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November 6, 2018

Project Reference
AECOM Project 60568797.2
Task Order 119-110617

Other Reference
WDNR BRRTs #02-30-000673

Shelly Billingsley
City of Kenosha
Director of Public Works
625 52nd Street, Room 305
Kenosha, Wisconsin 53140

Groundwater Sample Results - Former Kenosha Iron & Metal, 5512 19th Avenue, Kenosha, Wisconsin

Dear Ms. Billingsley;

AECOM has conducted monitoring well replacement, rehabilitation and groundwater sampling at three monitoring wells located at the above referenced site in general conformance with the work described in Task Order 119-061818 and subsequent Change Order #1 dated June 18, 2019. This site is adjacent to the development of the former Vincent McCall site which is being redeveloped as the Vincent McCall Lofts. As part of this redevelopment, the former Iron & Metals site has been leased to the Vincent McCall Lofts for the purpose of providing a second ingress-egress to the Vincent McCall property. The groundwater monitoring wells along the north perimeter of the property were sampled prior to construction to document that groundwater conditions adjacent to the existing residents have not changed.

Sample Procedures

Groundwater samples were planned to be collected from three existing monitoring wells, B-1, B-5, and B-9. Upon inspection, monitoring well B-1 was able to be sampled, but monitoring wells B-5 and B-9 appeared to be blocked by obstructions. On July 24, 2018, AECOM returned to the site with a drilling subcontractor and monitoring well B-9 was abandoned and replaced with B-9R. Monitoring well B-5 was able to be cleared by the driller. The procedures used for the well repair, replacement, and sampling are described below.

Monitoring Well Rehabilitation

The integrity of each of the three monitoring wells was conducted by opening the well, measuring the depth to water and measuring the depth to the bottom of each well. Monitoring wells B-5 and B-9 appeared to be blocked by obstructions approximately 10 feet below the top of the casing. Monitoring well B-5 had a blockage that consisted of vegetation and roots. The blockage was successfully removed, a bailer was successfully passed to the bottom of the well and groundwater was able to be withdrawn from the well.

Monitoring well B-5 was redeveloped by bailing 10 gallons of water with a bailer and then purging the well with a whale pump. Approximately eight gallons of water were removed by the pump before the well went dry.

Monitoring Well Abandonment

Monitoring well B-9 was not able to be rehabilitated and was abandoned. Abandonment was conducted in general conformance with NR 141.25 (Wisconsin Administrative Code) by fully removing the well casing and screen, then backfilling the annulus with bentonite chips. A copy of the monitoring well abandonment form 3300-5 is attached to this report.

Monitoring Well Installation

Monitoring well B-9 was replaced with B-9R located approximately five feet southwest of the original well location. Soil samples were collected at the B-9R location with a soil probe for lithological description. Next, the boring was enlarged using a hollow-stem auger for well installation and the well was installed inside the augers in general conformance with NR 141. The lithology is documented on Form 4400-122 and the well construction was documented on Form 4400-113A.

Monitoring well B-9R was developed using a bailer because of the low conductivity of the water table aquifer. Approximately seven gallons of water were removed before the well went dry. The development was documented on Form 4400-113B.

A copy of these forms is attached to this letter.

Groundwater Sampling

A groundwater sample was collected from monitoring well B-1 on April 10, 2018 using a low-flow sampling technique with a peristaltic pump and new tubing. Prior to groundwater sampling, the depth to groundwater was measured. Field parameters, including pH, conductivity, oxygen reducing potential, dissolved oxygen, and temperature, were measured during well purging and recorded following stabilization of each parameter. After the parameters had stabilized a groundwater sample was collected for volatile organic compound (VOC) analysis.

A groundwater sample was collected from monitoring wells B-5 and B-9R on August 9, 2018. Prior to groundwater sampling, the depth to groundwater was measured in each of the monitoring wells. Groundwater samples were collected using a dedicated bailer at each location. Field parameters (pH, conductivity, oxygen reducing potential, dissolved oxygen, and temperature) were also measured prior to sampling.

Groundwater samples were placed into laboratory-provided 40-ml VOC vials containing hydrochloric acid (HCl) preservative. The bottle was filled to a positive meniscus and covered with a cap fitted with a Teflon© septum. The bottle was inverted and gently tapped to verify that air bubbles were not present in the sample. Each bottle was labeled, typically with a label provided by the laboratory, with the well number, sample number, date, sampler's initials, project number and preservatives added. After labeling, the samples were placed in a cooler with the chain of custody, on ice, for shipment to an analytical laboratory.

The groundwater samples were analyzed at a Wisconsin-certified laboratory, Pace Analytical. All samples were maintained on ice until delivery to the laboratory. The samples were collected and tracked using standard chain of custody procedures. VOCs were analyzed by method SW846 Method 8260B.

Monitoring Well Abandonments

On July 24, 2018, when AECOM staff arrived at the site, they were informed by the consultant for VMC Lofts that existing wells B-3, B-4, B-6, B-7, and B-8 had been damaged by the earthwork contractor because the wells were located within proposed roadways or parking areas and were subsequently abandoned. VMC Lofts proposed to replace B-6 approximately 90 feet north of its original location and B-7 and B-8 approximately 30 feet north of their original location. An alternate location for B-4 was not needed because this well was located on VMC Lofts property. The alternate locations were chosen to avoid all parking or roadway area. These alternate locations were rejected because the locations would not be representative of groundwater conditions along the southern property boundary but would represent groundwater conditions at a different point on the site and the locations would not serve to provide sufficient separation to evaluate groundwater flow. Since continued groundwater monitoring is

not planned at this time or in the foreseeable future, well replacement was not required. Copies of the well abandonment forms for wells B-3, B-4, B-6, B-7, and B-8 are attached.

Results

The results of the groundwater analyses are provided in Table 1. The results table includes the past analyses from 2001 and 2002. VOCs were generally not detected in any of the three wells sampled in 2018 except for one VOC, 1,2-dichloroethane, which was detected in the groundwater sample from monitoring well B-1 above the PAL.

Previously, petroleum VOCs were detected in the groundwater at B-1 with only benzene exceeding groundwater quality standards. Benzene was not detected in the 2018 groundwater sample. Natural attenuation has apparently reduced/removed the prior detected petroleum impacts. The groundwater quality in B-5 is unchanged with no detected VOCs. The groundwater quality in B-9R is also relatively unchanged, and the 1,2-dichloroethane that was detected in 2002 was not detected in 2018.

At this time, the groundwater quality appears to be unchanged or slightly improved in the monitoring wells nearest the residences. The City of Kenosha has asserted its local governmental exemption status for this site and at this time there does not appear to be a need for continued monitoring. The development that is occurring in and adjacent to the site will provide an impermeable surface over portions of the site and should protect the groundwater from further degradation by limiting infiltration.

Closing

No further groundwater sampling is recommended at this time. Please contact the undersigned if you have questions about this letter.

Yours sincerely,

Lanette Altenbach

Lanette Altenbach, P.G.
Senior Hydrogeologist
AECOM
T: 414-944-6186
E: lanette.altenbach@aecom.com

enclosures: Groundwater Summary Table – Detected VOCs
Figure 1 – Monitoring Well Locations
B-9R Monitoring well boring log, construction form and development form
Monitoring well abandonment forms (B-3, B-4, B-6, B-7, B-8 and B-9)
Laboratory Analytical Results

cc: BRRTS # 02-30-000673 Doug Cieslak, WDNR Project Manager

Table 1
Laboratory Analytical Results
Detected Volatile Organic Compounds in Groundwater
Former Kenosha Iron Metal Site
BRRTS #02-30-000673

Well/Sample No.	Detected VOCs	Benzene	n-Butyl benzene	sec-Butyl benzene	1,2-Dichloro ethane	Ethyl benzene	Isopropyl benzene	p-Isopropyl toluene	n-Propyl benzene	Toluene	1,2,4-Trimethyl benzene	1,3,5-Trimethyl benzene	Total Xylenes
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	Sample Date												
B-1													
KI-B1R-W010612	6/12/2001	**63**	<1.20	<0.95	<1.40	3.61	<0.85	1.38	<0.8	34.1	39.1	<0.85	47.85
K1-B1-W020410	4/10/2002	**28.8**	<1.80	<1.65	<0.85	2.81	4.19	<1.60	2.21	13.5	57.9	<1.55	20.4
B-1	4/10/2018	<0.50	<0.50	<2.2	*0.54* J	<0.50	<0.14	<0.50	<0.50	<0.50	<0.50	<0.50	<1.50
B-5													
KI-B05-W010612	6/12/2001	<0.16	<0.24	<0.19	<0.28	<0.5	<0.17	<0.19	<0.16	<0.4	<0.4	<0.17	<0.57
K1-B5-W020410	4/10/2002	<0.31	<0.36	<0.33	<0.17	<0.5	<0.31	<0.32	<0.3	<0.3	<0.4	<0.31	<0.92
B-5	8/9/2018	<0.25	<0.71	<0.85	<0.28	<0.22	<0.39	<0.80	<0.81	<0.17	<0.84	<0.87	<1.5
B-5 Dup	8/9/2018	<0.25	<0.71	<0.85	<0.28	<0.22	<0.39	<0.80	<0.81	<0.17	<0.84	<0.87	<1.5
B-9													
KI-B9-W020410	4/10/2002	<0.31	<0.36	<0.33	*4.07*	<0.5	<0.31	<0.32	<0.3	<0.3	<0.4	<0.31	<0.92
B-9R	8/9/2018	<0.25	<0.71	<0.85	<0.28	<0.22	<0.39	<0.80	<0.81	<0.17	<0.84	<0.87	<1.5
PAL		0.5	---	---	0.5	140	---	---	---	160	96 [1]	96 [1]	1000 [1]
ES		5	---	---	5	700	---	---	---	800	480 [1]	480 [1]	10000 [1]

Notes: VOCs - Volatile Organic Compounds

PAL - NR140, Wisconsin Administrative Code Preventative Action Limit, April 2001, Exceedances are *Underlined Italics*

ES - NR140, Wisconsin Administrative Code Enforcement Standard, April 2001, Exceedances are **Bold**

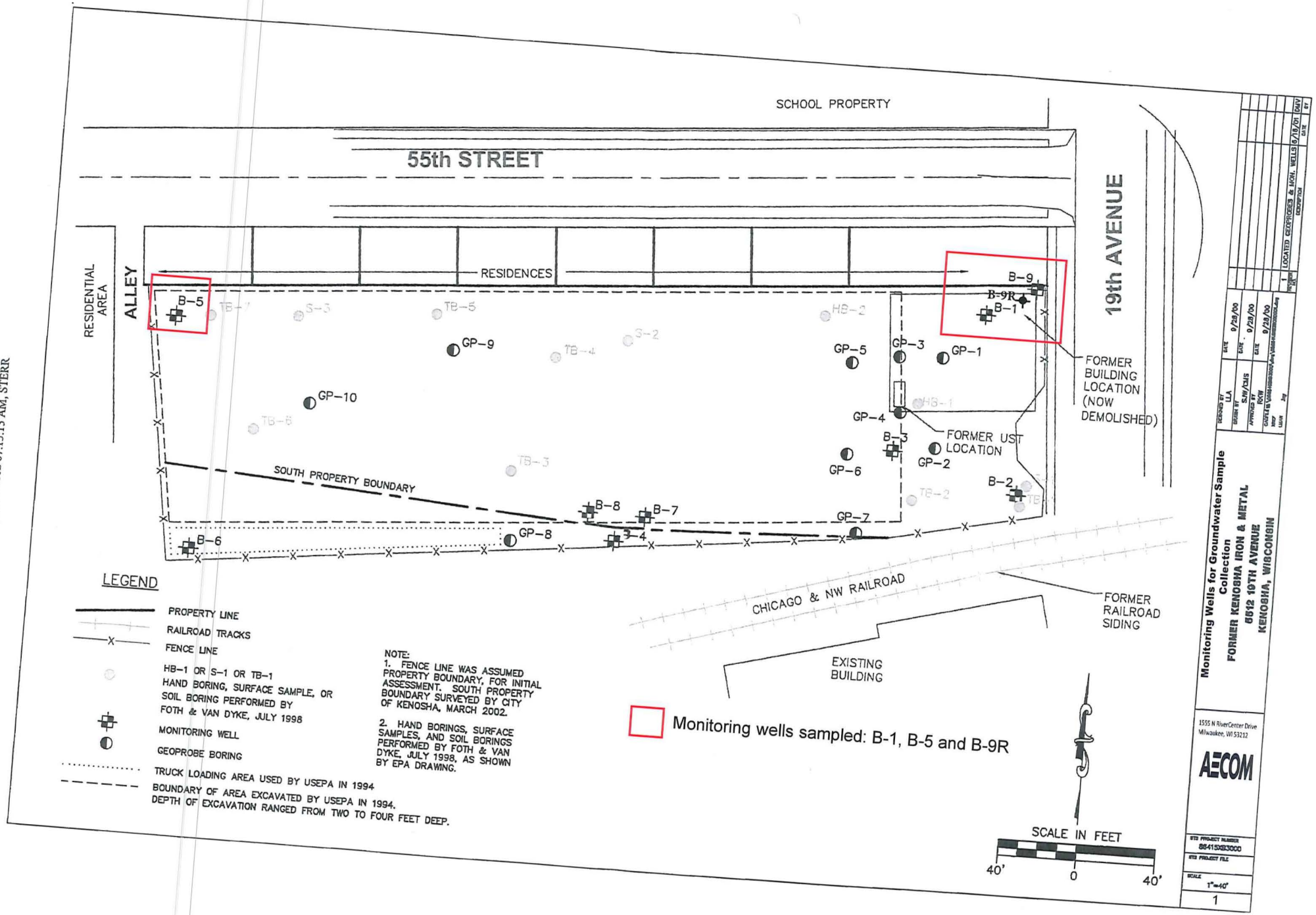
--- No NR140 ES or PAL Established

J - Concentration listed is below practical quantification limit and is therefore, estimated

