LETTER OF TRANSMITTAL

To: **Ms. Nancy Ryan**
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, WI 53212-3128

From: **Stephen Meer, P.E.**
The Sigma Group, Inc.
1300 W. Canal Street
Milwaukee, WI 53233

Please check the type(s) of documents you have enclosed. Submittals will be tracked and filed based on the information you provide. **Include the FID *and* BRRTS numbers which have been assigned to this site, and identify the intent of the document(s) you are submitting in order to speed processing.** Please attach any required fees to this checklist.

Date: February 13, 2017
Site Name: Former Western Metals
Address: 1215 N. 62nd St.
Wauwatosa, WI
FID# 241033540
BRRTS # 02-41-532149, 02-41-539928 & 06-41-559856

IS THIS RELEASE PECFA-ELIGIBLE?
☐ YES ☐ NO ☑ UNKNOWN AT THIS TIME

Type of Submittal:
☐ LUST ☑ ERP ☑ VPLE ☐ OTHER

CHECK	Agreements	FEE
	Tax assignment agreement - ss.75.106(2)(d) & 292.55	$700
	Tax cancellation agreement - ss. 75.106(2)(d) & 292.55	$700
	Negotiated agreements - s. 292.11(7)(d)2	$1,400
	Technical Assistance (s. 292.55)	**FEE**
	NR 708 No Further Action Letter	$350
	NR 716 No Further Investigation	$700
	NR 716 Site Investigation Workplan	$700
	NR 716 Site Investigation Report	$1,050
	NR 720 Soil Cleanup Standards/Reports	$1,050
	NR 722 Remedial Action Options Report	$1,050
	NR 724 Remedial Design Report	$1,050
	NR 724 Operation and Maintenance Report	$425
	NR 724 Construction Documentation Reports	$350
	NR 724 Long-Term Monitoring Plan	$425
	NR 726 Case Closure Action	$1,050
	NR 506 Exemption for building on a historic waste site	$700
	Other Technical Assistance	$700
	Liability Clarification Letters	**FEE**
	s. 292.13(3) Off-Site Exemption Letters	$700
	s. 292.55 Lease Letters - Single Properties	$700
	s. 292.55 Lease Letters - Multiple Properties	$1,400
	s. 292.55 General Liability Clarification Letters	$700
	s. 292.21(1)(c)1.d. Lender Assessments	$700
	Department Database Fees (ss. 292.12 and 292	**FEE**
	Sites with groundwater contamination that attains or exceeds ch. NR 140	$350
	Sites with soil contamination that attains or exceeds ch. 720 RCLs	$300
	Sites not otherwise addressed in this schedule, where the department imposes any other limitation or condition in accordance with s. 292.12(2)	$350
	Cases submitted for closure with monitoring wells not properly abandoned, without residual groundwater contamination	$350
	Modification or removal of a site or property from the database	$1,050
	Other / Miscellaneous	
x	Site update	

Remarks: _____

THE SIGMA GROUP
Single Source. Sound Solutions.

February 13, 2017 Project Reference #14823

Ms. Nancy Ryan
Wisconsin Department of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee, WI 53212

RE: Remedial Action/Site Update
Former Western Metals
1215 N. 62nd Street, Wauwatosa, WI
FID: 241033540
BRRTS: 02-41-532149, 02-41-539928, & 06-41-559856

Dear Ms. Ryan:

The Sigma Group, Inc. (Sigma), on behalf of WP Property Acquisitions, LLC (responsible party), has prepared this letter report to provide an update on remedial and other activities associated with redevelopment completed at the above-referenced site (**Figure 1**). The remedial actions presented below were conducted in a manner generally consistent with Sigma's *Supplemental Site Investigation Report (SSIR) and Remedial Action Plan (RAP)* dated April 2014 (*SSIR/RAP*) and subsequent *Addenda* dated May through June 2014. Sigma previously provided an update report titled *Partial Remedial Action Completion Summary – Contaminated Soil* Remediation dated January 2016 and an additional site update submitted electronically on June 2, 2016.

Additional activities completed at the site since submittal of Sigma's previous updates include additional testing of the sub-slab depressurization systems (SSDS) installed as part of construction of site buildings, collection of additional groundwater samples from the site groundwater monitoring well network and completion of additional capping activities at the site as part of ongoing redevelopment.

Sub-Slab Depressurization System Evaluations
Sigma has completed testing to verify the SSDS systems are effectively mitigating potential vapor intrusion risks associated with sub-slab soil and groundwater impacts. Testing results previously submitted to WDNR were generally collected prior to building occupancy. Sample collection associated with the SSDS systems has included the collection of indoor air samples from distinct first floor units within the 18 unit (two-story) buildings A, B, C and D and collection of an indoor air sample from the club house building. Indoor air samples have not yet been collected from Buildings E and G (eastern and western most multi-level residential buildings) as there is still some concrete joint sealing that remains to be completed by the contractor responsible for that scope of work. Buildings E and G have indoor parking levels occupying the first floor. Indoor air samples will be collected from these buildings following completion of the concrete sealing work within each building.

Sigma recently collected a second round of indoor air samples from distinct first floor units within the 18 unit (two-story) buildings A, B, C and D in November 2016 during

conservative conditions (late fall/winter, indoors 10°F > outdoors, heating system on, doors and windows closed, etc.). The indoor air samples were collected over a 6-day sampling period (November 17 through 23, 2016) using radiello passive samplers submitted for modified EPA TO-17 analysis. A table summarizing results of indoor air sampling completed to date is attached as **Table 1**. Based on sampling results, the SSDS are operating effectively. Sigma is tentatively planning on collecting one more round of indoor samples to confirm results of indoor air sampling completed to date.

In addition to the indoor air samples, Sigma has also completed pressure field extension (PFE) measurements within the 18 unit (two story) buildings A, B, C and D. PFE measurements are completed via monitoring points installed that allow measurements of pressure within the sub-slab venting layer relative to the indoor air. A table summarizing PFE measurements collected to date is included at **Table 2**. PFE measurements demonstrate that the SSDS are creating adequate negative pressure beneath the floor slabs of the evaluated buildings.

Additional Groundwater Monitoring

Two additional rounds of groundwater sampling have been completed at the site since the update submitted electronically in June 2016. Groundwater samples were collected from select site groundwater monitoring wells in August 2016. An additional round of groundwater sampling, including both on-site groundwater monitoring and SVE wells as well as select off-site wells, was completed in December 2016. Well locations are illustrated on the attached **Figure 2**. Groundwater analytical data are summarized in **Table 3**.

Review of the recent groundwater analytical data collected from the sampled site groundwater monitoring wells and piezometers indicate the following general trends:

- Wells and piezometers located closest to the locations where remedial activities have been completed at the site to date generally indicate stable or decreased contaminant concentrations relative to pre-remedial levels.

- Wells and piezometers located further away from the site or where remedial activities have been completed at the site to date generally have not exhibited a trend relative to the site remediation activities completed to date.

The general observations associated with the distance between wells/piezometers and the remediation activities completed to date at the site compared with trends in contaminants within the sampled wells is consistent with the conceptual site model developed during site investigation and remedial action planning. Groundwater monitoring activities will continue during operation of the soil vapor extraction (SVE) system described below.

Soil Vapor Extraction (SVE) System Update

All proposed wells associated with the soil vapor extraction system have been installed to date. The majority of the SVE wells have been connected to 4-inch diameter sch. 40 PVC header pipes that connect the wells and run below existing grade to the proposed locations for the SVE system blower equipment. The wells installed within the portion of the site that extends to the south have not yet been connected to the header pipes as storm sewer

utilities have not yet been installed within that portion of the site to date. Connection of the remaining wells to the header pipes is anticipated to be completed in the near future.

The buildings designed to house the SVE blower equipment have been constructed and electric power to each building has been connected. The SVE equipment has been delivered to the site and Sigma is coordinating completion of the equipment installation and preparation for operation of the system. It is anticipated that the system will begin operation in the near future.

Engineered Barrier Construction

Engineered barriers (concrete building slab, concrete or asphalt pavement, and clean soil cap) have been installed over the majority of the site in general accordance with the WDNR-approved capping plan for the site. The only portion of the site that has not been capped to date is the portion of the site that extends to the south near the site center along the southern site boundary. This portion of the site is designed to be finished as a "dog park" with a paved path and landscaped green space areas.

As discussed in a separate submittal, excess material imported to the subject property from the 1425 W. Layton Ave. property for use as a component of the cap has been stockpiled in this portion of the site. WDNR has recently approved placement of the excess material imported from the 1425 W. Layton Ave. site at the former Lakefield Sand and Gravel site. Once the excess material currently stockpiled in the "dog park" area of the site is removed in accordance with WDNR approvals, it is Sigma's understanding that the remaining utility/grading/capping work within the "dog park" portion of the site will be completed.

Additional documentation of on-going remediation (and site redevelopment) work at the site will be submitted in the near future.

If you have any questions regarding this submittal or require any additional information, please contact us at 414-643-4200.

Sincerely,

THE SIGMA GROUP, INC.

Stephen Meer, P.E.
Senior Engineer

Randy Boness, P.G.
Geosciences Group Manager

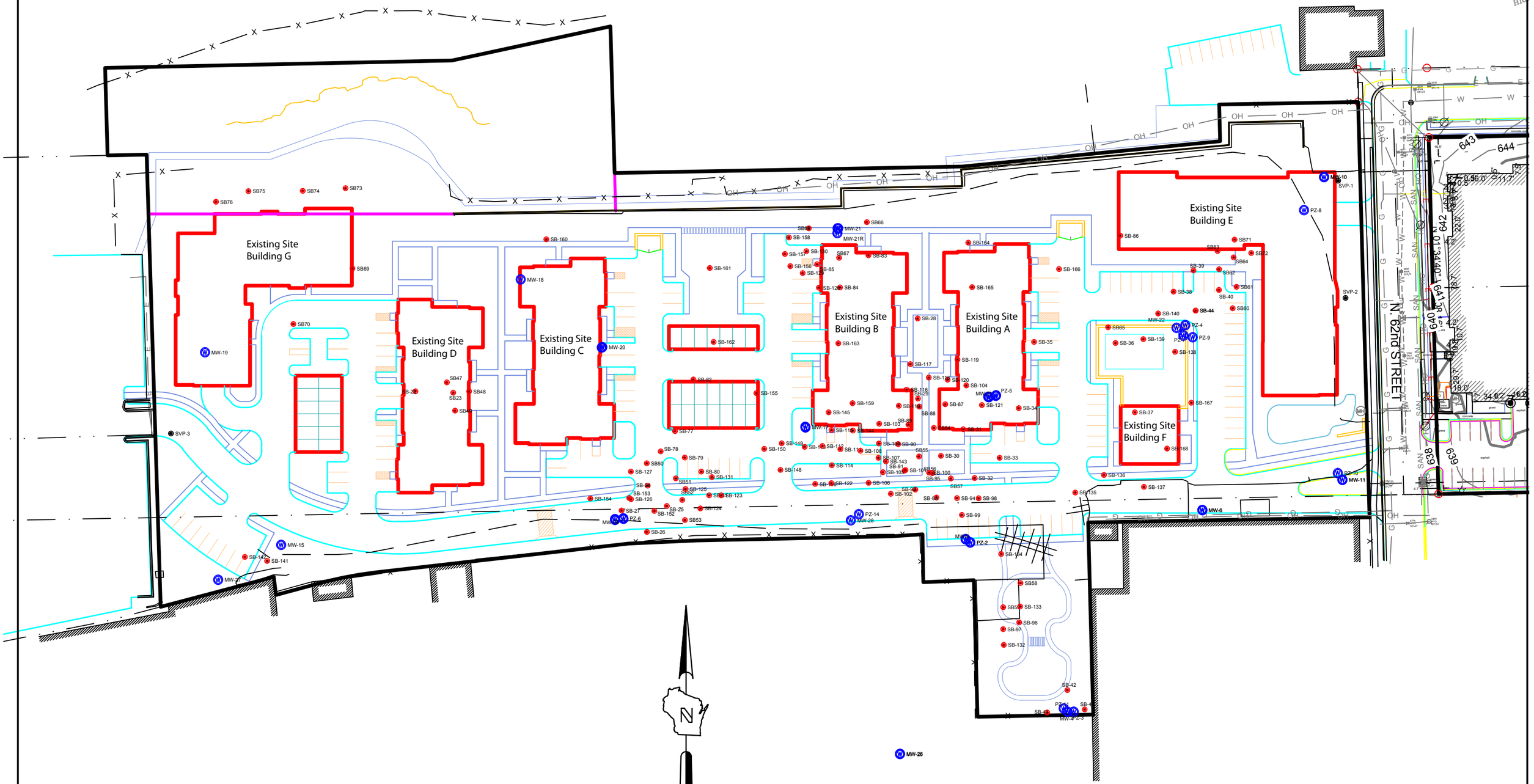
Attachments

cc: Mr. Wayne Wiertzma – WP Property Acquisitions, LLC

FIGURES

Figure 1: Site Plan Map

Figure 2: Well Location Map



Former Western Metals 1215 N. 62nd Street Wauwatosa, WI		THE SIGMA GROUP Single Source. Sound Solutions. www.thesigmagroup.com 1300 West Canal Street Milwaukee, WI 53233 Phone: 414-643-4200 Fax: 414-643-4210
2–13–2014	DRW: KAS	SCALE: 1" = 80'
Figure 1		SITE PLAN MAP

Scale
1 inch = 60 feet

60 feet

Wangard Wauwatosa

03-27-2014	DRW: PEH	

Site Overview - Subsurface Investigation Map

Figure 2

THE SIGMA GROUP
Single Source. Sound Solutions.
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1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

