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March 2015 Groundwater Sampling Report
SWMUs 17 and 33
AK Steel – Kansas City, Missouri
USEPA ID No.: MOD007118029

AK Steel

Project No. 79553

April 2015

RCRA

536654

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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
AOC	area of concern
BMcD	Burns & McDonnell Engineering company, Inc.
BMWCI	Burns & McDonnell Waste Consultants, Inc.
cis-1,2-DCE	cis-1,2-dichloroethene
CMS	Corrective Measures Study
CMS Report	*Draft Corrective Measures Report for SWMUs 2, 3, 4, 5, 6, 7, 12, 13, 17, 24, and 33, and AOCs 1, 4, and 8, AK Steel, Kansas City, Missouri*
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,2-dichloroethene
DQI	data quality indicator
Facility	AK Steel, 7000 Winner Road, Kansas City, Missouri
HSWA	Hazardous and Solid Waste Amendments
I-435	Interstate 435
IDW	investigation derived waste
J	estimated
MCL	maximum contaminant level
MCS	media cleanup standards
µg/L	micrograms per liter
MS	matrix spike
MSD	matrix spike duplicate
NELAP	National Environmental Laboratory Accreditation Program
NFGO	*USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*
Permit	RCRA Part B Post-Closure Permit
QA	quality assurance
QA SAP	*Quality Assurance Sampling and Analysis Plan of the Former Tank Farm and SWMU 17*
QC	quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RFI Report	*RCRA Facility Investigation Report, Armco Kansas City Facility*
RSL	regional screening level
SWMU	solid waste management unit
TCE	trichloroethene
TestAmerica-Denver	TestAmerica, Inc of Arvado, Colorado
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

DOCUMENT DISTRIBUTION

USEPA Region 7, Bruce Morrison, Project Manager – 2 copies

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AK Steel, Pat Gallo – 1 copy

Burns & McDonnell Engineering Company, Inc., Sharon Shelton – 2 copies

* * * * *

1.0 INTRODUCTION

On behalf of AK Steel (formerly Armco Inc. [1]), Burns & McDonnell Engineering Company, Inc. (BMcD) performed a Corrective Measures Study (CMS) for several solid waste management units (SWMUs) and areas of concern (AOCs) at the former Kansas City, Missouri Works (Facility). The results of the CMS were presented in the *Draft Corrective Measures Study Report for SWMUs 2, 3, 4, 5, 6, 7, 12, 13, 17, 24, and 33, and AOCs 1, 4, and 8, AK Steel, Kansas City, Missouri* ([CMS Report] BMcD, 2013) to satisfy Special Permit Condition XXXIII of Part II of AK Steel's final Hazardous and Solid Waste Amendments (HSWA) Resource Conservation and Recovery Act (RCRA) Part B Post-Closure Permit (Permit), which was issued by the United States Environmental Protection Agency (USEPA) Region 7 on November 30, 1994 (USEPA ID# MOD 007118029). During the CMS, additional data collection was recommended in a limited number of areas so that the need for corrective measures and/or corrective measures alternatives could be more appropriately evaluated. The *Quality Assurance Sampling and Analysis Plan for Additional Sampling of the Former Tank Farm and SWMU 17* ([QA SAP] BMcD, 2014a) was prepared and submitted to address the data gaps identified in the CMS Report.

1.1 PURPOSE AND SCOPE

This *March 2015 Groundwater Sampling Report* presents the results of the foruth quarterly sampling event at SWMUs 17 and 33 at the Facility. Figure 1-1 provides a site location map, and Figure 1-2 depicts the Facility layout.

Groundwater sampling activities were performed to collect the data needed to address data gaps identified in the CMS Report (BMcD, 2013). Groundwater samples for characterization near and downgradient of SWMU 17 were collected for volatile organic compounds (VOCs). Sample collection methodologies for environmental media including sampling requirements for quality assurance (QA)/quality control (QC) programs were summarized in the QA SAP (BMcD, 2014a).