1 - PAL and ES are for total trimethylbenzenes and total xylenes

ug/l - Micrograms per liter

Monitoring well B-9 was blocked and unable to be cleared. The well was abandoned and replaced (B-9R) on July 24, 2018.



Monitoring Well B-9R
Boring Log
Well Construction
Well Development

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Kenosha Iron & Metal		B-9R

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Tony Kapugi On-Site Environmental Services	7/24/2018	7/24/2018	Direct Push/HSA

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
V0340		B9-R	Feet MSL	Feet MSL	8.50

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
NW 1/4 of SW 1/4 of Section 31, T 2 N, R 23 E
Lat ___ ° ___ ' ___ "
Long ___ ° ___ ' ___ "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Kenosha	30	Kenosha

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 HA	60 60		0	Topsoil and Grass										
			1.5	Orange-brown fine grain SAND (SP), some coarse grain sand, trace small pebbles, dry	SP			0.0						
			3.0					0.0						
			4.5	Light brown fine grain SAND (SP), trace small pebbles, dry	SP			0.0						
2 DP	60 60		6.0	Gray SILTY CLAY (CL), little small pebbles, stiff, low plasticity, moist	CL			0.0						
			7.5	Wet at 7 ft. bgs				0.0						*Note: WC-1 sample collected at 1230
			9.0					0.0						
3 DP	60 56		10.5	Brown coarse grain SAND (SP), wet	SP			0.0						
			12.0	Gray SILTY CLAY (CL), trace small pebbles, stiff, moist	CL			0.0						
			13.5	Gray to brown CLAYEY SILT (CL), trace small pebbles, loose, moist	ML			0.0						
			15.0	End of Boring at 15 ft. bgs				0.0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel: 414-944-6080
	AECOM 1555 N RiverCenter Drive Milwaukee, WI 53212	Fax: 414-944-6081

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Kenosha Iron & Metal	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: B9-R
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or St. Plane ____ ft. N, ____ ft. E. S/C/N	Wis. Unique Well No.: V0340 / DNR Well Number:
Facility ID		Date Well Installed: 07/24/2018
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31, T. 2 N, R. 23 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Tony Kapugi, On-Site Environmental Services
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation ____ ft. MSL
C. Land surface elevation ____ ft. MSL
D. Surface seal, bottom ____ ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☒
SM ☐ SC ☐ ML ☒ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

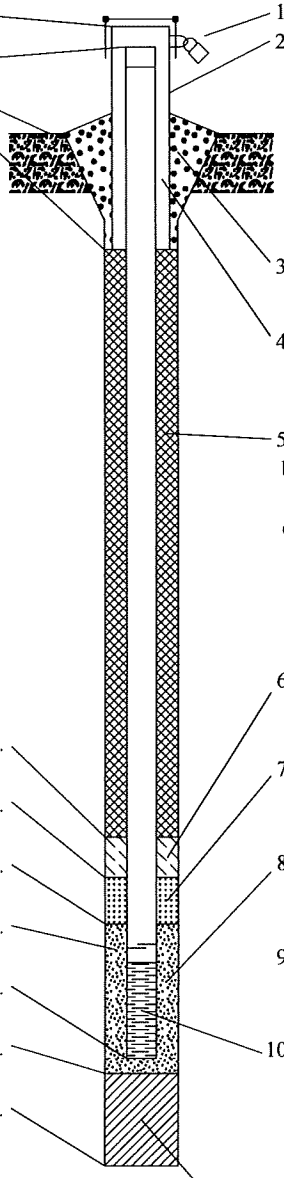
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
____

E. Bentonite seal, top ____ ft. MSL or 1.00 ft.
F. Fine sand, top ____ ft. MSL or 4.00 ft.
G. Filter pack, top ____ ft. MSL or 4.50 ft.
H. Screen joint, top ____ ft. MSL or 5.00 ft.
I. Well bottom ____ ft. MSL or 15.00 ft.
J. Filter pack, bottom ____ ft. MSL or 15.00 ft.
K. Borehole, bottom ____ ft. MSL or 15.00 ft.
L. Borehole, diameter 8.50 in.
M. O.D. well casing 2.30 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04 / ____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / Bentonite Chips & Topsoil Other ☐
4. Material between well casing and protective pipe: Bentonite ☐ 30 / 3/8" Bentonite Chips Other ☒
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____% Bentonite . . . Bentonite-cement grout ☐ 50
e. 1.5 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. Unimen 5010
b. Volume added 0.75 ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Sidley Ohio 1020 Sand
b. Volume added 6 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐
10. Screen material: Polyvinyl Chloride
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐
b. Manufacturer Monoflex
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14 / Native Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	
	AECOM 1555 N RiverCenter Drive Milwaukee, WI 53212	Tel: 414-944-6080 Fax: 414-944-6081

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☑ Other ☐ _____

Facility/Project Name	County Name	Well Name
Kenosha Iron and Metal 5512 19th Ave	Kenosha	B-9R

Facility License, Permit or Monitoring Number	County Code	Wisconsin Unique Well Number	DNR Well Number
	30	VO340	

1. Can this well be purged dry? ☑ Yes ☐ No

2. Well development method

surged with bailer and bailed	☑	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well: 60 min.

4. Depth of well (from top of well casing): 17.97 ft.

5. Inside diameter of well: 2 in.

6. Volume of water in filter pack and well casing: 6.35 gal.

7. Volume of water removed from well: 10 gal.

8. Volume of water added (if any): _____ gal.

9. Source of water added: _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

		Before Development	After Development
11. Depth to Water (from top of well casing)	a.	10.71 ft.	16.97 ft.
Date	b.	8/2/2018 (mm / dd / yyyy)	8/2/2018 (mm / dd / yyyy)
Time	c.	100 ☐ a.m. ☑ p.m.	640 ☐ a.m. ☑ p.m.
12. Sediment in well bottom		_____ inches	_____ inches
13. Water clarity		Clear ☐ 10 Turbid ☑ 15	Clear ☑ 20 Turbid ☐ 25
		(Describe) Turbid	(Describe) Cloudy

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Zach Last Name: Albert
Firm: AECOM

16. Additional comments on development:

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Zach Last Name: Albert
Facility/Firm: AECOM
Street: 1555 N. Rivercenter Drive, Ste. 214, Milwaukee, WI 53212, USA
City/State/Zip: Milwaukee WI

I hereby certify that the above information is correct and true to the best of my knowledge
Signature: Zachary Albert
Print Name: Zach Albert
Firm: AECOM

NOTE: See instructions for more information including a list of county codes and well type codes

Monitoring Well Abandonment Forms

B-3
B-4
B-6
B-7
B-8
B-9

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Kenosha		

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ ' N

__ __ ° __ __ . __ __ __ ' W

¼ / ¼ NW	¼ SW	Section	Township	Range ☒ E
or Gov't Lot #		31	2 N	23 W

Well Street Address: 5512 19th Avenue

Well City, Village or Town	Well ZIP Code
Kensoha	53140

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Damaged	__ __ PC368 __ __

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 5/30/2001

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
8	15

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	Unknown

2. Facility / Owner Information

Facility Name: Kenosha Iron & Metal

Facility ID (FID or PWS): 230099870

License/Permit/Monitoring #: B-3

Original Well Owner: City of Kenosha

Present Well Owner: City of Kenosha

Mailing Address of Present Owner: 625 52nd Street

City of Present Owner	State	ZIP Code
Kenosha	WI	53140

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☒ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☒ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain): Gravity

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15	1 - 50# bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Robert Cigale		07/23/18

Street or Route	Telephone Number
6871 South Lovers Lane	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		07/25/18

DNR Use Only

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 6-97

Facility/Project Name: Kenosha Iron & Metal 86415XB T3000	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: B-3
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: ☐) Lat. ° ' " Long. ° ' " or	Wis. Unique Well No: PC368 / DNR Well Number: B-3
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 05/30/2001
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31, T. 2 N, R. 23 ☒E ☐W	Well Installed By: (Person's Name and Firm) North Shore Drilling
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	

A. Protective pipe, top elevation 625.93 ft. MSL
B. Well casing, top elevation 625.96 ft. MSL
C. Land surface elevation 622.9 ft. MSL
D. Surface seal, bottom 620.4 ft. MSL or 2.5 ft.

12. USC classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☐

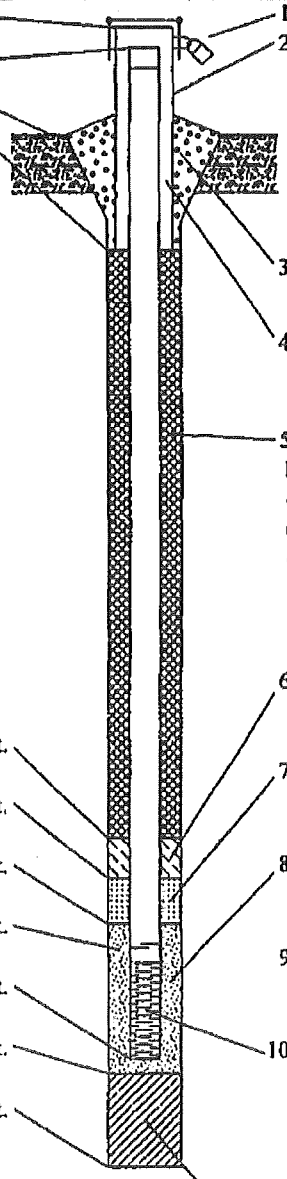
13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis): ____



E. Bentonite seal, top 620.4 ft. MSL or 2.5 ft.
F. Fine sand, top 618.9 ft. MSL or 4.0 ft.
G. Filter pack, top 618.4 ft. MSL or 4.5 ft.
H. Screen joint, top 617.9 ft. MSL or 5.0 ft.
I. Well bottom 607.9 ft. MSL or 15.0 ft.
J. Filter pack, bottom 607.9 ft. MSL or 15.0 ft.
K. Borehole, bottom 607.9 ft. MSL or 15.0 ft.
L. Borehole, diameter 8.0 in.
M. O.D. well casing 2.37 in.
N. I.D. well casing 2.06 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: ____ in.
b. Length: ____ ft.
c. Material: Steel ☐ 04 / Steel ____ Other ☒
d. Additional protection? ☒ Yes ☐ No
If yes, describe: Expandable Cap
3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / ____ Other ☐
4. Material between well casing and protective pipe: Bentonite ☐ 30 / None ____ Other ☒
5. Annular space seal: a. Granular Bentonite ☐ 33
b. ____ Lbs/gal mud weight . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
a. Badger Silica Sand 55/65mm
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint Filter Sand 80/120mm
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐
10. Screen material: PVC
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐
b. Manufacturer Env. Mfg. Inc.
c. Slot size: 0.006 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☐ 14 / None ____ Other ☒

