

Friess Environmental Consulting, Inc.
Guide to Abbreviations
in Laboratory Data Tables

< = Less than the specified detection limit.

DO = Dissolved Oxygen

ES = Enforcement Standard

DRO = Diesel range organics

GRO = Gasoline range organics

iu = instrument units

MTBE = Methyl-tert butyl ether

mV = Millivolts

NA = Not analyzed for indicated parameter

NM = Not measured for indicated parameter

NR = No recovery or not reported at this interval.

NR 140 ES = Wisconsin Administrative Code NR 140 Groundwater Quality
Enforcement Standard

NR 140 PAL = Wisconsin Administrative Code NR 140 Groundwater Quality
Preventive Action Limit

NR 720 Groundwater RCL = Wisconsin Administrative Code NR 720 Residual Contaminant Level for the protection of groundwater
via the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890

NR 720 Non-Industrial DC RCL = Wisconsin Administrative Code NR 720 Non-Industrial Residual Contaminant Level for direct contact
via the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890

Note: NR 720 values are calculated utilizing the U.S. EPA's Regional Screening Level Web-Calculator per DNR draft document RR-890.

NS = No NR 140 ES/PAL or NR 720 RCL standard has been established.

ORP = Oxidation-reduction potential

PAL = Preventive Action Limit

PID = Photoionization detector

ppb = parts per billion

ppm = parts per million

RCL = Residual contaminant level as established in WAC Chapter NR 720

S/US = Saturated/Unsaturated soil sample interval

TMBs = Trimethylbenzenes (combined 1,2,4- and 1,3,5-trimethylbenzene)

umhos = Micromhos

Table A.1. (Page 1 of 3)
Groundwater Analytical Results
VPI Property - 3123 South 9th Street
Sheboygan, Wisconsin

			VOCs								SVOCs					
Sample Location	Sampling Date	Depth to Water (ft bgs)	Benzene (ppb)	Chloro-methane (ppb)	1,1-Dichloro-ethane (ppb)	cis-1,2-Dichloro-ethene (ppb)	trans-1,2-Dichloro-ethene (ppb)	Toluene (ppb)	Vinyl Chloride (ppb)	Total Xylenes (ppb)	Bis(2Ethyl-hexyl)-phthalate (ppb)	Diethyl-phthalate (ppb)	Butyl Benzyl Phthalate (ppb)	Di-n-octyl Phthalate (ppb)	Phenol (ppb)	Di-isononyl Phthalate (ppb)
