	14.27
	10/18/2018	7.90	0.16	-102.7	2.562	19.61
	4/17/2019	7.02	1.17	-76.3	3.184	11.47
	10/9/2019	7.15	0.18	-125.2	2.791	21.69
MW-81 Jockey	9/30/2014	6.98	0.34	-85.5	2.53	18.36
	12/5/2016	7.91	0.64	-137.0	2.67	12.66
	5/19/2018	7.02	0.38	-47.4	2.558	14.73
	10/18/2018	6.83	0.20	-117.9	3.118	19.42
	4/17/2019	6.76	0.09	-55.5	2.977	11.13
	10/9/2019	6.93	0.12	-103.2	3.085	20.47
MW-82	9/30/2014	7.06	0.24	-89.2	4.205	19.64
	12/5/2016	8.07	0.52	-145.7	4.223	14.17
	5/19/2018	7.25	0.23	-67.9	3.011	14.82
	10/18/2018	7.83	0.21	-89.6	3.824	21.28
	4/17/2019	8.8	0.10	-50.1	2.982	11.49
	10/9/2019	7.03	0.09	-107.1	4.025	21.30

mg/l = milligrams per liter. mS/cm = microSiemens per centimeter
ft = feet mV = millivolts

Table 3
Detected Volatile Organic Compounds in Groundwater
KEP Perimeter Monitoring Wells and Piezometers

Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
MW-31	5/28/2014	< 2.5	1.9 J	*3.2 J*	< 12.2	< 1.9	< 2.5	**79.2**	< 0.87	< 2.5	*28.8*	**499**	< 0.88
	9/25/2014	< 0.5	< 0.24	*1.7 J*	< 2.4	< 0.37	< 0.5	**97.8 J**	< 0.17	< 0.5	*26.1 J*	**63.8 J**	< 0.18
	12/3/2014	< 0.5	0.46 J	*2.9*	< 2.4	< 0.37	< 0.5	**106**	< 0.17	< 0.5	*35*	**116**	**0.33 J**
	3/24/2015	< 2.5	< 1.2	*2.8 J*	< 12.2	< 1.9	< 2.5	**79.8 J**	< 0.87	< 2.5	*26.9*	**361**	< 0.88
	11/30/2016	< 1	< 0.48	*2.9*	< 4.9	< 0.75	< 1	**98.6**	< 0.35	< 1	*42.7*	**91.8**	**0.51 J**
	5/16/2018	< 5.0	< 2.4	< 4.1	< 2.3	< 3.7	< 5.0	*27*	< 1.7	< 5.0	15.0	**807**	< 1.8
	10/17/2018	< 0.98	< 1.1	*1.3 J*	< 3.9	< 5.4	< 8.8	*17.9*	< 5.0	< 1.3	9.6 J	**470**	< 0.70
	4/16/2019	< 0.24	0.31 J	*5.4*	< 0.97	< 1.3	< 2.2	**99.1**	< 1.2	< 0.33	*70.6*	**117**	**0.37 J**
	10/9/2019	1.1	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	1.1	< 1.2	< 0.33	< 1.1	**239**	< 0.17
MW-44	5/21/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/23/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/30/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/30/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/9/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-70	11/4/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	0.31 J	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/21/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/2/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
MW-71	11/4/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/21/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/2/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/2/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
MW-101	1/23/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/20/2014	0.63 J	0.25 J	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/29/2014	1.2	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	0.78 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/22/2015	0.99 J	0.42 J	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/15/2016	0.51 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/28/2016	0.79 J	0.65 J	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	0.86 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	0.82 J	0.35 J	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	0.67 J	0.27 J	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	1.1	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

Table 3
Detected Volatile Organic Compounds in Groundwater
KEP Perimeter Monitoring Wells and Piezometers

Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
MW-102	1/26/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	1/26/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/16/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/29/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	3/25/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/24/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/15/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.23** J
	4/15/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	*1.7*	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	*0.62* J	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	0.35 J	< 1.1	0.47 J	< 0.17
MW-102 DUP	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
MW-103	5/16/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/29/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-105	1/24/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	4/16/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/20/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/30/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/22/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/28/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

Table 3
Detected Volatile Organic Compounds in Groundwater
KEP Perimeter Monitoring Wells and Piezometers

Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
MW-107	7/15/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	9/24/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	3/25/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/28/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-108	5/21/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/23/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/30/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/30/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/9/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-108 DUP	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/9/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-109	6/5/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/15/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

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Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
MW-110	5/22/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-111	5/22/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-112	11/3/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	1.3	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/21/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/24/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/22/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/15/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
MW-113	8/18/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/28/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/25/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	3/25/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/22/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/15/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/9/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

Table 3
Detected Volatile Organic Compounds in Groundwater
KEP Perimeter Monitoring Wells and Piezometers

Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
MW-114	8/18/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	0.33 J	*8.7*	0.73 J	< 0.45	< 0.89	**5.5**	**30.4**
	4/9/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	3.1	< 0.61	< 0.45	< 0.89	*0.67 J*	**21.1**
	5/28/2014	2.6	1.7	< 0.41	< 2.4	0.55 J	< 0.5	*9.5*	0.21 J	< 0.5	0.61 J	**26.7**	**1.4**
	9/29/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	3.8	< 0.17	< 0.5	< 0.26	< 0.33	**32.1**
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	4.9	0.24 J	< 0.5	2.3 J	*0.84 J*	**24.8 J**
	3/25/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	2.8	0.18 J	< 0.5	0.36 J	< 0.33	**16.7**
	9/22/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	4.8	0.5 J	< 0.5	0.79 J	< 0.33	**19.5**
	4/15/2016	16.1	5.8	*0.82 J*	< 2.4	< 0.37	< 0.5	*49*	< 0.17	*1*	5.8	**270**	**5.5**
	11/28/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	3.9	< 0.17	< 0.5	0.75 J	< 0.33	**24**
	5/16/2018	3.3	1.3	< 0.41	< 2.4	< 0.37	< 0.50	3.9	< 0.17	< 0.50	0.57 J	**10.4**	**8.6**
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	3.3	< 1.2	< 0.33	< 1.1	< 0.26	**14.1**
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	2.1	< 1.2	< 0.33	< 1.1	< 0.26	**10.1**
	10/9/2019	2.3	1.4	< 0.24	< 0.97	< 1.3	< 2.2	2.4	< 1.2	< 0.33	< 1.1	**6.9**	**10.9**
MW-114 DUP	5/28/2014	2.6	1.6	< 0.41	< 2.4	0.55 J	< 0.5	*9.5*	0.24 J	< 0.5	0.62 J	**27.2**	**1.5**
	9/29/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	3.6	< 0.17	< 0.5	0.44 J	< 0.33	**30.6**
	12/4/2014	< 0.5	0.28 J	< 0.41	< 2.4	< 0.37	< 0.5	5.4	< 0.17	< 0.5	0.52 J	*1.2*	**17.8 J**
	9/22/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	3.6	0.47 J	< 0.5	< 0.26	< 0.33	**15.3**
	4/15/2016	15.9	5.7	*0.85 J*	< 2.4	< 0.37	< 0.5	*49.1*	< 0.17	*1.1*	5.9	**273**	**5.8**
	11/28/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	4	< 0.17	< 0.5	0.69 J	< 0.33	**25.2**
	5/16/2018	3.4	1.3	< 0.41	< 2.4	< 0.37	< 0.50	4.2	< 0.17	< 0.50	0.68 J	**11.5**	**7.8**
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	3.3	< 1.2	< 0.33	< 1.1	< 0.26	**14.1**
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	1.7	< 1.2	< 0.33	< 1.1	< 0.26	**10.7**
	10/9/2019	2.4	1.3	< 0.24	< 0.97	< 1.3	< 2.2	2.7	< 1.2	0.43 J	< 1.1	**7.0**	**9.6**
MW-115	8/18/2011	< 0.9	< 0.75	< 0.57	*1.3*	< 0.97	0.4 J	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	4/9/2012	1.6	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/28/2014	1.2	0.42 J	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/29/2014	0.91 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	0.71 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/22/2015	0.98 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/15/2016	0.77 J	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/28/2016	0.71 J	0.27 J	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/17/2018	0.72 J	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/16/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/9/2019	0.53 J	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

Table 3
Detected Volatile Organic Compounds in Groundwater
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Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
MW-116	11/8/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	4/11/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/22/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/2/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/17/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
PZ-116	11/8/2011	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	4/11/2012	< 0.9	< 0.75	< 0.57	< 0.91	< 0.97	< 0.24	< 0.83	< 0.61	< 0.45	< 0.89	< 0.48	< 0.18
	5/22/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/23/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/2/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.3** J
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.32** J
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.4** J
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	**0.76** J
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	**0.32** J
	4/17/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	**0.61** J
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	**0.87** J
MW-117	5/21/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	< 0.18
	9/24/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	3/24/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	4/17/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

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Location	Sample Date	1,1,1-Trichloro ethane (ug/L)	1,1-Dichloro ethane (ug/L)	1,1-Dichloro ethene (ug/L)	Bromo methane (ug/L)	Chloro ethane (ug/L)	Chloro methane (ug/L)	cis-1,2-Dichloro ethene (ug/L)	Methyl-tert-butyl ether (ug/L)	Tetrachloro ethene (ug/L)	trans-1,2-Dichloro ethene (ug/L)	Trichloro ethene (ug/L)	Vinyl chloride (ug/L)
PZ-117	5/21/2014	< 0.5	< 0.18	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.24	< 0.33	**0.64** J
	9/24/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.95** J
	12/4/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.95** J
	3/24/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	< 0.18
	9/23/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.66** J
	4/14/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.51** J
	11/29/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	< 0.26	< 0.17	< 0.5	< 0.26	< 0.33	**0.29** J
	5/17/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	< 0.26	< 0.17	< 0.50	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
	10/8/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	< 0.27	< 1.2	< 0.33	< 1.1	< 0.26	< 0.17
PZ-118	5/28/2014	< 0.5	0.41 J	0.65 J	< 2.4	< 0.37	< 0.5	**295**	< 0.17	< 0.5	2.3	< 0.33	**92.3**
	9/25/2014	< 0.5	0.39 J	< 0.41	< 2.4	< 0.37	< 0.5	**134**	< 0.17	< 0.5	1.6	< 0.33	**192**
	12/5/2014	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	*21.4*	< 0.17	< 0.5	0.81 J	< 0.33	**62.8**
	3/25/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	*20.4*	< 0.17	< 0.5	< 0.26	< 0.33	**48.1**
	9/22/2015	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	*21.5*	< 0.17	< 0.5	< 0.26	< 0.33	**37.2**
	4/15/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	*8.9*	< 0.17	< 0.5	0.31 J	< 0.33	**14.6**
	11/28/2016	< 0.5	< 0.24	< 0.41	< 2.4	< 0.37	< 0.5	*10.4*	< 0.17	< 0.5	0.78 J	< 0.33	**5.4**
	5/16/2018	< 0.50	< 0.24	< 0.41	< 2.4	< 0.37	< 0.50	4.7	< 0.17	< 0.50	< 0.26	< 0.33	**22.1**
	10/17/2018	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	5.2	< 1.2	< 0.33	< 1.1	< 0.26	**17.3**
	4/17/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	2.6	< 1.2	< 0.33	< 1.1	< 0.26	**1.8**
	10/9/2019	< 0.24	< 0.27	< 0.24	< 0.97	< 1.3	< 2.2	3.9	< 1.2	< 0.33	< 1.1	< 0.26	**3.7**
	PAL	40	85	0.7	1	80	3	7	12	0.5	20	0.5	0.02
	ES	200	850	7	10	400	30	70	60	5	100	5	0.2

Notes:

ug/L = micrograms per liter

J = Estimated value

PAL - Preventive Action Limit, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are *underlined italics*.

ES - Enforcement Standard, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are **bold.**

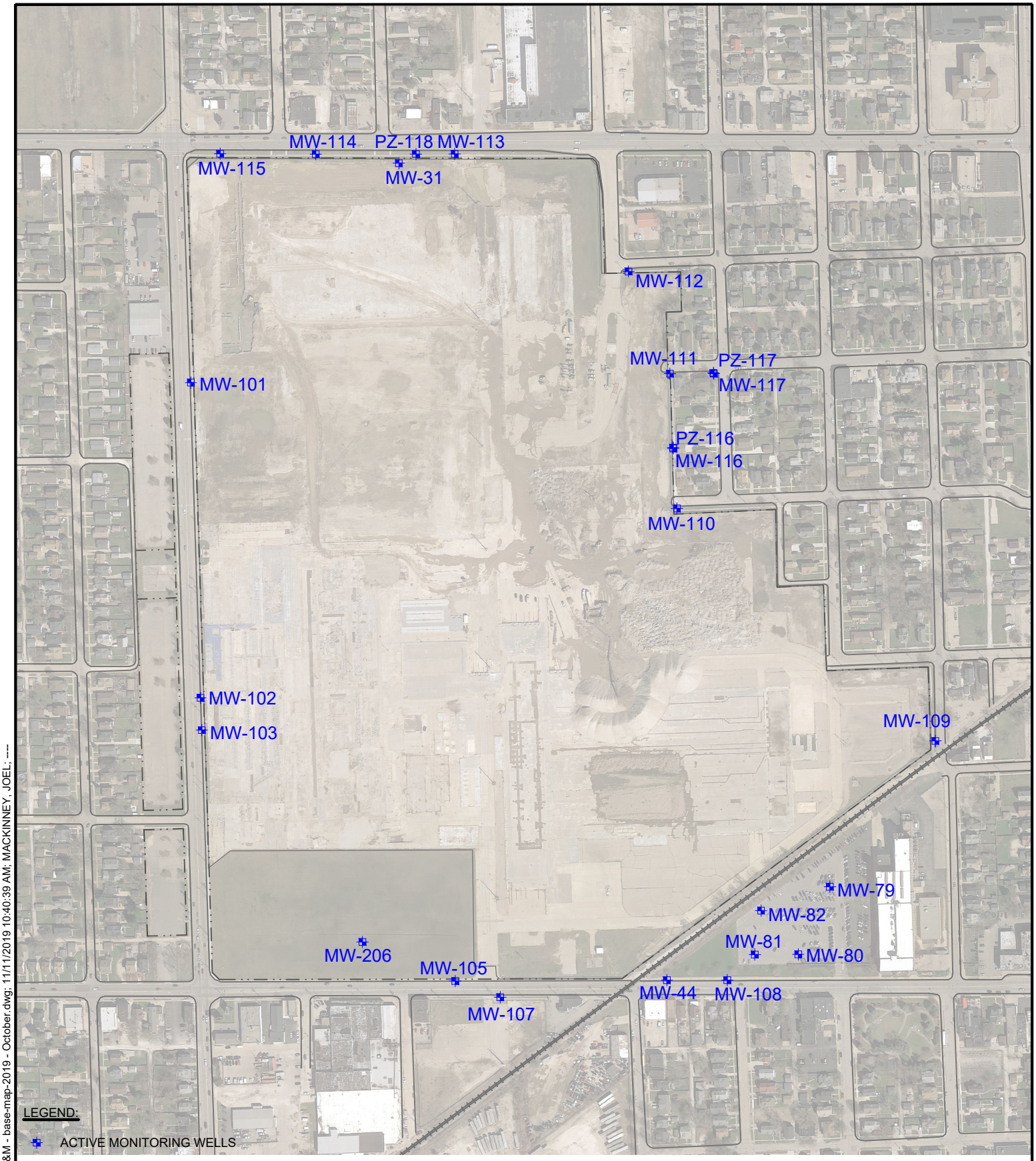
Table 3
Detected Volatile Organic Compounds in Groundwater
Jockey Site Monitoring Wells