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: STS Consultants, Ltd., 11425 West Lake Park Drive Milwaukee, WI 53224 Tel: 414-359-3030 Fax: 414-359-0822

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduit involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Kenosha		

Latitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N

__ __ ° __ __ . __ __ __ 'W

¼ / ¼ NW	¼ SW	Section	Township	Range ☒ E
or Gov't Lot #		31	2 N	23 W

Well Street Address: 5512 19th Avenue

Well City, Village or Town	Well ZIP Code
Kensoha	53140

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Damaged	PC369

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 06/06/2001

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
8	15

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	Unknown

2. Facility / Owner Information

Facility Name: Kenosha Iron & Metal

Facility ID (FID or PWS): 230099870

License/Permit/Monitoring #: B-4

Original Well Owner: City of Kenosha

Present Well Owner: City of Kenosha

Mailing Address of Present Owner: 625 52nd Street

City of Present Owner	State	ZIP Code
Kenosha	WI	53140

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☒ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☒ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain): Gravity

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15	1 - 50# bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Robert Cigale		07/23/18

Street or Route	Telephone Number
6871 South Lovers Lane	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		07/25/18

DNR Use Only

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 6-97

Facility/Project Name: Kenosha Iron & Metal 86415XB T3000	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: B-4
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: ☐) Lat. ° ' " Long. ° ' " or	Wis. Unique Well No: PC369 / DNR Well Number: B-4
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 06/06/2001
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31, T. 2 N, R. 23 ☒E ☐W	Well Installed By: (Person's Name and Firm) Dean
Distance Well Is From Waste/Source Boundary ____ ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	North Shore Drilling

A. Protective pipe, top elevation 625.45 ft. MSL

B. Well casing, top elevation 625.74 ft. MSL

C. Land surface elevation 622.6 ft. MSL

D. Surface seal, bottom 620.6 ft. MSL or 2.0 ft.

12. USC classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐ SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐ Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0; Hollow Stem Auger ☒ 4 1; Other ☐

15. Drilling fluid used: Water ☐ 0 2; Air ☐ 0 1; Drilling Mud ☐ 0 3; None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No

Describe ____

17. Source of water (attach analysis):

E. Bentonite seal, top 618.6 ft. MSL or 4.0 ft.

F. Fine sand, top 618.6 ft. MSL or 4.0 ft.

G. Filter pack, top 618.2 ft. MSL or 4.4 ft.

H. Screen joint, top 618.0 ft. MSL or 4.6 ft.

I. Well bottom 608.0 ft. MSL or 14.6 ft.

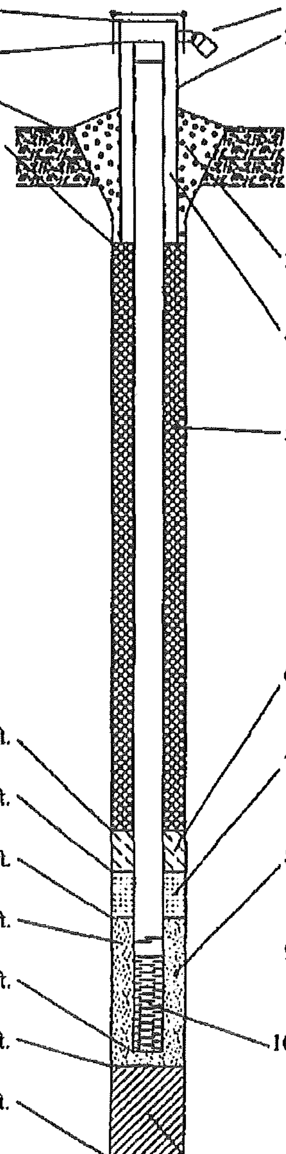
J. Filter pack, bottom 607.6 ft. MSL or 15.0 ft.

K. Borehole, bottom 607.6 ft. MSL or 15.0 ft.

L. Borehole, diameter 8.0 in.

M. O.D. well casing 2.37 in.

N. I.D. well casing 2.06 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
   a. Inside diameter: ____ in.
   b. Length: ____ ft.
   c. Material: Steel ☒ 0 4; Other ☐
   d. Additional protection? ☒ Yes ☐ No
   If yes, describe: Expandable Cap
3. Surface seal: Bentonite ☒ 3 0; Concrete ☐ 0 1; Other ☐
4. Material between well casing and protective pipe: Bentonite ☐ 3 0; None Other ☒
5. Annular space seal: a. Granular Bentonite ☐ 3 3
   b. ____ Lbs/gal mud weight . Bentonite-sand slurry ☐ 3 5
   c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
   d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
   e. ____ Ft^3 volume added for any of the above
   f. How installed: Tremie ☐ 0 1; Tremie pumped ☐ 0 2; Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
   b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 3 2
   c. ____ Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
   a. Badger Silica Sand 55/65mm
   b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
   a. Red Flint Filter Sand 80/120mm
   b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3; Flush threaded PVC schedule 80 ☐ 2 4; Other ☐
10. Screen material: PVC
    a. Screen Type: Factory cut ☒ 1 1; Continuous slot ☐ 0 1; Other ☐
    b. Manufacturer Env. Mfg. Inc.
    c. Slot size: 0.006 in.
    d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4; Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	STS Consultants, Ltd. 11425 West Lake Park Drive Milwaukee, WI 53224 Tel: 414-359-3030 Fax: 414-359-0822

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State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Kenosha	_ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) | Method Code (see instructions)

_ _ ° _ _ . _ _ _ 'N

_ _ ° _ _ . _ _ _ 'W

¼ / ¼ NW	¼ SW	Section	Township	Range ☒ E
or Gov't Lot #		31	2 N	23 W

Well Street Address: 5512 19th Avenue

Well City, Village or Town	Well ZIP Code
Kensoha	53140

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Damaged	PC287

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 05/31/2001

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15.1	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
8	15.1

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	Unknown

2. Facility / Owner Information

Facility Name: Kenosha Iron & Metal

Facility ID (FID or PWS): 230099870

License/Permit/Monitoring #: B-6

Original Well Owner: City of Kenosha

Present Well Owner: City of Kenosha

Mailing Address of Present Owner: 625 52nd Street

City of Present Owner	State	ZIP Code
Kenosha	WI	53140

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☒ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☒ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain): Gravity

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.1	1 - 50# bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Robert Cigale		07/23/18

Street or Route	Telephone Number
6871 South Lovers Lane	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		07/25/18

DNR Use Only

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Remediation/Redevelopment ☐ Waste Management ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 6-97

Facility/Project Name Kenosha Iron & Metal 86415XB T3000	Local Grid Location of Well ___ ft. ☐N. ☐S. ___ ft. ☐E. ☐W.	Well Name B-6
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: ☐) Lat. __° __' __" Long. __° __' __" or	Wis. Unique Well No: PC287 / DNR Well Number
Facility ID	St. Plane ___ ft. N, ___ ft. E. S/C/N	Date Well Installed 05/31/2001
Type of Well Well Code 11/mw	Section Location of Waste/Source NW 1/4 of SW 1/4 of Sec. 31, T. 2 N, R. 23 ☒E ☐W	Well Installed By: (Person's Name and Firm)
Distance Well Is From Waste/Source Boundary ___ ft.	Location of Well Relative to Waste/Source u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	North Shore Drilling

A. Protective pipe, top elevation 626.19 ft. MSL

B. Well casing, top elevation 626.60 ft. MSL

C. Land surface elevation 623.6 ft. MSL

D. Surface seal, bottom 621.3 ft. MSL or 2.3 ft.

12. USC classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ☒ 4 1
___ Other ☐

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1
Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No

Describe___

17. Source of water (attach analysis):

E. Bentonite seal, top 619.3 ft. MSL or 4.3 ft.

F. Fine sand, top 619.3 ft. MSL or 4.3 ft.

G. Filter pack, top 619.2 ft. MSL or 4.4 ft.

H. Screen joint, top 609.1 ft. MSL or 14.5 ft.

I. Well bottom 608.5 ft. MSL or 15.1 ft.

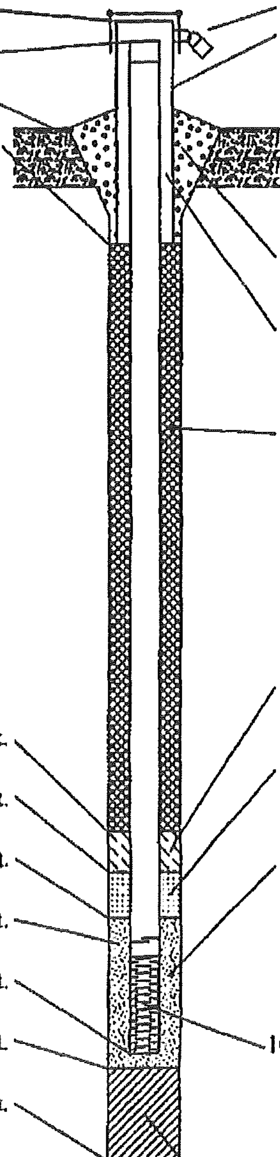
J. Filter pack, bottom 608.5 ft. MSL or 15.1 ft.

K. Borehole, bottom 608.5 ft. MSL or 15.1 ft.

L. Borehole, diameter 8.0 in.

M. O.D. well casing 2.37 in.

N. I.D. well casing 2.06 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: ___ in.
b. Length: ___ ft.
c. Material: Steel ☒ 0 4
___ Other ☐
d. Additional protection? ☒ Yes ☐ No
If yes, describe: Expandable Cap

3. Surface seal: Bentonite ☒ 3 0
Concrete ☐ 0 1
___ Other ☐

4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
None Other ☒

5. Annular space seal: a. Granular Bentonite ☐ 3 3
b. ___ Lbs/gal mud weight . Bentonite-sand slurry ☐ 3 5
c. ___ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ___ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ___ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ☒ 0 8

6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 3 2
c. ___ Other ☐

7. Fine sand material: Manufacturer, product name and mesh size
a. Badger Silica Sand 55/65mm
b. Volume added ___ ft^3

8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint Filter Sand 80/120mm
b. Volume added ___ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
___ Other ☐

10. Screen material: PVC
a. Screen Type: Factory cut ☒ 1 1
Continuous slot ☐ 0 1
___ Other ☐
b. Manufacturer Env. Mfg. Inc.
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☒ 1 4
___ Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm STS Consultants, Ltd.
11425 West Lake Park Drive Milwaukee, WI 53224
Tel: 414-359-3030
Fax: 414-359-0822

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduit involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Kenosha	_ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) | Method Code (see instructions)

_ _ ° _ _ . _ _ _ 'N

_ _ ° _ _ . _ _ _ 'W

¼ / ¼ NW	¼ SW	Section	Township	Range ☒ E
or Gov't Lot #		31	2 N	23 W

Well Street Address: 5512 19th Avenue

Well City, Village or Town	Well ZIP Code
Kensoha	53140

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Damaged	PK573

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/22/2002

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15.5	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
8	15.5

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	Unknown

2. Facility / Owner Information

Facility Name: Kenosha Iron & Metal

Facility ID (FID or PWS): 230099870

License/Permit/Monitoring #: B-7

Original Well Owner: City of Kenosha

Present Well Owner: City of Kenosha

Mailing Address of Present Owner: 625 52nd Street

City of Present Owner	State	ZIP Code
Kenosha	WI	53140

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☒ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☒ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain): Gravity

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.5	1 - 50# bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Robert Cigale		07/23/18

Street or Route	Telephone Number
6871 South Lovers Lane	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		07/25/18

DNR Use Only

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 6-97

Facility/Project Name: Kenoshu Iron & Metal 86415XC	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: B-7
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: ☐) Lat. ° ' " Long. ° ' " or	Wis. Unique Well No: PK573 / DNR Well Number:
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 03/22/2002
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31 T. 2 N, R. 23 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dean & Steve; North Shore Drilling
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	

A. Protective pipe, top elevation ____ ft. MSL

B. Well casing, top elevation ____ ft. MSL

C. Land surface elevation ____ ft. MSL

D. Surface seal, bottom ____ ft. MSL or 1.0 ft.

12. USC classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ☒ 4 1
____ Other ☐

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1
Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis):
____

E. Bentonite seal, top ____ ft. MSL or 1.0 ft.

F. Fine sand, top ____ ft. MSL or 4.0 ft.

G. Filter pack, top ____ ft. MSL or 4.5 ft.

H. Screen joint, top ____ ft. MSL or 5.0 ft.

I. Well bottom ____ ft. MSL or 15.0 ft.

J. Filter pack, bottom ____ ft. MSL or 15.5 ft.

K. Borehole, bottom ____ ft. MSL or 15.5 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 5.0 ft.
c. Material: Steel ☒ 0 4
____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

3. Surface seal: Bentonite ☐ 3 0
Concrete ☐ 0 1
Soil Other ☒

4. Material between well casing and protective pipe:
Bentonite ☐ 3 0
Sand Other ☒

5. Annular space seal: a. Granular Bentonite ☒ 3 3
b. ____ Lbs/gal mud weight . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ☒ 0 8

6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 3 2
c. ____ Other ☐

7. Fine sand material: Manufacturer, product name and mesh size
a. Red Flint #45-55
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #30
b. Volume added ____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
____ Other ☐

10. Screen material: PVC Schedule 40
a. Screen Type: Factory cut ☒ 1 1
Continuous slot ☐ 0 1
____ Other ☐
b. Manufacturer Timco
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.