TABLES

Table 1: Indoor Air Sampling Results

Table 2: PFE Measurements

Table 3: Groundwater Analytical Data

Table 1
Indoor Air Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. #14823

Sample Type:		Ambient Air Samples											
Site Building:		Building A	Building A	Building A	Building A	Clubhouse	Outdoor	Building B	Building B	Building B	Building B	Building B	VAL for Residential Indoor Air [2]
Sample Identification:		1st Floor East	1st Floor West	Unit 108-unocc.	Unit 107-unocc.	Clubhouse	Ambient	1st Floor Northwest	1st Floor Northwest	1st Floor Southeast	Unit 103 - occupied	Unit 108 - occupied	
Date:		12/10/15 to 12/17/15	12/10/15 to 12/17/15	11/17/16 to 11/23/16	11/17/16 to 11/23/16	12/10/15 to 12/17/15	12/10/15 to 12/17/15	2/29/16 to 3/1/16	2/29/16 to 3/7/2016	2/29/16 to 3/7/16	11/17/16 to 11/23/16	11/17/16 to 11/23/16	
Duration:		7 days	7 days	6 days	6 days	7 days	7 days	24 hours	7 days	7 days	6 days	6 days	
BETX & Contaminants of Concern (Radiellio passive samplers by modified EPA Method TO-17)													
Benzene	µg/m^3	0.88	1.0	NA	NA	1.1	0.72	NA	NA	NA	NA	NA	3.6
Ethylbenzene	µg/m^3	0.4	0.96	NA	NA	0.56	<0.16	NA	NA	NA	NA	NA	11
Toluene	µg/m^3	3.2	19	NA	NA	16	1.9	NA	NA	NA	NA	NA	5,200
Xylenes	µg/m^3	1.55	3.5	NA	NA	1.23	0.36	NA	NA	NA	NA	NA	100
Carbon Tetrachloride	µg/m^3	0.46	0.38	NA	NA	0.38	0.34	NA	NA	NA	NA	NA	4.7
1,1-Dichloroethane	µg/m^3	<0.18	<0.18	<0.19	<0.19	<0.18	<0.18	<0.61	<0.16	<0.16	<0.19	<0.19	18
1,2-Dichloroethane	µg/m^3	<0.14	<0.14	NA	NA	<0.14	<0.14	NA	NA	NA	NA	NA	1
1,1-Dichloroethene	µg/m^3	<0.59	<0.59	<0.64	<0.64	<0.59	<0.59	<0.076	<0.54	<0.54	<0.64	<0.64	210
cis-1,2-Dichloroethene	µg/m^3	<0.18	<0.18	<0.39	<0.39	<0.18	<0.18	<0.061	<0.33	<0.33	<0.39	<0.39	NS
trans-1,2-Dichloroethene	µg/m^3	6.5	37	13	15	<0.37	<0.37	23.5	28	70	13	18	NS
Naphthalene	µg/m^3	<0.45	<0.45	NA	NA	<0.45	<0.44	NA	NA	NA	NA	NA	0.83
Tetrachloroethene (PCE)	µg/m^3	<0.19	<0.19	<0.20	<0.20	<0.19	<0.19	<0.51	<0.18	<0.18	10	<0.20	42
1,1,1-Trichloroethane	µg/m^3	<0.18	<0.18	NA	NA	<0.18	<0.18	<0.83	<0.17	<0.17	NA	NA	5,200
Trichloroethene (TCE)	µg/m^3	<0.16	<0.16	<0.18	<0.18	<0.16	<0.16	<0.41	<0.15	<0.15	<0.18	<0.18	2.1
Vinyl Chloride	µg/m^3	<0.50	<0.50	<0.54	<0.54	<0.50	<0.50	<0.040	<0.46	<0.46	<0.54	<0.54	1.7

Notes:

1. Analytical units: µg/m^3 = micrograms per cubic meter

2. VAL for Residential Indoor Air = Vapor Action Level described in WDNR publication PUB-RR-800 "Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin" (dated December 2010) which in turn references EPA Region 3 Risk-Based Concentrations for **residential** air (Regional Screening Level Master Table - November 2012 [http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm]) and May 2012 "Indoor Air Vapor Action Levels for Various VOCs Quick Look-Up Table". VAL adjusted to 1-in-100,000 increase in lifetime cancer risk for carcinogens per WDNR publication PUB-RR-800; VAL is not adjusted for non-carcinogens (i.e., harzard index = 1).

6. NA = not analyzed

7. Laboratory flags: Enter flags as necessary

8. Exceedances: **BOLD** = concentration exceeds Vapor Action Level

Table 1
Indoor Air Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. #14823

Sample Type:		Ambient Air Samples								
Site Building:		Building C	Building C	Building C	Building C	Building D	Building D	Building D	Building D	VAL for Residential Indoor Air [2]
Sample Identification:		1st Floor Southeast	1st Floor Southwest	Unit 103 - occupied	Unit 110 - unoccupied	1st Floor South Central	1st Floor Northeast	Unit 107 - unoccupied	Unit 103 - occupied	
Date:		4/18/16 to 4/25/16	4/18/16 to 4/25/16	11/17/16 to 11/23/16	11/17/16 to 11/23/16	6/14/16 to 6/21/16	6/14/16 to 6/21/16	11/17/16 to 11/23/16	11/17/16 to 11/23/16	
Duration:		7 days	7 days	6 days	6 days	7 days	7 days	6 days	6 days	
BETX & Contaminants of Concern (Radiellio passive samplers by modified EPA Method TO-17)										
Benzene	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	3.6
Ethylbenzene	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	11
Toluene	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	5,200
Xylenes	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	100
Carbon Tetrachloride	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	4.7
1,1-Dichloroethane	µg/m^3	<0.16	<0.16	<0.19	<0.19	<0.16	<0.16	<0.19	<0.19	18
1,2-Dichloroethane	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	1
1,1-Dichloroethene	µg/m^3	<0.54	<0.54	<0.64	<0.64	<0.54	<0.54	<0.64	<0.64	210
cis-1,2-Dichloroethene	µg/m^3	<0.33	<0.33	<0.39	<0.39	0.68	0.47	<0.39	<0.39	NS
trans-1,2-Dichloroethene	µg/m^3	60	78	24	15	300	88	21	10	NS
Naphthalene	µg/m^3	NA	NA	NA	NA	NA	NA	NA	NA	0.83
Tetrachloroethene (PCE)	µg/m^3	0.17	<0.17	<0.20	<0.20	0.26	<0.17	<0.20	0.45	42
1,1,1-Trichloroethane	µg/m^3	<0.16	<0.16	<0.18	<0.18	<0.16	<0.17	<0.18	<0.18	5,200
Trichloroethene (TCE)	µg/m^3	0.2	<0.15	NA	NA	<0.15	<0.15	NA	NA	2.1
Vinyl Chloride	µg/m^3	<0.45	<0.45	<0.54	<0.54	<0.45	<0.46	<0.54	<0.54	1.7

Notes:

1. Analytical units: µg/m^3 = micrograms per cubic meter

2. VAL for Residential Indoor Air = Vapor Action Level described in WDNR publication PUB-RR-800 "Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin" (dated December 2010) which in turn references EPA Region 3 Risk-Based Concentrations for **residential** air (Regional Screening Level Master Table - November 2012 [http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm]) and May 2012 "Indoor Air Vapor Action Levels for Various VOCs Quick Look-Up Table". VAL adjusted to 1-in-100,000 increase in lifetime cancer risk for carcinogens per WDNR publication PUB-RR-800; VAL is not adjusted for non-carcinogens (i.e., harzard index = 1).

6. NA = not analyzed
7. Laboratory flags: Enter flags as necessary
8. Exceedances: **BOLD** = concentration exceeds Vapor Action Level

Table 2
Sub-Slab System Measurements
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, Wisconsin
Sigma Project No. 14823

Building A

Date	Manometer #	Manometer Reading (inches water)	Sub-Slab Point #	Sub-Slab Pressure (inches water)	Observations
12/17/15			NE garage	-0.230	
12/17/15			mech. Room	-0.195	
11/17/16			NE garage	-0.205	
11/17/16			mech. Room	-0.175	

Building B

Date	Manometer #	Manometer Reading (inches water)	Sub-Slab Point #	Sub-Slab Pressure (inches water)	Observations
3/7/16			NW garage	-0.426	
3/7/16			mech. Room	-0.308	
11/17/16			NW garage	-0.153	
11/17/16			mech. Room	-0.270	

Building C

Date	Manometer #	Manometer Reading (inches water)	Sub-Slab Point #	Sub-Slab Pressure (inches water)	Observations
4/25/16			NE garage	-0.458	
4/25/16			mech. Room	-0.459	
11/17/16			NE garage	-0.433	
11/17/16			mech. Room	-0.442	

Building D

Date	Manometer #	Manometer Reading (inches water)	Sub-Slab Point #	Sub-Slab Pressure (inches water)	Observations
6/21/16			NW garage	-0.076	
6/21/16			mech. Room	-0.084	
11/17/16			NW garage	-0.063	
11/17/16			mech. Room	-0.072	

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-4														MW-5												NR 140 ES	NR 140 PAL
Date:		12/9/04	2/9/06	4/18/06	6/19/08	12/8/10	4/15/11	9/23/11	7/1/13	10/7/13	10/29/13	3/11/14	12/14/15	8/31/16	12/14/16	12/9/04	2/9/06	4/18/06	6/19/08	12/8/10	4/15/11	9/23/11	7/1/13	10/7/13	10/29/13	7/8/14	12/14/15	8/31/16	12/14/16		
Water Elevation* (feet MSL):									628.77														629.12								
PVOCs & Detected VOCs																															
Benzene	µg/L	<0.27	<0.27	<0.2	<4.1	DNA	DNA	<4.1	<2.4	<2.4	<2.4	<2.4	<1.0	<4.4	<1.5	0.35	<27	<0.40	<1.0	DNA	DNA	<2.0	<1.2	<2.4	<2.4	NA	<1.0	<2.2	<1.5	5	0.5
Ethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<5.4	<5.5	<5.5	<5.5	<5.5	<1.0	<7.1	<2.0	DNA	DNA	DNA	DNA	DNA	DNA	<2.7	<2.75	<5.5	<5.5	NA	<1.0	<3.55	<2.0	700	140
Methyl-tert-butyl-ether	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<6.1	<2.3	<2.3	<2.3	<2.3	<1.0	<11	<0.58	DNA	DNA	DNA	DNA	DNA	DNA	<3.0	<1.15	<2.3	<2.3	NA	<1.0	<5.5	<0.58	60	12
Toluene	µg/L	0.36	<0.29	<0.2	<6.7	DNA	DNA	<6.7	<6.9	<6.9	<6.9	<6.9	<1.0	<4.4	<1.8	1.2	<29	<0.40	<1.7	DNA	DNA	<3.4	<3.45	<6.9	<6.9	NA	<1.0	<2.2	<1.8	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<9.7	<22	<22	<22	<22	<1.0	<16	<1.1	DNA	DNA	DNA	DNA	DNA	DNA	<4.8	<11	<22	<22	NA	<1.0	<8	<1.9	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<8.3	<14	<14	<14	<14	<1.0	<15	<1.4	DNA	DNA	DNA	DNA	DNA	DNA	<4.2	<7	<14	<14	NA	<1.0	<7.5	<1.4	NS	NS
Total Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<18	<37	<36	<36	<36	<2.0	<31	<2.5	DNA	DNA	DNA	DNA	DNA	DNA	<9	<18	<36	<36	NA	<2.0	<15.5	<3.3	480	96
Xylenes, Total	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<26.3	<13.4	<13.2	<13.2	<13.2	<3.0	<31	<6.6	DNA	DNA	DNA	DNA	DNA	DNA	<13.2	<6.6	<13.2	<13.2	NA	<3.0	<15.5	<6.6	2,000	400
Chloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<9.7	<6.3	<6.3	<6.3	<6.3	<1.0	<6.5	<1.5	DNA	DNA	DNA	DNA	DNA	DNA	<4.8	<3.15	<6.3	<6.3	NA	<1.0	<3.25	<1.5	400	80
Chloroform	µg/L	<0.20	<0.240	<0.20	<3.7	DNA	DNA	<13.0	<2.8	<2.8	<2.8	<2.8	<1.0	<4.3	<1.3	0.27	<24	<0.40	<0.92	DNA	DNA	<6.5	<1.4	<2.8	<2.8	NA	<1.0	<2.15	<1.3	6	0.6
Chloromethane	µg/L	<0.20	<0.490	<0.20	<2.4	DNA	DNA	<2.4	<8.1	<8.1	<8.1	<8.1	<1.0	<19	<0.86	<0.2	<49	<0.40	<0.60	DNA	DNA	<1.2	<4.05	<8.1	<8.1	NA	<1.0	<9.5	<0.86	30	3
1,2-Dichloroethane	µg/L	< 0.50	< 0.350	< 0.50	< 3.6	< 7.2	< 3.6	< 3.6	< 4.1	< 4.1	< 4.1	<4.1	<1.0	<4.8	<0.83	*0.89*	< 35	< 1.0	< 0.90	< 7.2	< 0.90	< 1.8	< 2.05	< 4.1	<8.2	NA	<1.0	<2.4	<0.83	5	0.5
1,1-Dichloroethane	µg/L	2.6	4.68	4.8	< 7.5	< 15	< 7.5	< 7.5	< 3	< 3	< 3	<3	7.3	<11	<1.5	83	81	59	3.9	< 15	7.7	16.8	< 1.5	14.2	12.2	NA	3.9	6.2 J	5.2	850	85
1,1-Dichloroethene	µg/L	0.59	*1.45*	*1.0 J*	< 5.7	< 11.4	< 5.7	< 5.7	< 4	< 4	< 4	<4	*2.1*	<6.5	<1.4	**13**	< 34	*4.1*	< 1.4	< 11.4	< 1.4	< 2.8	*5.4*	<4	<4	NA	<1.0	<3.25	<1.4	7	0.7
cis-1,2-Dichloroethene	µg/L	*47*	**171**	**210**	**1,150**	**754**	**803**	**923**	**192**	**360**	**380**	**264**	**360**	**500**	*35*	**1,800**	**1,030**	**1,000**	**100**	**1,050**	**177**	**932**	*33*	**850**	**840**	NA	**110**	**1000**	**860**	70	7
trans-1,2-Dichloroethene	µg/L	3.9	12	15	*54.3*	*62.8*	*62.8*	*51.6*	14.1	*30.2*	*36*	*27.9*	*56*	*64*	1.4	*38*	< 25	*28*	2.5	18.1	4.5	18.5	< 1.75	15	14.6	NA	2.6	6.0 J	7.2	100	20
Naphthalene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<8.9	<17	<17	<17	<17	<5.0	<16	<0.88	DNA	DNA	DNA	DNA	DNA	DNA	<4.4	<8.5	<17	<17	NA	<5.0	<8	<0.88	100	10
Tetrachloroethene	µg/L	< 0.50	< 0.310	< 0.50	< 4.5	< 9	< 4.5	< 4.5	< 3.3	< 3.3	<3.3	<3.3	<1.0	<4.9	<1.4	*1.4*	< 31	**11**	**20.6**	**22**	**13.4**	**24**	**13.6**	**22.3**	**18.9**	NA	**16**	<2.45	**12**	5	0.5
1,1,1-Trichloroethane	µg/L	36	*40*	34	18.2	30.7	23.1	15.8	12.5	19.9	18.3	17.8	25	20.1 J	*46*	5.4	< 31	12	*42*	*55.7*	26.6	*60.1*	25.2	*54*	*53*	NA	11	11.1 J	14	200	40
1,1,2-Trichloroethane	µg/L	<0.50	<0.50	<0.25	<4.2	DNA	DNA	<4.2	<3.4	<3.4	<3.4	<3.4	<1.0	<4.8	<2.0	<0.50	<0.50	*0.72 J*	<1.0	DNA	DNA	<2.1	<1.7	<3.4	<3.4	NA	<1.0	<2.4	<2.0	5	0.5
Trichloroethene (TCE)	µg/L	**110**	**157**	**170**	**1,010**	**1,060**	**1,030**	**1,070**	**680**	**850**	**800**	**850**	**1200**	**1020**	**1,300**	**21,000**	**21,400**	**9,000**	**721**	**1,540**	**590**	**1,460**	**370**	**1050**	**900**	NA	**260**	**17.8**	**370**	5	0.5
Vinyl Chloride	µg/L	**5.6**	**8.94**	**5.8**	**47.8**	**22.3**	**22.9**	**43.7**	**22**	**16.4**	**11.7**	**11.1**	**7.1**	**11.4**	<1.0	**42**	**53**	**100**	< 0.45	< 0.36	< 0.45	**42.2**	**1.15**	**18.1**	**17.7**	NA	<1.0	**18.4**	**19**	0.2	0.02
PAHs																															
Acenaphthene	µg/L	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Acenaphthylene	µg/L	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Anthracene	µg/L	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	3,000	600
Benzo(a)anthracene	µg/L	N.A.	N.A.	N.A.	0.0064 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0037	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Benzo(a)pyrene	µg/L	N.A.	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	0.2	0.02
Benzo(b)fluoranthene	µg/L	N.A.	N.A.	N.A.	0.0062 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0055	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	0.2	0.02
Benzo(ghi)perylene	µg/L	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Benzo(k)fluoranthene	µg/L	N.A.	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Chrysene	µg/L	N.A.	N.A.	N.A.	0.0079 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0074	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	N.A.	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Fluoranthene	µg/L	N.A.	N.A.	N.A.	0.025 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0083 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	400	80
Fluorene	µg/L	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	400	80
Indeno(1,2,3-cd)pyrene	µg/L	N.A.	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
1-Methylnaphthalene	µg/L	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
2-Methylnaphthalene	µg/L	N.A.	N.A.	N.A.	<0.011	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.011 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Naphthalene	µg/L	N.A.	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.022 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	100	10
Phenanthrene	µg/L	N.A.	N.A.	N.A.	0.025 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.018 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	NS	NS
Pyrene	µg/L	N.A.	N.A.	N.A.	0.022 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0092 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	250	50
Dissolved Metals																															
Arsenic	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.6	<5.0	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	96.7	82	NA	NA	2000	400
Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.6	<5.0	NA	NA	100	10
Hexavalent Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3	NA	NA	NA	NS	NS