Location	Sample Date	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Benzene (ug/L)	Chloroethane (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Isopropylbenzene (Cumene) (ug/L)	Methylene Chloride (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	Naphthalene (ug/L)	p-Isopropyltoluene (ug/L)	sec-Butylbenzene (ug/L)	trans-1,2-Dichloroethene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)
MW-79 (Jockey)	8/21/2008	NPD	NPD	NPD	NPD	NPD	<0.20	NPD	NPD	<1.0	NPD	NPD	NPD	NPD	NPD	<0.45	<0.32	<0.30
	10/6/2008	NPD	NPD	NPD	NPD	NPD	<0.20	NPD	NPD	<1.0	NPD	NPD	NPD	NPD	NPD	<0.45	<0.32	<0.30
	9/30/2014	<0.24	<0.41	<0.5	<0.37	<0.5	<0.26	<0.5	<0.14	<0.23	<0.5	<0.5	<2.5	<0.5	<2.2	<0.26	<0.33	<0.18
	12/9/2014	<0.24	<0.41	<0.5	<0.37	<0.5	<0.26	<0.5	<0.14	<0.23	<0.5	<0.5	<2.5	<0.5	<2.2	<0.26	<0.33	<0.18
	3/25/2015	<0.24	<0.41	<0.5	<0.37	<0.5	<0.26	<0.5	<0.14	<0.23	<0.5	<0.5	<2.5	<0.5	<2.2	<0.26	<0.33	<0.18
	5/17/2018	<0.24	<0.41	<0.50	<0.37	<0.50	<0.26	<0.50	<0.14	<0.23	<0.50	<0.50	<2.5	<0.50	<2.2	<0.26	<0.33	<0.18
	10/18/2018	<0.27	<0.24	<0.25	<1.3	<2.2	<0.27	<0.22	<0.39	<0.58	<0.71	<0.81	<1.2	<0.80	<0.85	<1.1	<0.26	<0.17
	4/17/2019	<0.27	<0.24	<0.25	<1.3	<2.2	<0.27	<0.22	<0.39	<0.58	<0.71	<0.81	<1.2	<0.80	<0.85	<1.1	<0.26	<0.17
	10/9/2019	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	< 0.27	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	< 0.17
MW-80 (Jockey)	8/21/2008	NPD	NPD	NPD	NPD	NPD	<0.20	NPD	NPD	<1.0	NPD	NPD	NPD	NPD	NPD	<0.45	<0.32	<0.30
	10/6/2008	NPD	NPD	NPD	NPD	NPD	<0.20	NPD	NPD	<1.0	NPD	NPD	NPD	NPD	NPD	<0.45	<0.32	<0.30
	9/30/2014	< 0.24	< 0.41	< 0.5	< 0.37	< 0.5	0.48 J	< 0.5	< 0.14	< 0.23	< 0.5	< 0.5	< 2.5	< 0.5	< 2.2	< 0.26	0.4 J	< 0.18
	12/9/2014	< 0.24	< 0.41	< 0.5	< 0.37	< 0.5	< 0.26	< 0.5	< 0.14	< 0.23	< 0.5	< 0.5	< 2.5	< 0.5	< 2.2	< 0.26	< 0.33	< 0.18
	3/25/2015	< 0.24	< 0.41	< 0.5	< 0.37	< 0.5	< 0.26	< 0.5	< 0.14	< 0.23	< 0.5	< 0.5	< 2.5	< 0.5	< 2.2	< 0.26	< 0.33	< 0.18
	5/17/2018	< 0.24	< 0.41	< 0.50	< 0.37	< 0.50	< 0.26	< 0.50	< 0.14	< 0.23	< 0.50	< 0.50	< 2.5	< 0.50	< 2.2	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	< 0.27	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	< 0.17
	4/17/2019	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	< 0.27	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	< 0.17
	10/9/2019	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	< 0.27	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	< 0.17
MW-81 (Jockey)	8/21/2008	NPD	NPD	NPD	NPD	NPD	**71.1**	NPD	NPD	<1.0	NPD	NPD	NPD	NPD	NPD	14.5	*1.3*	**15.8**
	10/6/2008	NPD	NPD	NPD	NPD	NPD	*45.5*	NPD	NPD	<1.0	NPD	NPD	NPD	NPD	NPD	14.6	<0.32	**12**
	9/30/2014	< 0.24	< 0.41	< 0.5	< 0.37	< 0.5	*29.5*	< 0.5	< 0.14	< 0.23	< 0.5	< 0.5	< 2.5	< 0.5	< 2.2	3.8	< 0.33	**2.8**
	12/9/2014	< 0.24	< 0.41	< 0.5	< 0.37	< 0.5	*14.4*	< 0.5	< 0.14	< 0.23	< 0.5	< 0.5	< 2.5	< 0.5	< 2.2	1.7	< 0.33	**1.6**
	3/25/2015	< 0.24	< 0.41	< 0.5	< 0.37	< 0.5	*9.6*	< 0.5	< 0.14	< 0.23	< 0.5	< 0.5	< 2.5	< 0.5	< 2.2	2.5	< 0.33	**6.1**
	5/17/2018	< 0.24	< 0.41	< 0.50	< 0.37	< 0.50	2	< 0.50	< 0.14	< 0.23	< 0.50	< 0.50	< 2.5	< 0.50	< 2.2	< 0.26	< 0.33	< 0.18
	10/18/2018	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	0.89 J	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	< 0.17
	4/17/2019	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	< 0.27	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	< 0.17
	10/9/2019	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	0.88 J	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	< 1.1	< 0.26	**0.27 J**

Table 3
Detected Volatile Organic Compounds in Groundwater
Jockey Site Monitoring Wells

Location	Sample Date	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Benzene (ug/L)	Chloroethane (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Isopropylbenzene (Cumene) (ug/L)	Methylene Chloride (ug/L)	n-Butylbenzene (ug/L)	n-Propylbenzene (ug/L)	Naphthalene (ug/L)	p-Isopropyltoluene (ug/L)	sec-Butylbenzene (ug/L)	trans-1,2-Dichloroethene (ug/L)	Trichloroethene (ug/L)	Vinyl chloride (ug/L)
MW-82 (Jockey)	8/21/2008	NPD	NPD	NPD	NPD	NPD	**1970**	NPD	NPD	<50	NPD	NPD	NPD	NPD	NPD	*75.3*	**4,670**	**62.6**
	10/6/2008	NPD	NPD	NPD	NPD	NPD	**1650**	NPD	NPD	**88.8**	NPD	NPD	NPD	NPD	NPD	*61.3*	**2,970**	**35.8**
	9/30/2014	< 24.2	< 41	< 50	< 37.5	< 50	**1350**	< 50	< 14.3	< 23.3	< 50	< 50	< 250	< 50	< 219	*84* J	**8,100**	**75.9** J
	12/9/2014	< 24.2	< 41	< 50	< 37.5	< 50	**1170**	< 50	< 14.3	< 23.3	< 50	< 50	< 250	< 50	< 219	*74.8* J	**8,300**	**58.4** J
	3/25/2015	< 9.7	< 16.4	< 20	< 15	< 20	**691**	< 20	< 5.7	< 9.3	< 20	< 20	< 100	< 20	< 87.4	*38.7* J	**2,670**	**27.6** J
	5/17/2018	< 2.4	< 4.1	< 5.0	< 3.7	< 5.0	**561**	< 5.0	< 1.4	< 2.3	< 5.0	< 5.0	< 25.0	< 5.0	< 21.9	*42.3*	**304**	**7.5** J
	10/18/2018	< 0.27	< 0.24	< 0.25	< 1.3	< 2.2	**133**	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	4	**17.9**	**25.1**
	4/17/2019	< 0.27	*0.88* J	< 0.25	< 1.3	< 2.2	**372**	< 0.22	< 0.39	< 0.58	< 0.71	< 0.81	< 1.2	< 0.80	< 0.85	*36.7*	**204**	**4.1**
	10/9/2019	< 1.4	< 1.2	< 1.2	< 6.7	< 10.9	**553**	< 1.1	< 2.0	< 2.9	< 3.5	< 4.1	< 5.9	< 4.0	< 4.2	*46.9*	**220**	**11**
	PAL	85	0.7	0.5	80	3	7	140	--	0.5	--	--	10	--	--	20	0.5	0.02
	ES	850	7	5	400	30	70	700	--	5	--	--	100	--	--	100	5	0.2

Notes:
ug/L = micrograms per liter
J = Estimated value - see data validation memo
PAL - Preventive Action Limit, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are *underlined italics*.
ES - Enforcement Standard, Wisconsin Administrative Code NR 140.10 Table 1, February 2017 exceedances are **bold**.
-- = PAL or ES not established
NPD = Not previously detected



AECOM
1555 RiverCenter Dr
Milwaukee, WI 53212
414.944.6080
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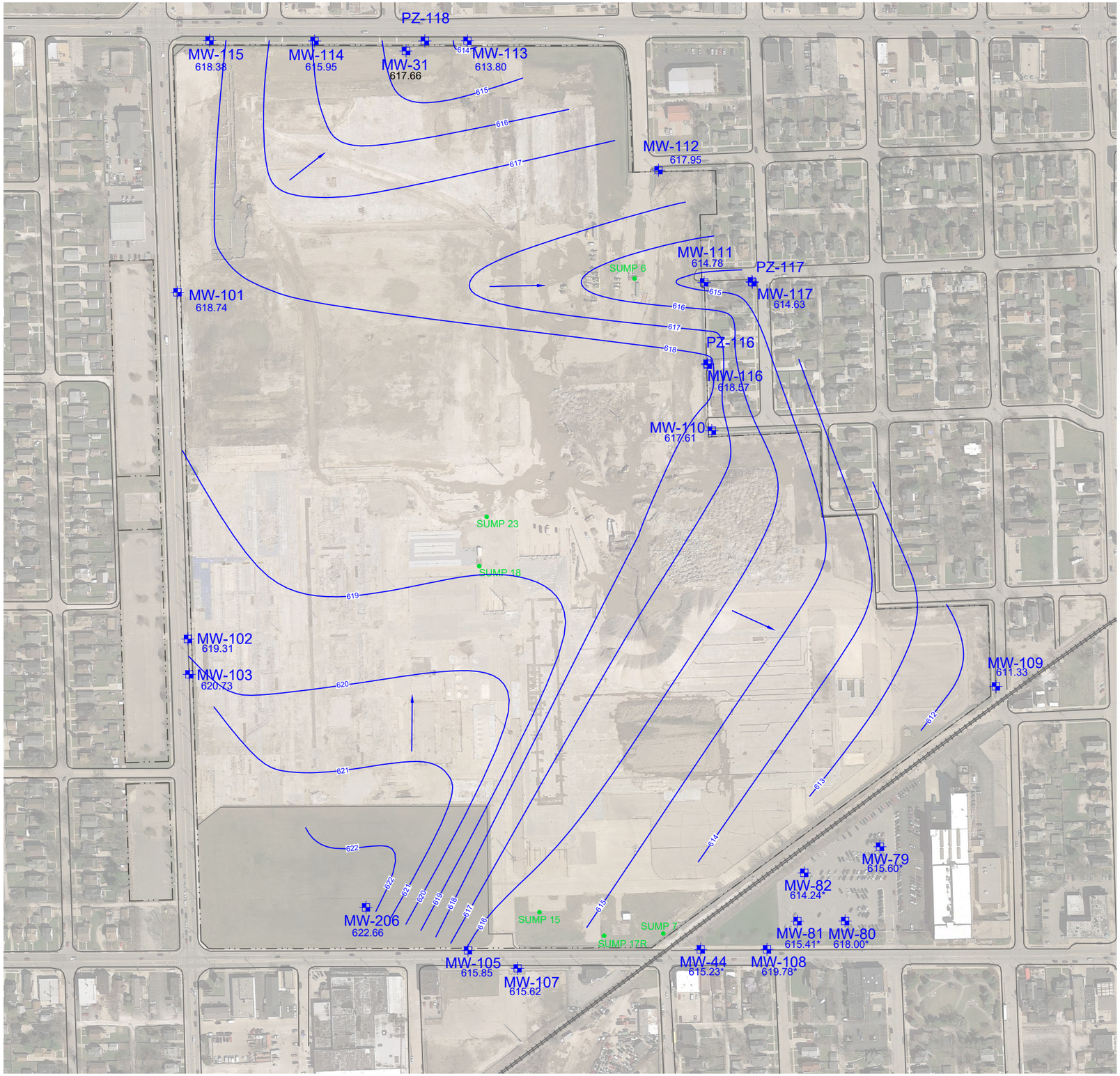
MONITORING WELL LOCATION MAP
KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	4/23/2019
Checked:	LLA	5/8/2019
Approved:	LLA	5/8/2019
PROJECT NUMBER	60597994	
FIGURE NUMBER	1	

P:\60597994\900_CAD_GIS\CAD\KEP - O&M - base-map-2019 - October.dwg; 11/11/2019 10:40:39 AM; MACKINNEY, JOEL; ---



LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD
- EXISTING FENCE
- PERIMETER MONITORING WELL LOCATIONS
- 617 WATER TABLE CONTOURS
- * WELLS LOCATED SOUTHEAST OF THE RAILROAD TRACKS (SOUTHEAST OF KEP) ARE UNDER THE INFLUANCE OF THE SOUTHERN GROUNDWATER RECOVERY SYSTEM AND ARE NOT INCLUDED IN THE CONTOURS BECAUSE WATER LEVELS ADJACENT TO THE RECOVERY SYSTEM WERE NOT MEASURED.

NOTES

1. AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO, IMAGE DATED 4/6/2017; DOWNLOADED ON 6/5/2017.
2. MW-31 NOT USED FOR CONTOUR MAP

N

0' 300' 600'

SCALE

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POTENTIOMETRIC SURFACE PERIMETER WATER TABLE MONITORING WELLS - OCTOBER 2019

KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	11/4/2019
Checked:	LLA	11/4/2019
Approved:	LLA	11/4/2019
PROJECT NUMBER	60597994	
FIGURE NUMBER	2	

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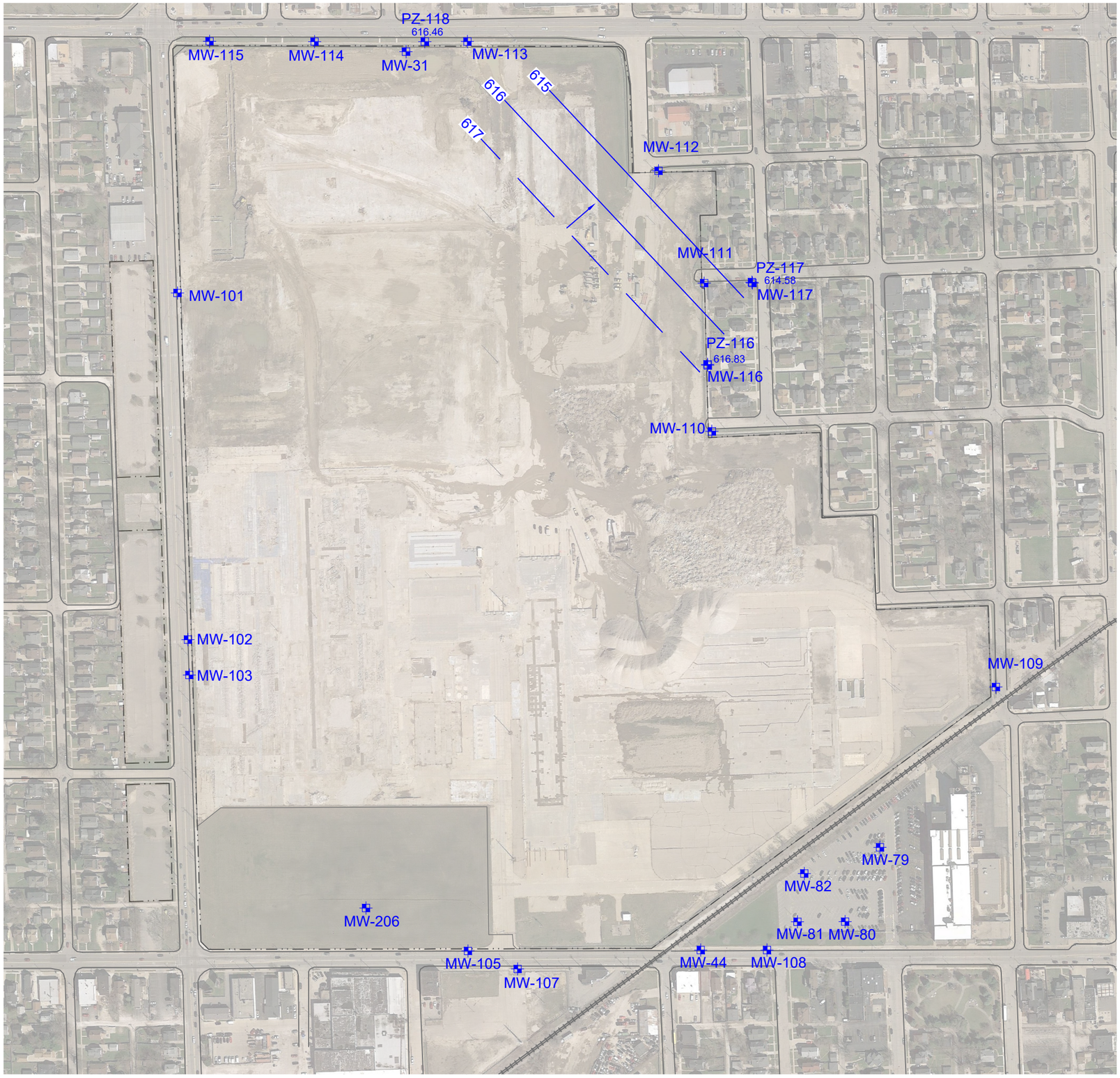

LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD
- EXISTING FENCE
- PERIMETER PIEZOMETER LOCATIONS
- 617 WATER TABLE CONTOURS

NOTES

1. AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO, IMAGE DATED 4/6/2017; DOWNLOADED ON 6/5/2017.

0' 300' 600'