11. Backfill material (below filter pack): None ☒ 1 4
____ Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: STS Consultants Ltd., W Lake Park Drive Milwaukee, WI Tel: 414 359 3030 Fax: 414 359 0822

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Kenosha		

Lattitude / Longitude (Degrees and Minutes): __ __ ° __ __ . __ __ __ 'N; __ __ ° __ __ . __ __ __ 'W — Method Code (see instructions): __ __ __ __ __ __

¼ / ¼ NW	¼ SW	Section	Township	Range ☒ E
or Gov't Lot #		31	2 N	23 W

Well Street Address: 5512 19th Avenue

Well City, Village or Town	Well ZIP Code
Kensoha	53140

Subdivision Name	Lot #

Reason For Removal From Service	WI Unique Well # of Replacement Well
Damaged	PK574

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/22/2002

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15.5	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
8	15.5

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	Unknown

2. Facility / Owner Information

Facility Name: Kenosha Iron & Metal

Facility ID (FID or PWS): 230099870

License/Permit/Monitoring #: B-8

Original Well Owner: City of Kenosha

Present Well Owner: City of Kenosha

Mailing Address of Present Owner: 625 52nd Street

City of Present Owner	State	ZIP Code
Kenosha	WI	53140

4. Pump, Liner, Screen, Casing & Sealing Material

	Yes	No	N/A
Pump and piping removed?			☒
Liner(s) removed?			☒
Screen removed?		☒	
Casing left in place?	☒		
Was casing cut off below surface?	☒		
Did sealing material rise to surface?	☒		
Did material settle after 24 hours?	☒		
If yes, was hole retopped?	☒		
If bentonite chips were used, were they hydrated with water from a known safe source?			☒

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " " ☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.5	1 - 50# bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Robert Cigale		07/23/18

Street or Route	Telephone Number
6871 South Lovers Lane	(414) 427-1200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Franklin	WI	53132		07/25/18

DNR Use Only

Date Received	Noted By

Comments:

State of Wisconsin
Department of Natural Resources Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 6-97

Facility/Project Name: Kenosha Iron & Metal 86415XC	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: B-8
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: ☐) Lat. ° ' " Long. ° ' " or	Wis. Unique Well No: PK574 / DNR Well Number:
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 03/22/2002
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31, T. 2 N, R. 23 ☒E ☐W	Well Installed By: (Person's Name and Firm): Dean & Steve
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	North Shore Drilling

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation ____ ft. MSL
C. Land surface elevation ____ ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1.0 ft.

12. USC classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☐

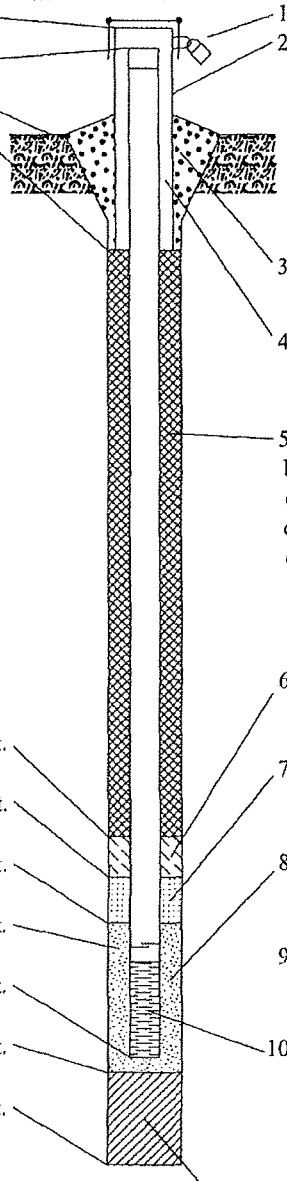
13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis):
____



E. Bentonite seal, top ____ ft. MSL or 1.0 ft.
F. Fine sand, top ____ ft. MSL or 4.0 ft.
G. Filter pack, top ____ ft. MSL or 4.5 ft.
H. Screen joint, top ____ ft. MSL or 5.0 ft.
I. Well bottom ____ ft. MSL or 15.0 ft.
J. Filter pack, bottom ____ ft. MSL or 15.5 ft.
K. Borehole, bottom ____ ft. MSL or 15.5 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.07 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 5.0 ft.
c. Material: Steel ☒ 04
____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 30
Concrete ☐ 01
Soil Other ☒
4. Material between well casing and protective pipe:
Bentonite ☐ 30
Sand Other ☒
5. Annular space seal: a. Granular Bentonite ☒ 33
b. ____ Lbs/gal mud weight . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
a. Red Flint #45-55
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #30
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
____ Other ☐
10. Screen material: PVC Schedule 40
a. Screen Type: Factory cut ☒ 11
Continuous slot ☐ 01
____ Other ☐
b. Manufacturer Timco
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 14
____ Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: STS Consultants Ltd. W Lake Park Drive Milwaukee, WI Tel: 414 359 3030 Fax: 414 359 0822

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

AECOM

Well/Drillhole/Borehole Abandonment

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location: B-9
County: Kenosha
(If applicable) Gov't Lot _____ Grid Number
Grid Location: ft. ΓN. ΓS., _____ ft. ΓE. ΓW.
Civil Town Name: Kenosha
Street Address of Well: 5512 19th Avenue
City, Village: Kenosha, WI 53140

(2) FACILITY NAME

Original Well Owner (If Known): City of Kenosha / Kenosha Iron + Metal
Present Well Owner: City of Kenosha
Street or Route: 5512 19th Avenue
City, State, Zip Code: Kenosha, WI 53140
Facility Well No. and/or Name (If Applicable): B-9
Reason for Abandonment: Blockage @ 8' bgs
Date of Abandonment: 7/24/18

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On
(Date) 3/22/2002

[X] Monitoring Well
Γ Water Well
Γ Drillhole
Γ Borehole

Construction Report Available? [X] Yes Γ No

Construction Type:
[X] Drilled Γ Driven (Sandpoint) Γ Dug
Γ Other (Specify) _____

Formation Type:
[X] Unconsolidated Formation Γ Bedrock

Total Well Depth (ft.) 15' bgs (From Ground Surface)
Casing diameter (in.) 2"
Casing Depth (ft.) 15' bgs

Lower Drillhole Diameter (in.) _____

Was Well Annular Space Grouted? Γ Yes Γ No [X] Unknown
If Yes, To What Depth? _____ Feet

(4) Depth to Water (Feet) 7.2' bgs

Pump & Piping Removed? [X] Yes Γ No Γ Not Applicable
Liner(s) Removed? [X] Yes Γ No Γ Not Applicable
Screen Removed? [X] Yes Γ No Γ Not Applicable
Casing Left In Place? Γ Yes [X] No
If No, Explain: Removed all PVC due to blockage

Was Casing Cut Off Below Surface? Γ Yes [X] No
Did Sealing Material Rise to Surface? Γ Yes [X] No
Did Material Settle After 24 Hours? Γ Yes [X] No
If Yes, Was Hole Retopped? Γ Yes Γ No

(5) Required Method of Placing Sealing Material
[X] Conductor Pipe-Gravity Γ Conductor Pipe-Pumped
Γ Dump Bailer Γ Other (Explain)

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
Γ Neat Cement Grout
Γ Sand-Cement (Concrete) Grout
Γ Concrete
Γ Clay-Sand Slurry
Γ Bentonite-Sand Slurry
[X] Chipped Bentonite
Γ Bentonite Pellets
[X] Granular Bentonite
Γ Bentonite - Cement Grout

(7) Material Used to Fill Well/Drillhole

From (Ft.)	To (Ft.)	No. of Yards, Sacks Sealant, or Volume (Circle One)	Mix Ratio or Mud Weight
Surface	15.5' bgs	2 bags	

3/8" Bentonite Chips

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work: SES

Signature of Person Doing Work: [signature]
Date Signed: 7/24/18
Street or Route: P.O. Box 280
Telephone Number: (608) 837-8992
City, State, Zip Code: Sun Prairie, WI 53590

State of Wisconsin
Department of Natural Resources Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 6-97

Facility/Project Name: Kenosha Iron & Metal 86415XC	Local Grid Location of Well: ____ ft. ☐N. ☐S. ____ ft. ☐E. ☐W.	Well Name: B-9
Facility License, Permit or Monitoring No.	Grid Origin Location (Check if estimated: ☐) Lat. ° ' " Long. ° ' " or	Wis. Unique Well No: PK575 / DNR Well Number
Facility ID	St. Plane ____ ft. N, ____ ft. E. S/C/N	Date Well Installed: 03/22/2002
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31, T. 2 N, R. 23 ☒E ☐W	Well Installed By: (Person's Name and Firm): Dean & Steve / North Shore Drilling
Distance Well Is From Waste/Source Boundary ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation ____ ft. MSL
C. Land surface elevation ____ ft. MSL
D. Surface seal, bottom ____ ft. MSL or 1.0 ft.

12. USC classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

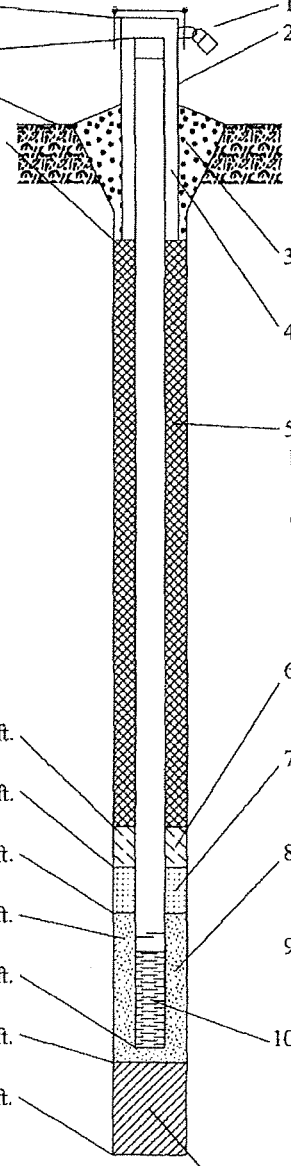
14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / ____ Other ☐

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis): ____

E. Bentonite seal, top ____ ft. MSL or 1.0 ft.
F. Fine sand, top ____ ft. MSL or 4.0 ft.
G. Filter pack, top ____ ft. MSL or 4.5 ft.
H. Screen joint, top ____ ft. MSL or 5.0 ft.
I. Well bottom ____ ft. MSL or 15.0 ft.
J. Filter pack, bottom ____ ft. MSL or 15.5 ft.
K. Borehole, bottom ____ ft. MSL or 15.5 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.38 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 5.0 ft.
c. Material: Steel ☒ 0 4 / ____ Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0 / Concrete ☐ 0 1 / Soil Other ☒
4. Material between well casing and protective pipe: Bentonite ☐ 3 0 / Sand Other ☒
5. Annular space seal: a. Granular Bentonite ☒ 3 3
b. ____Lbs/gal mud weight . Bentonite-sand slurry ☐ 3 5
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____% Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 3 2
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name and mesh size
a. Red Flint #45-55
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name and mesh size
a. Red Flint #30
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / ____ Other ☐
10. Screen material: PVC Schedule 40
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / ____ Other ☐
b. Manufacturer Timco
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4 / ____ Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: STS Consultants Ltd., W Lake Park Drive Milwaukee, WI Tel: 414 359 3030 Fax: 414 359 0822