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-6									NR 140 ES	NR 140 PAL
Date:		12/9/04	2/9/06	4/18/06	6/19/08	12/8/10	4/15/11	7/1/13	10/7/13	10/29/13		
Water Elevation* (feet MSL):								629.24				
PVOCs & Detected VOCs												
Benzene	µg/L	0.21	<.270	<0.20	<0.41	DNA	DNA	<0.24	<0.24	<0.24	5	0.5
Ethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<0.55	<0.55	<0.55	700	140
Methyl-tert-butyl-ether	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<0.23	<0.23	<0.23	60	12
Toluene	µg/L	<0.20	<0.290	<0.20	<0.67	DNA	DNA	<0.69	<0.69	<0.69	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<2.2	<2.2	<2.2	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<1.4	<1.4	<1.4	NS	NS
Total Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<3.6	<3.6	<3.6	480	96
Xylenes, Total	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<1.32	<1.32	<1.32	2,000	400
Chloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<0.63	<0.63	<0.63	400	80
Chloroform	µg/L	<0.20	<0.240	<0.20	<0.37	DNA	DNA	<0.28	<0.28	<0.28	6	0.6
Chloromethane	µg/L	<0.20	<0.490	<0.20	<0.24	DNA	DNA	<0.81	<0.81	<0.81	30	3
1,2-Dichloroethane	µg/L	*0.68*	<0.350	< 0.50	< 0.36	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	5	0.5
1,1-Dichloroethane	µg/L	2.1	<0.320	0.54	< 0.75	< 0.75	< 0.75	< 0.3	0.43 J	0.31 J	850	85
1,1-Dichloroethene	µg/L	< 0.50	<0.340	< 0.50	< 0.57	< 0.57	< 0.57	*1.53*	<0.4	<0.4	7	0.7
cis-1,2-Dichloroethene	µg/L	*7.6*	<0.270	< 0.50	< 0.83	< 0.83	< 0.83	< 0.38	< 0.38	< 0.38	70	7
trans-1,2-Dichloroethene	µg/L	< 0.50	<0.250	< 0.50	< 0.89	< 0.89	< 0.89	< 0.35	< 0.35	< 0.35	100	20
Naphthalene	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<1.7	<1.7	<1.7	100	10
Tetrachloroethene	µg/L	< 0.50	<0.310	< 0.50	< 0.45	< 0.45	< 0.45	< 0.33	< 0.33	< 0.33	5	0.5
1,1,1-Trichloroethane	µg/L	< 0.50	<0.310	< 0.50	1.9	6.7	6.1	10.7	13.6	16.1	200	40
1,1,2-Trichloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	<0.34	<0.34	<0.34	5	0.5
Trichloroethene (TCE)	µg/L	*4.8*	<0.340	< 0.20	*0.91 J*	< 0.48	< 0.48	*0.52*	0.46 J	<0.33	5	0.5
Vinyl Chloride	µg/L	**0.41**	**0.2**	< 0.20	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	0.2	0.02
PAHs												
Acenaphthene	µg/L	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Acenaphthylene	µg/L	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Anthracene	µg/L	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	3,000	600
Benzo(a)anthracene	µg/L	N.A.	N.A.	N.A.	<0.0037	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(a)pyrene	µg/L	N.A.	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(b)fluoranthene	µg/L	N.A.	N.A.	N.A.	<0.0055	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(ghi)perylene	µg/L	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(k)fluoranthene	µg/L	N.A.	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Chrysene	µg/L	N.A.	N.A.	N.A.	<0.0074	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	N.A.	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Fluoranthene	µg/L	N.A.	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Fluorene	µg/L	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Indeno(1,2,3-cd)pyrene	µg/L	N.A.	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
1-Methylnaphthalene	µg/L	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
2-Methylnaphthalene	µg/L	N.A.	N.A.	N.A.	<0.011	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Naphthalene	µg/L	N.A.	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	100	10
Phenanthrene	µg/L	N.A.	N.A.	N.A.	<0.0079	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Pyrene	µg/L	N.A.	N.A.	N.A.	<0.0072	N.A.	N.A.	N.A.	N.A.	N.A.	250	50
Dissolved Metals												
Arsenic	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000	400
Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Hexavalent Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD**
   ITALICS
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA

Table 3
Groundwater Analytical Data
Former Western Metals, 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-7/19								MW-8/22											MW-9/20										NR 140 ES	NR 140 PAL
Date:		2/14/06	4/18/06	6/20/08	12/8/10	4/15/11	7/1/13	10/8/13	10/29/13	2/13/06	4/18/06	6/20/08	4/15/11	9/23/11	7/1/13	10/8/13	10/30/13	3/11/14	12/14/15	8/31/16	2/13/06	4/18/06	6/20/08	12/8/10	4/15/11	7/3/13	10/8/13	10/29/13	12/14/15	8/31/16	12/15/16		
Water Elevation* (feet MSL):							631.53								630.21										628.77							
PVOCs & Detected VOCs																																
Benzene	µg/L	<0.270	<0.20	<0.41	DNA	DNA	<0.24	<0.24	DRY	<27	0.21 J	DNA	<20.5	<0.41	<0.24	<0.24	<0.24	<0.24	<1.0	<0.44	<2.700	<0.20	<0.41	DNA	DNA	<0.24	<0.24	<0.24	<1.0	<0.44	<0.92	5	0.5
Ethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<0.55	<0.55	DRY	DNA	DNA	DNA	DNA	<0.54	<0.55	<0.55	<0.55	<0.55	<1.0	<0.71	DNA	DNA	DNA	DNA	DNA	<0.55	<0.55	<0.55	<1.0	<0.71	<0.40	700	140
Methyl-tert-butyl-ether	µg/L	DNA	DNA	DNA	DNA	DNA	<0.23	<0.23	DRY	DNA	DNA	DNA	DNA	<0.61	<0.23	<0.23	<0.23	<0.23	<1.0	<1.1	DNA	DNA	DNA	DNA	DNA	<0.23	<0.23	<0.23	<1.0	<1.1	<0.12	60	12
Toluene	µg/L	<0.290	<0.20	1	DNA	DNA	<0.69	<0.69	DRY	<29	<0.20	DNA	<33.5	<0.67	<0.69	<0.69	<0.69	<0.69	<1.0	<0.44	<2.900	<0.20	<0.67	DNA	DNA	<0.69	<0.69	<0.69	<1.0	<0.44	<0.37	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<2.2	<2.2	DRY	DNA	DNA	DNA	DNA	<0.97	<2.2	<2.2	<2.2	<2.2	<1.0	<1.6	DNA	DNA	DNA	DNA	DNA	<2.2	<2.2	<2.2	<1.0	<1.6	<0.37	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<1.4	<1.4	DRY	DNA	DNA	DNA	DNA	<0.83	<1.4	<1.4	<1.4	<1.4	<1.0	<1.5	DNA	DNA	DNA	DNA	DNA	<1.4	<1.4	<1.4	<1.0	<1.5	<0.29	NS	NS
Total Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<3.6	<3.6	DRY	DNA	DNA	DNA	DNA	<1.8	<3.6	<3.6	<3.6	<3.6	<2.0	<3.1	DNA	DNA	DNA	DNA	DNA	<3.6	<3.6	<3.6	<2.0	<3.1	<0.66	480	96
Xylenes, Total	µg/L	DNA	DNA	DNA	DNA	DNA	<1.32	<1.32	DRY	DNA	DNA	DNA	DNA	<2.63	<1.32	<1.32	<1.32	<1.32	<3.0	<3.1	DNA	DNA	DNA	DNA	DNA	<1.32	<1.32	<1.32	<3.0	<3.1	<1.3	2,000	400
Chloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	<0.63	<0.63	DRY	DNA	DNA	DNA	DNA	<0.97	<0.63	<0.63	<0.63	<0.63	<1.0	<0.65	DNA	DNA	DNA	DNA	DNA	<0.63	<0.63	<0.63	<1.0	<0.65	<0.29	400	80
Chloroform	µg/L	<0.240	<0.20	<0.37	DNA	DNA	<0.28	<0.28	DRY	<24	0.22 J	DNA	<18.5	<1.3	<0.28	<0.28	<0.28	<0.28	<1.0	<0.43	<2.400	<0.20	<0.37	DNA	DNA	<0.28	<0.28	<0.28	<1.0	<0.43	<0.26	6	0.6
Chloromethane	µg/L	<0.490	<0.20	<0.24	DNA	DNA	<0.81	<0.81	DRY	<49	<0.20	DNA	<12.0	<0.24	<0.81	<0.81	<0.81	<0.81	<1.0	<1.9	<4.900	<0.20	<0.24	DNA	DNA	<0.81	<0.81	<0.81	<1.0	<1.9	<0.17	30	3
1,2-Dichloroethane	µg/L	<0.350	< 0.50	< 0.36	< 0.36	< 0.36	< 0.41	< 0.41	DRY	< 35	*1.9*	<18.0	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	< 0.41	<1.0	<0.48	< 3.500	< 0.50	< 0.36	< 0.36	< 0.36	<0.41	<0.41	<0.41	<1.0	<0.48	<0.17	5	0.5
1,1-Dichloroethane	µg/L	<0.320	< 0.50	< 0.75	< 0.75	< 0.75	< 0.3	< 0.3	DRY	**919**	22	*457*	1	1.4	< 0.3	1.2	1.18	1.26	<1.0	<1.1	*395*	*340*	*126.0*	< 0.75	< 0.75	<0.3	<0.3	<0.3	<1.0	<1.1	<0.31	850	85
1,1-Dichloroethene	µg/L	<0.340	< 0.50	< 0.57	< 0.57	< 0.57	< 0.4	< 0.4	DRY	**203**	*6.7*	**236.0**	< 0.57	< 0.57	< 0.4	<0.4	<0.4	<0.4	<1.0	<0.65	*81*	*70*	**73.9**	*1.5*	< 0.57	<0.4	<0.4	<0.4	<1.0	*1.07 J*	<0.28	7	0.7
cis-1,2-Dichloroethene	µg/L	<0.270	< 0.50	< 0.83	< 0.83	< 0.83	< 0.38	< 0.38	DRY	**14,800**	**1,600**	<935	DNA	*21.2*	6.4	*18.5*	*18.3*	*20.5*	*32.0*	*40.0*	*14*	2.0	1.3	< 0.83	< 0.83	<0.38	<0.38	<0.38	<1.0	<0.45	<0.25	70	7
trans-1,2-Dichloroethene	µg/L	<0.250	< 0.50	< 0.89	< 0.89	< 0.89	< 0.35	< 0.35	DRY	**413**	*49*	<9.5	< 0.89	< 0.89	0.9	0.45 J	0.50 J	0.54 J	1.4	1.35 J	< 2.500	< 0.50	< 0.89	< 0.89	< 0.89	<0.35	<0.35	<0.35	<1.0	<0.54	<0.28	100	20
Naphthalene	µg/L	DNA	DNA	DNA	DNA	DNA	<1.7	<1.7	DRY	DNA	DNA	DNA	DNA	<0.89	<1.7	<1.7	<1.7	<1.7	<5.0	<1.6	DNA	DNA	DNA	DNA	DNA	<1.7	<1.7	<1.7	<5.0	<1.6	<0.18	100	10
Tetrachloroethene	µg/L	<0.310	< 0.50	< 0.45	< 0.45	< 0.45	< 0.33	< 0.33	DRY	< 31	< 0.50	<22.5	DNA	*3.3*	**6.9**	**5.3**	**5.2**	*3.6*	*3.7*	*3.7*	0.1	< 0.50	< 0.45	< 0.45	< 0.45	<0.33	<0.33	<0.33	<1.0	<0.49	<0.27	5	0.5
1,1,1-Trichloroethane	µg/L	<0.310	< 0.50	< 0.90	< 0.90	< 0.90	< 0.33	< 0.33	DRY	< 31	5.8	<45.0	1.8	3.1	3.1	3.6	3.4	3.0	2.3	1.65 J	9.5	*45*	28.3	< 0.90	< 0.90	<0.33	<0.33	<0.33	2.5	4.2	<0.36	200	40
1,1,2-Trichloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	<0.34	<0.34	DRY	DNA	DNA	DNA	DNA	<0.42	<0.34	<0.34	<0.34	<0.34	<1.0	<0.48	DNA	DNA	DNA	DNA	DNA	<0.34	<0.34	<0.34	<1.0	<0.48	<0.40	5	0.5
Trichloroethene (TCE)	µg/L	<0.340	< 0.20	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	DRY	**4,190**	**130**	**7,280**	**76.4**	**135**	**176**	**170**	**147**	**132**	<1.0	**119**	< 3.4	*1.9*	< 0.48	< 0.48	< 0.48	<0.33	<0.33	<0.33	<1.0	<0.47	<0.30	5	0.5
Vinyl Chloride	µg/L	**0.2**	< 0.20	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	DRY	**508**	**31**	**29.1**	< 0.18	< 0.18	< 0.18	**0.25 J**	**0.30 J**	<0.18	<1.0	<0.17	**10.0**	**7.5**	< 0.18	< 0.18	< 0.18	<0.18	<0.18	<0.18	<1.0	<0.17	<0.20	0.2	0.02
PAHs																																
Acenaphthene	µg/L	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Acenaphthylene	µg/L	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Anthracene	µg/L	N.A.	N.A.	0.0069 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.010 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3,000	600
Benzo(a)anthracene	µg/L	N.A.	N.A.	0.0086 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.0071 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.024 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(a)pyrene	µg/L	N.A.	N.A.	0.0058 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.015 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(b)fluoranthene	µg/L	N.A.	N.A.	0.0069 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.0062 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.019 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(ghi)perylene	µg/L	N.A.	N.A.	0.0084 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.0089 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.022 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(k)fluoranthene	µg/L	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.012 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Chrysene	µg/L	N.A.	N.A.	0.020 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.017 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.032 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0070 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Fluoranthene	µg/L	N.A.	N.A.	0.017 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.0098 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.030 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Fluorene	µg/L	N.A.	N.A.	0.014 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.016 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.012 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Indeno(1,2,3-cd)pyrene	µg/L	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0098 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
1-Methylnaphthalene	µg/L	N.A.	N.A.	0.033 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.016 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.021 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
2-Methylnaphthalene	µg/L	N.A.	N.A.	0.061	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.028 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.028 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Naphthalene	µg/L	N.A.	N.A.	0.032 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.020 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.023 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	100	10
Phenanthrene	µg/L	N.A.	N.A.	0.054	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.038 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.046 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Pyrene	µg/L	N.A.	N.A.	0.020 J	N.A.	N.A.	N.A.	N.A.	DRY	N.A.	N.A.	0.015 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.039 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	250	50