P-3	12/13/2019	NR	<0.25	<2.2	<0.27	<0.27	<1.10	0.48	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-4	12/13/2019	NR	<0.25	<2.2	<0.27	<0.27	<1.10	<0.17	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-5	12/13/2019	NR	0.25	2.40	<0.27	<0.27	<1.10	0.42	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-6	12/13/2019	NR	<0.25	2.70	<0.27	<0.27	<1.10	<0.17	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-7	12/13/2019	NR	<0.25	<2.2	<0.27	<0.27	<1.10	<0.17	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-8	12/13/2019	NR	<0.25	<2.2	<0.27	<0.27	<1.10	0.36	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-9	1/17/2020	NR	<0.25	<2.2	<0.27	37.1	2.40	0.27	1.90	<0.73	149	<1.7	<2.9	NA	NA	NA
P-1	12/13/2019	NR	0.25	<2.2	<0.27	5.40	<1.10	0.30 J	0.78 J	<0.73	NA	NA	NA	NA	NA	NA
MW-1	1/17/2020	3.04	<0.25	<2.2	<0.27	<0.27	<1.10	<0.17	0.67	<0.73	14.7	<0.79	59.6	NA	NA	NA
	10/27/2020	2.88	<0.25	<2.2	<0.27	10.20	0.73	<0.17	0.60 J	<0.73	7.60	1.13 J	<0.96	<0.76	1.13 J	NA
	2/2/2021	2.89	<0.25	<2.2	<0.27	9.30	0.47 J	<0.17	0.93	<0.73	8.70	1.26 J	<0.96	<0.76	1.01 J	NA
	5/11/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	16.6	1.13 J	<1.33	<1.24	<0.69	NA
	8/13/2021	3.18	NA	NA	NA	NA	NA	NA	NA	NA	<1.30	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	2.48	<0.30	<0.74	<0.43	0.90 J	<0.50	0.48 J	0.32 J	<1.01	5.40	2.47 J	<1.28	95.7	<0.46	NA
	6/9/2022	NM	<0.30	<0.74	<0.43	2.54	<0.50	<0.33	0.86	<1.01	2.22 J	<0.73	<1.28	<1.24	<0.46	NA
Well Abandoned																
P-13/MW-2	4/2/2020	3.59	<0.33	<0.8	<0.46	<0.39	<0.37	0.57 J	<0.20	<1.48	<1.61	1.16 J	<0.96	<0.76	<0.68	NA
Well Abandoned																
P-14/MW-3	4/2/2020	4.12	<0.33	<0.8	<0.46	<0.39	<0.37	0.35 J	<0.20	<1.48	<1.61	1.12 J	<0.96	<0.76	<0.68	NA
	10/27/2020	4.23	NA	NA	NA	NA	NA	NA	NA	NA	<1.61	3.50 J	<0.96	3.50 J	2.06 J	NA
Well Abandoned																
P-15/MW-4	4/2/2020	5.91	<0.33	<0.8	<0.46	<0.39	<0.37	0.37 J	<0.20	<1.48	<1.61	3.50 J	<0.96	<0.76	<0.68	NA
	10/27/2020	6.14	NA	NA	NA	NA	NA	NA	NA	NA	<1.61	2.28 J	<0.96	<0.76	1.54 J	NA
	2/2/2021	6.18	NA	NA	NA	NA	NA	NA	NA	NA	<1.61	1.75 J	<0.96	<0.76	1.21 J	NA
	5/11/2021	4.59	NA	NA	NA	NA	NA	NA	NA	NA	1.44 J	1.11 J	<1.33	<1.24	<0.69	NA
	8/13/2021	5.55	NA	NA	NA	NA	NA	NA	NA	NA	4.70 J	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	2.05	NA	NA	NA	NA	NA	NA	NA	NA	2.38 J	1.51 J	<1.28	<1.24	<0.46	NA
	7/14/2022	6.61	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	<0.46	NA
	9/29/2022	6.23	NA	NA	NA	NA	NA	NA	NA	NA	2.43 J	<0.73	<1.28	<1.24	0.46 J	NA
NR 140 Groundwater ES			-	5.0	30.0	850	70	100	0.2	2,000	6	NS	NS	NS	NS	NS
NR 140 Groundwater PAL			-	0.5	3	85	7.0	20	0.02	400	0.6	NS	NS	NS	NS	NS