Please complete both forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Laboratory Analytical Reports

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

April 16, 2018

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

RE: Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Dear Lanette Altenbach:
Enclosed are the analytical results for sample(s) received by the laboratory on April 12, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

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

Enclosures

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

CERTIFICATIONS

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40167353001	**TRIP BLANK**	Water	04/10/18 08:00	04/12/18 09:50
40167353002	**B-1**	Water	04/10/18 10:49	04/12/18 09:50

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SAMPLE ANALYTE COUNT

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40167353001	**TRIP BLANK**	EPA 8260	LAP	64	PASI-G
40167353002	**B-1**	EPA 8260	LAP	64	PASI-G

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SUMMARY OF DETECTION

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40167353002	**B-1**					
EPA 8260	1,2-Dichloroethane	0.54J	ug/L	1.0	04/13/18 15:20	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Sample: TRIP BLANK **Lab ID: 40167353001** Collected: 04/10/18 08:00 Received: 04/12/18 09:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		04/13/18 13:04	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		04/13/18 13:04	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	75-25-2	L2
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/13/18 13:04	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		04/13/18 13:04	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		04/13/18 13:04	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/13/18 13:04	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/13/18 13:04	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		04/13/18 13:04	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/13/18 13:04	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/13/18 13:04	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/13/18 13:04	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/13/18 13:04	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/13/18 13:04	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/13/18 13:04	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/13/18 13:04	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/13/18 13:04	156-59-2	L1
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/13/18 13:04	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/13/18 13:04	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		04/13/18 13:04	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		04/13/18 13:04	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/13/18 13:04	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		04/13/18 13:04	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		04/13/18 13:04	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/13/18 13:04	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/13/18 13:04	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/13/18 13:04	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		04/13/18 13:04	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: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Sample: TRIP BLANK **Lab ID: 40167353001** Collected: 04/10/18 08:00 Received: 04/12/18 09:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		04/13/18 13:04	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		04/13/18 13:04	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		04/13/18 13:04	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/13/18 13:04	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/13/18 13:04	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/13/18 13:04	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/13/18 13:04	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/13/18 13:04	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 13:04	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	61-130		1		04/13/18 13:04	460-00-4	HS
Dibromofluoromethane (S)	104	%	67-130		1		04/13/18 13:04	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		04/13/18 13:04	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Sample: B-1 **Lab ID: 40167353002** Collected: 04/10/18 10:49 Received: 04/12/18 09:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		04/13/18 15:20	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		04/13/18 15:20	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	75-25-2	L2
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		04/13/18 15:20	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		04/13/18 15:20	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		04/13/18 15:20	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		04/13/18 15:20	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		04/13/18 15:20	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		04/13/18 15:20	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		04/13/18 15:20	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		04/13/18 15:20	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		04/13/18 15:20	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		04/13/18 15:20	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		04/13/18 15:20	75-34-3	
1,2-Dichloroethane	**0.54J**	ug/L	1.0	0.17	1		04/13/18 15:20	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		04/13/18 15:20	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/13/18 15:20	156-59-2	L1
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		04/13/18 15:20	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		04/13/18 15:20	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		04/13/18 15:20	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		04/13/18 15:20	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		04/13/18 15:20	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		04/13/18 15:20	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		04/13/18 15:20	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		04/13/18 15:20	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/13/18 15:20	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		04/13/18 15:20	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		04/13/18 15:20	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: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Sample: B-1 **Lab ID: 40167353002** Collected: 04/10/18 10:49 Received: 04/12/18 09:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		04/13/18 15:20	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		04/13/18 15:20	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		04/13/18 15:20	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		04/13/18 15:20	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		04/13/18 15:20	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		04/13/18 15:20	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		04/13/18 15:20	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/13/18 15:20	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/13/18 15:20	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	61-130		1		04/13/18 15:20	460-00-4	
Dibromofluoromethane (S)	108	%	67-130		1		04/13/18 15:20	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		04/13/18 15:20	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

QC Batch: 285991 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40167353001, 40167353002

METHOD BLANK: 1673116 Matrix: Water
Associated Lab Samples: 40167353001, 40167353002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	04/13/18 08:31	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	04/13/18 08:31	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	04/13/18 08:31	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	04/13/18 08:31	
1,1-Dichloroethane	ug/L	<0.24	1.0	04/13/18 08:31	
1,1-Dichloroethene	ug/L	<0.41	1.0	04/13/18 08:31	
1,1-Dichloropropene	ug/L	<0.44	1.0	04/13/18 08:31	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	04/13/18 08:31	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	04/13/18 08:31	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	04/13/18 08:31	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	04/13/18 08:31	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	04/13/18 08:31	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	04/13/18 08:31	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	04/13/18 08:31	
1,2-Dichloroethane	ug/L	<0.17	1.0	04/13/18 08:31	
1,2-Dichloropropane	ug/L	<0.23	1.0	04/13/18 08:31	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	04/13/18 08:31	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	04/13/18 08:31	
1,3-Dichloropropane	ug/L	<0.50	1.0	04/13/18 08:31	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	04/13/18 08:31	
2,2-Dichloropropane	ug/L	<0.48	1.0	04/13/18 08:31	
2-Chlorotoluene	ug/L	<0.50	1.0	04/13/18 08:31	
4-Chlorotoluene	ug/L	<0.21	1.0	04/13/18 08:31	
Benzene	ug/L	<0.50	1.0	04/13/18 08:31	
Bromobenzene	ug/L	<0.23	1.0	04/13/18 08:31	
Bromochloromethane	ug/L	<0.34	1.0	04/13/18 08:31	
Bromodichloromethane	ug/L	<0.50	1.0	04/13/18 08:31	
Bromoform	ug/L	<0.50	1.0	04/13/18 08:31	
Bromomethane	ug/L	<2.4	5.0	04/13/18 08:31	
Carbon tetrachloride	ug/L	<0.50	1.0	04/13/18 08:31	
Chlorobenzene	ug/L	<0.50	1.0	04/13/18 08:31	
Chloroethane	ug/L	<0.37	1.0	04/13/18 08:31	
Chloroform	ug/L	<2.5	5.0	04/13/18 08:31	
Chloromethane	ug/L	<0.50	1.0	04/13/18 08:31	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	04/13/18 08:31	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	04/13/18 08:31	
Dibromochloromethane	ug/L	<0.50	1.0	04/13/18 08:31	
Dibromomethane	ug/L	<0.43	1.0	04/13/18 08:31	
Dichlorodifluoromethane	ug/L	<0.22	1.0	04/13/18 08:31	
Diisopropyl ether	ug/L	<0.50	1.0	04/13/18 08:31	
Ethylbenzene	ug/L	<0.50	1.0	04/13/18 08:31	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

METHOD BLANK: 1673116 Matrix: Water
Associated Lab Samples: 40167353001, 40167353002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	04/13/18 08:31	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	04/13/18 08:31	
m&p-Xylene	ug/L	<1.0	2.0	04/13/18 08:31	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	04/13/18 08:31	
Methylene Chloride	ug/L	<0.23	1.0	04/13/18 08:31	
n-Butylbenzene	ug/L	<0.50	1.0	04/13/18 08:31	
n-Propylbenzene	ug/L	<0.50	1.0	04/13/18 08:31	
Naphthalene	ug/L	<2.5	5.0	04/13/18 08:31	
o-Xylene	ug/L	<0.50	1.0	04/13/18 08:31	
p-Isopropyltoluene	ug/L	<0.50	1.0	04/13/18 08:31	
sec-Butylbenzene	ug/L	<2.2	5.0	04/13/18 08:31	
Styrene	ug/L	<0.50	1.0	04/13/18 08:31	
tert-Butylbenzene	ug/L	<0.18	1.0	04/13/18 08:31	
Tetrachloroethene	ug/L	<0.50	1.0	04/13/18 08:31	
Toluene	ug/L	<0.50	1.0	04/13/18 08:31	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	04/13/18 08:31	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	04/13/18 08:31	
Trichloroethene	ug/L	<0.33	1.0	04/13/18 08:31	
Trichlorofluoromethane	ug/L	<0.18	1.0	04/13/18 08:31	
Vinyl chloride	ug/L	<0.18	1.0	04/13/18 08:31	
4-Bromofluorobenzene (S)	%	97	61-130	04/13/18 08:31	
Dibromofluoromethane (S)	%	103	67-130	04/13/18 08:31	
Toluene-d8 (S)	%	98	70-130	04/13/18 08:31	

LABORATORY CONTROL SAMPLE: 1673117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.1	95	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	18.2	91	70-130	
1,1,2-Trichloroethane	ug/L	20	19.7	99	70-130	
1,1-Dichloroethane	ug/L	20	21.9	109	71-132	
1,1-Dichloroethene	ug/L	20	22.9	114	75-130	
1,2,4-Trichlorobenzene	ug/L	20	16.1	80	70-130	
1,2-Dibromo-3-chloropropane	ug/L	20	13.2	66	63-123	
1,2-Dibromoethane (EDB)	ug/L	20	18.5	93	70-130	
1,2-Dichlorobenzene	ug/L	20	19.3	97	70-130	
1,2-Dichloroethane	ug/L	20	22.0	110	70-131	
1,2-Dichloropropane	ug/L	20	18.1	91	80-120	
1,3-Dichlorobenzene	ug/L	20	18.4	92	70-130	
1,4-Dichlorobenzene	ug/L	20	19.2	96	70-130	
Benzene	ug/L	20	21.0	105	73-145	
Bromodichloromethane	ug/L	20	16.5	83	70-130	
Bromoform	ug/L	20	12.0	60	67-130	L2
Bromomethane	ug/L	20	17.4	87	26-128	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

LABORATORY CONTROL SAMPLE: 1673117

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	20	17.5	87	70-133	
Chlorobenzene	ug/L	20	19.7	99	70-130	
Chloroethane	ug/L	20	19.3	96	58-120	
Chloroform	ug/L	20	22.1	111	80-121	
Chloromethane	ug/L	20	16.9	84	40-127	
cis-1,2-Dichloroethene	ug/L	20	26.5	132	70-130	L1
cis-1,3-Dichloropropene	ug/L	20	15.7	78	70-130	
Dibromochloromethane	ug/L	20	15.0	75	70-130	
Dichlorodifluoromethane	ug/L	20	15.2	76	20-135	
Ethylbenzene	ug/L	20	18.9	95	87-129	
Isopropylbenzene (Cumene)	ug/L	20	19.5	98	70-130	
m&p-Xylene	ug/L	40	39.4	99	70-130	
Methyl-tert-butyl ether	ug/L	20	21.9	110	66-143	
Methylene Chloride	ug/L	20	23.3	116	70-130	
o-Xylene	ug/L	20	19.8	99	70-130	
Styrene	ug/L	20	19.5	97	70-130	
Tetrachloroethene	ug/L	20	17.7	89	70-130	
Toluene	ug/L	20	19.9	99	82-130	
trans-1,2-Dichloroethene	ug/L	20	22.1	110	75-132	
trans-1,3-Dichloropropene	ug/L	20	14.8	74	70-130	
Trichloroethene	ug/L	20	20.5	103	70-130	
Trichlorofluoromethane	ug/L	20	24.7	123	76-133	
Vinyl chloride	ug/L	20	18.8	94	57-136	
4-Bromofluorobenzene (S)	%			99	61-130	
Dibromofluoromethane (S)	%			110	67-130	
Toluene-d8 (S)	%			99	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: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60586797.2 KENOSHA IRON+METAL
Pace Project No.: 40167353

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40167353001	**TRIP BLANK**	EPA 8260	285991		
40167353002	**B-1**	EPA 8260	285991		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