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals, 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-10								MW-11												MW-12									NR 140 ES	NR 140 PAL
Date:		2/13/06	4/18/06	6/19/08	12/8/10	4/15/11	7/1/13	10/8/13	10/30/13	2/13/06	4/18/06	6/19/08	12/8/10	4/15/11	9/23/11	7/1/13	10/7/13	10/29/13	12/14/15	8/31/16	2/14/06	4/18/06	6/20/08	12/8/10	4/14/11	7/2/13	10/7/13	10/30/13	12/14/15		
Water Elevation* (feet MSL):																																
PVOCs & Detected VOCs																																
Benzene	µg/L	<0.270	<0.20	<0.41	DNA	DNA	<0.24	<0.24	<0.24	<1.350	<0.20	<0.41	DNA	DNA	<0.41	<0.24	<0.24	<0.24	<1.0	<0.4	<0.270	<0.20	<0.41	DNA	DNA	<0.24	<0.24	<0.24	<1.0	5	0.5
Ethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<0.55	<0.55	<0.55	DNA	DNA	DNA	DNA	DNA	<0.54	<0.55	<0.55	<0.55	<1.0	<0.71	DNA	DNA	DNA	DNA	DNA	<0.55	<0.55	<0.55	<1.0	700	140
Methyl-tert-butyl-ether	µg/L	DNA	DNA	DNA	DNA	DNA	<0.23	<0.23	<0.23	DNA	DNA	DNA	DNA	DNA	<0.61	<0.23	<0.23	<0.23	<1.0	<1.1	DNA	DNA	DNA	DNA	DNA	<0.23	<0.23	<0.23	<1.0	60	12
Toluene	µg/L	<0.290	<0.20	<0.67	DNA	DNA	<0.69	<0.69	<0.69	<1.450	<0.20	<0.67	DNA	DNA	<0.67	<0.69	<0.69	<0.69	<1.0	<0.44	<0.290	<0.20	<0.67	DNA	DNA	<0.69	<0.69	<0.69	<1.0	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<2.2	<2.2	<2.2	DNA	DNA	DNA	DNA	DNA	<0.97	<2.2	<2.2	<2.2	<1.0	<1.6	DNA	DNA	DNA	DNA	DNA	<2.2	<2.2	<2.2	<1.0	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<1.4	<1.4	<1.4	DNA	DNA	DNA	DNA	DNA	<0.83	<1.4	<1.4	<1.4	<1.0	<1.5	DNA	DNA	DNA	DNA	DNA	<1.4	<1.4	<1.4	<1.0	NS	NS
Total Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<3.6	<3.6	<3.6	DNA	DNA	DNA	DNA	DNA	<1.8	<3.6	<3.6	<3.6	<2.0	<3.1	DNA	DNA	DNA	DNA	DNA	<3.6	<3.6	<3.6	<2.0	480	96
Xylenes, Total	µg/L	DNA	DNA	DNA	DNA	DNA	<1.32	<1.32	<1.32	DNA	DNA	DNA	DNA	DNA	<2.63	<1.32	<1.32	<1.32	<3.0	<3.1	DNA	DNA	DNA	DNA	DNA	<1.32	<1.32	<1.32	<3.0	2,000	400
Chloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	<0.63	<0.63	<0.63	DNA	DNA	DNA	DNA	DNA	<0.97	<0.63	<0.63	<0.63	<1.0	<0.65	DNA	DNA	DNA	DNA	DNA	<0.63	<0.63	<0.63	<1.0	400	80
Chloroform	µg/L	<0.240	<0.20	<0.37	DNA	DNA	<0.28	<0.28	<0.28	<1.200	0.40 J	<0.37	DNA	DNA	<1.3	<0.28	0.29 J	0.36 J	<1.0	<0.43	<0.240	<0.20	<0.37	DNA	DNA	<0.28	<0.28	<0.28	<1.0	6	0.6
Chloromethane	µg/L	<0.490	<0.20	<0.24	DNA	DNA	<0.81	<0.81	<0.81	<2.450	<0.20	<0.24	DNA	DNA	<0.24	<0.81	<0.81	<0.81	<1.0	<1.9	<0.490	<0.20	<0.24	DNA	DNA	<0.81	<0.81	<0.81	<1.0	30	3
1,2-Dichloroethane	µg/L	<0.350	<0.50	<0.36	<0.36	<0.36	<0.41	<0.41	<0.41	*1.8*	*3.00*	<0.36	<0.36	<0.36	< 0.36	<0.41	<0.41	<0.41	<1.0	<0.48	<0.350	<0.50	<0.36	<0.36	<0.36	<0.41	<0.41	<0.41	<1.0	5	0.5
1,1-Dichloroethane	µg/L	<0.320	<0.50	<0.75	<0.75	<0.75	<0.3	<0.3	<0.3	18	4.9	<0.75	4.20	<0.75	1.90	<0.3	0.91 J	0.91 J	<1.0	<0.65	<0.320	<0.50	<0.75	<0.75	<0.75	<0.3	<0.3	<0.3	<1.0	850	85
1,1-Dichloroethene	µg/L	0.3	<0.50	<0.57	<0.57	<0.57	<0.4	<0.4	<0.4	<1.700	*0.71*	<0.57	*0.75*	<0.75	<0.57	*1.25*	<0.4	<0.4	<1.0	<0.65	0.34	<0.50	<0.57	<0.57	<0.57	<0.4	<0.4	<0.4	<1.0	7	0.7
cis-1,2-Dichloroethene	µg/L	*11*	<0.50	2.4	<0.83	<0.83	<0.38	<0.38	<0.38	*15*	*17*	<0.83	<0.83	<0.83	<0.83	<0.38	*8.40*	6.00	1.60	<0.45	3.52	<0.50	<0.83	<0.83	<0.83	<0.38	<0.38	<0.38	<1.0	70	7
trans-1,2-Dichloroethene	µg/L	<0.250	<0.50	<0.89	<0.89	<0.89	<0.35	0	0	<1.250	0.70	<0.89	<0.89	<0.89	<0.89	<0.35	0.49 J	0.63 J	<1.0	<0.54	<0.250	<0.50	<0.89	<0.89	<0.89	<0.35	<0.35	<0.35	<1.0	100	20
Naphthalene	µg/L	DNA	DNA	DNA	DNA	DNA	<1.7	<1.7	<1.7	DNA	DNA	DNA	DNA	DNA	<0.89	<1.7	<1.7	<1.7	<5.0	<1.6	DNA	DNA	DNA	DNA	DNA	<1.7	<1.7	<1.7	<5.0	100	10
Tetrachloroethene	µg/L	<0.310	<0.50	<0.45	<0.45	<0.45	<0.33	<0.33	<0.33	<1.550	<0.50	**6.00**	*2.70*	DNA	*3.10*	**9.30**	**8.10**	**8.1**	*3.2*	*3.2*	<0.310	<0.50	<0.45	<0.45	<0.45	<0.33	<0.33	<0.33	<1.0	5	0.5
1,1,1-Trichloroethane	µg/L	<0.310	<0.50	<0.90	<0.90	<0.90	<0.33	<0.33	<0.33	*118*	*66.00*	10.50	*67.90*	14.30	32.00	7.10	26.20	27	7	2.2 J	<0.310	<0.50	<0.90	<0.90	<0.90	<0.33	<0.33	<0.33	<1.0	200	40
1,1,2-Trichloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	<0.34	<0.34	<0.34	DNA	DNA	DNA	DNA	DNA	<0.42	<0.34	<0.34	<0.34	<1.0	<0.48	DNA	DNA	DNA	DNA	DNA	<0.34	<0.34	<0.34	<1.0	5	0.5
Trichloroethene (TCE)	µg/L	<0.340	<0.20	**5.6**	<0.48	<0.48	<0.33	<0.33	<0.33	**30.0**	**23**	**6.00**	**15.90**	**7.30**	**16.70**	*3.70*	**12.80**	**12.30**	*2.60*	*0.75 J*	<0.340	<0.20	<0.48	<0.48	<0.48	<0.33	< .33	<0.33	<1.0	5	0.5
Vinyl Chloride	µg/L	**0.2**	<0.20	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<1.000	**0.43**	<0.18	<0.18	<0.18	<0.18	<0.18	**1.73**	**1.01**	<3.0	<0.17	**0.20**	<0.20	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<1.0	0.2	0.02
PAHs																																
Acenaphthene	µg/L	N.A.	N.A.	<0.0083	N.A.	N.A.	<0.021	N.A.	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Acenaphthylene	µg/L	N.A.	N.A.	0.0068 J	N.A.	N.A.	<0.02	N.A.	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Anthracene	µg/L	N.A.	N.A.	0.027 J	N.A.	N.A.	<0.02	N.A.	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3,000	600
Benzo(a)anthracene	µg/L	N.A.	N.A.	0.19	N.A.	N.A.	<0.025	N.A.	N.A.	N.A.	N.A.	0.018 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.017 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(a)pyrene	µg/L	N.A.	N.A.	**0.22**	N.A.	N.A.	<0.018	N.A.	N.A.	N.A.	N.A.	*0.029*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.012 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(b)fluoranthene	µg/L	N.A.	N.A.	**0.31**	N.A.	N.A.	<0.02	N.A.	N.A.	N.A.	N.A.	*0.031 J*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.014 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(ghi)perylene	µg/L	N.A.	N.A.	0.23	N.A.	N.A.	<0.023	N.A.	N.A.	N.A.	N.A.	0.033 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.012 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(k)fluoranthene	µg/L	N.A.	N.A.	0.22	N.A.	N.A.	<0.027	N.A.	N.A.	N.A.	N.A.	0.021 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.012 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Chrysene	µg/L	N.A.	N.A.	**0.26**	N.A.	N.A.	<0.018	N.A.	N.A.	N.A.	N.A.	*0.024 J*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.018 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	N.A.	N.A.	0.046 J	N.A.	N.A.	<0.023	N.A.	N.A.	N.A.	N.A.	0.0063 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Fluoranthene	µg/L	N.A.	N.A.	0.43	N.A.	N.A.	<0.026	N.A.	N.A.	N.A.	N.A.	0.026 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.028 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Fluorene	µg/L	N.A.	N.A.	<0.0066	N.A.	N.A.	<0.02	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Indeno(1,2,3-cd)pyrene	µg/L	N.A.	N.A.	0.17	N.A.	N.A.	<0.027	N.A.	N.A.	N.A.	N.A.	0.022 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0074 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
1-Methylnaphthalene	µg/L	N.A.	N.A.	<0.010	N.A.	N.A.	<0.019	N.A.	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
2-Methylnaphthalene	µg/L	N.A.	N.A.	<0.011	N.A.	N.A.	<0.016	N.A.	N.A.	N.A.	N.A.	<0.011	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.011	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Naphthalene	µg/L	N.A.	N.A.	<0.017	N.A.	N.A.	<0.023	N.A.	N.A.	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	100	10
Phenanthrene	µg/L	N.A.	N.A.	0.12	N.A.	N.A.	<0.018	N.A.	N.A.	N.A.	N.A.	0.021 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.019 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Pyrene	µg/L	N.A.	N.A.	0.42	N.A.	N.A.	<0.025	N.A.	N.A.	N.A.	N.A.	0.030 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.033 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	250	50