Note: Only the detected compounds are presented.

Note: "J" indicates slight detection above the level of detection but less than the level of quantification.

Note: Concentrations in **blue italics** exceed their respective NR 140 preventive action limits (PALs).

Note: Concentrations in **red bold** exceed their respective NR 140 enforcement standards (ESs).

Note: NA means not analyzed during that sampling period

Table A.1. (Page 2 of 3)
Groundwater Analytical Results
VPI Property - 3123 South 9th Street
Sheboygan, Wisconsin

Sample Location	Sampling Date	Depth to Water (ft bgs)	VOCs								SVOCs					
			Benzene (ppb)	Chloro-methane (ppb)	1,1-Dichloro-ethane (ppb)	cis-1,2-Dichloro-ethene (ppb)	trans-1,2-Dichloro-ethene (ppb)	Toluene (ppb)	Vinyl Chloride (ppb)	Total Xylenes (ppb)	Bis(2Ethyl-hexyl)-phthalate (ppb)	Diethyl-phthalate (ppb)	Butyl Benzyl Phthalate (ppb)	Di-n-octyl Phthalate (ppb)	Phenol (ppb)	Di-isononyl Phthalate (ppb)
P-16/MW-5	4/2/2020	5.93	<0.33	<0.8	<0.46	<0.39	<0.37	0.41 J	<0.20	<1.48	34.0	1.19 J	<0.96	<0.76	<0.68	NA
	10/27/2020	6.19	NA	NA	NA	NA	NA	NA	NA	NA	5.10 J	4.00	<0.96	<0.76	2.15 J	NA
	2/2/2021	6.17	NA	NA	NA	NA	NA	NA	NA	NA	12.8	2.44 J	<0.96	<0.76	1.01 J	NA
	5/11/2021	4.37	NA	NA	NA	NA	NA	NA	NA	NA	13.2	<0.76	<1.33	<1.24	<0.69	NA
	8/13/2021	3.94	NA	NA	NA	NA	NA	NA	NA	NA	10.0	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	4.03	NA	NA	NA	NA	NA	NA	NA	NA	14.6	1.42 J	<1.28	<1.24	<0.46	NA
	7/25/2022	6.56	NA	NA	NA	NA	NA	NA	NA	NA	9.90	<0.73	<1.28	<1.24	<0.46	NA
	9/29/2022	4.07	NA	NA	NA	NA	NA	NA	NA	NA	2.70 J	<0.73	<1.28	<1.24	2.71	NA
HA-1/MW-6	4/2/2020	NM	NR	NR	NR	NR	NR	NR	NR	NR	8.40 J	<3.36	<2.88	<2.28	<2.04	NA
	5/4/2020	3.43	NR	NR	NR	NR	NR	NR	NR	NR	<1.61	1.26 J	<2.88	<2.28	<2.04	NA
	10/27/2020	3.43	NA	NA	NA	NA	NA	NA	NA	NA	<1.61	2.87 J	<0.96	<0.76	2.12 J	NA
	2/2/2021	3.55	NA	NA	NA	NA	NA	NA	NA	NA	<1.61	1.70 J	<0.96	<0.76	1.42 J	NA
	5/11/2021	2.56	NA	NA	NA	NA	NA	NA	NA	NA	<1.30	1.07 J	<1.33	<1.24	<0.69	NA
	8/13/2021	2.34	NA	NA	NA	NA	NA	NA	NA	NA	1.88 J	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	1.38	NA	NA	NA	NA	NA	NA	NA	NA	3.90 J	1.31 J	<1.28	<1.24	<0.46	NA
	7/14/2022	5.93	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	<0.46	NA
P-17/MW-7	9/29/2022	2.65	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	0.49 J	NA
	10/28/2020	6.14	<0.33	<0.8	<0.46	<0.39	<0.37	<0.36	<0.20	<1.48	<1.61	3.13 J	<0.96	<0.76	1.99 J	NA
	5/11/2021	5.10	NA	NA	NA	NA	NA	NA	NA	NA	1.82 J	0.79 J	<1.33	<1.24	<0.69	NA
	8/13/2021	5.42	NA	NA	NA	NA	NA	NA	NA	NA	1.68 J	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	4.34	NA	NA	NA	NA	NA	NA	NA	NA	1.87 J	2.10 J	<1.28	2.67 J	<0.46	NA
	7/14/2022	7.78	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	<0.46	NA
P-12 P-21/MW-8	9/29/2022	6.59	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	14.4	NA
	1/17/2020	NR	<0.25	<2.2	<0.27	3.40	<10.9	<0.17	0.18	<0.73	73.3	1.80	<1.30	NA	NA	NA
	10/28/2020	5.10	<0.33	<0.8	<0.46	<0.39	<0.37	<0.36	<0.20	<1.48	<1.61	2.93 J	<0.96	<0.76	2.12 J	NA
	2/2/2021	5.37	NA	NA	NA	NA	NA	NA	NA	NA	<1.61	2.79 J	<0.96	<0.76	1.94 J	NA
	5/11/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	20.4	1.97 J	<1.33	<1.24	<0.69	NA
	8/13/2021	4.03	NA	NA	NA	NA	NA	NA	NA	NA	<1.30	<0.76	<1.33	<1.24	<0.69	NA
NR 140 Groundwater ES NR 140 Groundwater PAL	4/12/2022	2.53	NA	NA	NA	NA	NA	NA	NA	NA	1.98 J	1.69 J	<1.28	<1.24	<0.46	NA
	6/9/2022	NM	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	<0.46	NA
Well Abandoned																
NR 140 Groundwater ES		-	5.0	30.0	850	70	100	800	0.2	2,000	6	NS	NS	NS	NS	NS
NR 140 Groundwater PAL		-	0.5	3	85	7.0	20	160	0.02	400	0.6	NS	NS	NS	NS	NS

Note: Only the detected compounds are presented.
Note: "J" indicates slight detection above the level of detection but less than the level of quantification.
Note: Concentrations in **blue italics** exceed their respective NR 140 preventive action limits (PALs).
Note: Concentrations in **red bold** exceed their respective NR 140 enforcement standards (ESs).
Note: NA means not analyzed during that sampling period

Table A.1. (Page 3 of 3)
Groundwater Analytical Results
VPI Property - 3123 South 9th Street
Sheboygan, Wisconsin