4016735

Page: 1 of 1

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: ~~Paul Lindquist~~	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 Group — Excavation~~ Kenosha Iron + Metal	Pace Project Manager: Chris Hyska
Requested Due Date/TAT: Standard	Project Number: ~~60523016.1~~ 60586797.2	Pace Profile #: (2430) Kenosha work

REGULATORY AGENCY

☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ GA ☐ IL ☐ IN ☐ MI ☐ NC ☐ OH ☐ : ☑ WI ☐ OTHER___

Filtered (Y/N): N

Requested Analysis: VOC by 8260

Residual Chlorine (Y/N)

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 #	Section D Required Client Information — 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	Pace Project Number Lab I.D.
1	Trip Blank 001	WT		4/10/18	0800	—	—		2				X					
2	B-1 002	WT		4/10/18	1049	—	—		3				X					
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Zach Albers / AECOM	4/11/18	1300	Mary Jamin	4/11/18	1227
Mary Jamin	4/12/18	1145			
ES Logistics	4/12/18	0950	Kristin Price	4/12/18	0950

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
ADF		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zach Albers

SIGNATURE of SAMPLER: Zach Albers DATE Signed (MM / DD / YY): 04/10/18

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

Sample Preservation Receipt Form

Client Name: AECOM

Project # 90167357

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):

	Glass							Plastic							Vials						Jars			General							
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																		2									U						2.5 / 5 / 10
002																		3															2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

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

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40167353

40167353

Client Name: AECOM

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: ND /Corr:

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

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

Person examining contents:
Date: 4/12/18
Initials: SSM

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume: ☐Yes ☒No ☐N/A MS/MSD	☐Yes ☒No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12. 002 - No ID's SSM 4/12/18
-Includes date/time/ID/Analysis Matrix:		
Trip Blank Present:	☒Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☒Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): NA		

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 4/12/18

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

August 17, 2018

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

RE: Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Dear Lanette Altenbach:
Enclosed are the analytical results for sample(s) received by the laboratory on August 11, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

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

Enclosures

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

CERTIFICATIONS

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40173933001	**TRIP BLANK**	Water	08/09/18 13:05	08/11/18 09:45
40173933002	**B-5**	Water	08/09/18 13:10	08/11/18 09:45
40173933003	**B-5 DUP**	Water	08/09/18 13:10	08/11/18 09:45
40173933004	**B-9R**	Water	08/09/18 13:25	08/11/18 09:45

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

SAMPLE ANALYTE COUNT

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40173933001	**TRIP BLANK**	EPA 8260	HNW	63	PASI-G
40173933002	**B-5**	EPA 8260	HNW	63	PASI-G
40173933003	**B-5 DUP**	EPA 8260	HNW	63	PASI-G
40173933004	**B-9R**	EPA 8260	HNW	63	PASI-G

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: TRIP BLANK **Lab ID: 40173933001** Collected: 08/09/18 13:05 Received: 08/11/18 09:45 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		08/14/18 18:14	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		08/14/18 18:14	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		08/14/18 18:14	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		08/14/18 18:14	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		08/14/18 18:14	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		08/14/18 18:14	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		08/14/18 18:14	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		08/14/18 18:14	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		08/14/18 18:14	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		08/14/18 18:14	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/14/18 18:14	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		08/14/18 18:14	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		08/14/18 18:14	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		08/14/18 18:14	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		08/14/18 18:14	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		08/14/18 18:14	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		08/14/18 18:14	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		08/14/18 18:14	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		08/14/18 18:14	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		08/14/18 18:14	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/14/18 18:14	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		08/14/18 18:14	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		08/14/18 18:14	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		08/14/18 18:14	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		08/14/18 18:14	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		08/14/18 18:14	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		08/14/18 18:14	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		08/14/18 18:14	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		08/14/18 18:14	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		08/14/18 18:14	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		08/14/18 18:14	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		08/14/18 18:14	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		08/14/18 18:14	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		08/14/18 18:14	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		08/14/18 18:14	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		08/14/18 18:14	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/14/18 18:14	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		08/14/18 18:14	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	2.7	0.39	1		08/14/18 18:14	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		08/14/18 18:14	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		08/14/18 18:14	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/14/18 18:14	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/14/18 18:14	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		08/14/18 18:14	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		08/14/18 18:14	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		08/14/18 18:14	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: TRIP BLANK **Lab ID: 40173933001** Collected: 08/09/18 13:05 Received: 08/11/18 09:45 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		08/14/18 18:14	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		08/14/18 18:14	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/14/18 18:14	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		08/14/18 18:14	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		08/14/18 18:14	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		08/14/18 18:14	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		08/14/18 18:14	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		08/14/18 18:14	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		08/14/18 18:14	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		08/14/18 18:14	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/14/18 18:14	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/14/18 18:14	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		08/14/18 18:14	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		08/14/18 18:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		08/14/18 18:14	460-00-4	
Dibromofluoromethane (S)	108	%	70-130		1		08/14/18 18:14	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		08/14/18 18:14	2037-26-5	

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ANALYTICAL RESULTS

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: B-5 **Lab ID: 40173933002** Collected: 08/09/18 13:10 Received: 08/11/18 09:45 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		08/15/18 15:36	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		08/15/18 15:36	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		08/15/18 15:36	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		08/15/18 15:36	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		08/15/18 15:36	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		08/15/18 15:36	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		08/15/18 15:36	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		08/15/18 15:36	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		08/15/18 15:36	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		08/15/18 15:36	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/15/18 15:36	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		08/15/18 15:36	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		08/15/18 15:36	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		08/15/18 15:36	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		08/15/18 15:36	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		08/15/18 15:36	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		08/15/18 15:36	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		08/15/18 15:36	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		08/15/18 15:36	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		08/15/18 15:36	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/15/18 15:36	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		08/15/18 15:36	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		08/15/18 15:36	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		08/15/18 15:36	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		08/15/18 15:36	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		08/15/18 15:36	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		08/15/18 15:36	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		08/15/18 15:36	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		08/15/18 15:36	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		08/15/18 15:36	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		08/15/18 15:36	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		08/15/18 15:36	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		08/15/18 15:36	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		08/15/18 15:36	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		08/15/18 15:36	10061-02-6	L1
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		08/15/18 15:36	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/15/18 15:36	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		08/15/18 15:36	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	2.7	0.39	1		08/15/18 15:36	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		08/15/18 15:36	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		08/15/18 15:36	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/15/18 15:36	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/15/18 15:36	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		08/15/18 15:36	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		08/15/18 15:36	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		08/15/18 15:36	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: B-5 **Lab ID: 40173933002** Collected: 08/09/18 13:10 Received: 08/11/18 09:45 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		08/15/18 15:36	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		08/15/18 15:36	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/15/18 15:36	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		08/15/18 15:36	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		08/15/18 15:36	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		08/15/18 15:36	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		08/15/18 15:36	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		08/15/18 15:36	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		08/15/18 15:36	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		08/15/18 15:36	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/15/18 15:36	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/15/18 15:36	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		08/15/18 15:36	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		08/15/18 15:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		08/15/18 15:36	460-00-4	
Dibromofluoromethane (S)	101	%	70-130		1		08/15/18 15:36	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		08/15/18 15:36	2037-26-5	

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ANALYTICAL RESULTS

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: B-5 DUP **Lab ID: 40173933003** Collected: 08/09/18 13:10 Received: 08/11/18 09:45 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		08/15/18 15:57	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		08/15/18 15:57	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		08/15/18 15:57	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		08/15/18 15:57	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		08/15/18 15:57	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		08/15/18 15:57	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		08/15/18 15:57	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		08/15/18 15:57	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		08/15/18 15:57	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		08/15/18 15:57	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/15/18 15:57	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		08/15/18 15:57	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		08/15/18 15:57	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		08/15/18 15:57	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		08/15/18 15:57	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		08/15/18 15:57	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		08/15/18 15:57	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		08/15/18 15:57	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		08/15/18 15:57	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		08/15/18 15:57	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/15/18 15:57	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		08/15/18 15:57	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		08/15/18 15:57	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		08/15/18 15:57	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		08/15/18 15:57	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		08/15/18 15:57	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		08/15/18 15:57	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		08/15/18 15:57	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		08/15/18 15:57	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		08/15/18 15:57	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		08/15/18 15:57	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		08/15/18 15:57	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		08/15/18 15:57	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		08/15/18 15:57	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		08/15/18 15:57	10061-02-6	L1
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		08/15/18 15:57	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/15/18 15:57	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		08/15/18 15:57	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	2.7	0.39	1		08/15/18 15:57	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		08/15/18 15:57	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		08/15/18 15:57	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/15/18 15:57	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/15/18 15:57	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		08/15/18 15:57	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		08/15/18 15:57	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		08/15/18 15:57	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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: B-5 DUP **Lab ID: 40173933003** Collected: 08/09/18 13:10 Received: 08/11/18 09:45 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		08/15/18 15:57	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		08/15/18 15:57	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/15/18 15:57	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		08/15/18 15:57	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		08/15/18 15:57	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		08/15/18 15:57	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		08/15/18 15:57	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		08/15/18 15:57	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		08/15/18 15:57	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		08/15/18 15:57	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/15/18 15:57	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/15/18 15:57	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		08/15/18 15:57	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		08/15/18 15:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		08/15/18 15:57	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		08/15/18 15:57	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		08/15/18 15:57	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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: B-9R **Lab ID: 40173933004** Collected: 08/09/18 13:25 Received: 08/11/18 09:45 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		08/14/18 16:44	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		08/14/18 16:44	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		08/14/18 16:44	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		08/14/18 16:44	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		08/14/18 16:44	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		08/14/18 16:44	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		08/14/18 16:44	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		08/14/18 16:44	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		08/14/18 16:44	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		08/14/18 16:44	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/14/18 16:44	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		08/14/18 16:44	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		08/14/18 16:44	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		08/14/18 16:44	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		08/14/18 16:44	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		08/14/18 16:44	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		08/14/18 16:44	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		08/14/18 16:44	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		08/14/18 16:44	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		08/14/18 16:44	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		08/14/18 16:44	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		08/14/18 16:44	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		08/14/18 16:44	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		08/14/18 16:44	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		08/14/18 16:44	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		08/14/18 16:44	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		08/14/18 16:44	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		08/14/18 16:44	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		08/14/18 16:44	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		08/14/18 16:44	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		08/14/18 16:44	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		08/14/18 16:44	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		08/14/18 16:44	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		08/14/18 16:44	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		08/14/18 16:44	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		08/14/18 16:44	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		08/14/18 16:44	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		08/14/18 16:44	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	2.7	0.39	1		08/14/18 16:44	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		08/14/18 16:44	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		08/14/18 16:44	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		08/14/18 16:44	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		08/14/18 16:44	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		08/14/18 16:44	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		08/14/18 16:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		08/14/18 16:44	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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Sample: B-9R **Lab ID: 40173933004** Collected: 08/09/18 13:25 Received: 08/11/18 09:45 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		08/14/18 16:44	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		08/14/18 16:44	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		08/14/18 16:44	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		08/14/18 16:44	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		08/14/18 16:44	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		08/14/18 16:44	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		08/14/18 16:44	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		08/14/18 16:44	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		08/14/18 16:44	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		08/14/18 16:44	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		08/14/18 16:44	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		08/14/18 16:44	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		08/14/18 16:44	75-01-4	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		08/14/18 16:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		08/14/18 16:44	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		08/14/18 16:44	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		08/14/18 16:44	2037-26-5	

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

QC Batch: 297023 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40173933001, 40173933004