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-13										MW-14/21/21R										MW-15											MW-16	NR 140 ES	NR 140 PAL
Date:		2/14/06	4/18/06	6/19/08	12/8/10	4/15/11	9/23/11	7/2/13	10/7/13	10/30/13	12/14/15	2/13/06	4/18/06	6/20/08	12/8/10	7/2/13	10/8/13	10/29/13	12/14/15	8/31/16	12/15/16	2/14/06	4/18/06	6/20/08	12/8/10	4/15/11	9/23/11	7/2/13	10/7/13	10/29/13	12/14/15	8/31/16	12/15/16	6/20/08		
Water Elevation* (feet MSL):																																			
PVOCs & Detected VOCs																																			
Benzene	µg/L	<0.270	<0.20	<0.41	DNA	DNA	<0.41	<0.24	<0.24	<0.24	<1.0	<0.270	<0.20	<8.2	DNA	<2.4	<2.4	<0.24	<1.0	<0.44	<0.30	<0.270	<0.20	<0.41	DNA	DNA	<0.41	<0.24	<0.24	<0.24	<1.0	<0.44	<0.92	*0.79 J*	5	0.5
Ethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<0.54	<0.55	<0.55	<0.55	<1.0	DNA	DNA	DNA	DNA	<5.5	<5.5	<0.55	<1.0	<0.71	<0.40	DNA	DNA	DNA	DNA	DNA	<0.54	<0.55	<0.55	<0.55	<1.0	<0.71	<0.40	DNA	700	140
Methyl-tert-butyl-ether	µg/L	DNA	DNA	DNA	DNA	DNA	<0.61	<0.23	<0.23	<0.23	<1.0	DNA	DNA	DNA	DNA	<2.3	<2.3	<0.23	<1.0	<1.1	<0.12	DNA	DNA	DNA	DNA	DNA	<0.61	<0.23	<0.23	<0.23	<1.0	<1.1	<0.12	DNA	60	12
Toluene	µg/L	<0.290	<0.20	<0.67	DNA	DNA	<0.67	<0.69	<0.69	<0.69	<1.0	<0.290	<0.20	<13.4	DNA	<6.9	<6.9	<0.69	<1.0	<0.44	<0.37	<0.290	0.36 J	<0.67	DNA	DNA	<0.67	<0.69	<0.69	<0.69	<1.0	<0.44	<0.37	1.8	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<0.97	<2.2	<2.2	<2.2	<1.0	DNA	DNA	DNA	DNA	<22	<22	<2.2	<1.0	<1.6	<0.37	DNA	DNA	DNA	DNA	DNA	<0.97	<2.2	<2.2	<2.2	<1.0	<1.6	<0.37	DNA	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<0.83	<1.4	<1.4	<1.4	<1.0	DNA	DNA	DNA	DNA	<14	<14	<1.4	<1.0	<1.5	<0.29	DNA	DNA	DNA	DNA	DNA	<0.83	<1.4	<1.4	<1.4	<1.0	<1.5	<0.29	DNA	NS	NS
Total Trimethylbenzene	µg/L	DNA	DNA	DNA	DNA	DNA	<1.8	<3.6	<3.6	<3.6	<2.0	DNA	DNA	DNA	DNA	<36	<36	<3.6	<2.0	<3.1	<0.66	DNA	DNA	DNA	DNA	DNA	<1.8	<3.6	<3.6	<3.6	<2.0	<3.1	<0.66	DNA	480	96
Xylenes, Total	µg/L	DNA	DNA	DNA	DNA	DNA	<1.98	<1.32	<1.32	<1.32	<3.0	DNA	DNA	DNA	DNA	<13.2	<13.2	<1.32	<3.0	<3.1	<1.3	DNA	DNA	DNA	DNA	DNA	<2.63	<1.32	<1.32	<1.32	<3.0	<3.1	<1.3	DNA	2,000	400
Chloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	<0.97	<0.63	<0.63	<0.63	<1.0	DNA	DNA	DNA	DNA	<6.3	<6.3	<0.63	<1.0	<0.65	<0.29	DNA	DNA	DNA	DNA	DNA	<0.97	<0.63	<0.63	<0.63	<1.0	<0.65	<0.29	DNA	400	80
Chloroform	µg/L	<0.240	<0.20	<0.37	DNA	DNA	<1.3	<0.28	<0.28	<0.28	<1.0	<0.240	<0.20	<17.4	DNA	<2.8	<2.8	<0.28	<1.0	<0.43	<0.26	<0.240	<0.20	<0.37	DNA	DNA	<1.3	<0.28	<0.28	<0.28	<1.0	<0.43	<0.26	<0.37	6	0.6
Chloromethane	µg/L	<0.490	<0.20	<0.24	DNA	DNA	<0.24	<0.81	<0.81	<0.81	<1.0	<0.490	<0.20	<4.8	DNA	<8.1	<8.1	<0.81	<1.0	<1.9	<0.17	<0.490	<0.20	<0.24	DNA	DNA	<0.24	<0.81	<0.81	<0.81	<1.0	<1.9	<0.17	<0.24	30	3
1,2-Dichloroethane	µg/L	<0.350	< 0.50	< 0.36	< 0.36	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	<1.0	<0.350	< 0.50	< 7.2	< 0.36	< 4.1	< 4.1	<0.41	<1.0	<0.48	<0.17	< 0.350	< 0.50	< 0.36	< 0.36	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	<1.0	<0.48	<0.17	< 0.36	5	0.5
1,1-Dichloroethane	µg/L	<0.320	< 0.50	< 0.75	< 0.75	< 0.75	< 0.75	< 0.3	0.59 J	0.53 J	<1.0	< 0.320	< 0.50	< 15.0	< 0.75	< 3	< 3	<0.30	<1.0	<1.1	<0.31	0.62	< 0.50	< 0.75	0.89	< 0.75	1.1	< 0.3	0.73 J	0.73 J	<1.0	<1.1	<0.31	0.8	850	85
1,1-Dichloroethene	µg/L	0.34	< 0.50	< 0.57	< 0.57	< 0.57	< 0.57	< 0.4	< 0.4	<0.4	<1.0	0.34	< 0.50	< 11.4	< 0.57	< 4	< 4	<0.40	<1.0	<0.65	<0.28	0.34	< 0.50	< 0.57	< 0.57	< 0.57	< 0.57	< 0.4	< 0.4	< 0.4	<1.0	<0.65	<0.28	*0.95*	7	0.7
cis-1,2-Dichloroethene	µg/L	*35*	*16*	*15.4*	*35.9*	DNA	*51.9*	*18.5*	*24.5*	*25*	*41*	2.4	< 0.50	< 16.6	*17.1*	**110**	**84**	**126**	*29*	2.3	<0.25	2.69	0.8	< 0.83	< 0.83	< 0.83	0.93	0.7	0.69 J	0.79 J	<1.0	1.03 J	1.3	< 0.83	70	7
trans-1,2-Dichloroethene	µg/L	4.02	1.3	1.4	3.1	2.3	3.7	2.76	3.5	4.1	4	< 0.250	< 0.50	< 17.8	< 0.89	4.2	<3.5	5.3	1.4	<0.54	<0.28	< 0.250	< 0.50	< 0.89	< 0.89	< 0.89	< 0.89	< 0.35	< 0.35	< 0.35	<1.0	<0.54	<0.28	< 0.89	100	20
Naphthalene	µg/L	DNA	DNA	DNA	DNA	DNA	<0.89	<1.7	<1.7	<1.7	<5.0	DNA	DNA	DNA	DNA	<17	<17	<1.7	<5.0	<1.6	<0.18	DNA	DNA	DNA	DNA	DNA	<0.89	<1.7	<1.7	<1.7	<5.0	<1.6	<0.18	DNA	100	10
Tetrachloroethene	µg/L	<0.310	< 0.50	< 0.45	< 0.45	< 0.45	< 0.45	< 0.33	< 0.33	< 0.33	<1.0	<0.31	*0.73*	< 9.0	*2.1*	< 3.3	< 3.3	*2.22*	*1.5*	*1.61*	*1.3*	<0.310	< 0.50	< 0.45	< 0.45	< 0.45	< 0.45	< 0.33	< 0.33	< 0.33	<1.0	<0.49	<0.27	< 0.45	5	0.5
1,1,1-Trichloroethane	µg/L	<0.310	< 0.50	< 0.90	< 0.90	< 0.90	< 0.90	< 0.33	0.42 J	0.36 J	<1.0	3.25	1.4	< 18.0	< 0.90	< 3.3	< 3.3	0.76 J	<1.0	<0.84	<0.36	0.31	< 0.50	< 0.90	< 0.90	< 0.90	< 0.90	< 0.33	< 0.33	< 0.33	<1.0	<0.84	<0.36	21.8	200	40
1,1,2-Trichloroethane	µg/L	DNA	DNA	DNA	DNA	DNA	<0.42	<0.34	<0.34	<0.34	<1.0	DNA	DNA	DNA	DNA	<3.4	<3.4	<0.34	<1.0	<0.48	<0.40	DNA	DNA	DNA	DNA	DNA	<0.42	<0.34	<0.34	<0.34	<1.0	<0.48	<0.40	DNA	5	0.5
Trichloroethene (TCE)	µg/L	<0.340	*0.55*	*1.9*	*0.55 J*	0.48	*0.53 J*	< 0.33	*0.65 J*	0.45 J	<1.0	**58**	**28**	**32.1**	**128**	**460**	**810**	**660**	**330**	**91**	**64**	**6.8**	**8**	*0.74*	*1*	DNA	*1.1*	*1.66*	*1.58*	*2.33*	*2.5*	*1.82*	*1.7*	< 0.48	5	0.5
Vinyl Chloride	µg/L	**0.2**	< 0.20	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	< 0.18	<0.18	<1.0	< 0.200	< 0.20	< 3.6	< 0.18	< 1.8	< 1.8	<0.18	<1.0	<017	<0.20	**0.94**	< 0.20	**12.5**	< 0.18	< 0.18	**1.5**	**0.76**	**0.59**	**0.69**	<1.0	**0.66**	**1.4**	< 0.18	0.2	0.02
PAHs																																			
Acenaphthene	µg/L	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0099	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0086	NS	NS
Acenaphthylene	µg/L	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0063 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0055	NS	NS
Anthracene	µg/L	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.017 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0072	3,000	600
Benzo(a)anthracene	µg/L	N.A.	N.A.	0.0084 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.038 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0038	NS	NS
Benzo(a)pyrene	µg/L	N.A.	N.A.	0.0062 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	*0.028*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0060	0.2	0.02
Benzo(b)fluoranthene	µg/L	N.A.	N.A.	0.0097 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	*0.037 J*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0057	0.2	0.02
Benzo(ghi)perylene	µg/L	N.A.	N.A.	0.011 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.026 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0069	NS	NS
Benzo(k)fluoranthene	µg/L	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.021 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0086	NS	NS
Chrysene	µg/L	N.A.	N.A.	0.016 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	*0.045 J*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0077	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0064 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0048	NS	NS
Fluoranthene	µg/L	N.A.	N.A.	0.015 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.068	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0060 J	400	80
Fluorene	µg/L	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.020 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.011 J	400	80
Indeno(1,2,3-cd)pyrene	µg/L	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.017 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0040	NS	NS
1-Methylnaphthalene	µg/L	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.023 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.021 J	NS	NS
2-Methylnaphthalene	µg/L	N.A.	N.A.	<0.011	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.033 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.012	NS	NS
Naphthalene	µg/L	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.028 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.018	100	10
Phenanthrene	µg/L	N.A.	N.A.	0.018 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.032 J	NS	NS
Pyrene	µg/L	N.A.	N.A.	0.018 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.074	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0079 J	250	50