SCALE

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Milwaukee, WI 53212
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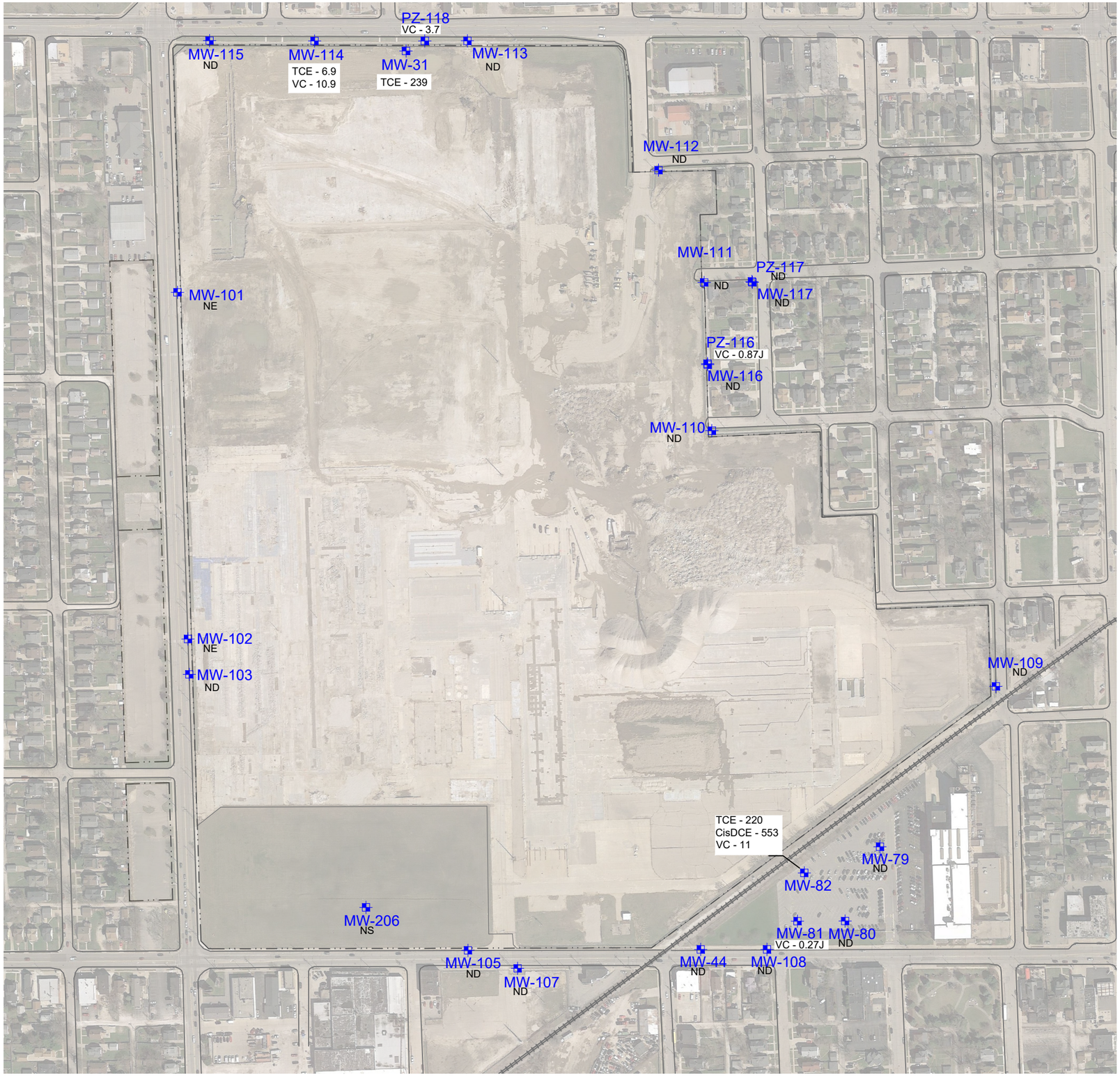
POTENTIOMETRIC SURFACE PERIMETER PIEZOMETERS - OCTOBER 2019

KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	11/4/2019
Checked:	LLA	11/4/2019
Approved:	LLA	11/4/2019
PROJECT NUMBER	60597994	
FIGURE NUMBER	3	



LEGEND

- APPROXIMATE SITE BOUNDARY
- RAILROAD
- EXISTING FENCE
- PERIMETER MONITORING WELL LOCATIONS - results below well name
- **NS** NOT SAMPLED
- **ND** NO DETECT
- **NE** NO ES EXCEEDANCE
- **TCE** TRICHLORETHENE
- **CisDCE** CIS-1,2-DICHLOROETHENE
- **VC** VINYL CHLORIDE
- **J** ESTIMATED CONCENTRATION BELOW REPORTING LIMIT

NOTES

1. AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO, IMAGE DATED 4/6/2017; DOWNLOADED ON 6/5/2017.
2. RESULTS REPORTED IN MICROGRAMS/LITER (UG/L)

N

0' 300' 600'

SCALE

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Milwaukee, WI 53212
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VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER ABOVE ENFORCEMENT STANDARDS - OCTOBER 2019

KENOSHA ENGINE PLANT
CITY OF KENOSHA
KENOSHA, WISCONSIN

Drawn :	JSM	11/4/2019
Checked:	LLA	11/4/2019
Approved:	LLA	11/4/2019
PROJECT NUMBER	60597994	
FIGURE NUMBER	4	

Figure 5
MW-31
TCE and Groundwater Elevations over Time

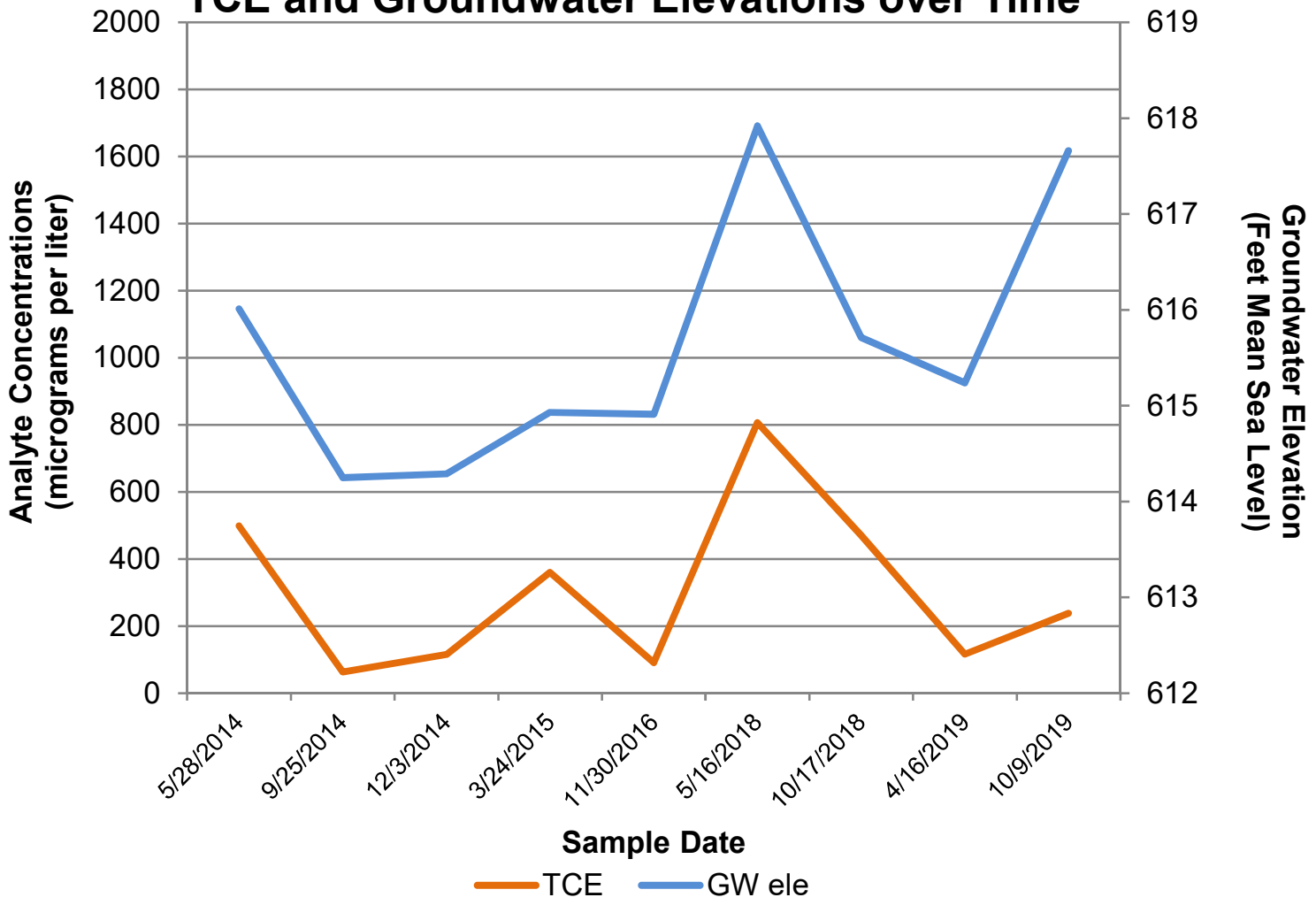


Figure 6
MW-114
Analtye Concentrations and Groundwater Elevations over Time

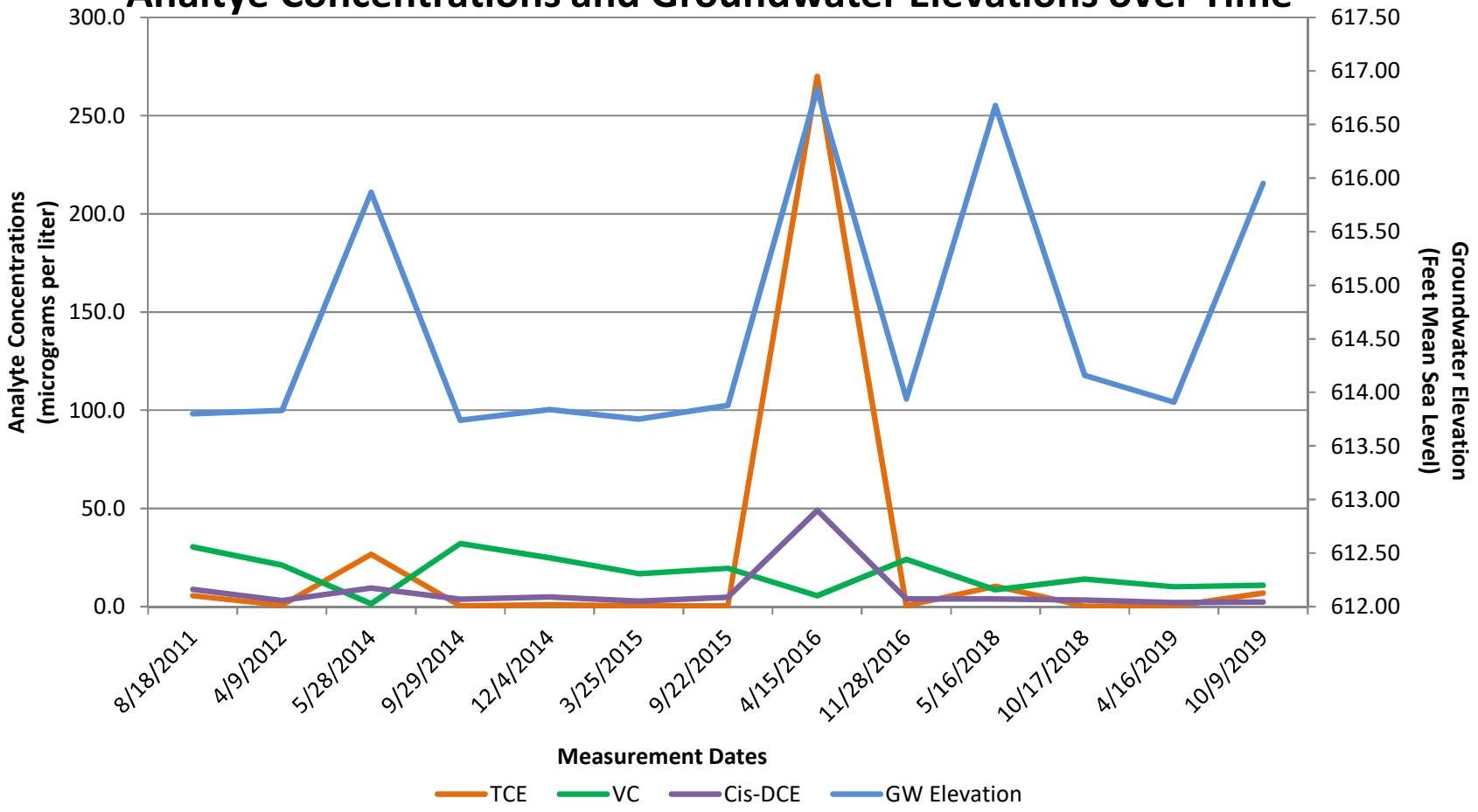


Figure 7
MW-118
Analtye Concentrations and Groundwater Elevations over Time

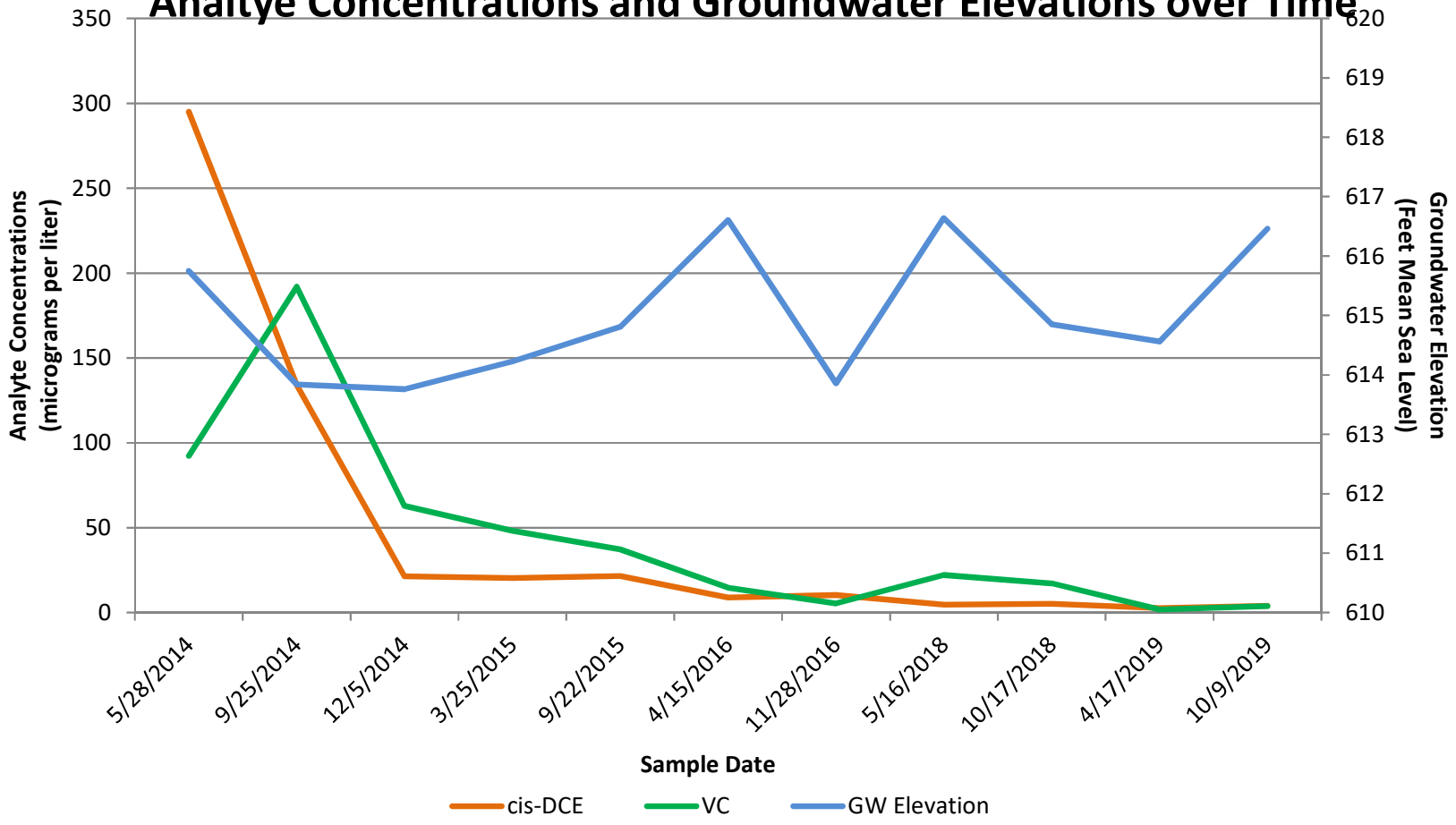
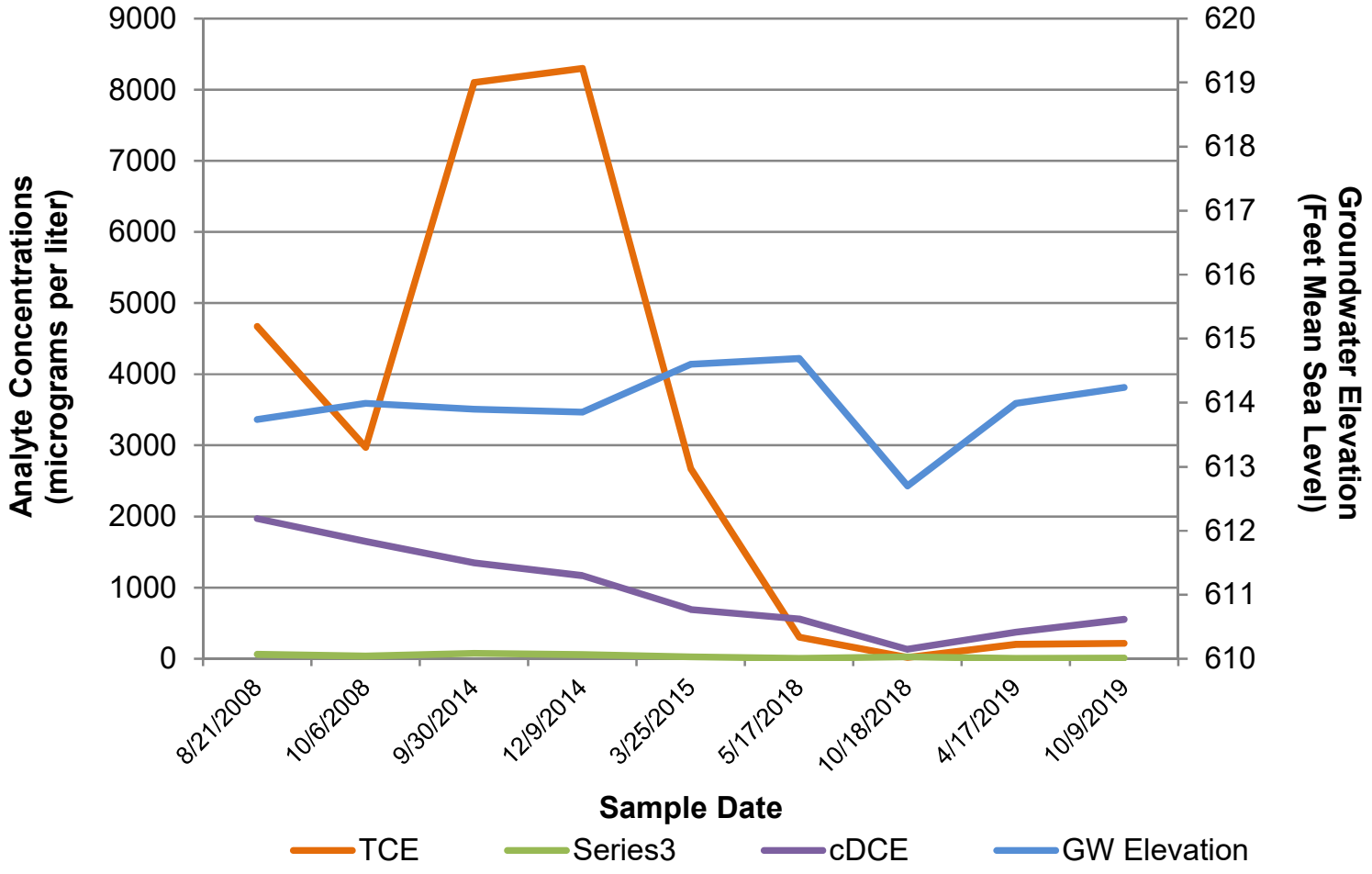