METHOD BLANK: 1735117 Matrix: Water
Associated Lab Samples: 40173933001, 40173933004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	08/14/18 09:16	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	08/14/18 09:16	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	08/14/18 09:16	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	08/14/18 09:16	
1,1-Dichloroethane	ug/L	<0.27	1.0	08/14/18 09:16	
1,1-Dichloroethene	ug/L	<0.24	1.0	08/14/18 09:16	
1,1-Dichloropropene	ug/L	<0.54	1.8	08/14/18 09:16	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	08/14/18 09:16	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	08/14/18 09:16	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	08/14/18 09:16	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	08/14/18 09:16	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	08/14/18 09:16	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	08/14/18 09:16	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	08/14/18 09:16	
1,2-Dichloroethane	ug/L	<0.28	1.0	08/14/18 09:16	
1,2-Dichloropropane	ug/L	<0.28	1.0	08/14/18 09:16	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	08/14/18 09:16	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	08/14/18 09:16	
1,3-Dichloropropane	ug/L	<0.83	2.8	08/14/18 09:16	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	08/14/18 09:16	
2,2-Dichloropropane	ug/L	<2.3	7.6	08/14/18 09:16	
2-Chlorotoluene	ug/L	<0.93	5.0	08/14/18 09:16	
4-Chlorotoluene	ug/L	<0.76	2.5	08/14/18 09:16	
Benzene	ug/L	<0.25	1.0	08/14/18 09:16	
Bromobenzene	ug/L	<0.24	1.0	08/14/18 09:16	
Bromochloromethane	ug/L	<0.36	5.0	08/14/18 09:16	
Bromodichloromethane	ug/L	<0.36	1.2	08/14/18 09:16	
Bromoform	ug/L	<4.0	13.2	08/14/18 09:16	
Bromomethane	ug/L	<0.97	5.0	08/14/18 09:16	
Carbon tetrachloride	ug/L	<0.17	1.0	08/14/18 09:16	
Chlorobenzene	ug/L	<0.71	2.4	08/14/18 09:16	
Chloroethane	ug/L	<1.3	5.0	08/14/18 09:16	
Chloroform	ug/L	<1.3	5.0	08/14/18 09:16	
Chloromethane	ug/L	<2.2	7.3	08/14/18 09:16	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	08/14/18 09:16	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	08/14/18 09:16	
Dibromochloromethane	ug/L	<2.6	8.7	08/14/18 09:16	
Dibromomethane	ug/L	<0.94	3.1	08/14/18 09:16	
Dichlorodifluoromethane	ug/L	<0.50	5.0	08/14/18 09:16	
Diisopropyl ether	ug/L	<1.9	6.3	08/14/18 09:16	
Ethylbenzene	ug/L	<0.22	1.0	08/14/18 09:16	

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
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QUALITY CONTROL DATA

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

METHOD BLANK: 1735117 Matrix: Water
Associated Lab Samples: 40173933001, 40173933004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	08/14/18 09:16	
Isopropylbenzene (Cumene)	ug/L	<0.39	2.7	08/14/18 09:16	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	08/14/18 09:16	
Methylene Chloride	ug/L	<0.58	5.0	08/14/18 09:16	
n-Butylbenzene	ug/L	<0.71	2.4	08/14/18 09:16	
n-Propylbenzene	ug/L	<0.81	5.0	08/14/18 09:16	
Naphthalene	ug/L	<1.2	5.0	08/14/18 09:16	
p-Isopropyltoluene	ug/L	<0.80	2.7	08/14/18 09:16	
sec-Butylbenzene	ug/L	<0.85	5.0	08/14/18 09:16	
Styrene	ug/L	<0.47	1.6	08/14/18 09:16	
tert-Butylbenzene	ug/L	<0.30	1.0	08/14/18 09:16	
Tetrachloroethene	ug/L	<0.33	1.1	08/14/18 09:16	
Toluene	ug/L	<0.17	5.0	08/14/18 09:16	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	08/14/18 09:16	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	08/14/18 09:16	
Trichloroethene	ug/L	<0.26	1.0	08/14/18 09:16	
Trichlorofluoromethane	ug/L	<0.21	1.0	08/14/18 09:16	
Vinyl chloride	ug/L	<0.17	1.0	08/14/18 09:16	
Xylene (Total)	ug/L	<1.5	3.0	08/14/18 09:16	
4-Bromofluorobenzene (S)	%	88	70-130	08/14/18 09:16	
Dibromofluoromethane (S)	%	108	70-130	08/14/18 09:16	
Toluene-d8 (S)	%	99	70-130	08/14/18 09:16	

LABORATORY CONTROL SAMPLE: 1735118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.9	109	70-133	
1,1,2,2-Tetrachloroethane	ug/L	20	20.7	103	67-130	
1,1,2-Trichloroethane	ug/L	20	21.1	106	70-130	
1,1-Dichloroethane	ug/L	20	23.6	118	70-134	
1,1-Dichloroethene	ug/L	20	22.4	112	75-132	
1,2,4-Trichlorobenzene	ug/L	20	16.7	84	68-130	
1,2-Dibromo-3-chloropropane	ug/L	20	17.9	89	60-126	
1,2-Dibromoethane (EDB)	ug/L	20	19.8	99	70-130	
1,2-Dichlorobenzene	ug/L	20	19.8	99	70-130	
1,2-Dichloroethane	ug/L	20	21.4	107	73-134	
1,2-Dichloropropane	ug/L	20	21.6	108	79-128	
1,3-Dichlorobenzene	ug/L	20	18.6	93	70-130	
1,4-Dichlorobenzene	ug/L	20	20.1	101	70-130	
Benzene	ug/L	20	20.6	103	69-137	
Bromodichloromethane	ug/L	20	20.6	103	70-130	
Bromoform	ug/L	20	20.7	104	64-133	
Bromomethane	ug/L	20	10.1	51	29-123	
Carbon tetrachloride	ug/L	20	22.0	110	73-142	

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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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

LABORATORY CONTROL SAMPLE: 1735118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chlorobenzene	ug/L	20	20.7	104	70-130	
Chloroethane	ug/L	20	21.0	105	59-133	
Chloroform	ug/L	20	25.4	127	80-129	
Chloromethane	ug/L	20	15.7	78	27-125	
cis-1,2-Dichloroethene	ug/L	20	22.3	112	70-134	
cis-1,3-Dichloropropene	ug/L	20	19.4	97	70-130	
Dibromochloromethane	ug/L	20	20.1	100	70-130	
Dichlorodifluoromethane	ug/L	20	10.6	53	12-127	
Ethylbenzene	ug/L	20	20.1	101	86-127	
Isopropylbenzene (Cumene)	ug/L	20	19.4	97	70-130	
Methyl-tert-butyl ether	ug/L	20	19.8	99	65-136	
Methylene Chloride	ug/L	20	22.1	111	72-133	
Styrene	ug/L	20	20.4	102	70-130	
Tetrachloroethene	ug/L	20	20.5	103	70-130	
Toluene	ug/L	20	20.8	104	84-124	
trans-1,2-Dichloroethene	ug/L	20	22.8	114	70-133	
trans-1,3-Dichloropropene	ug/L	20	20.4	102	67-130	
Trichloroethene	ug/L	20	21.2	106	70-130	
Trichlorofluoromethane	ug/L	20	23.2	116	69-147	
Vinyl chloride	ug/L	20	19.0	95	48-134	
Xylene (Total)	ug/L	60	62.1	104	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1735317 1735318

Parameter	Units	40173924004 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	<20.0	50	50	53.6	53.1	107	106	70-136	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<20.0	50	50	49.4	51.8	99	104	67-133	5	20	
1,1,2-Trichloroethane	ug/L	<100	50	50	51.9	51.8	104	104	70-130	0	20	
1,1-Dichloroethane	ug/L	<20.0	50	50	55.7	51.0	111	102	70-139	9	20	
1,1-Dichloroethene	ug/L	<20.0	50	50	54.2	50.5	108	101	72-137	7	20	
1,2,4-Trichlorobenzene	ug/L	<100	50	50	55.1	53.5	110	107	68-130	3	20	
1,2-Dibromo-3-chloropropane	ug/L	<118	50	50	59.1	60.6	118	121	60-130	3	21	
1,2-Dibromoethane (EDB)	ug/L	<55.3	50	50	51.7	51.9	103	104	70-130	0	20	
1,2-Dichlorobenzene	ug/L	<47.0	50	50	52.8	51.9	106	104	70-130	2	20	
1,2-Dichloroethane	ug/L	<20.0	50	50	49.7	48.1	99	96	71-137	3	20	
1,2-Dichloropropane	ug/L	<20.0	50	50	51.4	51.7	103	103	78-130	1	20	
1,3-Dichlorobenzene	ug/L	<41.9	50	50	50.1	50.6	100	101	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<62.9	50	50	48.4	48.5	97	97	70-130	0	20	
Benzene	ug/L	2720	50	50	2090	1670	-1270	-2110	66-143	22	20	E,M1, R1
Bromodichloromethane	ug/L	<24.2	50	50	51.3	50.7	103	101	70-130	1	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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1735317 1735318

Parameter	Units	40173924004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromoform	ug/L	<265	50	50	48.7	47.0	97	94	64-134	4	20	
Bromomethane	ug/L	<100	50	50	23.7	22.5	47	45	29-136	5	25	
Carbon tetrachloride	ug/L	<20.0	50	50	54.3	52.0	109	104	73-142	4	20	
Chlorobenzene	ug/L	<47.4	50	50	51.2	50.3	102	101	70-130	2	20	
Chloroethane	ug/L	<100	50	50	50.7	46.2	101	92	58-138	9	20	
Chloroform	ug/L	<100	50	50	58.7	48.7	104	84	80-131	18	20	
Chloromethane	ug/L	<146	50	50	36.7	34.3	73	69	24-125	7	20	
cis-1,2-Dichloroethene	ug/L	<20.0	50	50	53.6	50.1	107	100	68-137	7	22	
cis-1,3-Dichloropropene	ug/L	<242	50	50	55.6	57.2	111	114	70-130	3	20	
Dibromochloromethane	ug/L	<173	50	50	52.0	51.4	104	103	70-131	1	20	
Dichlorodifluoromethane	ug/L	<100	50	50	25.6	24.9	51	50	10-127	2	20	
Ethylbenzene	ug/L	531	50	50	873	816	683	569	81-136	7	20	E,M1
Isopropylbenzene (Cumene)	ug/L	<53.3	50	50	76.0	72.8	76	70	70-132	4	20	
Methyl-tert-butyl ether	ug/L	<83.1	50	50	50.0	48.6	100	97	58-142	3	23	
Methylene Chloride	ug/L	<100	50	50	50.3	42.9	101	86	69-137	16	20	
Styrene	ug/L	<31.0	50	50	53.4	51.2	107	102	70-130	4	20	
Tetrachloroethene	ug/L	<21.8	50	50	50.7	49.6	101	99	70-132	2	20	
Toluene	ug/L	<100	50	50	56.7	56.9	104	104	81-130	0	20	
trans-1,2-Dichloroethene	ug/L	<72.7	50	50	55.0	50.2	110	100	70-136	9	20	
trans-1,3-Dichloropropene	ug/L	<291	50	50	48.5	49.4	97	99	67-130	2	20	
Trichloroethene	ug/L	<20.0	50	50	52.5	52.3	105	105	70-131	0	20	
Trichlorofluoromethane	ug/L	<20.0	50	50	53.9	47.7	108	95	66-150	12	20	
Vinyl chloride	ug/L	<20.0	50	50	48.6	44.1	97	88	46-134	10	20	
Xylene (Total)	ug/L	1150	150	150	2220	1970	712	547	70-134	12	20	ES,MS
4-Bromofluorobenzene (S)	%						103	101	70-130			
Dibromofluoromethane (S)	%						101	100	70-130			
Toluene-d8 (S)	%						99	100	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

QC Batch: 297235 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40173933002, 40173933003