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-17											PZ-1		PZ-2												PZ-3										NR 140 ES	NR 140 PAL
Date:		6/20/08	12/8/10	4/15/11	9/23/11	7/2/13	10/8/13	10/29/13	7/8/14	12/14/15	8/31/16	12/15/16	2/13/06	4/18/06	2/9/06	4/18/06	6/19/06	6/19/08	12/8/10	4/15/11	9/23/11	7/1/13	10/7/13	10/29/13	12/14/15	8/31/16	12/14/16	2/9/06	4/18/06	6/19/06	6/19/08	12/8/10	4/15/11	9/23/11	7/1/13	10/7/13	10/29/13	12/14/15	12/14/16		
Water Elevation* (feet MSL):																																							
PVOCs & Detected VOCs																																							
Acetone	µg/L	DNA	DNA	DNA	<0.92	DNA	DNA	DNA	DNA	DNA	DNA	<0.92	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	*5,000*	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<0.92	9,000	1,800
Benzene	µg/L	<0.41	DNA	DNA	<0.30	<1.2	<2.4	<2.4	NA	<1.0	<2.2	<0.30	<1.350	<0.20	<2.700	<0.20	<2.0	DNA	DNA	<0.82	<1.2	<2.4	<2.4	<1.0	<2.2	<1.5	<0.270	<0.20	<0.41	DNA	DNA	DNA	<0.41	<0.24	<0.24	<0.24	<1.0	<0.30	5	0.5
2-Butanone	µg/L	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<0.58	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	**15,000**	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<0.58	4,000	800
Ethylbenzene	µg/L	DNA	DNA	DNA	<1.1	<2.75	<5.5	<5.5	NA	<1.0	<3.55	<0.40	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<1.1	<2.75	<5.5	<5.5	<1.0	<3.55	<2.0	DNA	DNA	DNA	DNA	DNA	DNA	<0.54	<0.55	<0.55	<0.55	<1.0	<0.40	700	140
Methyl-tert-butyl-ether	µg/L	DNA	DNA	DNA	<1.2	<1.15	<2.3	<2.3	NA	<1.0	<5.5	<0.12	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<1.2	<1.15	<2.3	<2.3	<1.0	<5.5	<0.58	DNA	DNA	DNA	DNA	DNA	DNA	<0.61	<0.23	<0.23	<0.23	<1.0	<0.12	60	12
Toluene	µg/L	<0.67	DNA	DNA	<1.3	<3.45	<6.9	<6.9	NA	<1.0	<2.2	<0.37	<1.450	<0.20	<2.000	<0.20	<3.4	DNA	DNA	<1.3	<3.45	<6.9	<6.9	<1.0	<2.2	<1.8	<0.290	<0.20	<0.67	DNA	DNA	DNA	<0.67	<0.69	<0.69	<0.69	<1.0	<0.37	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	DNA	DNA	<1.9	<11	<22	<22	NA	<1.0	<8	<0.37	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<1.9	<11	<22	<22	<1.0	<8	<1.9	DNA	DNA	DNA	DNA	DNA	DNA	<0.97	<2.2	<2.2	<2.2	<1.0	<0.37	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	DNA	DNA	<1.7	<7	<14	<14	NA	<1.0	<7.5	<0.29	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<1.7	<7	<14	<14	<1.0	<7.5	<1.4	DNA	DNA	DNA	DNA	DNA	DNA	<0.83	<1.4	<1.4	<1.4	<1.0	<0.29	NS	NS
Total Trimethylbenzene	µg/L	DNA	DNA	DNA	<3.6	<18	<36	<36	NA	<2.0	<15.5	<0.66	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<3.6	<18	<36	<36	<2.0	<15.5	<3.3	DNA	DNA	DNA	DNA	DNA	DNA	<1.8	<3.6	<3.6	<3.6	<2.0	<0.66	480	96
Xylenes, Total	µg/L	DNA	DNA	DNA	<5.3	<6.60	<13.2	<13.2	NA	<3.0	<15.5	<1.3	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<5.3	<6.6	<13.2	<13.2	<3.0	<15.5	<6.6	DNA	DNA	DNA	DNA	DNA	DNA	<2.63	<1.32	<1.32	<1.32	<3.0	<1.3	2,000	400
Chloroethane	µg/L	DNA	DNA	DNA	<1.9	<3.15	<6.3	<6.3	NA	<1.0	<3.25	<0.29	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<1.9	<3.15	<6.3	<6.3	<1.0	<3.25	<1.5	DNA	DNA	DNA	DNA	DNA	DNA	<0.97	<0.63	<0.63	<0.63	<1.0	<0.29	400	80
Chloroform	µg/L	<0.37	DNA	DNA	<2.6	<1.4	<2.8	<2.8	NA	<1.0	<2.15	<0.26	<1.200	<0.20	<2.400	<0.20	<1.8	DNA	DNA	<2.6	<1.4	<2.8	<2.8	<1.0	<2.19	<1.3	<0.240	<0.20	<0.37	DNA	DNA	DNA	<1.3	<0.28	<0.28	<0.28	<1.0	<0.26	6	0.6
Chloromethane	µg/L	<0.24	DNA	DNA	<0.48	<4.05	<8.1	<8.1	NA	<1.0	<9.5	<0.17	<2.45	<0.20	<4.900	<0.20	<1.2	DNA	DNA	<0.48	<4.05	<8.1	<8.1	<1.0	<9.5	<0.86	<0.490	<0.20	<0.24	DNA	DNA	DNA	<0.24	<0.81	<0.81	<0.81	<1.0	<0.17	30	3
1,2-Dichloroethane	µg/L	< 0.36	< 0.36	< 0.36	< 0.72	< 2.05	<4.1	<4.1	NA	<1.0	<2.4	<0.17	< 1.750	0.92	< 3.500	< 0.50	< 1.8	DNA	< 0.36	< 0.72	< 0.72	< 2.05	<4.1	<4.1	<1.0	<2.4	<0.83	< 0.350	< 0.50	< 0.36	DNA	< 0.36	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	<1.0	<0.17	5	0.5
1,1-Dichloroethane	µg/L	< 0.75	< 0.75	< 0.75	< 1.5	< 1.5	<3	<3	NA	<1.0	<5.5	<0.31	34	15	< 3.2	< 0.50	< 3.8	DNA	< 0.75	< 1.5	< 1.5	< 1.5	<3	<3	<1.0	<5.5	<1.5	0.72	< 0.50	< 0.75	DNA	2.2	1.7	1.3	< 0.3	< 0.3	0.33 J	<1.0	<0.31	850	85
1,1-Dichloroethene	µg/L	< 0.57	< 0.57	< 0.57	< 1.1	*3.15*	<4	<4	NA	<1.0	<3.25	<0.28	*6.95*	*1.9*	0.4	*1.9*	< 2.8	DNA	< 0.57	< 1.1	< 1.1	< 2	<4	<4	<1.0	<3.25	<1.4	0.34	< 0.50	< 0.57	DNA	< 0.57	< 0.57	< 0.57	< 0.4	< 0.4	< 0.4	<1.0	<0.28	7	0.7
cis-1,2-Dichloroethene	µg/L	2.7	*21.9*	DNA	*27.8*	*15.7*	*29.5*	*37*	NA	*8.7*	5.1 J	*7.2*	**376**	**210**	**653**	**620**	**338**	DNA	**187**	**213**	**278**	**230**	**270**	**280**	**280**	**291**	**95**	*9.06*	5	*8.8*	DNA	2.1	DNA	*13.1*	2.16	2.35	3.6	2.2	1.5	70	7
trans-1,2-Dichloroethene	µg/L	< 0.89	3.9	1.4	4.4	< 1.75	<3.5	<3.5	NA	<1.0	<2.7	<0.28	13	4.4	*93*	*65*	*44.6*	DNA	*21.6*	DNA	*35.6*	*33*	*37*	*36*	*48*	*27.8*	14	< 0.250	< 0.50	< 0.89	DNA	< 0.89	< 0.89	< 0.89	< 0.35	< 0.35	< 0.35	<1.0	<0.28	100	20
Naphthalene	µg/L	DNA	DNA	DNA	<1.8	<8.5	<17	<17	NA	<5.0	<8	<0.18	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<1.8	<8.5	<17	<17	<17	<5.0	<8	<0.88	DNA	DNA	DNA	DNA	DNA	DNA	<0.89	<1.7	<1.7	<1.7	<5.0	<0.18	100	10
Tetrachloroethene	µg/L	< 0.45	*2.1*	DNA	*2*	< 1.65	<3.3	<3.3	NA	<1.0	<2.45	<0.27	< 1.550	< 0.50	< 3.100	< 0.50	< 2.2	DNA	< 0.45	< 0.90	< 0.90	< 1.65	<3.3	<3.3	<1.0	<2.45	<1.4	0.31	< 0.50	< 0.45	DNA	< 0.45	< 0.45	< 0.45	< 0.33	< 0.33	< 0.33	<1.0	<0.27	5	0.5
1,1,1-Trichloroethane	µg/L	< 0.90	16.9	15	27.3	13	20	17.4	NA	5.4	<4.2	1.7	**15**	*1.6*	0.1	< 0.50	< 4.5	DNA	< 0.90	< 1.8	< 1.8	< 1.65	<3.3	<3.3	<1.0	<4.2	<1.8	0.31	< 0.50	< 0.90	DNA	< 0.90	< 0.90	< 0.90	< 0.33	< 0.33	< 0.33	<1.0	<0.36	200	40
1,1,2-Trichloroethane	µg/L	DNA	DNA	DNA	<0.84	<1.7	<3.4	<3.4	NA	<1.0	<2.4	<0.40	DNA	DNA	DNA	DNA	DNA	DNA	DNA	<0.84	<1.7	<3.4	<3.4	<1.0	<2.4	<2.0	DNA	DNA	DNA	DNA	DNA	DNA	<0.42	<0.34	<0.34	<0.34	<1.0	<0.40	5	0.5
Trichloroethene (TCE)	µg/L	**5.7**	**179**	**208**	**395**	**320**	**400**	**340**	NA	**140**	**101**	**77**	**95**	**10**	**706**	**170**	**453**	DNA	< 0.18	**1.7**	**3.6**	**8.5**	**10.3**	**13.2**	**21**	**14.9**	**5.4**	*3.36*	*1.6*	**7.6**	DNA	< 0.48	< 0.48	< 0.48	< 0.33	< 0.33	0.46 J	*2.8*	<0.30	5	0.5
Vinyl Chloride	µg/L	**0.31**	< 0.18	< 0.18	< 0.18	< 0.9	<1.8	<1.8	NA	<1.0	<0.85	<0.20	**6.3**	**29**	**15**	**25**	**16.3**	DNA	< 0.18	**1.7**	**3.6**	**8.5**	**10.3**	**13.2**	**21**	**14.9**	**5.4**	**1.08**	**1.3**	**2.8**	DNA	< 0.18	< 0.18	< 0.18	**2.48**	**1.97**	**2.71**	**2.7**	**2.2**	0.2	0.02
PAHs																																							
Acenaphthene	µg/L	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0083	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Acenaphthylene	µg/L	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0053	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Anthracene	µg/L	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0069	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	3,000	600
Benzo(a)anthracene	µg/L	<0.0037	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0069 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0037	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(a)pyrene	µg/L	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(b)fluoranthene	µg/L	<0.0055	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0080 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0055	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Benzo(ghi)perylene	µg/L	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Benzo(k)fluoranthene	µg/L	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0082	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Chrysene	µg/L	0.0099 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.011 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0074	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.2	0.02
Dibenzo(a,h)anthracene	µg/L	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0046	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Fluoranthene	µg/L	<0.0057	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.017 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0092 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Fluorene	µg/L	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0066	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	400	80
Indeno(1,2,3-cd)pyrene	µg/L	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.0038	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
1-Methylnaphthalene	µg/L	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.010	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
2-Methylnaphthalene	µg/L	0.012 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.011 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.011	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Naphthalene	µg/L	0.017 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	<0.017	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	100	10
Phenanthrene	µg/L	0.022 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.023 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.0096 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NS	NS
Pyrene	µg/L	0.0073 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.016 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0.011 J	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	250	50
Dissolved Metals																																							
Arsenic	µg/L	NA	NA	NA	NA	NA	NA	NA	<0.6	<5.0	<0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	NA	NA	55.7	38	44.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000	400
Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	<2.6	9.6	4.9 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Hexavalent Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-23					MW-24					PZ-4							NR 140 ES	NR 140 PAL
Date:		4/15/11	9/23/11	7/2/13	10/8/13	10/29/13	4/15/11	9/23/11	7/2/13	10/7/13	10/29/13	4/15/11	9/23/11	7/1/13	10/8/13	10/30/13	12/14/15	12/14/16		
Water Elevation* (feet MSL):																				
PVOCs & Detected VOCs																				
Benzene	µg/L	DNA	<1.0	<0.24	<0.24	<0.24	DNA	<0.41	<0.24	<0.24	<0.24	DNA	<16.4	<2.4	<2.4	<2.4	<1.0	<0.61	5	0.5
Ethylbenzene	µg/L	DNA	<1.4	<0.55	<0.55	<0.55	DNA	<0.54	<0.55	<0.55	<0.55	DNA	<21.6	<5.5	<5.5	<5.5	<1.0	<0.81	700	140
Methyl-tert-butyl-ether	µg/L	DNA	<1.5	<0.23	<0.23	<0.23	DNA	<0.61	<0.23	<0.23	<0.23	DNA	<24.4	<2.3	<2.3	<2.3	<1.0	<0.23	60	12
Toluene	µg/L	DNA	<1.7	<0.69	<0.69	<0.69	DNA	<0.67	<0.69	<0.69	<0.69	DNA	<26.8	<6.9	<6.9	<6.9	<1.0	<0.73	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	<2.4	<2.2	<2.2	<2.2	DNA	<0.97	<2.2	<2.2	<2.2	DNA	<38.8	<22	<22	<22	<1.0	<0.74	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	<2.1	<1.4	<1.4	<1.4	DNA	<0.83	<1.4	<1.4	<1.4	DNA	<33.2	<14	<14	<14	<1.0	<0.57	NS	NS
Total Trimethylbenzene	µg/L	DNA	<4.5	<3.6	<3.6	<3.6	DNA	<1.8	<3.6	<3.6	<3.6	DNA	<72	<36	<36	<36	<2.0	<1.31	480	96
Xylenes, Total	µg/L	DNA	<6.6	<1.32	<1.32	<1.32	DNA	<2.63	<1.32	<1.32	<1.32	DNA	<105.2	<8.7	<8.7	<8.7	<3.0	<2.7	2,000	400
Chloroethane	µg/L	DNA	<2.4	<0.63	<0.63	<0.63	DNA	<0.97	<0.63	<0.63	<0.63	DNA	<38.8	<6.3	<6.3	<6.3	<1.0	<0.58	400	80
Chloroform	µg/L	DNA	<3.2	<0.28	<0.28	<0.28	DNA	<1.3	<0.28	<0.28	<0.28	DNA	<52.0	<2.8	<2.8	<2.8	<1.0	<0.51	6	0.6
Chloromethane	µg/L	DNA	<0.60	<0.81	<0.81	<0.81	DNA	<0.24	<0.81	<0.81	<0.81	DNA	<9.6	<8.1	<8.1	<8.1	<1.0	<0.34	30	3
1,2-Dichloroethane	µg/L	< 0.72	< 0.90	< 0.41	< 0.41	< 0.41	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	< 9.0	< 14.4	< 4.1	< 4.1	< 4.1	<1.0	<0.33	5	0.5
1,1-Dichloroethane	µg/L	< 1.5	< 1.9	< 0.3	1.65	1.99	< 0.75	< 0.75	< 0.3	< 0.3	< 0.3	23.4	*161*	< 3	< 3	6.4 J	4.9	4.2	850	85
1,1-Dichloroethene	µg/L	< 1.1	< 1.4	0.48	<0.4	<0.4	DNA	*3*	< 0.4	0.50 J	0.58J	**17.5**	**38**	< 4	*4.0 J*	*4.6 J*	*3.4*	<0.55	7	0.7
cis-1,2-Dichloroethene	µg/L	2.1	*13.1*	*26.3*	**120**	**187**	DNA	*67.6*	3.9	*32*	*40*	**1,160**	**4,310**	**102**	**187**	**240**	**400**	**320**	70	7
trans-1,2-Dichloroethene	µg/L	< 1.8	< 2.2	0.92	2.71	4.9	1.6	1.6	< 0.35	1.09 J	1.73	DNA	*73.7*	10.6	7.6 J	10.2 J	15	12	100	20
Naphthalene	µg/L	DNA	<2.2	<1.7	<1.7	<1.7	DNA	<0.89	<1.7	<1.7	<1.7	DNA	<35.6	<17	<17	<17	<5.0	<0.35	100	10
Tetrachloroethene	µg/L	DNA	*1.9 J*	*3.7*	*1.75*	*1.29*	< 0.45	< 0.45	0.39	*0.51 J*	0.40 J	< 11.2	< 18.0	< 3.3	< 3.3	< 3.3	<1.0	<0.55	5	0.5
1,1,1-Trichloroethane	µg/L	5.2	4.1	3.7	2.89	2.38	< 0.90	< 0.90	< 0.33	< 0.33	< 0.33	< 22.5	< 36.0	< 3.3	< 3.3	< 3.3	<1.0	<0.72	200	40
1,1,2-Trichloroethane	µg/L	DNA	<1.0	<0.34	<0.34	<0.34	DNA	<0.42	<0.34	<0.34	<0.34	DNA	<16.8	<3.4	<3.4	<3.4	<1.0	<0.80	5	0.5
Trichloroethene (TCE)	µg/L	**233**	**241**	**193**	**146**	**116**	**60.5**	**120**	**82**	**188**	**169**	**705**	**1,770**	**800**	**680**	**640**	**450**	**570**	5	0.5
Vinyl Chloride	µg/L	< 0.36	< 0.45	< 0.18	**1.02**	**1.82**	**3.9**	< 0.18	< 0.18	**0.22 J**	<0.18	< 4.5	**83.4**	< 1.8	**4.9 J**	**7.4**	**15**	<0.41	0.2	0.02

Notes:
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2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
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4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
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9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		PZ-5					PZ-6					MW-25						MW-18					NR 140 ES	NR 140 PAL
Date:		4/15/11	9/23/11	7/2/13	10/8/13	10/29/13	4/15/11	9/23/11	7/2/13	10/7/13	10/29/13	9/23/11	7/19/13	10/7/13	10/30/13	12/14/15	12/14/16	6/20/08	9/23/11	7/1/13	10/8/13	10/29/13		
Water Elevation* (feet MSL):																								
PVOCs & Detected VOCs																								
Benzene	µg/L	DNA	<0.41	<0.24	<0.24	<0.24	DNA	<0.41	<0.24	<0.24	<0.24	<0.41	<0.24	<0.24	<0.24	<1.0	<0.30	DNA	<0.41	<0.24	<0.24	<0.24	5	0.5
Ethylbenzene	µg/L	DNA	<0.54	<0.55	<0.55	<0.55	DNA	<0.54	<0.55	<0.55	<0.55	<0.54	<0.55	<0.55	<0.55	<1.0	<0.40	DNA	<0.54	<0.55	<0.55	<0.55	700	140
Methyl-tert-butyl-ether	µg/L	DNA	<0.61	<0.23	<0.23	<0.23	DNA	<0.61	<0.23	<0.23	<0.23	<0.61	<0.23	<0.23	<0.23	<1.0	<0.12	DNA	<0.61	<0.23	<0.23	<0.23	60	12
Toluene	µg/L	DNA	<0.67	<0.69	<0.69	<0.69	DNA	<0.67	<0.69	<0.69	<0.69	<0.67	<0.69	<0.69	<0.69	<1.0	<0.37	DNA	<0.67	<0.69	<0.69	<0.69	800	160
1,2,4-Trimethylbenzene	µg/L	DNA	<0.97	<2.2	<2.2	<2.2	DNA	<0.97	<2.2	<2.2	<2.2	<0.97	<2.2	<2.2	<2.2	<1.0	<0.37	DNA	<0.97	<2.2	<2.2	<2.2	NS	NS
1,3,5-Trimethylbenzene	µg/L	DNA	<0.83	<1.4	<1.4	<1.4	DNA	<0.83	<1.4	<1.4	<1.4	<0.83	<1.4	<1.4	<1.4	<1.0	<0.29	DNA	<0.83	<1.4	<1.4	<1.4	NS	NS
Total Trimethylbenzene	µg/L	DNA	<1.8	<3.6	<3.6	<3.6	DNA	<1.8	<3.6	<3.6	<3.6	<1.8	<3.6	<3.6	<3.6	<2.0	<0.66	DNA	<1.8	<3.6	<3.6	<3.6	480	96
Xylenes, Total	µg/L	DNA	<2.63	<1.32	<1.32	<1.32	DNA	<2.63	<1.32	<1.32	<1.32	<2.63	<1.32	<1.32	<1.32	<3.0	<1.3	DNA	<2.63	<1.32	<1.32	<1.32	2,000	400
Chloroethane	µg/L	DNA	<0.97	<0.63	<0.63	<0.63	DNA	<0.97	<0.63	<0.63	<0.63	<0.97	<0.63	<0.63	<0.63	<1.0	<0.29	DNA	<0.97	<0.63	<0.63	<0.63	400	80
Chloroform	µg/L	DNA	<1.3	<0.28	<0.28	<0.28	DNA	<1.3	<0.28	<0.28	<0.28	<1.3	<0.28	<0.28	<0.28	<1.0	<0.26	DNA	<1.3	<0.28	<0.28	<0.28	6	0.6
Chloromethane	µg/L	DNA	<0.24	<0.81	<0.81	<0.81	DNA	<0.24	<0.81	<0.81	<0.81	<0.24	<0.81	<0.81	<0.81	<1.0	<0.17	DNA	<0.24	<0.81	<0.81	<0.81	30	3
1,2-Dichloroethane	µg/L	< 0.36	< 0.36	< 0.41	< 0.41	< 0.41	< 0.36	< 0.36	<0.41	<0.41	<0.41	< 0.36	*0.57 J*	*0.56 J*	*0.56 J*	<1.0	<0.17	DNA	< 0.36	< 0.41	<0.41	<0.41	5	0.5
1,1-Dichloroethane	µg/L	1.4	< 0.75	< 0.3	< 0.3	0.30 J	< 0.75	< 0.75	<0.3	0.33 J	1.07	0.81	<0.3	1.68	1.87	1.4	1.4	DNA	< 0.75	< 0.3	<0.3	<0.3	850	85
1,1-Dichloroethene	µg/L	< 0.57	< 0.57	< 0.4	< 0.4	< 0.4	< 0.57	< 0.57	<0.4	<0.4	<0.4	< 0.57	<0.4	<0.4	0.44 J	<1.0	<0.28	DNA	< 0.57	1.74	<0.4	<0.4	7	0.7
cis-1,2-Dichloroethene	µg/L	DNA	**70.4**	*24.2*	**75**	**73**	2.5	1.4	<0.38	2.14	1.34	**103**	**133**	**234**	**283**	*36*	**280**	DNA	< 0.83	< 0.38	<0.38	<0.38	70	7
trans-1,2-Dichloroethene	µg/L	< 0.89	< 0.89	< 0.35	0.74 J	0.92 J	2.2	< 0.89	<0.35	<0.35	<0.35	4.4	7.4	12	17.1	13	16	DNA	< 0.89	< 0.35	<0.35	<0.35	100	20
Naphthalene	µg/L	DNA	<0.89	<1.7	<1.7	<1.7	DNA	<0.89	<1.7	<1.7	<1.7	<0.89	<1.7	<1.7	<1.7	<5.0	<0.18	DNA	<0.89	<1.7	<1.7	<1.7	100	10
Tetrachloroethene	µg/L	< 0.45	< 0.45	< 0.33	< 0.33	< 0.33	< 0.45	< 0.45	<0.33	<0.33	<0.33	< 0.45	<0.33	<0.33	<0.33	<1.0	<0.27	DNA	< 0.45	< 0.33	<0.33	<0.33	5	0.5
1,1,1-Trichloroethane	µg/L	< 0.90	< 0.90	< 0.33	< 0.33	< 0.33	< 0.90	< 0.90	<0.33	<0.33	<0.33	< 0.90	0.36 J	0.39 J	<0.33	<1.0	<0.36	DNA	27.8	18.5	24.5	24.3	200	40
1,1,2-Trichloroethane	µg/L	DNA	<0.42	<0.34	<0.34	<0.34	DNA	<0.42	<0.34	<0.34	<0.34	<0.42	<0.34	<0.34	<0.34	<1.0	<0.40	DNA	<0.42	<0.34	<0.34	<0.34	5	0.5
Trichloroethene (TCE)	µg/L	DNA	< 0.48	0.46	<0.33	<0.33	**5.1**	*0.78*	<0.33	<0.33	<0.33	< 0.48	0.39 J	0.44 J	*0.77 J*	<1.0	<0.30	DNA	< 0.48	< 0.33	<0.33	<0.33	5	0.5
Vinyl Chloride	µg/L	**10.2**	**7.2**	**8.2**	**12.3**	**12**	**10.1**	**11.8**	**2.23**	**6.5**	**5.4**	< 0.18	**1.47**	**1.3**	**1.37**	<1.0	<0.20	DNA	< 0.18	< 0.18	<0.18	<0.18	0.2	0.02