Figure 8
MW-82
Analyte Concentrations and Groundwater Elevations over Time



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

October 17, 2019

Lanette Altenbach
AECOM, Inc.
1555 N River Center Drive
Suite 214
Milwaukee, WI 53212

RE: Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Dear Lanette Altenbach:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Joel Mackinney, AECOM

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

CERTIFICATIONS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40197116001	**TRIP BLANK**	Water	10/08/19 10:50	10/11/19 08:10
40197116002	**MW-101**	Water	10/08/19 11:00	10/11/19 08:10
40197116003	**MW-102**	Water	10/08/19 11:15	10/11/19 08:10
40197116004	**MW-105**	Water	10/08/19 11:50	10/11/19 08:10
40197116005	**MW-103**	Water	10/08/19 12:05	10/11/19 08:10
40197116006	**MW-107**	Water	10/08/19 12:40	10/11/19 08:10
40197116007	**MW-109**	Water	10/08/19 13:40	10/11/19 08:10
40197116008	**PZ-117**	Water	10/08/19 13:55	10/11/19 08:10
40197116009	**MW-110**	Water	10/08/19 14:30	10/11/19 08:10
40197116010	**MW-117**	Water	10/08/19 14:45	10/11/19 08:10
40197116011	**MW-111**	Water	10/08/19 15:25	10/11/19 08:10
40197116012	**PZ-116**	Water	10/08/19 15:50	10/11/19 08:10
40197116013	**MW-112**	Water	10/08/19 16:25	10/11/19 08:10
40197116014	**MW-116**	Water	10/08/19 16:30	10/11/19 08:10
40197116015	**MW-115**	Water	10/09/19 09:50	10/11/19 08:10
40197116016	**MW-108**	Water	10/09/19 09:55	10/11/19 08:10
40197116017	**MW-108 DUP**	Water	10/09/19 09:55	10/11/19 08:10
40197116018	**MW-44**	Water	10/09/19 11:05	10/11/19 08:10
40197116019	**MW-114**	Water	10/09/19 11:10	10/11/19 08:10
40197116020	**MW-114 DUP**	Water	10/09/19 11:10	10/11/19 08:10
40197116021	**MW-79**	Water	10/09/19 12:05	10/11/19 08:10
40197116022	**MW-113**	Water	10/09/19 12:30	10/11/19 08:10
40197116023	**MW-80**	Water	10/09/19 13:05	10/11/19 08:10
40197116024	**PZ-118**	Water	10/09/19 13:40	10/11/19 08:10
40197116025	**MW-81**	Water	10/09/19 14:05	10/11/19 08:10
40197116026	**MW-31**	Water	10/09/19 14:40	10/11/19 08:10
40197116027	**MW-82**	Water	10/09/19 14:55	10/11/19 08:10

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

SAMPLE ANALYTE COUNT

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40197116001	**TRIP BLANK**	EPA 8260	SMT	63	PASI-G
40197116002	**MW-101**	EPA 8260	SMT	63	PASI-G
40197116003	**MW-102**	EPA 8260	SMT	63	PASI-G
40197116004	**MW-105**	EPA 8260	SMT	63	PASI-G
40197116005	**MW-103**	EPA 8260	SMT	63	PASI-G
40197116006	**MW-107**	EPA 8260	SMT	63	PASI-G
40197116007	**MW-109**	EPA 8260	SMT	63	PASI-G
40197116008	**PZ-117**	EPA 8260	SMT	63	PASI-G
40197116009	**MW-110**	EPA 8260	SMT	63	PASI-G
40197116010	**MW-117**	EPA 8260	SMT	63	PASI-G
40197116011	**MW-111**	EPA 8260	SMT	63	PASI-G
40197116012	**PZ-116**	EPA 8260	SMT	63	PASI-G
40197116013	**MW-112**	EPA 8260	SMT	63	PASI-G
40197116014	**MW-116**	EPA 8260	SMT	63	PASI-G
40197116015	**MW-115**	EPA 8260	SMT	63	PASI-G
40197116016	**MW-108**	EPA 8260	SMT	63	PASI-G
40197116017	**MW-108 DUP**	EPA 8260	SMT	63	PASI-G
40197116018	**MW-44**	EPA 8260	SMT	63	PASI-G
40197116019	**MW-114**	EPA 8260	SMT	63	PASI-G
40197116020	**MW-114 DUP**	EPA 8260	SMT	63	PASI-G
40197116021	**MW-79**	EPA 8260	HNW	63	PASI-G
40197116022	**MW-113**	EPA 8260	HNW	63	PASI-G
40197116023	**MW-80**	EPA 8260	HNW	63	PASI-G
40197116024	**PZ-118**	EPA 8260	HNW	63	PASI-G
40197116025	**MW-81**	EPA 8260	HNW	63	PASI-G
40197116026	**MW-31**	EPA 8260	HNW	63	PASI-G
40197116027	**MW-82**	EPA 8260	HNW	63	PASI-G

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SUMMARY OF DETECTION

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40197116002	**MW-101**					
EPA 8260	1,1,1-Trichloroethane	1.1	ug/L	1.0	10/15/19 08:52	M1
40197116003	**MW-102**					
EPA 8260	Tetrachloroethene	0.35J	ug/L	1.1	10/15/19 09:11	
EPA 8260	Trichloroethene	0.47J	ug/L	1.0	10/15/19 09:11	
40197116012	**PZ-116**					
EPA 8260	Vinyl chloride	0.87J	ug/L	1.0	10/15/19 12:07	
40197116015	**MW-115**					
EPA 8260	1,1,1-Trichloroethane	0.53J	ug/L	1.0	10/15/19 13:05	
40197116019	**MW-114**					
EPA 8260	1,1-Dichloroethane	1.4	ug/L	1.0	10/15/19 14:44	
EPA 8260	cis-1,2-Dichloroethene	2.4	ug/L	1.0	10/15/19 14:44	
EPA 8260	1,1,1-Trichloroethane	2.3	ug/L	1.0	10/15/19 14:44	
EPA 8260	Trichloroethene	6.9	ug/L	1.0	10/15/19 14:44	
EPA 8260	Vinyl chloride	10.9	ug/L	1.0	10/15/19 14:44	
40197116020	**MW-114 DUP**					
EPA 8260	1,1-Dichloroethane	1.3	ug/L	1.0	10/15/19 15:04	
EPA 8260	cis-1,2-Dichloroethene	2.7	ug/L	1.0	10/15/19 15:04	
EPA 8260	Tetrachloroethene	0.43J	ug/L	1.1	10/15/19 15:04	
EPA 8260	1,1,1-Trichloroethane	2.4	ug/L	1.0	10/15/19 15:04	
EPA 8260	Trichloroethene	7.0	ug/L	1.0	10/15/19 15:04	
EPA 8260	Vinyl chloride	9.6	ug/L	1.0	10/15/19 15:04	
40197116024	**PZ-118**					
EPA 8260	cis-1,2-Dichloroethene	3.9	ug/L	1.0	10/15/19 19:34	
EPA 8260	Vinyl chloride	3.7	ug/L	1.0	10/15/19 19:34	
40197116025	**MW-81**					
EPA 8260	cis-1,2-Dichloroethene	0.88J	ug/L	1.0	10/15/19 19:56	
EPA 8260	Vinyl chloride	0.27J	ug/L	1.0	10/15/19 19:56	
40197116026	**MW-31**					
EPA 8260	cis-1,2-Dichloroethene	1.1	ug/L	1.0	10/15/19 18:08	
EPA 8260	1,1,1-Trichloroethane	1.1	ug/L	1.0	10/15/19 18:08	
EPA 8260	Trichloroethene	239	ug/L	1.0	10/15/19 18:08	
40197116027	**MW-82**					
EPA 8260	cis-1,2-Dichloroethene	553	ug/L	5.0	10/15/19 18:30	
EPA 8260	trans-1,2-Dichloroethene	46.9	ug/L	18.2	10/15/19 18:30	
EPA 8260	Trichloroethene	220	ug/L	5.0	10/15/19 18:30	
EPA 8260	Vinyl chloride	11.0	ug/L	5.0	10/15/19 18:30	