METHOD BLANK: 1735827 Matrix: Water
Associated Lab Samples: 40173933002, 40173933003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	08/15/18 08:48	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	08/15/18 08:48	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	08/15/18 08:48	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	08/15/18 08:48	
1,1-Dichloroethane	ug/L	<0.27	1.0	08/15/18 08:48	
1,1-Dichloroethene	ug/L	<0.24	1.0	08/15/18 08:48	
1,1-Dichloropropene	ug/L	<0.54	1.8	08/15/18 08:48	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	08/15/18 08:48	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	08/15/18 08:48	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	08/15/18 08:48	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	08/15/18 08:48	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	08/15/18 08:48	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	08/15/18 08:48	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	08/15/18 08:48	
1,2-Dichloroethane	ug/L	<0.28	1.0	08/15/18 08:48	
1,2-Dichloropropane	ug/L	<0.28	1.0	08/15/18 08:48	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	08/15/18 08:48	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	08/15/18 08:48	
1,3-Dichloropropane	ug/L	<0.83	2.8	08/15/18 08:48	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	08/15/18 08:48	
2,2-Dichloropropane	ug/L	<2.3	7.6	08/15/18 08:48	
2-Chlorotoluene	ug/L	<0.93	5.0	08/15/18 08:48	
4-Chlorotoluene	ug/L	<0.76	2.5	08/15/18 08:48	
Benzene	ug/L	<0.25	1.0	08/15/18 08:48	
Bromobenzene	ug/L	<0.24	1.0	08/15/18 08:48	
Bromochloromethane	ug/L	<0.36	5.0	08/15/18 08:48	
Bromodichloromethane	ug/L	<0.36	1.2	08/15/18 08:48	
Bromoform	ug/L	<4.0	13.2	08/15/18 08:48	
Bromomethane	ug/L	<0.97	5.0	08/15/18 08:48	
Carbon tetrachloride	ug/L	<0.17	1.0	08/15/18 08:48	
Chlorobenzene	ug/L	<0.71	2.4	08/15/18 08:48	
Chloroethane	ug/L	<1.3	5.0	08/15/18 08:48	
Chloroform	ug/L	<1.3	5.0	08/15/18 08:48	
Chloromethane	ug/L	<2.2	7.3	08/15/18 08:48	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	08/15/18 08:48	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	08/15/18 08:48	
Dibromochloromethane	ug/L	<2.6	8.7	08/15/18 08:48	
Dibromomethane	ug/L	<0.94	3.1	08/15/18 08:48	
Dichlorodifluoromethane	ug/L	<0.50	5.0	08/15/18 08:48	
Diisopropyl ether	ug/L	<1.9	6.3	08/15/18 08:48	
Ethylbenzene	ug/L	<0.22	1.0	08/15/18 08:48	

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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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

METHOD BLANK: 1735827 Matrix: Water
Associated Lab Samples: 40173933002, 40173933003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	08/15/18 08:48	
Isopropylbenzene (Cumene)	ug/L	<0.39	2.7	08/15/18 08:48	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	08/15/18 08:48	
Methylene Chloride	ug/L	<0.58	5.0	08/15/18 08:48	
n-Butylbenzene	ug/L	<0.71	2.4	08/15/18 08:48	
n-Propylbenzene	ug/L	<0.81	5.0	08/15/18 08:48	
Naphthalene	ug/L	<1.2	5.0	08/15/18 08:48	
p-Isopropyltoluene	ug/L	<0.80	2.7	08/15/18 08:48	
sec-Butylbenzene	ug/L	<0.85	5.0	08/15/18 08:48	
Styrene	ug/L	<0.47	1.6	08/15/18 08:48	
tert-Butylbenzene	ug/L	<0.30	1.0	08/15/18 08:48	
Tetrachloroethene	ug/L	<0.33	1.1	08/15/18 08:48	
Toluene	ug/L	<0.17	5.0	08/15/18 08:48	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	08/15/18 08:48	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	08/15/18 08:48	
Trichloroethene	ug/L	<0.26	1.0	08/15/18 08:48	
Trichlorofluoromethane	ug/L	<0.21	1.0	08/15/18 08:48	
Vinyl chloride	ug/L	<0.17	1.0	08/15/18 08:48	
Xylene (Total)	ug/L	<1.5	3.0	08/15/18 08:48	
4-Bromofluorobenzene (S)	%	92	70-130	08/15/18 08:48	
Dibromofluoromethane (S)	%	98	70-130	08/15/18 08:48	
Toluene-d8 (S)	%	101	70-130	08/15/18 08:48	

LABORATORY CONTROL SAMPLE: 1735828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.0	106	70-133	
1,1,2,2-Tetrachloroethane	ug/L	50	56.7	113	67-130	
1,1,2-Trichloroethane	ug/L	50	58.0	116	70-130	
1,1-Dichloroethane	ug/L	50	50.0	100	70-134	
1,1-Dichloroethene	ug/L	50	50.1	100	75-132	
1,2,4-Trichlorobenzene	ug/L	50	53.9	108	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	57.8	116	60-126	
1,2-Dibromoethane (EDB)	ug/L	50	54.1	108	70-130	
1,2-Dichlorobenzene	ug/L	50	53.8	108	70-130	
1,2-Dichloroethane	ug/L	50	54.5	109	73-134	
1,2-Dichloropropane	ug/L	50	56.4	113	79-128	
1,3-Dichlorobenzene	ug/L	50	52.5	105	70-130	
1,4-Dichlorobenzene	ug/L	50	53.6	107	70-130	
Benzene	ug/L	50	54.4	109	69-137	
Bromodichloromethane	ug/L	50	55.3	111	70-130	
Bromoform	ug/L	50	50.1	100	64-133	
Bromomethane	ug/L	50	32.7	65	29-123	
Carbon tetrachloride	ug/L	50	54.0	108	73-142	

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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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

LABORATORY CONTROL SAMPLE: 1735828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chlorobenzene	ug/L	50	54.0	108	70-130	
Chloroethane	ug/L	50	44.4	89	59-133	
Chloroform	ug/L	50	53.8	108	80-129	
Chloromethane	ug/L	50	35.0	70	27-125	
cis-1,2-Dichloroethene	ug/L	50	53.6	107	70-134	
cis-1,3-Dichloropropene	ug/L	50	57.2	114	70-130	
Dibromochloromethane	ug/L	50	54.4	109	70-130	
Dichlorodifluoromethane	ug/L	50	23.0	46	12-127	
Ethylbenzene	ug/L	50	58.0	116	86-127	
Isopropylbenzene (Cumene)	ug/L	50	58.9	118	70-130	
Methyl-tert-butyl ether	ug/L	50	46.5	93	65-136	
Methylene Chloride	ug/L	50	46.9	94	72-133	
Styrene	ug/L	50	58.1	116	70-130	
Tetrachloroethene	ug/L	50	52.8	106	70-130	
Toluene	ug/L	50	54.9	110	84-124	
trans-1,2-Dichloroethene	ug/L	50	49.7	99	70-133	
trans-1,3-Dichloropropene	ug/L	50	65.3	131	67-130	L1
Trichloroethene	ug/L	50	55.0	110	70-130	
Trichlorofluoromethane	ug/L	50	51.7	103	69-147	
Vinyl chloride	ug/L	50	44.2	88	48-134	
Xylene (Total)	ug/L	150	170	113	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Dibromofluoromethane (S)	%			99	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1735888 1735889

Parameter	Units	40174012004 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	50.8	50.9	102	102	70-136	0	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	54.2	55.5	108	111	67-133	2	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	55.2	54.4	110	109	70-130	1	20	
1,1-Dichloroethane	ug/L	<0.27	50	50	47.9	47.8	96	96	70-139	0	20	
1,1-Dichloroethene	ug/L	<0.24	50	50	48.6	49.0	97	98	72-137	1	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	51.5	52.3	103	104	68-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	53.0	55.4	106	111	60-130	4	21	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	51.3	51.6	103	103	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	51.2	52.1	102	104	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	51.7	51.9	103	104	71-137	0	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	55.7	53.2	111	106	78-130	5	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	50.8	52.2	102	104	70-130	3	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	51.1	52.3	102	105	70-130	2	20	
Benzene	ug/L	<0.25	50	50	52.0	52.7	104	105	66-143	1	20	
Bromodichloromethane	ug/L	<0.36	50	50	52.3	52.2	105	104	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1735888 1735889

Parameter	Units	40174012004 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	47.4	47.3	95	95	64-134	0	20	
Bromomethane	ug/L	<0.97	50	50	33.3	35.7	67	71	29-136	7	25	
Carbon tetrachloride	ug/L	<0.17	50	50	51.0	51.3	102	103	73-142	1	20	
Chlorobenzene	ug/L	<0.71	50	50	51.9	52.8	104	106	70-130	2	20	
Chloroethane	ug/L	<1.3	50	50	42.2	44.3	84	89	58-138	5	20	
Chloroform	ug/L	<1.3	50	50	51.5	52.0	103	104	80-131	1	20	
Chloromethane	ug/L	<2.2	50	50	34.5	36.7	69	73	24-125	6	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	51.8	51.7	104	103	68-137	0	22	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	54.1	53.4	108	107	70-130	1	20	
Dibromochloromethane	ug/L	<2.6	50	50	51.6	51.0	103	102	70-131	1	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	22.4	23.4	45	47	10-127	4	20	
Ethylbenzene	ug/L	<0.22	50	50	55.9	55.4	112	111	81-136	1	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	56.8	57.3	114	115	70-132	1	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	43.9	44.1	88	88	58-142	0	23	
Methylene Chloride	ug/L	<0.58	50	50	45.9	47.5	92	95	69-137	3	20	
Styrene	ug/L	<0.47	50	50	55.6	55.8	111	112	70-130	1	20	
Tetrachloroethene	ug/L	<0.33	50	50	51.0	51.1	102	102	70-132	0	20	
Toluene	ug/L	<0.17	50	50	53.6	54.0	107	108	81-130	1	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	48.8	48.1	98	96	70-136	2	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	62.6	62.3	125	125	67-130	1	20	
Trichloroethene	ug/L	<0.26	50	50	53.2	52.4	106	105	70-131	2	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	49.7	50.1	99	100	66-150	1	20	
Vinyl chloride	ug/L	<0.17	50	50	40.6	43.0	81	86	46-134	6	20	
Xylene (Total)	ug/L	<1.5	150	150	164	165	109	110	70-134	1	20	
4-Bromofluorobenzene (S)	%						99	98	70-130			
Dibromofluoromethane (S)	%						100	96	70-130			
Toluene-d8 (S)	%						101	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: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
ES	The reported result is estimated because one or more of the constituent results are qualified as such.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60568797 KENOSHA IRON & METAL
Pace Project No.: 40173933

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40173933001	**TRIP BLANK**	EPA 8260	297023		
40173933002	**B-5**	EPA 8260	297235		
40173933003	**B-5 DUP**	EPA 8260	297235		
40173933004	**B-9R**	EPA 8260	297023		

Pace Analytical™
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

40073933

Page: 1 of 1

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:	Company Name: City of Kenosha
Milwaukee, WI 53212		Address: 652 52nd St., Kenosha, WI 53140
Email To: Lanette.Altenbach@aecom.com	Purchase Order No.: N/A	Pace Quote Reference: N/A
Phone: 414-577-1363	Project Name: ~~704 75th Street~~ Kenosha Iron + metal	Pace Project Manager: Chris Hyska
Requested Due Date/TAT: Standard	Project Number: ~~60578441~~ 60568797	Pace Profile #: (2430) Kenosha work

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ GA ☐ IL ☐ IN ☐ MI ☐ NC ☐ OH ☐ ☑ WI ☐ OTHER___

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 #	Section D Required Client Information — 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	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED 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	Filtered (Y/N)	Requested Analysis: VOCs 8260	PAH 8270SIM	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D.
1	Trip Blank	001	WT	G	9/4/18	1305	—	—		2				X						X			
2	B-5	002				1310				3				X						X			
3	B-5-Dup	003				1310														X			
4	B-9R	004				1325														X			
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Zach Albert / AECOM	9/10/18	0900	Mary Fannin	9/10/18	1200
Mary Fannin	9/10/18	1410			
Shay Bliss	9/11/18	0945		9/11/18	0945

SAMPLE CONDITIONS: KOI

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Zach Albert

SIGNATURE of SAMPLER: Zach Albert

DATE Signed (MM / DD / YY): 09/09/18

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

Sample Preservation Receipt Form

Client Name: AECOM Project # 40173933

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

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

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001																		2															2.5 / 5 / 10
002																		3															2.5 / 5 / 10
003																		3															2.5 / 5 / 10
004																		3															2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
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014																																	2.5 / 5 / 10
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016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☒No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

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

Sample Condition Upon Receipt Form (SCUR)

Client Name: AECOM

Project #: WO#: 40173933

40173933

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

Tracking #: _____

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

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

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

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

Cooler Temperature Uncorr: Rad /Corr: _____

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

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

Person examining contents:
Date: 8/11/18
Initials: SSL

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 8/11/18	
Pace Trip Blank Lot # (if purchased): N/A		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 8/13/18