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD**
   ITALICS
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-26				MW-27				MW-28						MW-29	MW-29R						PZ-7					NR 140 ES	NR 140 PAL
Date:		10/7/13	10/29/13	12/14/15	12/14/16	10/7/13	10/29/13	12/14/15	8/31/16	1/10/14	3/11/14	7/8/14	12/14/15	8/31/16	12/15/16	1/10/14	8/12/15	11/11/15	2/10/16	5/16/16	8/11/16	11/21/16	7/12/13	10/8/13	10/30/13	12/14/15	12/14/16		
Water Elevation* (feet MSL):																												
PVOCs & Detected VOCs																													
Acetone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9,000	1,800
Benzene	µg/L	<0.24	<0.24	<1.0	<0.30	<0.24	<0.24	<1.0	<0.44	<24	<12	NA	<1.0	<22	<15	<0.24	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<2.4	<2.4	<2.4	<1.0	<0.30	5	0.5
2-Butanone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,000	800
Ethylbenzene	µg/L	<0.55	<0.55	<1.0	<0.40	<0.55	<0.55	<1.0	<0.71	<55	<27.5	NA	<1.0	<35.5	<20	<0.55	<0.71	<0.71	<0.71	<0.71	<0.71	<0.71	<5.5	<5.5	<5.5	<1.0	<0.40	700	140
Methyl-tert-butyl-ether	µg/L	<0.23	<0.23	<1.0	<0.12	<0.23	<0.23	<1.0	<1.1	<23	<11.5	NA	<1.0	<55	<5.8	<0.23	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<2.3	<2.3	<2.3	<1.0	<0.12	60	12
Toluene	µg/L	<0.69	<0.69	<1.0	<0.37	<0.69	<0.69	<1.0	<0.44	<69	<34.5	NA	<1.0	<22	<18	<0.69	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<6.9	<6.9	<6.9	<1.0	<0.37	800	160
1,2,4-Trimethylbenzene	µg/L	<2.2	<2.2	<1.0	<0.37	<2.2	<2.2	<1.0	<1.6	<220	<110	NA	<1.0	<80	<19	<2.2	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<22	<22	<22	<1.0	<0.37	NS	NS
1,3,5-Trimethylbenzene	µg/L	<1.4	<1.4	<1.0	<0.29	<1.4	<1.4	<1.0	<1.5	<140	<70	NA	<1.0	<75	<14	<1.4	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<14	<14	<14	<1.0	<0.29	NS	NS
Total Trimethylbenzene	µg/L	<3.6	<3.6	<2.0	<0.66	<3.6	<3.6	<2.0	<3.1	<360	<180	NA	<2.0	<155	<33	<3.6	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<36	<36	<36	<2.0	<0.66	480	96
Xylenes, Total	µg/L	<1.32	<1.32	<3.0	<1.3	<1.32	<1.32	<3.0	<3.1	<132	<66	NA	<3.0	<155	<66	<1.32	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<13.2	<13.2	<13.2	<3.0	<1.3	2,000	400
Chloroethane	µg/L	<0.63	<0.63	<1.0	<0.29	<0.63	<0.63	<1.0	<0.65	<63	<31.5	NA	<1.0	<32.5	<15	<0.63	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<6.3	<6.3	<6.3	<1.0	<0.29	400	80
Chloroform	µg/L	<0.28	<0.28	<1.0	<0.26	<0.28	<0.28	<1.0	<0.43	<28	<14	NA	<1.0	<21.5	<13	<0.28	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<2.8	<2.8	<2.8	<1.0	<0.26	6	0.6
Chloromethane	µg/L	<0.81	<0.81	<1.0	<0.17	<0.81	<0.81	<1.0	<1.9	<81	<40.5	NA	<1.0	<95	<8.6	<0.81	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<8.1	<8.1	<8.1	<1.0	<0.17	30	3
1,2-Dichloroethane	µg/L	<0.41	<0.41	<1.0	<0.17	<0.41	<0.41	<1.0	<0.48	<41	<20.5	NA	<1.0	<24	<8.3	<0.41	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<4.1	<4.1	<4.1	<1.0	<0.17	5	0.5
1,1-Dichloroethane	µg/L	0.61 J	0.77 J	<1.0	<0.31	<0.3	0.36 J	<1.0	<1.1	<30	<15	NA	8.7	<55	<1.5	<0.3	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<3	<3	<3	<1.0	<0.31	850	85
1,1-Dichloroethene	µg/L	<0.4	<0.4	<1.0	<0.28	<0.4	<0.4	<1.0	<0.65	<40	<20	NA	**13**	<32.5	<14	<0.4	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<4	<4	<4	<1.0	<0.28	7	0.7
cis-1,2-Dichloroethene	µg/L	*13.9*	*11.3*	*11*	*13*	3.15	3.3	*7.2*	*8.6*	**127**	**1160**	NA	**1800**	**2800**	**2,500**	<0.38	0.54 J	<0.45	<0.45	<0.45	<0.45	<0.45	**296**	**266**	**309**	**230**	**160**	70	7
trans-1,2-Dichloroethene	µg/L	0.65 J	0.78 J	<1.0	<0.28	<0.35	0.39 J	<1.0	<0.54	<35	<17.5	NA	**130**	**212**	**220**	<0.35	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	4.5 J	4.7 J	4.2 J	2.2	2.3	100	20
Naphthalene	µg/L	<1.7	<1.7	<5.0	<0.18	<1.7	<1.7	<5.0	<1.6	<170	<85	NA	<5.0	<80	<8.8	<1.7	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<17	<17	<17	<5.0	<0.18	100	10
Tetrachloroethene	µg/L	<0.33	<0.33	<1.0	<0.27	<0.33	<0.33	<1.0	<0.49	<33	<16.5	NA	**5.1**	<24.5	<14	<0.33	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<3.3	<3.3	<3.3	<1.0	<0.27	5	0.5
1,1,1-Trichloroethane	µg/L	4.7	3.8	1.8	<0.36	<0.33	<0.33	<1.0	<0.84	*53 J*	**211**	NA	*69*	*58 J*	*87*	<0.33	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<3.3	<3.3	<3.3	<1.0	<0.36	200	40
1,1,2-Trichloroethane	µg/L	<0.34	<0.34	<1.0	<0.40	<0.34	<0.34	<1.0	<0.48	<34	<17	NA	<1.0	<24	<20	<0.34	<0.48	<0.48	<0.48	<0.48	<0.48	<0.48	<3.4	<3.4	<3.4	<1.0	<0.40	5	0.5
Trichloroethene (TCE)	µg/L	**54**	**44**	**27**	**15**	**38**	**15.4**	**66**	**20.3**	**3500**	**9200**	NA	**9800**	**12,400**	**11,000**	*2.62*	*1.48 J*	*2.97*	*1.59*	*1.21 J*	*2.6*	*2.07*	**75**	**60**	**32**	*2.8*	**3.3**	5	0.5
Vinyl Chloride	µg/L	<0.18	<0.18	<1.0	<0.20	**0.52 J**	**0.61**	<1.0	<0.17	<18	<9	NA	**7.8**	<8.5	<10	**0.32 J**	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	**9.3**	**6.3**	**8.4**	**19**	**4.1**	0.2	0.02
Dissolved Metals																													
Arsenic	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.6	<5.0	<0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	65.8	180	163	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000	400
Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.6	5.2	<1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Hexavalent Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		PZ-8			PZ-9			PZ-10				PZ-11				PZ-12			PZ-13		PZ-14		NR 140 ES	NR 140 PAL
Date:		7/12/13	10/8/13	10/30/13	10/8/13	10/29/13	12/14/15	10/7/13	10/29/13	12/14/15	12/14/16	10/7/13	10/29/13	12/14/15	12/14/16	10/7/13	10/29/13	12/14/15	10/7/13	10/30/13	2/6/14	12/14/15		
Water Elevation* (feet MSL):																								
PVOCs & Detected VOCs																								
Acetone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	790	NA	NA	NA	NA	NA	NA	NA	9,000	1,800
Benzene	µg/L	<0.24	<0.24	<0.24	<0.24	<0.24	<1.0	<0.24	<0.24	<1.0	<0.30	<0.24	<0.24	<1.0	<0.30	<0.24	<0.24	<1.0	<0.24	<0.24	<0.24	<1.0	5	0.5
2-Butanone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*960*	NA	NA	NA	NA	NA	NA	NA	4,000	800
Ethylbenzene	µg/L	<0.55	<0.55	<0.55	<0.55	<0.55	<1.0	<0.55	<0.55	<1.0	<0.40	<0.55	<0.55	<1.0	<0.40	<0.55	<0.55	<1.0	<0.55	<0.55	<0.55	<1.0	700	140
Methyl-tert-butyl-ether	µg/L	<0.23	<0.23	<0.23	0.33 J	0.46 J	<1.0	<0.23	<0.23	<1.0	<0.12	<0.23	<0.23	<1.0	<0.12	<0.23	<0.23	<1.0	<0.23	<0.23	<0.23	<1.0	60	12
Toluene	µg/L	<0.69	<0.69	<0.69	<0.69	<0.69	<1.0	<0.69	<0.69	<1.0	<0.37	<0.69	<0.69	<1.0	<0.37	<0.69	<0.69	<1.0	<0.69	<0.69	<0.69	<1.0	800	160
1,2,4-Trimethylbenzene	µg/L	<2.2	<2.2	<2.2	<2.2	<2.2	<1.0	<2.2	<2.2	<1.0	<0.37	<2.2	<2.2	<1.0	<0.37	<2.2	<2.2	<1.0	<2.2	<2.2	<2.2	<1.0	NS	NS
1,3,5-Trimethylbenzene	µg/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.0	<1.4	<1.4	<1.0	<0.29	<1.4	<1.4	<1.0	<0.29	<1.4	<1.4	<1.0	<1.4	<1.4	<1.4	<1.0	NS	NS
Total Trimethylbenzene	µg/L	<3.6	<3.6	<3.6	<3.6	<3.6	<2.0	<3.6	<3.6	<2.0	<0.66	<3.6	<3.6	<2.0	<0.66	<3.6	<3.6	<2.0	<3.6	<3.6	<3.6	<2.0	480	96
Xylenes, Total	µg/L	<1.32	<1.32	<1.32	<1.32	<1.32	<3.0	<1.32	<1.32	<3.0	<1.3	<1.32	<1.32	<3.0	<1.3	<1.32	<1.32	<3.0	<1.32	<1.32	<1.32	<3.0	2,000	400
Chloroethane	µg/L	<0.63	<0.63	<0.63	<0.63	<0.63	<1.0	<0.63	<0.63	<1.0	<0.29	<0.63	<0.63	<1.0	<0.29	<0.63	<0.63	<1.0	<0.63	<0.63	<0.63	<1.0	400	80
Chloroform	µg/L	<0.28	<0.28	<0.28	<0.28	<0.28	<1.0	<0.28	<0.28	<1.0	<0.26	<0.28	<0.28	<1.0	<0.26	<0.28	<0.28	<1.0	<0.28	<0.28	<0.28	<1.0	6	0.6
Chloromethane	µg/L	<0.81	<0.81	<0.81	<0.81	<0.81	<1.0	<0.81	<0.81	<1.0	<0.17	<0.81	<0.81	<1.0	<0.17	<0.81	<0.81	<1.0	<0.81	<0.81	<0.81	<1.0	30	3
1,2-Dichloroethane	µg/L	<0.41	<0.41	<0.41	<0.41	<0.41	<1.0	*2.09*	<4.1	*1.3*	<0.17	<0.41	<0.41	<1.0	<0.17	<0.41	<0.41	<1.0	<0.41	<0.41	<0.41	<1.0	5	0.5
1,1-Dichloroethane	µg/L	<0.3	<0.3	<0.3	<0.3	0.35 J	<1.0	<0.3	<0.3	<1.0	<0.31	<0.3	<0.3	<1.0	<0.31	<0.3	<0.3	<1.0	<0.3	<0.3	0.35 J	<1.0	850	85
1,1-Dichloroethene	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<1.0	*0.94 J*	<4	<1.0	<0.28	<0.4	<0.4	<1.0	<0.28	<0.4	<0.4	<1.0	<0.4	<0.4	*0.71 J*	<1.0	7	0.7
cis-1,2-Dichloroethene	µg/L	<0.38	<0.38	<0.38	<0.38	<0.38	<1.0	**320**	**295**	**300**	*32*	**146**	**136**	*61*	**70**	<0.38	<0.38	<1.0	<0.38	0.48 J	*27.2*	*7.6*	70	7
trans-1,2-Dichloroethene	µg/L	<0.35	<0.35	<0.35	<0.35	<0.35	<1.0	5.3	6.8 J	2.9	<0.28	3.05	2.88	1.3	<0.28	<0.35	<0.35	<1.0	<0.35	<0.35	2.22	<1.0	100	20
Naphthalene	µg/L	<1.7	<1.7	<1.7	<1.7	<1.7	<5.0	<1.7	<1.7	<5.0	<0.18	<1.7	<1.7	<5.0	<0.18	<1.7	<1.7	<5.0	<1.7	<1.7	<1.7	<5.0	100	10
Tetrachloroethene	µg/L	<0.33	<0.33	<0.33	<0.33	<0.33	<1.0	<0.33	<0.33	<1.0	<0.27	<0.33	<0.33	<1.0	<0.27	<0.33	<0.33	<1.0	<0.33	<0.33	<0.33	<1.0	5	0.5
1,1,1-Trichloroethane	µg/L	<0.33	<0.33	<0.33	<0.33	<0.33	<1.0	<0.33	<0.33	<1.0	<0.36	<0.33	<0.33	<1.0	<0.36	<0.33	<0.33	<1.0	<0.33	<0.33	<0.33	<1.0	200	40
1,1,2-Trichloroethane	µg/L	<0.34	<0.34	<0.34	<0.34	<0.34	<1.0	<0.34	<0.34	<1.0	<0.40	<0.34	<0.34	<1.0	<0.40	<0.34	<0.34	<1.0	<0.34	<0.34	<0.34	<1.0	5	0.5
Trichloroethene (TCE)	µg/L	<0.33	<0.33	<0.33	<0.33	<0.33	<1.0	*3.9*	**5.7 J**	*1.5*	<0.30	<0.33	<0.33	<1.0	<0.30	<0.33	<0.33	<1.0	0.40 J	<0.33	***10.8***	***19***	5	0.5
Vinyl Chloride	µg/L	**3.3**	**3.09**	**3.2**	<0.18	<0.18	<1.0	**29**	**19.7**	**28**	<0.20	**38**	**33**	<1.0	**32**	<0.18	<0.18	<1.0	**0.21 J**	<0.18	***11.8***	***1.9***	0.2	0.02
Dissolved Metals																								
Arsenic	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	1
Barium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2000	400
Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	10
Hexavalent Chromium	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD**
   ITALICS
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		MW-30	MW-31	PZ-15		MW-32			PZ-16			PZ-17		MW-33			MW-34	NR 140 ES	NR 140 PAL
Date:		3/11/14	3/11/14	4/23/14	12/14/15	4/23/14	12/14/15	12/14/16	4/23/14	12/14/15	12/14/16	4/23/14	12/14/15	4/23/14	12/14/15	12/14/16	5/1/14		
Water Elevation* (feet MSL):																			
PVOCs & Detected VOCs																			
Benzene	µg/L	<0.24	<0.24	<0.24	<1.0	<0.24	<1.0	<0.30	<2.4	<1.0	<0.30	<0.24	<1.0	<0.24	<1.0	<0.30	<0.24	5	0.5
Ethylbenzene	µg/L	0.97 J	<0.55	<0.55	<1.0	<0.55	<1.0	<0.40	<5.5	<1.0	<0.40	<0.55	<1.0	<0.55	<1.0	<0.40	<0.55	700	140
Methyl-tert-butyl-ether	µg/L	<0.23	<0.23	<0.23	<1.0	<0.23	<1.0	<0.12	<2.3	<1.0	<0.12	<0.23	<1.0	0.40 J	<1.0	<0.12	<0.23	60	12
Toluene	µg/L	<0.69	<0.69	<0.69	<1.0	<0.69	<1.0	<0.37	<6.9	<1.0	<0.37	<0.69	<1.0	<0.69	<1.0	<0.37	<0.69	800	160
1,2,4-Trimethylbenzene	µg/L	40	<2.2	<2.2	<1.0	<2.2	<1.0	<0.37	<22	<1.0	<0.37	<2.2	<1.0	<2.2	<1.0	<0.37	<2.2	NS	NS
1,3,5-Trimethylbenzene	µg/L	<1.4	<1.4	<1.4	<1.0	<1.4	<1.0	<0.29	<14	<1.0	<0.29	<1.4	<1.0	<1.4	<1.0	<0.29	<1.4	NS	NS
Total Trimethylbenzene	µg/L	40	<3.6	<3.6	<2.0	<3.6	<2.0	<0.66	<36	<2.0	<0.66	<3.6	<2.0	<3.6	<2.0	<0.66	<3.6	480	96
Xylenes, Total	µg/L	<1.32	<1.32	<1.32	<3.0	<1.32	<3.0	<1.3	<13.2	<3.0	<1.3	<1.32	<3.0	<1.32	<3.0	<1.3	<1.32	2,000	400
Chloroethane	µg/L	<0.63	<0.63	<0.63	<1.0	<0.63	<1.0	<0.29	<6.3	<1.0	<0.29	<0.63	<1.0	<0.63	<1.0	<0.29	<0.63	400	80
Chloroform	µg/L	<0.28	<0.28	<0.28	<1.0	<0.28	<1.0	<0.26	<2.8	<1.0	<0.26	<0.28	<1.0	<0.28	<1.0	<0.26	<0.28	6	0.6
Chloromethane	µg/L	<0.81	<0.81	<0.81	<1.0	<0.81	<1.0	<0.17	<8.1	<1.0	<0.17	<0.81	<1.0	<0.81	<1.0	<0.17	<0.81	30	3
1,2-Dichloroethane	µg/L	<0.41	<0.41	<0.41	<1.0	<0.41	<1.0	<0.17	<4.1	<1.0	<0.17	<0.41	<1.0	<0.41	<1.0	<0.17	<0.41	5	0.5
1,1-Dichloroethane	µg/L	<0.3	<0.3	<0.3	<1.0	0.42 J	<1.0	<0.31	<3	<1.0	<0.31	<0.3	<1.0	<0.3	<1.0	<0.31	1.03	850	85
1,1-Dichloroethene	µg/L	<0.4	<0.4	<0.4	<1.0	<0.4	<1.0	<0.28	<4	<1.0	<0.28	<0.4	<1.0	<0.4	<1.0	<0.28	<0.4	7	0.7
cis-1,2-Dichloroethene	µg/L	<0.38	<0.38	<0.38	<1.0	3.8	5.1	*4.1*	**187**	**120**	**73**	<0.38	<1.0	*27.5*	*35*	*48*	*21.8*	70	7
trans-1,2-Dichloroethene	µg/L	<0.35	<0.35	<0.35	<1.0	0.35 J	<1.0	<0.28	7.4 J	7.1	5.3	<0.35	<1.0	3.5	4.4	6.6	2.4	100	20
Naphthalene	µg/L	<1.7	<1.7	<1.7	<5.0	<1.7	<5.0	<0.18	<17	<5.0	<0.18	<1.7	<5.0	<1.7	<5.0	<0.18	<1.7	100	10
Tetrachloroethene	µg/L	<0.33	<0.33	<0.33	<1.0	<0.33	<1.0	<0.27	<3.3	<1.0	<0.27	<0.33	<1.0	<0.33	<1.0	<0.27	*0.55 J*	5	0.5
1,1,1-Trichloroethane	µg/L	<0.33	<0.33	<0.33	<1.0	<0.33	<1.0	<0.36	<3.3	<1.0	<0.36	<0.33	<1.0	<0.33	<1.0	<0.36	9.5	200	40
1,1,2-Trichloroethane	µg/L	<0.34	<0.34	<0.34	<1.0	<0.34	<1.0	<0.40	<3.4	<1.0	<0.40	<0.34	<1.0	<0.34	<1.0	<0.40	<0.34	5	0.5
Trichloroethene (TCE)	µg/L	<0.33	<0.33	<0.33	<1.0	**9.8**	**21**	**20**	**8.6 J**	*3.6*	<0.30	<0.33	<1.0	<0.33	<1.0	<0.30	42	5	0.5
Vinyl Chloride	µg/L	<0.18	<0.18	4.8	<1.0	<0.18	<1.0	<0.20	**19.7**	**2.0**	<0.20	<0.18	<1.0	**0.26 J**	<1.0	**1.4**	<0.18	0.2	0.02