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: TRIP BLANK **Lab ID: 40197116001** Collected: 10/08/19 10:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 08:32	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 08:32	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 08:32	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 08:32	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 08:32	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 08:32	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 08:32	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 08:32	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 08:32	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 08:32	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 08:32	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 08:32	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 08:32	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 08:32	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 08:32	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 08:32	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 08:32	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 08:32	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 08:32	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 08:32	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 08:32	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 08:32	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 08:32	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 08:32	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 08:32	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 08:32	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 08:32	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 08:32	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 08:32	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 08:32	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 08:32	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 08:32	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 08:32	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 08:32	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 08:32	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 08:32	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 08:32	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 08:32	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 08:32	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 08:32	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 08:32	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 08:32	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 08:32	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 08:32	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 08:32	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 08:32	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: TRIP BLANK **Lab ID: 40197116001** Collected: 10/08/19 10:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 08:32	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 08:32	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 08:32	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 08:32	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 08:32	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 08:32	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 08:32	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 08:32	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 08:32	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 08:32	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 08:32	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 08:32	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 08:32	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 08:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		10/15/19 08:32	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		10/15/19 08:32	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/15/19 08:32	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-101 **Lab ID: 40197116002** Collected: 10/08/19 11:00 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 08:52	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 08:52	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 08:52	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 08:52	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 08:52	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 08:52	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 08:52	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 08:52	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 08:52	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 08:52	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 08:52	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 08:52	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 08:52	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 08:52	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 08:52	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 08:52	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 08:52	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 08:52	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 08:52	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 08:52	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 08:52	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 08:52	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 08:52	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 08:52	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 08:52	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 08:52	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 08:52	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 08:52	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 08:52	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 08:52	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 08:52	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 08:52	594-20-7	L1,M0
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 08:52	563-58-6	M1
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 08:52	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 08:52	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 08:52	108-20-3	M1
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 08:52	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 08:52	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 08:52	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 08:52	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 08:52	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 08:52	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 08:52	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 08:52	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 08:52	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 08:52	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-101 **Lab ID: 40197116002** Collected: 10/08/19 11:00 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 08:52	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 08:52	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 08:52	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 08:52	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 08:52	120-82-1	
1,1,1-Trichloroethane	**1.1**	ug/L	1.0	0.24	1		10/15/19 08:52	71-55-6	M1
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 08:52	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 08:52	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 08:52	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 08:52	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 08:52	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 08:52	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 08:52	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 08:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 08:52	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/15/19 08:52	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 08:52	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-102 **Lab ID: 40197116003** Collected: 10/08/19 11:15 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 09:11	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:11	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 09:11	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 09:11	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 09:11	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 09:11	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:11	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 09:11	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 09:11	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 09:11	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:11	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 09:11	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 09:11	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 09:11	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 09:11	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 09:11	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 09:11	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 09:11	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 09:11	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 09:11	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:11	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 09:11	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 09:11	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 09:11	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:11	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:11	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:11	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:11	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 09:11	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:11	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 09:11	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 09:11	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 09:11	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 09:11	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 09:11	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 09:11	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 09:11	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 09:11	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 09:11	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 09:11	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 09:11	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 09:11	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 09:11	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 09:11	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 09:11	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:11	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-102 **Lab ID: 40197116003** Collected: 10/08/19 11:15 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:11	79-34-5	
Tetrachloroethene	**0.35J**	ug/L	1.1	0.33	1		10/15/19 09:11	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 09:11	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 09:11	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 09:11	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:11	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 09:11	79-00-5	
Trichloroethene	**0.47J**	ug/L	1.0	0.26	1		10/15/19 09:11	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 09:11	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 09:11	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 09:11	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 09:11	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 09:11	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 09:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		10/15/19 09:11	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/15/19 09:11	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		10/15/19 09:11	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-105 **Lab ID: 40197116004** Collected: 10/08/19 11:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 09:31	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:31	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 09:31	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 09:31	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 09:31	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 09:31	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:31	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 09:31	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 09:31	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 09:31	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:31	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 09:31	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 09:31	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 09:31	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 09:31	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 09:31	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 09:31	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 09:31	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 09:31	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 09:31	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:31	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 09:31	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 09:31	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 09:31	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:31	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:31	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:31	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:31	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 09:31	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:31	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 09:31	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 09:31	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 09:31	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 09:31	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 09:31	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 09:31	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 09:31	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 09:31	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 09:31	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 09:31	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 09:31	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 09:31	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 09:31	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 09:31	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 09:31	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:31	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-105 **Lab ID: 40197116004** Collected: 10/08/19 11:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:31	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 09:31	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 09:31	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 09:31	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 09:31	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:31	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 09:31	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 09:31	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 09:31	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 09:31	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 09:31	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 09:31	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 09:31	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 09:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/15/19 09:31	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		10/15/19 09:31	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 09:31	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-103 **Lab ID: 40197116005** Collected: 10/08/19 12:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 09:50	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:50	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 09:50	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 09:50	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 09:50	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 09:50	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:50	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 09:50	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 09:50	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 09:50	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:50	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 09:50	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 09:50	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 09:50	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 09:50	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 09:50	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 09:50	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 09:50	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 09:50	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 09:50	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 09:50	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 09:50	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 09:50	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 09:50	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:50	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:50	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:50	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:50	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 09:50	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:50	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 09:50	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 09:50	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 09:50	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 09:50	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 09:50	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 09:50	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 09:50	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 09:50	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 09:50	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 09:50	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 09:50	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 09:50	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 09:50	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 09:50	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 09:50	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 09:50	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-103 **Lab ID: 40197116005** Collected: 10/08/19 12:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 09:50	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 09:50	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 09:50	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 09:50	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 09:50	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 09:50	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 09:50	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 09:50	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 09:50	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 09:50	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 09:50	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 09:50	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 09:50	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 09:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/15/19 09:50	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		10/15/19 09:50	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/15/19 09:50	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-107 **Lab ID: 40197116006** Collected: 10/08/19 12:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 10:10	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:10	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 10:10	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 10:10	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 10:10	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 10:10	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:10	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 10:10	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 10:10	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 10:10	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:10	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 10:10	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 10:10	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 10:10	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 10:10	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 10:10	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 10:10	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 10:10	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 10:10	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 10:10	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:10	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 10:10	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 10:10	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 10:10	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:10	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:10	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:10	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:10	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 10:10	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:10	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 10:10	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 10:10	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 10:10	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 10:10	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 10:10	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 10:10	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 10:10	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 10:10	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 10:10	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 10:10	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 10:10	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 10:10	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 10:10	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 10:10	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 10:10	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:10	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-107 **Lab ID: 40197116006** Collected: 10/08/19 12:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:10	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 10:10	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 10:10	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 10:10	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 10:10	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:10	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 10:10	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 10:10	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 10:10	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 10:10	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 10:10	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 10:10	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 10:10	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 10:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/15/19 10:10	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/15/19 10:10	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 10:10	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-109 **Lab ID: 40197116007** Collected: 10/08/19 13:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 10:29	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:29	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 10:29	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 10:29	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 10:29	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 10:29	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:29	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 10:29	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 10:29	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 10:29	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:29	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 10:29	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 10:29	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 10:29	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 10:29	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 10:29	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 10:29	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 10:29	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 10:29	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 10:29	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:29	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 10:29	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 10:29	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 10:29	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:29	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:29	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:29	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:29	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 10:29	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:29	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 10:29	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 10:29	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 10:29	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 10:29	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 10:29	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 10:29	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 10:29	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 10:29	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 10:29	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 10:29	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 10:29	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 10:29	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 10:29	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 10:29	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 10:29	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:29	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-109 **Lab ID: 40197116007** Collected: 10/08/19 13:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:29	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 10:29	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 10:29	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 10:29	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 10:29	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:29	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 10:29	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 10:29	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 10:29	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 10:29	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 10:29	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 10:29	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 10:29	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 10:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		10/15/19 10:29	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/15/19 10:29	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/15/19 10:29	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: PZ-117 **Lab ID: 40197116008** Collected: 10/08/19 13:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 10:49	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:49	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 10:49	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 10:49	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 10:49	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 10:49	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:49	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 10:49	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 10:49	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 10:49	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:49	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 10:49	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 10:49	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 10:49	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 10:49	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 10:49	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 10:49	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 10:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 10:49	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 10:49	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 10:49	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 10:49	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 10:49	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 10:49	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:49	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:49	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:49	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:49	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 10:49	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:49	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 10:49	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 10:49	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 10:49	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 10:49	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 10:49	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 10:49	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 10:49	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 10:49	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 10:49	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 10:49	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 10:49	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 10:49	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 10:49	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 10:49	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 10:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 10:49	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: PZ-117 **Lab ID: 40197116008** Collected: 10/08/19 13:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 10:49	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 10:49	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 10:49	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 10:49	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 10:49	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 10:49	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 10:49	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 10:49	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 10:49	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 10:49	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 10:49	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 10:49	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 10:49	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 10:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 10:49	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/15/19 10:49	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		10/15/19 10:49	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-110 **Lab ID: 40197116009** Collected: 10/08/19 14:30 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 11:08	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:08	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 11:08	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 11:08	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 11:08	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 11:08	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:08	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 11:08	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 11:08	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 11:08	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:08	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 11:08	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 11:08	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 11:08	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 11:08	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 11:08	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 11:08	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 11:08	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 11:08	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 11:08	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:08	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 11:08	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 11:08	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 11:08	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:08	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:08	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:08	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:08	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 11:08	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:08	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 11:08	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 11:08	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 11:08	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 11:08	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 11:08	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 11:08	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 11:08	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 11:08	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 11:08	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 11:08	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 11:08	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 11:08	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 11:08	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 11:08	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 11:08	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:08	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-110 **Lab ID: 40197116009** Collected: 10/08/19 14:30 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:08	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 11:08	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 11:08	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 11:08	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 11:08	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:08	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 11:08	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 11:08	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 11:08	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 11:08	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 11:08	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 11:08	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 11:08	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 11:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		10/15/19 11:08	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/15/19 11:08	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 11:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-117 **Lab ID: 40197116010** Collected: 10/08/19 14:45 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 11:28	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:28	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 11:28	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 11:28	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 11:28	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 11:28	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:28	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 11:28	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 11:28	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 11:28	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:28	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 11:28	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 11:28	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 11:28	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 11:28	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 11:28	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 11:28	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 11:28	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 11:28	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 11:28	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:28	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 11:28	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 11:28	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 11:28	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:28	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:28	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:28	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:28	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 11:28	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:28	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 11:28	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 11:28	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 11:28	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 11:28	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 11:28	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 11:28	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 11:28	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 11:28	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 11:28	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 11:28	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 11:28	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 11:28	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 11:28	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 11:28	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 11:28	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:28	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-117 **Lab ID: 40197116010** Collected: 10/08/19 14:45 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:28	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 11:28	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 11:28	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 11:28	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 11:28	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:28	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 11:28	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 11:28	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 11:28	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 11:28	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 11:28	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 11:28	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 11:28	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 11:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 11:28	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/15/19 11:28	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 11:28	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-111 **Lab ID: 40197116011** Collected: 10/08/19 15:25 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 11:47	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:47	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 11:47	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 11:47	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 11:47	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 11:47	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:47	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 11:47	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 11:47	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 11:47	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:47	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 11:47	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 11:47	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 11:47	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 11:47	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 11:47	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 11:47	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 11:47	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 11:47	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 11:47	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 11:47	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 11:47	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 11:47	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 11:47	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:47	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:47	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:47	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:47	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 11:47	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:47	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 11:47	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 11:47	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 11:47	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 11:47	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 11:47	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 11:47	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 11:47	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 11:47	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 11:47	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 11:47	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 11:47	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 11:47	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 11:47	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 11:47	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 11:47	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 11:47	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-111 **Lab ID: 40197116011** Collected: 10/08/19 15:25 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 11:47	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 11:47	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 11:47	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 11:47	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 11:47	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 11:47	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 11:47	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 11:47	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 11:47	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 11:47	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 11:47	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 11:47	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 11:47	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 11:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/15/19 11:47	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		10/15/19 11:47	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 11:47	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: PZ-116 **Lab ID: 40197116012** Collected: 10/08/19 15:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 12:07	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:07	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 12:07	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 12:07	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 12:07	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 12:07	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:07	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 12:07	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 12:07	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 12:07	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:07	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 12:07	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 12:07	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 12:07	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 12:07	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 12:07	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 12:07	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 12:07	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 12:07	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 12:07	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:07	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 12:07	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 12:07	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 12:07	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:07	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:07	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:07	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:07	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 12:07	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:07	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 12:07	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 12:07	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 12:07	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 12:07	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 12:07	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 12:07	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 12:07	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 12:07	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 12:07	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 12:07	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 12:07	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 12:07	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 12:07	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 12:07	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 12:07	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:07	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: PZ-116 **Lab ID: 40197116012** Collected: 10/08/19 15:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:07	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 12:07	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 12:07	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 12:07	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 12:07	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:07	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 12:07	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 12:07	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 12:07	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 12:07	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 12:07	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 12:07	108-67-8	
Vinyl chloride	**0.87J**	ug/L	1.0	0.17	1		10/15/19 12:07	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 12:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/15/19 12:07	460-00-4	
Dibromofluoromethane (S)	111	%	70-130		1		10/15/19 12:07	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/15/19 12:07	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-112 **Lab ID: 40197116013** Collected: 10/08/19 16:25 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 12:27	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:27	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 12:27	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 12:27	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 12:27	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 12:27	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:27	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 12:27	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 12:27	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 12:27	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:27	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 12:27	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 12:27	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 12:27	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 12:27	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 12:27	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 12:27	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 12:27	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 12:27	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 12:27	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:27	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 12:27	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 12:27	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 12:27	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:27	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:27	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:27	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:27	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 12:27	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:27	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 12:27	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 12:27	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 12:27	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 12:27	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 12:27	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 12:27	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 12:27	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 12:27	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 12:27	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 12:27	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 12:27	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 12:27	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 12:27	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 12:27	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 12:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:27	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-112 **Lab ID: 40197116013** Collected: 10/08/19 16:25 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:27	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 12:27	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 12:27	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 12:27	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 12:27	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:27	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 12:27	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 12:27	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 12:27	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 12:27	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 12:27	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 12:27	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 12:27	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 12:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/15/19 12:27	460-00-4	
Dibromofluoromethane (S)	104	%	70-130		1		10/15/19 12:27	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/15/19 12:27	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-116 **Lab ID: 40197116014** Collected: 10/08/19 16:30 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 12:46	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:46	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 12:46	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 12:46	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 12:46	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 12:46	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:46	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 12:46	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 12:46	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 12:46	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:46	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 12:46	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 12:46	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 12:46	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 12:46	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 12:46	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 12:46	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 12:46	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 12:46	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 12:46	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 12:46	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 12:46	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 12:46	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 12:46	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:46	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:46	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:46	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:46	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 12:46	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:46	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 12:46	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 12:46	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 12:46	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 12:46	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 12:46	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 12:46	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 12:46	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 12:46	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 12:46	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 12:46	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 12:46	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 12:46	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 12:46	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 12:46	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 12:46	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 12:46	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-116 **Lab ID: 40197116014** Collected: 10/08/19 16:30 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 12:46	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 12:46	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 12:46	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 12:46	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 12:46	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 12:46	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 12:46	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 12:46	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 12:46	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 12:46	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 12:46	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 12:46	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 12:46	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 12:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 12:46	460-00-4	