			VOCs								SVOCs					
Sample Location	Sampling Date	Depth to Water (ft bgs)	Benzene (ppb)	Chloro-methane (ppb)	1,1-Dichloro-ethane (ppb)	cis-1,2-Dichloro-ethene (ppb)	trans-1,2-Dichloro-ethene (ppb)	Toluene (ppb)	Vinyl Chloride (ppb)	Total Xylenes (ppb)	Bis(2Ethyl-hexyl)-phthalate (ppb)	Diethyl-phthalate (ppb)	Butyl Benzyl Phthalate (ppb)	Di-n-octyl Phthalate (ppb)	Phenol (ppb)	Di-isononyl Phthalate (ppb)
P-22/MW-9	10/28/2020	2.30	<0.33	<0.8	<0.46	<0.39	<0.37	<0.36	<0.20	<1.48	46.0	2.50 J	<0.96	<0.76	1.95 J	NA
	2/2/2021	2.80	NA	NA	NA	NA	NA	NA	NA	NA	5.50	2.24 J	<0.96	<0.76	1.72 J	NA
	5/11/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	12.2	<0.76	<1.33	<1.24	<0.69	NA
	8/13/2021	3.79	NA	NA	NA	NA	NA	NA	NA	NA	1.76 J	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	3.40	NA	NA	NA	NA	NA	NA	NA	NA	8.00	1.49 J	<1.28	<1.24	<0.46	NA
	6/9/2022	NM	NA	NA	NA	NA	NA	NA	NA	NA	2.93 J	<0.73	<1.28	<1.24	0.56 J	NA
Well Abandoned																
P-2	12/13/2019	NR	<0.25	<2.2	<0.27	10.6	<1.10	0.26	<0.17	<0.73	NA	NA	NA	NA	NA	NA
P-24/MW-10	10/28/2020	NM	<0.33	<0.8	<0.46	<0.39	<0.37	<0.36	<0.20	<1.48	NA	NA	NA	NA	NA	NA
	2/2/2021	NM	<0.33	<0.8	<0.46	<0.39	<0.37	<0.36	<0.20	<1.48	NA	NA	NA	NA	NA	NA
Well Abandoned																
P-11	1/17/2020	NR	<2.5	<21.9	<2.7	<2.7	<1.10	<1.7	<1.7	<7.30	2,940,000	<64,000	<108,000	NA	NA	NA
P-25/MW-11	11/5/2020	NM	NA	NA	NA	NA	NA	NA	NA	NA	532,000	<11.2	110.0	<7,600	5.50 J	NA
	2/2/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	30,000	1.90 J	<1.30	1,070	2.11 J	NA
	5/11/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	9,200	1.08 J	<1.33	<1.24	<0.69	NA
	8/13/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	2,930	<760	<1,330	<1,240	<690	NA
	4/12/2022	1.73	NA	NA	NA	NA	NA	NA	NA	NA	13,000	<14.6	<25.6	<2,480	<9.20	NA
	6/9/2022	NM	NA	NA	NA	NA	NA	NA	NA	NA	17,600 J	<3,650	<6,400	<6,200	<2,300	NA
Well Abandoned																
P-10	1/17/2020	NR	0.26	<2.2	0.38	4.40	<1.10	<0.17	0.56	0.53	5,350	<91.2	<153	NA	NA	NA
P-26/MW-12	5/11/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	115	2.42 J	<1.33	<1.24	0.74 J	NA
	8/13/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	2,470	<760	<1,330	<1,240	<690	NA
	4/12/2022	NM	<0.30	<0.74	<0.43	2.03	<0.50	0.34 J	0.39 J	<1.01	751	3.40	<1.28	<124	<0.46	NA
	6/9/2022	NM	<0.30	<0.74	<0.43	1.14 J	<0.50	4.00	0.28 J	<1.01	1,420	<146	<256	<248	<92.0	NA
Well Abandoned																
P-29/MW-13	5/11/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	3,700	<0.76	<1.33	<1.24	<0.69	NA
	8/13/2021	NM	NA	NA	NA	NA	NA	NA	NA	NA	2,230	<760	<1,330	<1,240	<690	NA
	4/12/2022	2.22	NA	NA	NA	NA	NA	NA	NA	NA	2,272	1.79 J	<1.28	<248	<0.46	NA
	7/14/2022	4.90	NA	NA	NA	NA	NA	NA	NA	NA	54.0	<7.30	<12.8	<12.4	<4.60	NA
	9/29/2022	4.78	NA	NA	NA	NA	NA	NA	NA	NA	2,990	<73.0	<128	<124	<46.0	NA
P-31/MW-14	5/11/2021	3.79	NA	NA	NA	NA	NA	NA	NA	NA	3.80 J	1.06 J	<1.33	4.30 J	<0.69	NA
	8/13/2021	5.36	NA	NA	NA	NA	NA	NA	NA	NA	1.65 J	<0.76	<1.33	<1.24	<0.69	NA
	4/12/2022	4.35	NA	NA	NA	NA	NA	NA	NA	NA	3.30 J	1.75 J	<1.28	<1.24	<0.46	NA
	7/14/2022	6.54	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	<0.46	NA
	9/29/2022	5.51	NA	NA	NA	NA	NA	NA	NA	NA	<1.37	<0.73	<1.28	<1.24	0.64 J	NA
NR 140 Groundwater ES			-	5.0	30.0	850	70	100	800	0.2	2,000	6	NS	NS	NS	NS
NR 140 Groundwater PAL			-	0.5	3	85	7.0	20	160	0.02	400	0.6	NS	NS	NS	NS

Note: Only the detected compounds are presented.

Note: "J" indicates slight detection above the level of detection but less than the level of quantification.

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Note: Concentrations in **red bold** exceed their respective NR 140 enforcement standards (ESs).

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