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		SVE-1		SVE-3		SVE-4		SVE-5		SVE-6		SVE-7		SVE-8		SVE-9		SVE-10		NR 140 ES	NR 140 PAL
Date:		12/15/15	12/14/16	12/16/15	12/14/16	12/16/15	12/14/16	12/17/15	12/15/16	12/17/15	12/15/16	12/16/15	12/15/16	12/16/15	12/15/16	12/16/15	12/15/16	12/16/15	12/15/16		
Water Elevation* (feet MSL):																					
PVOCs & Detected VOCs																					
Acetone	µg/L	NA	NA	NA	NA	NA	NA	NA	<0.92	NA	<0.92	NA	<0.92	NA	<0.92	NA	<0.92	NA	<0.92	9,000	1,800
Benzene	µg/L	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	5	0.5
2-Butanone	µg/L	NA	NA	NA	NA	NA	NA	NA	<0.58	NA	<0.58	NA	<0.58	NA	<0.58	NA	<0.58	NA	<0.58	4,000	800
Ethylbenzene	µg/L	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	700	140
Methyl-tert-butyl-ether	µg/L	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	60	12
Toluene	µg/L	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	1.3	<0.37	800	160
1,2,4-Trimethylbenzene	µg/L	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	NS	NS
1,3,5-Trimethylbenzene	µg/L	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	NS	NS
Total Trimethylbenzene	µg/L	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	480	96
Xylenes, Total	µg/L	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	2,000	400
Chloroethane	µg/L	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	400	80
Chloroform	µg/L	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	6	0.6
Chloromethane	µg/L	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	30	3
1,2-Dichloroethane	µg/L	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	5	0.5
1,1-Dichloroethane	µg/L	<1.0	<0.31	2.5	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	850	85
1,1-Dichloroethene	µg/L	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	*3*	<0.28	<1.0	*1.8*	7	0.7
cis-1,2-Dichloroethene	µg/L	<1.0	<0.25	*41*	<0.25	<1.0	*16*	<1.0	<0.25	<1.0	<0.25	<1.0	<0.25	<1.0	3.1	**180**	*35*	*26*	*63*	70	7
trans-1,2-Dichloroethene	µg/L	<1.0	<0.28	3	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	3	1.7	17	*53*	100	20
4-Methyl-2-pentanone	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	*NA*	500	50
Naphthalene	µg/L	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	100	10
Tetrachloroethene	µg/L	<1.0	<0.27	**20**	**5**	**5.9**	**12**	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	**20**	**37**	5	0.5
1,1,1-Trichloroethane	µg/L	<1.0	<0.36	20	7.3	3.6	7	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	200	40
1,1,2-Trichloroethane	µg/L	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	5	0.5
Trichloroethene (TCE)	µg/L	**25**	*1.2*	**240**	**29**	**20**	**110**	**10**	*3.4*	**16**	**6.6**	*1.9*	*1.2*	**57**	**28**	**46**	**8**	**11**	**16,000**	5	0.5
Vinyl Chloride	µg/L	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	4.1	<0.20	<1.0	<0.20	0.2	0.02

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/14/16: Chloroform 1.3 µg/L; All other VOCs reported below laboratory detection limits.
8. Equipment blank results: 7/1/13: All VOCs reported below laboratory detection limits.
   12/15/16: Acetone 17 µg/L, Chloroform 2.1 µg/L; All other VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    DNA = data not available

Table 3
Groundwater Analytical Data
Former Western Metals - 1215 N. 62nd Street, Wauwatosa, WI
Sigma Project No. 13609

Well Location:		SVE-11		SVE-12		SVE-13		SVE-14		SVE-15		SVE-16		SVE-17		SVE-18		SVE-19		SVE-20		SVE-21		NR 140 ES	NR 140 PAL
Date:		12/16/15	12/15/16	12/16/15	12/14/16	12/16/15	12/16/16	12/16/15	12/16/16	12/17/15	12/16/16	12/17/15	12/16/16	12/17/15	12/16/16	12/17/15	12/16/16	12/15/15	12/16/16	12/15/15	12/16/16	12/16/15	12/15/16		
Water Elevation* (feet MSL):																									
PVOCs & Detected VOCs																									
Acetone	µg/L	NA	<1.8	NA	130	NA	<0.92	NA	<0.92	NA	**43**	NA	<0.92	NA	<0.92	NA	13	NA	<0.92	NA	<0.92	NA	<0.92	9,000	1,800
Benzene	µg/L	<1.0	<0.61	<1.0	<1.5	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	<1.0	<0.30	5	0.5
2-Butanone	µg/L	NA	<1.2	NA	100	NA	<0.58	NA	<0.58	NA	**8.5**	NA	<0.58	NA	<0.58	NA	18	NA	<0.58	NA	<0.58	NA	<0.58	4,000	800
Ethylbenzene	µg/L	<1.0	<0.81	<1.0	<2.0	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	700	140
Methyl-tert-butyl-ether	µg/L	<1.0	<0.23	<1.0	<0.58	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	<1.0	<0.12	60	12
Toluene	µg/L	<1.0	<0.73	<1.0	<1.8	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	800	160
1,2,4-Trimethylbenzene	µg/L	<1.0	<0.74	<1.0	<1.9	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	<1.0	<0.37	NS	NS
1,3,5-Trimethylbenzene	µg/L	<1.0	<0.57	<1.0	<1.4	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	NS	NS
Total Trimethylbenzene	µg/L	<2.0	<1.31	<2.0	<3.3	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	<2.0	<0.66	480	96
Xylenes, Total	µg/L	<3.0	<2.7	<3.0	<6.6	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	<3.0	<1.3	2,000	400
Chloroethane	µg/L	<1.0	<0.58	<1.0	<1.5	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	<1.0	<0.29	400	80
Chloroform	µg/L	<1.0	<0.51	<1.0	<1.3	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	<1.0	<0.26	6	0.6
Chloromethane	µg/L	<1.0	<0.34	<1.0	<0.86	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	30	3
1,2-Dichloroethane	µg/L	<1.0	<0.33	<1.0	<0.83	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	<1.0	<0.17	5	0.5
1,1-Dichloroethane	µg/L	<1.0	<0.62	<1.0	9	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	<1.0	<0.31	850	85
1,1-Dichloroethene	µg/L	<1.0	<0.55	<1.0	<1.4	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	7	0.7
cis-1,2-Dichloroethene	µg/L	6.7	6.8	6.2	**340**	<1.0	2.6	<1.0	2.2	<1.0	1.4	<1.0	<0.25	<1.0	6.5	<1.0	<0.25	2.5	5	<1.0	<0.25	*8.7*	**170**	70	7
trans-1,2-Dichloroethene	µg/L	2	2.9	<1.0	*57*	<1.0	<0.28	<1.0	<0.28	1.4	2	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	<0.28	<1.0	9.7	100	20
4-Methyl-2-pentanone	µg/L	NA	NA	NA	*NA*	NA	<0.11	NA	<0.11	NA	1.9	NA	<0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500	50
Naphthalene	µg/L	<5.0	<0.35	<5.0	<0.88	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	<5.0	<0.18	100	10
Tetrachloroethene	µg/L	*1.2*	<0.55	*2.6*	<1.4	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	*1.2*	<0.27	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	<1.0	<0.27	5	0.5
1,1,1-Trichloroethane	µg/L	5.5	<0.72	10	23	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	<1.0	<0.36	2.1	<0.36	<1.0	<0.36	<1.0	<0.36	200	40
1,1,2-Trichloroethane	µg/L	<1.0	<0.80	<1.0	<2.0	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	<1.0	<0.40	5	0.5
Trichloroethene (TCE)	µg/L	**540**	**480**	**250**	**1,200**	**13**	**8.5**	*3.9*	*2.3*	**26**	**33**	**9.4**	*4.2*	**24**	**11**	**7.2**	*2.4*	**71**	**39**	**11**	*4*	**97**	**700**	5	0.5
Vinyl Chloride	µg/L	<1.0	<0.41	<1.0	<1.0	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	<1.0	<0.20	0.2	0.02

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