Dibromofluoromethane (S)	110	%	70-130		1		10/15/19 12:46	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		10/15/19 12:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-115 **Lab ID: 40197116015** Collected: 10/09/19 09:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 13:05	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 13:05	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 13:05	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 13:05	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 13:05	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 13:05	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 13:05	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 13:05	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 13:05	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 13:05	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 13:05	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 13:05	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 13:05	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 13:05	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 13:05	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 13:05	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 13:05	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 13:05	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 13:05	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 13:05	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 13:05	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 13:05	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 13:05	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 13:05	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 13:05	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 13:05	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 13:05	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 13:05	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 13:05	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 13:05	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 13:05	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 13:05	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 13:05	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 13:05	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 13:05	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 13:05	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 13:05	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 13:05	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 13:05	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 13:05	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 13:05	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 13:05	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 13:05	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 13:05	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 13:05	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 13:05	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-115 **Lab ID: 40197116015** Collected: 10/09/19 09:50 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 13:05	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 13:05	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 13:05	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 13:05	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 13:05	120-82-1	
1,1,1-Trichloroethane	**0.53J**	ug/L	1.0	0.24	1		10/15/19 13:05	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 13:05	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 13:05	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 13:05	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 13:05	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 13:05	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 13:05	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 13:05	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 13:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/15/19 13:05	460-00-4	
Dibromofluoromethane (S)	107	%	70-130		1		10/15/19 13:05	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		10/15/19 13:05	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-108 **Lab ID: 40197116016** Collected: 10/09/19 09:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 13:45	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 13:45	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 13:45	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 13:45	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 13:45	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 13:45	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 13:45	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 13:45	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 13:45	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 13:45	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 13:45	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 13:45	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 13:45	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 13:45	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 13:45	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 13:45	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 13:45	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 13:45	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 13:45	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 13:45	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 13:45	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 13:45	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 13:45	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 13:45	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 13:45	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 13:45	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 13:45	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 13:45	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 13:45	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 13:45	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 13:45	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 13:45	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 13:45	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 13:45	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 13:45	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 13:45	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 13:45	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 13:45	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 13:45	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 13:45	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 13:45	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 13:45	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 13:45	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 13:45	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 13:45	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 13:45	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-108 **Lab ID: 40197116016** Collected: 10/09/19 09:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 13:45	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 13:45	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 13:45	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 13:45	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 13:45	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 13:45	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 13:45	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 13:45	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 13:45	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 13:45	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 13:45	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 13:45	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 13:45	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 13:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		10/15/19 13:45	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/15/19 13:45	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 13:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-108 DUP **Lab ID: 40197116017** Collected: 10/09/19 09:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 14:04	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:04	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 14:04	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 14:04	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 14:04	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 14:04	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:04	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 14:04	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 14:04	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 14:04	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:04	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 14:04	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 14:04	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 14:04	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 14:04	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 14:04	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 14:04	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 14:04	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 14:04	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 14:04	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:04	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 14:04	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 14:04	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 14:04	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:04	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:04	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:04	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:04	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 14:04	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:04	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 14:04	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 14:04	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 14:04	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 14:04	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 14:04	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 14:04	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 14:04	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 14:04	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 14:04	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 14:04	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 14:04	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 14:04	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 14:04	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 14:04	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 14:04	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:04	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-108 DUP **Lab ID: 40197116017** Collected: 10/09/19 09:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:04	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 14:04	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 14:04	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 14:04	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 14:04	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:04	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 14:04	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 14:04	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 14:04	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 14:04	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 14:04	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 14:04	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 14:04	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 14:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 14:04	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/15/19 14:04	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		10/15/19 14:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-44 **Lab ID: 40197116018** Collected: 10/09/19 11:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 14:24	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:24	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 14:24	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 14:24	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 14:24	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 14:24	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:24	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 14:24	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 14:24	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 14:24	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:24	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 14:24	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 14:24	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 14:24	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 14:24	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 14:24	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 14:24	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 14:24	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 14:24	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 14:24	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:24	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 14:24	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 14:24	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 14:24	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:24	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:24	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:24	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:24	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 14:24	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:24	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 14:24	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 14:24	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 14:24	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 14:24	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 14:24	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 14:24	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 14:24	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 14:24	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 14:24	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 14:24	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 14:24	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 14:24	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 14:24	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 14:24	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 14:24	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:24	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-44 **Lab ID: 40197116018** Collected: 10/09/19 11:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:24	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 14:24	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 14:24	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 14:24	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 14:24	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:24	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 14:24	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 14:24	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 14:24	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 14:24	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 14:24	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 14:24	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 14:24	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 14:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/15/19 14:24	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		10/15/19 14:24	1868-53-7	
Toluene-d8 (S)	93	%	70-130		1		10/15/19 14:24	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-114 **Lab ID: 40197116019** Collected: 10/09/19 11:10 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 14:44	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:44	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 14:44	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 14:44	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 14:44	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 14:44	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:44	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 14:44	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 14:44	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 14:44	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:44	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 14:44	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 14:44	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 14:44	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 14:44	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 14:44	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 14:44	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 14:44	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 14:44	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 14:44	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 14:44	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 14:44	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 14:44	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 14:44	75-71-8	
1,1-Dichloroethane	**1.4**	ug/L	1.0	0.27	1		10/15/19 14:44	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:44	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 14:44	75-35-4	
cis-1,2-Dichloroethene	**2.4**	ug/L	1.0	0.27	1		10/15/19 14:44	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 14:44	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:44	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 14:44	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 14:44	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 14:44	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 14:44	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 14:44	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 14:44	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 14:44	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 14:44	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 14:44	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 14:44	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 14:44	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 14:44	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 14:44	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 14:44	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 14:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 14:44	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-114 **Lab ID: 40197116019** Collected: 10/09/19 11:10 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 14:44	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 14:44	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 14:44	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 14:44	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 14:44	120-82-1	
1,1,1-Trichloroethane	**2.3**	ug/L	1.0	0.24	1		10/15/19 14:44	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 14:44	79-00-5	
Trichloroethene	**6.9**	ug/L	1.0	0.26	1		10/15/19 14:44	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 14:44	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 14:44	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 14:44	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 14:44	108-67-8	
Vinyl chloride	**10.9**	ug/L	1.0	0.17	1		10/15/19 14:44	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 14:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 14:44	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/15/19 14:44	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		10/15/19 14:44	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-114 DUP **Lab ID: 40197116020** Collected: 10/09/19 11:10 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 15:04	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 15:04	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 15:04	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 15:04	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 15:04	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 15:04	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 15:04	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 15:04	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 15:04	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 15:04	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 15:04	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 15:04	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 15:04	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 15:04	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 15:04	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 15:04	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 15:04	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 15:04	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 15:04	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 15:04	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 15:04	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 15:04	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 15:04	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 15:04	75-71-8	
1,1-Dichloroethane	**1.3**	ug/L	1.0	0.27	1		10/15/19 15:04	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 15:04	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 15:04	75-35-4	
cis-1,2-Dichloroethene	**2.7**	ug/L	1.0	0.27	1		10/15/19 15:04	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 15:04	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 15:04	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 15:04	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 15:04	594-20-7	L1
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 15:04	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 15:04	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 15:04	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 15:04	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 15:04	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 15:04	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 15:04	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 15:04	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 15:04	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 15:04	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 15:04	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 15:04	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 15:04	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 15:04	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-114 DUP **Lab ID: 40197116020** Collected: 10/09/19 11:10 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 15:04	79-34-5	
Tetrachloroethene	**0.43J**	ug/L	1.1	0.33	1		10/15/19 15:04	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 15:04	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 15:04	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 15:04	120-82-1	
1,1,1-Trichloroethane	**2.4**	ug/L	1.0	0.24	1		10/15/19 15:04	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 15:04	79-00-5	
Trichloroethene	**7.0**	ug/L	1.0	0.26	1		10/15/19 15:04	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 15:04	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 15:04	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 15:04	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 15:04	108-67-8	
Vinyl chloride	**9.6**	ug/L	1.0	0.17	1		10/15/19 15:04	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 15:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/15/19 15:04	460-00-4	
Dibromofluoromethane (S)	110	%	70-130		1		10/15/19 15:04	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		10/15/19 15:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-79 **Lab ID: 40197116021** Collected: 10/09/19 12:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 17:47	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 17:47	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 17:47	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 17:47	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 17:47	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 17:47	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 17:47	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 17:47	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 17:47	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 17:47	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 17:47	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 17:47	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 17:47	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 17:47	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 17:47	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 17:47	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 17:47	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 17:47	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 17:47	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 17:47	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 17:47	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 17:47	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 17:47	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 17:47	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 17:47	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 17:47	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 17:47	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 17:47	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 17:47	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 17:47	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 17:47	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 17:47	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 17:47	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 17:47	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 17:47	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 17:47	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 17:47	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 17:47	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 17:47	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 17:47	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 17:47	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 17:47	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 17:47	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 17:47	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 17:47	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 17:47	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-79 **Lab ID: 40197116021** Collected: 10/09/19 12:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 17:47	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 17:47	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 17:47	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 17:47	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 17:47	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 17:47	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 17:47	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 17:47	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 17:47	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 17:47	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 17:47	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 17:47	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 17:47	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 17:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/15/19 17:47	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		10/15/19 17:47	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		10/15/19 17:47	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-113 **Lab ID: 40197116022** Collected: 10/09/19 12:30 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 18:51	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 18:51	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 18:51	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 18:51	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 18:51	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 18:51	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 18:51	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 18:51	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 18:51	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 18:51	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 18:51	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 18:51	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 18:51	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 18:51	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 18:51	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 18:51	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 18:51	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 18:51	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 18:51	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 18:51	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 18:51	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 18:51	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 18:51	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 18:51	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 18:51	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 18:51	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 18:51	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 18:51	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 18:51	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 18:51	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 18:51	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 18:51	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 18:51	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 18:51	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 18:51	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 18:51	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 18:51	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 18:51	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 18:51	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 18:51	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 18:51	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 18:51	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 18:51	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 18:51	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 18:51	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 18:51	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-113 **Lab ID: 40197116022** Collected: 10/09/19 12:30 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 18:51	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 18:51	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 18:51	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 18:51	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 18:51	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 18:51	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 18:51	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 18:51	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 18:51	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 18:51	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 18:51	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 18:51	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 18:51	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 18:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/15/19 18:51	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		10/15/19 18:51	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/15/19 18:51	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-80 **Lab ID: 40197116023** Collected: 10/09/19 13:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 19:13	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:13	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 19:13	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 19:13	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 19:13	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 19:13	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:13	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 19:13	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 19:13	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 19:13	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:13	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 19:13	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 19:13	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 19:13	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 19:13	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 19:13	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 19:13	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 19:13	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 19:13	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 19:13	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:13	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 19:13	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 19:13	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 19:13	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:13	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:13	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:13	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:13	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 19:13	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:13	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 19:13	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 19:13	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 19:13	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 19:13	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 19:13	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 19:13	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 19:13	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 19:13	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 19:13	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 19:13	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 19:13	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 19:13	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 19:13	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 19:13	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 19:13	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:13	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-80 **Lab ID: 40197116023** Collected: 10/09/19 13:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:13	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 19:13	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 19:13	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 19:13	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 19:13	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:13	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 19:13	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 19:13	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 19:13	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 19:13	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 19:13	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 19:13	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 19:13	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 19:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 19:13	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		10/15/19 19:13	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		10/15/19 19:13	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: PZ-118 **Lab ID: 40197116024** Collected: 10/09/19 13:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 19:34	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:34	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 19:34	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 19:34	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 19:34	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 19:34	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:34	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 19:34	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 19:34	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 19:34	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:34	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 19:34	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 19:34	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 19:34	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 19:34	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 19:34	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 19:34	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 19:34	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 19:34	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 19:34	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:34	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 19:34	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 19:34	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 19:34	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:34	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:34	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:34	75-35-4	
cis-1,2-Dichloroethene	**3.9**	ug/L	1.0	0.27	1		10/15/19 19:34	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 19:34	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:34	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 19:34	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 19:34	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 19:34	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 19:34	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 19:34	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 19:34	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 19:34	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 19:34	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 19:34	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 19:34	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 19:34	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 19:34	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 19:34	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 19:34	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 19:34	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:34	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: PZ-118 **Lab ID: 40197116024** Collected: 10/09/19 13:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:34	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 19:34	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 19:34	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 19:34	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 19:34	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:34	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 19:34	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 19:34	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 19:34	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 19:34	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 19:34	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 19:34	108-67-8	
Vinyl chloride	**3.7**	ug/L	1.0	0.17	1		10/15/19 19:34	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 19:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/15/19 19:34	460-00-4	
Dibromofluoromethane (S)	102	%	70-130		1		10/15/19 19:34	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		10/15/19 19:34	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-81 **Lab ID: 40197116025** Collected: 10/09/19 14:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 19:56	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:56	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 19:56	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 19:56	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 19:56	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 19:56	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:56	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 19:56	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 19:56	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 19:56	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:56	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 19:56	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 19:56	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 19:56	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 19:56	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 19:56	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 19:56	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 19:56	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 19:56	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 19:56	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 19:56	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 19:56	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 19:56	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 19:56	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:56	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:56	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:56	75-35-4	
cis-1,2-Dichloroethene	**0.88J**	ug/L	1.0	0.27	1		10/15/19 19:56	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 19:56	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:56	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 19:56	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 19:56	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 19:56	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 19:56	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 19:56	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 19:56	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 19:56	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 19:56	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 19:56	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 19:56	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 19:56	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 19:56	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 19:56	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 19:56	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 19:56	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 19:56	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-81 **Lab ID: 40197116025** Collected: 10/09/19 14:05 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 19:56	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 19:56	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 19:56	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 19:56	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 19:56	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/15/19 19:56	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 19:56	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/15/19 19:56	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 19:56	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 19:56	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 19:56	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 19:56	108-67-8	
Vinyl chloride	**0.27J**	ug/L	1.0	0.17	1		10/15/19 19:56	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 19:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 19:56	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/15/19 19:56	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/15/19 19:56	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-31 **Lab ID: 40197116026** Collected: 10/09/19 14:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/15/19 18:08	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 18:08	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/15/19 18:08	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/15/19 18:08	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/15/19 18:08	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/15/19 18:08	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 18:08	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/15/19 18:08	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/15/19 18:08	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 18:08	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 18:08	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/15/19 18:08	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/15/19 18:08	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/15/19 18:08	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/15/19 18:08	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/15/19 18:08	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/15/19 18:08	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/15/19 18:08	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/15/19 18:08	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/15/19 18:08	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/15/19 18:08	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/15/19 18:08	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/15/19 18:08	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/15/19 18:08	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 18:08	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 18:08	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/15/19 18:08	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.27	1		10/15/19 18:08	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/15/19 18:08	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 18:08	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/15/19 18:08	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/15/19 18:08	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/15/19 18:08	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/15/19 18:08	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/15/19 18:08	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/15/19 18:08	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/15/19 18:08	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 18:08	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/15/19 18:08	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/15/19 18:08	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/15/19 18:08	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/15/19 18:08	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/15/19 18:08	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/15/19 18:08	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/15/19 18:08	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/15/19 18:08	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-31 **Lab ID: 40197116026** Collected: 10/09/19 14:40 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/15/19 18:08	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/15/19 18:08	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/15/19 18:08	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/15/19 18:08	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/15/19 18:08	120-82-1	
1,1,1-Trichloroethane	**1.1**	ug/L	1.0	0.24	1		10/15/19 18:08	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/15/19 18:08	79-00-5	
Trichloroethene	**239**	ug/L	1.0	0.26	1		10/15/19 18:08	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/15/19 18:08	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/15/19 18:08	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/15/19 18:08	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/15/19 18:08	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/15/19 18:08	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		10/15/19 18:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/15/19 18:08	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		10/15/19 18:08	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		10/15/19 18:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-82 **Lab ID: 40197116027** Collected: 10/09/19 14:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<1.2**	ug/L	5.0	1.2	5		10/15/19 18:30	71-43-2	
Bromobenzene	**<1.2**	ug/L	5.0	1.2	5		10/15/19 18:30	108-86-1	
Bromochloromethane	**<1.8**	ug/L	25.0	1.8	5		10/15/19 18:30	74-97-5	
Bromodichloromethane	**<1.8**	ug/L	6.1	1.8	5		10/15/19 18:30	75-27-4	
Bromoform	**<19.9**	ug/L	66.2	19.9	5		10/15/19 18:30	75-25-2	
Bromomethane	**<4.9**	ug/L	25.0	4.9	5		10/15/19 18:30	74-83-9	
n-Butylbenzene	**<3.5**	ug/L	11.8	3.5	5		10/15/19 18:30	104-51-8	
sec-Butylbenzene	**<4.2**	ug/L	25.0	4.2	5		10/15/19 18:30	135-98-8	
tert-Butylbenzene	**<1.5**	ug/L	5.1	1.5	5		10/15/19 18:30	98-06-6	
Carbon tetrachloride	**<0.83**	ug/L	5.0	0.83	5		10/15/19 18:30	56-23-5	
Chlorobenzene	**<3.6**	ug/L	11.8	3.6	5		10/15/19 18:30	108-90-7	
Chloroethane	**<6.7**	ug/L	25.0	6.7	5		10/15/19 18:30	75-00-3	
Chloroform	**<6.4**	ug/L	25.0	6.4	5		10/15/19 18:30	67-66-3	
Chloromethane	**<10.9**	ug/L	36.5	10.9	5		10/15/19 18:30	74-87-3	
2-Chlorotoluene	**<4.6**	ug/L	25.0	4.6	5		10/15/19 18:30	95-49-8	
4-Chlorotoluene	**<3.8**	ug/L	12.6	3.8	5		10/15/19 18:30	106-43-4	
1,2-Dibromo-3-chloropropane	**<8.8**	ug/L	29.4	8.8	5		10/15/19 18:30	96-12-8	
Dibromochloromethane	**<13.0**	ug/L	43.4	13.0	5		10/15/19 18:30	124-48-1	
1,2-Dibromoethane (EDB)	**<4.1**	ug/L	13.8	4.1	5		10/15/19 18:30	106-93-4	
Dibromomethane	**<4.7**	ug/L	15.6	4.7	5		10/15/19 18:30	74-95-3	
1,2-Dichlorobenzene	**<3.5**	ug/L	11.8	3.5	5		10/15/19 18:30	95-50-1	
1,3-Dichlorobenzene	**<3.1**	ug/L	10.5	3.1	5		10/15/19 18:30	541-73-1	
1,4-Dichlorobenzene	**<4.7**	ug/L	15.7	4.7	5		10/15/19 18:30	106-46-7	
Dichlorodifluoromethane	**<2.5**	ug/L	25.0	2.5	5		10/15/19 18:30	75-71-8	
1,1-Dichloroethane	**<1.4**	ug/L	5.0	1.4	5		10/15/19 18:30	75-34-3	
1,2-Dichloroethane	**<1.4**	ug/L	5.0	1.4	5		10/15/19 18:30	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/L	5.0	1.2	5		10/15/19 18:30	75-35-4	
cis-1,2-Dichloroethene	**553**	ug/L	5.0	1.4	5		10/15/19 18:30	156-59-2	
trans-1,2-Dichloroethene	**46.9**	ug/L	18.2	5.5	5		10/15/19 18:30	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/L	5.0	1.4	5		10/15/19 18:30	78-87-5	
1,3-Dichloropropane	**<4.1**	ug/L	13.8	4.1	5		10/15/19 18:30	142-28-9	
2,2-Dichloropropane	**<11.3**	ug/L	37.8	11.3	5		10/15/19 18:30	594-20-7	
1,1-Dichloropropene	**<2.7**	ug/L	9.0	2.7	5		10/15/19 18:30	563-58-6	
cis-1,3-Dichloropropene	**<18.1**	ug/L	60.5	18.1	5		10/15/19 18:30	10061-01-5	
trans-1,3-Dichloropropene	**<21.9**	ug/L	72.8	21.9	5		10/15/19 18:30	10061-02-6	
Diisopropyl ether	**<9.4**	ug/L	31.5	9.4	5		10/15/19 18:30	108-20-3	
Ethylbenzene	**<1.1**	ug/L	5.0	1.1	5		10/15/19 18:30	100-41-4	
Hexachloro-1,3-butadiene	**<5.9**	ug/L	25.0	5.9	5		10/15/19 18:30	87-68-3	
Isopropylbenzene (Cumene)	**<2.0**	ug/L	25.0	2.0	5		10/15/19 18:30	98-82-8	
p-Isopropyltoluene	**<4.0**	ug/L	13.3	4.0	5		10/15/19 18:30	99-87-6	
Methylene Chloride	**<2.9**	ug/L	25.0	2.9	5		10/15/19 18:30	75-09-2	
Methyl-tert-butyl ether	**<6.2**	ug/L	20.8	6.2	5		10/15/19 18:30	1634-04-4	
Naphthalene	**<5.9**	ug/L	25.0	5.9	5		10/15/19 18:30	91-20-3	
n-Propylbenzene	**<4.1**	ug/L	25.0	4.1	5		10/15/19 18:30	103-65-1	
Styrene	**<2.3**	ug/L	7.8	2.3	5		10/15/19 18:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.3**	ug/L	5.0	1.3	5		10/15/19 18:30	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Sample: MW-82 **Lab ID: 40197116027** Collected: 10/09/19 14:55 Received: 10/11/19 08:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<1.4**	ug/L	5.0	1.4	5		10/15/19 18:30	79-34-5	
Tetrachloroethene	**<1.6**	ug/L	5.4	1.6	5		10/15/19 18:30	127-18-4	
Toluene	**<0.86**	ug/L	25.0	0.86	5		10/15/19 18:30	108-88-3	
1,2,3-Trichlorobenzene	**<3.1**	ug/L	25.0	3.1	5		10/15/19 18:30	87-61-6	
1,2,4-Trichlorobenzene	**<4.8**	ug/L	25.0	4.8	5		10/15/19 18:30	120-82-1	
1,1,1-Trichloroethane	**<1.2**	ug/L	5.0	1.2	5		10/15/19 18:30	71-55-6	
1,1,2-Trichloroethane	**<2.8**	ug/L	25.0	2.8	5		10/15/19 18:30	79-00-5	
Trichloroethene	**220**	ug/L	5.0	1.3	5		10/15/19 18:30	79-01-6	
Trichlorofluoromethane	**<1.1**	ug/L	5.0	1.1	5		10/15/19 18:30	75-69-4	
1,2,3-Trichloropropane	**<3.0**	ug/L	25.0	3.0	5		10/15/19 18:30	96-18-4	
1,2,4-Trimethylbenzene	**<4.2**	ug/L	14.0	4.2	5		10/15/19 18:30	95-63-6	
1,3,5-Trimethylbenzene	**<4.4**	ug/L	14.6	4.4	5		10/15/19 18:30	108-67-8	
Vinyl chloride	**11.0**	ug/L	5.0	0.87	5		10/15/19 18:30	75-01-4	
Xylene (Total)	**<7.5**	ug/L	15.0	7.5	5		10/15/19 18:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		5		10/15/19 18:30	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		5		10/15/19 18:30	1868-53-7	
Toluene-d8 (S)	103	%	70-130		5		10/15/19 18:30	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

QC Batch: 337323 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40197116001, 40197116002, 40197116003, 40197116004, 40197116005, 40197116006, 40197116007, 40197116008, 40197116009, 40197116010, 40197116011, 40197116012, 40197116013, 40197116014, 40197116015, 40197116016, 40197116017, 40197116018, 40197116019, 40197116020

METHOD BLANK: 1960072 Matrix: Water
Associated Lab Samples: 40197116001, 40197116002, 40197116003, 40197116004, 40197116005, 40197116006, 40197116007, 40197116008, 40197116009, 40197116010, 40197116011, 40197116012, 40197116013, 40197116014, 40197116015, 40197116016, 40197116017, 40197116018, 40197116019, 40197116020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	10/15/19 06:30	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	10/15/19 06:30	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	10/15/19 06:30	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	10/15/19 06:30	
1,1-Dichloroethane	ug/L	<0.27	1.0	10/15/19 06:30	
1,1-Dichloroethene	ug/L	<0.24	1.0	10/15/19 06:30	
1,1-Dichloropropene	ug/L	<0.54	1.8	10/15/19 06:30	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	10/15/19 06:30	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	10/15/19 06:30	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/15/19 06:30	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	10/15/19 06:30	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	10/15/19 06:30	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	10/15/19 06:30	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	10/15/19 06:30	
1,2-Dichloroethane	ug/L	<0.28	1.0	10/15/19 06:30	
1,2-Dichloropropane	ug/L	<0.28	1.0	10/15/19 06:30	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	10/15/19 06:30	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	10/15/19 06:30	
1,3-Dichloropropane	ug/L	<0.83	2.8	10/15/19 06:30	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	10/15/19 06:30	
2,2-Dichloropropane	ug/L	<2.3	7.6	10/15/19 06:30	
2-Chlorotoluene	ug/L	<0.93	5.0	10/15/19 06:30	
4-Chlorotoluene	ug/L	<0.76	2.5	10/15/19 06:30	
Benzene	ug/L	<0.25	1.0	10/15/19 06:30	
Bromobenzene	ug/L	<0.24	1.0	10/15/19 06:30	
Bromochloromethane	ug/L	<0.36	5.0	10/15/19 06:30	
Bromodichloromethane	ug/L	<0.36	1.2	10/15/19 06:30	
Bromoform	ug/L	<4.0	13.2	10/15/19 06:30	
Bromomethane	ug/L	<0.97	5.0	10/15/19 06:30	
Carbon tetrachloride	ug/L	<0.17	1.0	10/15/19 06:30	
Chlorobenzene	ug/L	<0.71	2.4	10/15/19 06:30	
Chloroethane	ug/L	<1.3	5.0	10/15/19 06:30	
Chloroform	ug/L	<1.3	5.0	10/15/19 06:30	
Chloromethane	ug/L	<2.2	7.3	10/15/19 06:30	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	10/15/19 06:30	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	10/15/19 06:30	
Dibromochloromethane	ug/L	<2.6	8.7	10/15/19 06:30	
Dibromomethane	ug/L	<0.94	3.1	10/15/19 06:30	

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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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

METHOD BLANK: 1960072 Matrix: Water

Associated Lab Samples: 40197116001, 40197116002, 40197116003, 40197116004, 40197116005, 40197116006, 40197116007, 40197116008, 40197116009, 40197116010, 40197116011, 40197116012, 40197116013, 40197116014, 40197116015, 40197116016, 40197116017, 40197116018, 40197116019, 40197116020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	<0.50	5.0	10/15/19 06:30	
Diisopropyl ether	ug/L	<1.9	6.3	10/15/19 06:30	
Ethylbenzene	ug/L	<0.22	1.0	10/15/19 06:30	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	10/15/19 06:30	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	10/15/19 06:30	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	10/15/19 06:30	
Methylene Chloride	ug/L	<0.58	5.0	10/15/19 06:30	
n-Butylbenzene	ug/L	<0.71	2.4	10/15/19 06:30	
n-Propylbenzene	ug/L	<0.81	5.0	10/15/19 06:30	
Naphthalene	ug/L	<1.2	5.0	10/15/19 06:30	
p-Isopropyltoluene	ug/L	<0.80	2.7	10/15/19 06:30	
sec-Butylbenzene	ug/L	<0.85	5.0	10/15/19 06:30	
Styrene	ug/L	<0.47	1.6	10/15/19 06:30	
tert-Butylbenzene	ug/L	<0.30	1.0	10/15/19 06:30	
Tetrachloroethene	ug/L	<0.33	1.1	10/15/19 06:30	
Toluene	ug/L	<0.17	5.0	10/15/19 06:30	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	10/15/19 06:30	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	10/15/19 06:30	
Trichloroethene	ug/L	<0.26	1.0	10/15/19 06:30	
Trichlorofluoromethane	ug/L	<0.21	1.0	10/15/19 06:30	
Vinyl chloride	ug/L	<0.17	1.0	10/15/19 06:30	
Xylene (Total)	ug/L	<1.5	3.0	10/15/19 06:30	
4-Bromofluorobenzene (S)	%	98	70-130	10/15/19 06:30	
Dibromofluoromethane (S)	%	101	70-130	10/15/19 06:30	
Toluene-d8 (S)	%	95	70-130	10/15/19 06:30	

LABORATORY CONTROL SAMPLE: 1960073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	55.2	110	70-130	
1,1,1-Trichloroethane	ug/L	50	59.9	120	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	54.7	109	70-130	
1,1,2-Trichloroethane	ug/L	50	56.2	112	70-130	
1,1-Dichloroethane	ug/L	50	64.9	130	73-150	
1,1-Dichloroethene	ug/L	50	58.2	116	73-138	
1,1-Dichloropropene	ug/L	50	58.6	117	70-130	
1,2,3-Trichlorobenzene	ug/L	50	45.6	91	70-130	
1,2,3-Trichloropropane	ug/L	50	55.5	111	70-130	
1,2,4-Trichlorobenzene	ug/L	50	49.0	98	70-130	
1,2,4-Trimethylbenzene	ug/L	50	53.5	107	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	55.2	110	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	53.9	108	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

LABORATORY CONTROL SAMPLE: 1960073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/L	50	49.2	98	70-130	
1,2-Dichloroethane	ug/L	50	57.0	114	75-140	
1,2-Dichloropropane	ug/L	50	61.1	122	73-135	
1,3,5-Trimethylbenzene	ug/L	50	53.4	107	70-130	
1,3-Dichlorobenzene	ug/L	50	51.4	103	70-130	
1,3-Dichloropropane	ug/L	50	54.4	109	70-130	
1,4-Dichlorobenzene	ug/L	50	48.3	97	70-130	
2,2-Dichloropropane	ug/L	50	66.0	132	70-130	L1
2-Chlorotoluene	ug/L	50	55.1	110	70-130	
4-Chlorotoluene	ug/L	50	53.6	107	70-130	
Benzene	ug/L	50	58.9	118	70-130	
Bromobenzene	ug/L	50	48.3	97	70-130	
Bromochloromethane	ug/L	50	54.7	109	70-130	
Bromodichloromethane	ug/L	50	57.6	115	70-130	
Bromoform	ug/L	50	40.6	81	68-129	
Bromomethane	ug/L	50	38.7	77	18-159	
Carbon tetrachloride	ug/L	50	57.0	114	70-130	
Chlorobenzene	ug/L	50	52.7	105	70-130	
Chloroethane	ug/L	50	52.7	105	53-147	
Chloroform	ug/L	50	59.6	119	74-136	
Chloromethane	ug/L	50	47.5	95	29-115	
cis-1,2-Dichloroethene	ug/L	50	56.8	114	70-130	
cis-1,3-Dichloropropene	ug/L	50	55.1	110	70-130	
Dibromochloromethane	ug/L	50	47.7	95	70-130	
Dibromomethane	ug/L	50	55.6	111	70-130	
Dichlorodifluoromethane	ug/L	50	44.2	88	10-130	
Diisopropyl ether	ug/L	50	61.4	123	70-130	
Ethylbenzene	ug/L	50	56.1	112	80-124	
Hexachloro-1,3-butadiene	ug/L	50	48.2	96	70-130	
Isopropylbenzene (Cumene)	ug/L	50	55.6	111	70-130	
Methyl-tert-butyl ether	ug/L	50	58.4	117	54-137	
Methylene Chloride	ug/L	50	58.9	118	73-138	
n-Butylbenzene	ug/L	50	57.2	114	70-130	
n-Propylbenzene	ug/L	50	55.6	111	70-130	
Naphthalene	ug/L	50	47.7	95	70-130	
p-Isopropyltoluene	ug/L	50	54.7	109	70-130	
sec-Butylbenzene	ug/L	50	56.3	113	70-130	
Styrene	ug/L	50	49.5	99	70-130	
tert-Butylbenzene	ug/L	50	54.0	108	70-130	
Tetrachloroethene	ug/L	50	53.5	107	70-130	
Toluene	ug/L	50	55.5	111	80-126	
trans-1,2-Dichloroethene	ug/L	50	61.2	122	73-145	
trans-1,3-Dichloropropene	ug/L	50	50.4	101	70-130	
Trichloroethene	ug/L	50	58.0	116	70-130	
Trichlorofluoromethane	ug/L	50	51.8	104	76-147	
Vinyl chloride	ug/L	50	52.5	105	51-120	
Xylene (Total)	ug/L	150	163	109	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

LABORATORY CONTROL SAMPLE: 1960073

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			108	70-130	
Dibromofluoromethane (S)	%			98	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1961251 1961252

Parameter	Units	40197116002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	<0.27	50	50	58.3	56.2	117	112	70-130	4	20	
1,1,1-Trichloroethane	ug/L	1.1	50	50	68.4	65.4	135	129	70-130	5	20	M1
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	59.1	54.6	118	109	70-130	8	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	57.1	54.8	114	110	70-137	4	20	
1,1-Dichloroethane	ug/L	<0.27	50	50	72.9	67.6	146	135	73-153	8	20	
1,1-Dichloroethene	ug/L	<0.24	50	50	65.5	61.5	131	123	73-138	6	20	
1,1-Dichloropropene	ug/L	<0.54	50	50	66.0	62.3	132	125	70-130	6	20	M1
1,2,3-Trichlorobenzene	ug/L	<0.63	50	50	49.0	47.3	98	95	70-130	3	20	
1,2,3-Trichloropropane	ug/L	<0.59	50	50	59.3	55.3	119	111	70-130	7	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	51.4	49.0	103	98	70-130	5	20	
1,2,4-Trimethylbenzene	ug/L	<0.84	50	50	55.4	52.4	111	105	70-130	6	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	59.0	54.0	118	108	58-129	9	20	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	57.3	53.2	115	106	70-130	8	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	52.1	48.8	104	98	70-130	7	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	61.6	58.0	123	116	75-140	6	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	61.0	59.4	122	119	71-138	3	20	
1,3,5-Trimethylbenzene	ug/L	<0.87	50	50	55.1	51.2	110	102	70-130	7	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	53.1	50.3	106	101	70-130	5	20	
1,3-Dichloropropane	ug/L	<0.83	50	50	57.8	54.2	116	108	70-130	7	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	50.4	47.9	101	96	70-130	5	20	
2,2-Dichloropropane	ug/L	<2.3	50	50	71.1	68.9	142	138	70-130	3	20	M0
2-Chlorotoluene	ug/L	<0.93	50	50	57.2	53.4	114	107	70-130	7	20	
4-Chlorotoluene	ug/L	<0.76	50	50	54.7	52.1	109	104	70-130	5	20	
Benzene	ug/L	<0.25	50	50	63.8	60.5	128	121	70-130	5	20	
Bromobenzene	ug/L	<0.24	50	50	51.3	48.7	103	97	70-130	5	20	
Bromochloromethane	ug/L	<0.36	50	50	58.9	53.7	118	107	70-130	9	20	
Bromodichloromethane	ug/L	<0.36	50	50	59.7	55.4	119	111	70-130	7	20	
Bromoform	ug/L	<4.0	50	50	43.3	40.8	87	82	68-129	6	20	
Bromomethane	ug/L	<0.97	50	50	46.2	42.0	92	84	15-170	9	20	
Carbon tetrachloride	ug/L	<0.17	50	50	61.9	58.2	124	116	70-130	6	20	
Chlorobenzene	ug/L	<0.71	50	50	55.4	52.7	111	105	70-130	5	20	
Chloroethane	ug/L	<1.3	50	50	57.7	54.4	115	109	51-148	6	20	
Chloroform	ug/L	<1.3	50	50	63.6	58.9	127	118	74-136	8	20	
Chloromethane	ug/L	<2.2	50	50	52.2	49.5	104	99	23-115	5	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	62.5	59.3	125	119	70-131	5	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	57.5	54.2	115	108	70-130	6	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1961251 1961252

Parameter	Units	40197116002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromochloromethane	ug/L	<2.6	50	50	49.0	46.2	98	92	70-130	6	20	
Dibromomethane	ug/L	<0.94	50	50	58.3	54.0	117	108	70-130	8	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	49.3	45.4	99	91	10-132	8	20	
Diisopropyl ether	ug/L	<1.9	50	50	69.1	64.3	138	129	70-130	7	20	M1
Ethylbenzene	ug/L	<0.22	50	50	57.7	55.1	115	110	80-125	5	20	
Hexachloro-1,3-butadiene	ug/L	<1.2	50	50	50.4	49.7	101	99	70-130	1	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	57.0	55.1	114	110	70-130	3	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	66.7	62.9	133	126	51-145	6	20	
Methylene Chloride	ug/L	<0.58	50	50	65.9	61.8	132	124	73-140	6	20	
n-Butylbenzene	ug/L	<0.71	50	50	59.5	56.1	119	112	70-130	6	20	
n-Propylbenzene	ug/L	<0.81	50	50	57.0	54.6	114	109	70-130	4	20	
Naphthalene	ug/L	<1.2	50	50	51.3	48.0	103	96	70-130	7	20	
p-Isopropyltoluene	ug/L	<0.80	50	50	56.6	53.5	113	107	70-130	6	20	
sec-Butylbenzene	ug/L	<0.85	50	50	57.6	55.0	115	110	70-130	5	20	
Styrene	ug/L	<0.47	50	50	50.4	48.6	101	97	70-130	4	20	
tert-Butylbenzene	ug/L	<0.30	50	50	55.3	53.1	111	106	70-130	4	20	
Tetrachloroethene	ug/L	<0.33	50	50	54.8	54.2	110	108	70-130	1	20	
Toluene	ug/L	<0.17	50	50	57.3	53.9	115	108	80-131	6	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	68.2	62.8	136	126	73-148	8	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	53.4	50.2	107	100	70-130	6	20	
Trichloroethene	ug/L	<0.26	50	50	60.1	57.4	120	115	70-130	5	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	55.9	52.3	112	105	74-147	7	20	
Vinyl chloride	ug/L	<0.17	50	50	61.8	56.2	124	112	41-129	10	20	
Xylene (Total)	ug/L	<1.5	150	150	170	161	113	107	70-130	5	20	
4-Bromofluorobenzene (S)	%						110	108	70-130			
Dibromofluoromethane (S)	%						106	101	70-130			
Toluene-d8 (S)	%						100	100	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

QC Batch: 337324 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40197116021, 40197116022, 40197116023, 40197116024, 40197116025, 40197116026, 40197116027

METHOD BLANK: 1960074 Matrix: Water
Associated Lab Samples: 40197116021, 40197116022, 40197116023, 40197116024, 40197116025, 40197116026, 40197116027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	10/15/19 16:00	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	10/15/19 16:00	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	10/15/19 16:00	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	10/15/19 16:00	
1,1-Dichloroethane	ug/L	<0.27	1.0	10/15/19 16:00	
1,1-Dichloroethene	ug/L	<0.24	1.0	10/15/19 16:00	
1,1-Dichloropropene	ug/L	<0.54	1.8	10/15/19 16:00	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	10/15/19 16:00	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	10/15/19 16:00	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/15/19 16:00	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	10/15/19 16:00	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	10/15/19 16:00	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	10/15/19 16:00	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	10/15/19 16:00	
1,2-Dichloroethane	ug/L	<0.28	1.0	10/15/19 16:00	
1,2-Dichloropropane	ug/L	<0.28	1.0	10/15/19 16:00	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	10/15/19 16:00	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	10/15/19 16:00	
1,3-Dichloropropane	ug/L	<0.83	2.8	10/15/19 16:00	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	10/15/19 16:00	
2,2-Dichloropropane	ug/L	<2.3	7.6	10/15/19 16:00	
2-Chlorotoluene	ug/L	<0.93	5.0	10/15/19 16:00	
4-Chlorotoluene	ug/L	<0.76	2.5	10/15/19 16:00	
Benzene	ug/L	<0.25	1.0	10/15/19 16:00	
Bromobenzene	ug/L	<0.24	1.0	10/15/19 16:00	
Bromochloromethane	ug/L	<0.36	5.0	10/15/19 16:00	
Bromodichloromethane	ug/L	<0.36	1.2	10/15/19 16:00	
Bromoform	ug/L	<4.0	13.2	10/15/19 16:00	
Bromomethane	ug/L	<0.97	5.0	10/15/19 16:00	
Carbon tetrachloride	ug/L	<0.17	1.0	10/15/19 16:00	
Chlorobenzene	ug/L	<0.71	2.4	10/15/19 16:00	
Chloroethane	ug/L	<1.3	5.0	10/15/19 16:00	
Chloroform	ug/L	<1.3	5.0	10/15/19 16:00	
Chloromethane	ug/L	<2.2	7.3	10/15/19 16:00	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	10/15/19 16:00	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	10/15/19 16:00	
Dibromochloromethane	ug/L	<2.6	8.7	10/15/19 16:00	
Dibromomethane	ug/L	<0.94	3.1	10/15/19 16:00	
Dichlorodifluoromethane	ug/L	<0.50	5.0	10/15/19 16:00	
Diisopropyl ether	ug/L	<1.9	6.3	10/15/19 16:00	
Ethylbenzene	ug/L	<0.22	1.0	10/15/19 16:00	

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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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

METHOD BLANK: 1960074 Matrix: Water
Associated Lab Samples: 40197116021, 40197116022, 40197116023, 40197116024, 40197116025, 40197116026, 40197116027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	10/15/19 16:00	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	10/15/19 16:00	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	10/15/19 16:00	
Methylene Chloride	ug/L	<0.58	5.0	10/15/19 16:00	
n-Butylbenzene	ug/L	<0.71	2.4	10/15/19 16:00	
n-Propylbenzene	ug/L	<0.81	5.0	10/15/19 16:00	
Naphthalene	ug/L	<1.2	5.0	10/15/19 16:00	
p-Isopropyltoluene	ug/L	<0.80	2.7	10/15/19 16:00	
sec-Butylbenzene	ug/L	<0.85	5.0	10/15/19 16:00	
Styrene	ug/L	<0.47	1.6	10/15/19 16:00	
tert-Butylbenzene	ug/L	<0.30	1.0	10/15/19 16:00	
Tetrachloroethene	ug/L	<0.33	1.1	10/15/19 16:00	
Toluene	ug/L	<0.17	5.0	10/15/19 16:00	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	10/15/19 16:00	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	10/15/19 16:00	
Trichloroethene	ug/L	<0.26	1.0	10/15/19 16:00	
Trichlorofluoromethane	ug/L	<0.21	1.0	10/15/19 16:00	
Vinyl chloride	ug/L	<0.17	1.0	10/15/19 16:00	
Xylene (Total)	ug/L	<1.5	3.0	10/15/19 16:00	
4-Bromofluorobenzene (S)	%	98	70-130	10/15/19 16:00	
Dibromofluoromethane (S)	%	100	70-130	10/15/19 16:00	
Toluene-d8 (S)	%	102	70-130	10/15/19 16:00	

LABORATORY CONTROL SAMPLE: 1960075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.3	111	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	54.7	109	70-130	
1,1,2-Trichloroethane	ug/L	50	53.3	107	70-130	
1,1-Dichloroethane	ug/L	50	52.7	105	73-150	
1,1-Dichloroethene	ug/L	50	51.0	102	73-138	
1,2,4-Trichlorobenzene	ug/L	50	48.9	98	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	53.9	108	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	52.5	105	70-130	
1,2-Dichlorobenzene	ug/L	50	51.1	102	70-130	
1,2-Dichloroethane	ug/L	50	55.7	111	75-140	
1,2-Dichloropropane	ug/L	50	54.1	108	73-135	
1,3-Dichlorobenzene	ug/L	50	49.5	99	70-130	
1,4-Dichlorobenzene	ug/L	50	49.7	99	70-130	
Benzene	ug/L	50	54.7	109	70-130	
Bromodichloromethane	ug/L	50	54.3	109	70-130	
Bromoform	ug/L	50	49.0	98	68-129	
Bromomethane	ug/L	50	20.4	41	18-159	
Carbon tetrachloride	ug/L	50	48.6	97	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

LABORATORY CONTROL SAMPLE: 1960075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chlorobenzene	ug/L	50	51.4	103	70-130	
Chloroethane	ug/L	50	49.4	99	53-147	
Chloroform	ug/L	50	51.1	102	74-136	
Chloromethane	ug/L	50	38.3	77	29-115	
cis-1,2-Dichloroethene	ug/L	50	49.4	99	70-130	
cis-1,3-Dichloropropene	ug/L	50	56.4	113	70-130	
Dibromochloromethane	ug/L	50	54.1	108	70-130	
Dichlorodifluoromethane	ug/L	50	43.8	88	10-130	
Ethylbenzene	ug/L	50	56.0	112	80-124	
Isopropylbenzene (Cumene)	ug/L	50	54.5	109	70-130	
Methyl-tert-butyl ether	ug/L	50	46.1	92	54-137	
Methylene Chloride	ug/L	50	48.6	97	73-138	
Styrene	ug/L	50	48.3	97	70-130	
Tetrachloroethene	ug/L	50	47.4	95	70-130	
Toluene	ug/L	50	53.5	107	80-126	
trans-1,2-Dichloroethene	ug/L	50	49.5	99	73-145	
trans-1,3-Dichloropropene	ug/L	50	51.8	104	70-130	
Trichloroethene	ug/L	50	54.0	108	70-130	
Trichlorofluoromethane	ug/L	50	47.2	94	76-147	
Vinyl chloride	ug/L	50	48.9	98	51-120	
Xylene (Total)	ug/L	150	161	107	70-130	
4-Bromofluorobenzene (S)	%			110	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1960628 1960629

Parameter	Units	40197116021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.24	50	50	58.6	58.0	117	116	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	56.3	56.5	113	113	70-130	0	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	56.4	54.1	113	108	70-137	4	20	
1,1-Dichloroethane	ug/L	<0.27	50	50	55.0	55.2	110	110	73-153	0	20	
1,1-Dichloroethene	ug/L	<0.24	50	50	51.8	51.2	104	102	73-138	1	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	48.4	49.6	97	99	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	54.8	54.3	110	109	58-129	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	55.7	53.7	111	107	70-130	4	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	53.2	53.1	106	106	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	58.0	56.2	116	112	75-140	3	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	56.4	55.1	113	110	71-138	2	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	51.8	51.9	104	104	70-130	0	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	50.5	50.2	101	100	70-130	0	20	
Benzene	ug/L	<0.25	50	50	57.7	56.5	115	113	70-130	2	20	
Bromodichloromethane	ug/L	<0.36	50	50	56.4	54.5	113	109	70-130	3	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: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1960628 1960629

Parameter	Units	40197116021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromoform	ug/L	<4.0	50	50	52.4	50.8	105	102	68-129	3	20	
Bromomethane	ug/L	<0.97	50	50	21.8	22.7	44	45	15-170	4	20	
Carbon tetrachloride	ug/L	<0.17	50	50	51.6	52.0	103	104	70-130	1	20	
Chlorobenzene	ug/L	<0.71	50	50	53.6	52.9	107	106	70-130	1	20	
Chloroethane	ug/L	<1.3	50	50	50.9	51.0	102	102	51-148	0	20	
Chloroform	ug/L	<1.3	50	50	53.9	51.9	108	104	74-136	4	20	
Chloromethane	ug/L	<2.2	50	50	39.4	38.6	79	77	23-115	2	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	52.4	52.9	105	106	70-131	1	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	57.5	57.4	115	115	70-130	0	20	
Dibromochloromethane	ug/L	<2.6	50	50	57.6	56.0	115	112	70-130	3	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	43.0	41.5	86	83	10-132	3	20	
Ethylbenzene	ug/L	<0.22	50	50	58.9	57.4	118	115	80-125	3	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	57.0	55.5	114	111	70-130	3	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	48.3	46.6	97	93	51-145	4	20	
Methylene Chloride	ug/L	<0.58	50	50	50.7	49.5	101	99	73-140	3	20	
Styrene	ug/L	<0.47	50	50	50.5	49.4	101	99	70-130	2	20	
Tetrachloroethene	ug/L	<0.33	50	50	49.0	48.7	98	97	70-130	1	20	
Toluene	ug/L	<0.17	50	50	56.7	55.2	113	110	80-131	3	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	51.8	50.4	104	101	73-148	3	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	54.6	53.7	109	107	70-130	2	20	
Trichloroethene	ug/L	<0.26	50	50	55.3	54.9	111	110	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	49.4	48.8	99	98	74-147	1	20	
Vinyl chloride	ug/L	<0.17	50	50	50.4	50.1	101	100	41-129	1	20	
Xylene (Total)	ug/L	<1.5	150	150	170	167	113	112	70-130	2	20	
4-Bromofluorobenzene (S)	%						113	110	70-130			
Dibromofluoromethane (S)	%						98	101	70-130			
Toluene-d8 (S)	%						103	102	70-130			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60597994-1 KEP-PERMIETER WELLS
Pace Project No.: 40197116

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40197116001	**TRIP BLANK**	EPA 8260	337323		
40197116002	**MW-101**	EPA 8260	337323		
40197116003	**MW-102**	EPA 8260	337323		
40197116004	**MW-105**	EPA 8260	337323		
40197116005	**MW-103**	EPA 8260	337323		
40197116006	**MW-107**	EPA 8260	337323		
40197116007	**MW-109**	EPA 8260	337323		
40197116008	**PZ-117**	EPA 8260	337323		
40197116009	**MW-110**	EPA 8260	337323		
40197116010	**MW-117**	EPA 8260	337323		
40197116011	**MW-111**	EPA 8260	337323		
40197116012	**PZ-116**	EPA 8260	337323		
40197116013	**MW-112**	EPA 8260	337323		
40197116014	**MW-116**	EPA 8260	337323		
40197116015	**MW-115**	EPA 8260	337323		
40197116016	**MW-108**	EPA 8260	337323		
40197116017	**MW-108 DUP**	EPA 8260	337323		
40197116018	**MW-44**	EPA 8260	337323		
40197116019	**MW-114**	EPA 8260	337323		
40197116020	**MW-114 DUP**	EPA 8260	337323		
40197116021	**MW-79**	EPA 8260	337324		
40197116022	**MW-113**	EPA 8260	337324		
40197116023	**MW-80**	EPA 8260	337324		
40197116024	**PZ-118**	EPA 8260	337324		
40197116025	**MW-81**	EPA 8260	337324		
40197116026	**MW-31**	EPA 8260	337324		
40197116027	**MW-82**	EPA 8260	337324		

40197116

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: AECOM - Milw	Report To: Lanette Altenbach	Attention: Accounts Payable/Finance Department
Address: 1555 N. River Center Dr., Suite 214	Copy To: Joel Mackinney	Company Name: City of Kenosha
Milwaukee, WI 53212		Address: 652 52nd St., Kenosha, WI 53140
Email To: Lanette.Altenbach@aecom.com	Purchase Order No.:	Pace Quote Reference:
Phone: 414-577-1363 Fax:	Project Name: KEP - Permieter Wells	Pace Project Manager: Chris Hyska
Requested Due Date/TAT: Standard	Project Number: 60597994-1	Pace Profile #: (2430) Kenosha work

REGULATORY AGENCY

__NPDES X GROUND WATER __DRINKING WATER

__UST __RCRA OTHER_____

SITE LOCATION __GA __IL __IN __MI __NC __OH __SC X WI OTHER___

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOCs 8260	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
1	Trip Blank	WT				10/8/19	1050		2				X					X		001
2	MW-101	WT				10/8/19	1100		3				X					X		002
3	MW-102	WT				10/8/19	1115		3				X					X		003
4	MW-105	WT				10/8/19	1150		3				X					X		004
5	MW-103	WT				10/8/19	1205		3				X					X		005
6	MW-107	WT		1240		10/8/19	~~1250~~ JSM		3				X					X		006
7	MW-109	WT				10/8/19	1340		3				X					X		007
8	PZ-117	WT				10/8/19	1355		3				X					X		008
9	MW-110	WT				10/8/19	1430		3				X					X		009
10	MW-117	WT				10/8/19	1445		3				X					X		010
11	MW-111	WT				10/8/19	1525		3				X					X		011
12	PZ-116	WT				10/8/19	1550		3				X					X		012

Additional Comments:

~~Total Metals: Fe, Ba, Cr, Pb, Ni~~ JSM 10/8/19

~~Dissolved Metals: Fe~~

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Joel Mackinney AECOM	10/10/19	0930	Mary Jansen	10/10/19	12:55	
Mary Jansen	10/10/19	1600				
C Logistics	10/11/19	0810		10/11/19	0810	RO1

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joel Mackinney + Keith Nielsen

SIGNATURE of SAMPLER: Joel Mackinney

DATE Signed (MM / DD / YY): 10/8/19

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

E-File,(ALLQ020rev.3,31Mar05), 13Jun2005

40197116

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 3

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Address: 1555 N. River Center Dr., Suite 214	Copy To: JSM	Company Name: City of Kenosha
Milwaukee, WI 53212		Address: 652 52nd St., Kenosha, WI 53140
Email To: Lanette.Altenbach@aecom.com	Purchase Order No.:	Pace Quote Reference:
Phone: 414-577-1363 Fax:	Project Name: KEP - Permieter Wells	Pace Project Manager: Chris Hyska
Requested Due Date/TAT: Standard	Project Number: 60597994-1	Pace Profile #: (2430) Kenosha work

REGULATORY AGENCY

__NPDES X GROUND WATER __DRINKING WATER

__UST __RCRA OTHER_____

SITE LOCATION __GA __IL __IN __MI __NC __OH __SC X WI OTHER___

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: VOCs 8260	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
1	MW-112	WT				10/8/19	1625						X					X		013
2	MW-116	WT				10/8/19	1630						X					X		014
3	MW-115	WT				10/9/19	0950						X					X		015
4	MW-108	WT				10/9/19	0955						X					X		016
5	MW-108 Dup	WT				10/9/19	0955						X					X		017
6	MW-44	WT				10/9/19	1105						X					X		018
7	MW-114	WT				10/9/19	1110						X					X		019
8	MW-114 Dup	WT				10/9/19	1110						X					X		020
9	MW-79	WT				10/9/19	1205						X					X		021
10	MW-113	WT				10/9/19	1230						X					X		022
11	MW-80	WT				10/9/19	1305						X					X		023
12	PZ-118	WT				10/9/19	1340						X					X		024

Additional Comments:

~~Total Metals: Fe, Ba, Cr, Pb, Ni~~ JM

~~Dissolved Metals: Fe~~

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Joel Mackinney AECOM	10/10	0930	Mary Fanning	10/10/19	12:55
Mary Fanning	10/10	1600			
C Logistics	10/11/19	0810		10/11/19	0810

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
1.0	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
0.1	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joel Mackinney + KEN and SEA

SIGNATURE of SAMPLER: Joel Mackinney

DATE Signed (MM / DD / YY): 10/9/19

E-File,(ALLQ020rev.3,31Mar05), 13Jun2005

401971116

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 of 3

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Milwaukee, WI 53212		Address: 652 52nd St., Kenosha, WI 53140
Email To: Lanette.Altenbach@aecom.com	Purchase Order No.:	Pace Quote Reference:
Phone: 414-577-1363 Fax:	Project Name: KEP - Permieter Wells	Pace Project Manager: Chris Hyska
Requested Due Date/TAT: Standard	Project Number: 60597994-1	Pace Profile #: (2430) Kenosha work

REGULATORY AGENCY

__NPDES X GROUND WATER __DRINKING WATER

__UST __RCRA OTHER_____

SITE LOCATION __GA __IL __IN __MI __NC __OH __SC X WI OTHER___

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / ,-)

Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
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SOIL/SOLID	SL
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WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: VOCs 8260	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
1	MW-81	WT				10/9/19	1405						X					X		025
2	MW-31	WT				10/9/19	1440						X					X		026
3	MW-82	WT				10/9/19	1455						X					X		027
4		WT																		
5		WT																		
6		WT																		
7		WT																		
8		WT																		
9		WT																		
10		WT																		
11		WT																		
12		WT																		

Additional Comments:

~~Total Metals: Fe, Ba, Cr, Pb, Ni~~ JSM

~~Dissolved Metals: Fe~~

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Joel Mackinney AECOM	10/10/19	0930	Mary Fannin	10/10/19	1255
Mary Fannin	10/10/19	1100			
CS Logistics	10/11/19	0810		10/11/19	0810

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joel Mackinney and SEA

SIGNATURE of SAMPLER: Joel Mackinney DATE Signed (MM / DD / YY): 10/09/19

SAMPLE CONDITIONS	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
R01		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

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

Sample Preservation Receipt Form

Client Name: Alcoa Project # 40197116

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	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001																		2															2.5 / 5 / 10
002																		3															2.5 / 5 / 10
003																		3															2.5 / 5 / 10
004																		3															2.5 / 5 / 10
005																		3															2.5 / 5 / 10
006																		3															2.5 / 5 / 10
007																		3															2.5 / 5 / 10
008																		3															2.5 / 5 / 10
009																		3															2.5 / 5 / 10
010																		3															2.5 / 5 / 10
011																		3															2.5 / 5 / 10
012																		3															2.5 / 5 / 10
013																		3															2.5 / 5 / 10
014																		3															2.5 / 5 / 10
015																		3															2.5 / 5 / 10
016																		3															2.5 / 5 / 10
017																		3															2.5 / 5 / 10
018																		3															2.5 / 5 / 10
019																		3															2.5 / 5 / 10
020																		3															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	BP3B	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 Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Aecom Project #: 40197116

	Glass							Plastic							Vials						Jars			General									
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
021																		3															2.5 / 5 / 10
022																		3															2.5 / 5 / 10
023																		3															2.5 / 5 / 10
024																		3															2.5 / 5 / 10
025																		3															2.5 / 5 / 10
026																		3															2.5 / 5 / 10
027																		7															2.5 / 5 / 10
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																																	2.5 / 5 / 20

[illegible] 10/11/22

Page 2 of 3

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

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40197116

40197116

Client Name: Arcom

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 - NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RO /Corr: _____

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

Person examining contents:
Date: 10/11/19
Initials: DM

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

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-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): 403		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10/14/19