1.2 BACKGROUND

1.2.1 Facility Location

Figure 1-1 presents a Facility Location Map. The Facility is located in northeast Kansas City, Missouri, within the Blue River and Missouri River floodplains. Portions of the Facility are located both east and west of Interstate Highway 435 (I-435). Figure 1-2 depicts the Facility, and presents ownership and

[1] Effective September 30, 1999, Armco Inc. was merged with and into AK Steel Corporation, a Delaware Corporation with headquarters in West Chester, Ohio.

operational changes that have occurred since issuance of the Permit. The current address for the AK Steel Kansas City Facility is:

AK Steel
7000 Winner Road
Kansas City, Missouri 64125

1.2.2 Facility History and Current Use

The Facility history was previously described in Section 1.2.2 of the *Additional Sampling of Former Tank Farm and SWMU 17* Report (BMcD, 2014b).

1.2.3 Environmental Setting

The environmental setting for the Facility was previously described in Section 2 of the *RCRA Facility Investigation Report, Armco Kansas City Facility* ([RFI Report] Burns & McDonnell Waste Consultants, Inc. [BMWCI], 1999).

1.3 REPORT ORGANIZATION

This *March 2014 Groundwater Sampling Report, SWMU 17 and 33* has been prepared by BMcD and consists of one volume. This document is organized as follows:

- Section 1.0 – Introduction
- Section 2.0 – Introduction to Data Presentation
- Section 3.0 – Groundwater Investigation for SWMU 17
- Section 4.0 – Summary and Conclusions
- Section 5.0 – References
- Tables
- Figures
- Appendices

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2.0 INTRODUCTION TO THE DATA PRESENTATION

During the sampling of SWMUs 17 and 33, samples were collected for chemical analyses in accordance with the QA SAP. Section 3.0 presents the findings for the groundwater investigation. A summary of the groundwater samples and analyses is provided in Table 3-1. Groundwater samples were collected in March 2015 from 32 monitoring wells. Based on previous investigations and site history, chemical analysis for groundwater was conducted for VOCs.

General supporting information for the data and text provided in this *March 2015 Groundwater Sampling Report, SWMUs 17 and 33* is provided in the following Appendices:

- Appendix A – Comprehensive Analytical Result Tables
- Appendix B – Appendix B – QA/QC Review of Analytical Data
- Appendix C – Groundwater Sampling Forms
- Appendix D – Field Logbook
- Appendix E – Analytical Laboratory Reports

2.1 DATA ANALYSIS

2.1.1 Quality Control Evaluation

TestAmerica, Inc., of Arvada, Colorado (TestAmerica-Denver) provided laboratory services for the groundwater samples collected at SWMUs 17 and 33. TestAmerica-Denver is certified as part of the National Environmental Laboratory Accreditation Program (NELAP).

The laboratory data were reviewed for achievement of QA/QC criteria. Field QC samples included field duplicates, matrix spike (MS)/matrix spike duplicates (MSDs), and a temperature blank. Data quality indicators (DQIs) that were evaluated include: precision, accuracy, representativeness, comparability, and completeness. Data verification and validation were performed following procedures outlined in the QA SAP (BMcD, 2014a). Data qualifiers, when appropriate, were added to the data in accordance with *USEPA's Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* ([NFGO] USEPA, 2008). A description of data qualifiers assigned by the analytical laboratory and BMcD during data verification and validation are provided in Appendix B.

Based upon the results of the data verification and validation, the data were considered valid to use in reporting the results of the March 2015 groundwater sampling event at SWMUs 17 and 33. As indicated in the QA/QC Review of Analytical Data (Appendix B), the objectives for precision, accuracy, representativeness, completeness, and comparability were met.

2.1.2 Screening of Data

Screening levels are used to determine the nature and extent of contamination and may subsequently serve as action levels for various activities. As presented in the QA SAP (BMcD, 2014a), the following conventions were used to screen the investigation data.

Groundwater

The groundwater screening levels are presented on Table 2-1, and the discussion in Section 3.0 includes a comparison of sample results to the screening levels. In the context of the CMS, criteria for screening data were previously presented in Section 2.1 of the CMS Report (BMcD, 2013). Constituents that exceed screening levels are highlighted in the data summary table. The following conventions were used for screening the data:

- The analytical data for groundwater were screened against the Safe Drinking Water Act maximum contaminant level (MCL) for constituents that have MCLs.
- If a constituent did not have a MCL, then the USEPA regional screening level (RSL) for tapwater (USEPA, 2015) was used for groundwater data screening.

2.2 DATA PRESENTATION

Analytical data are presented in analytical results data tables, on figures, and in text discussions. Analytical result data tables have been condensed to show only the constituents detected in one or more of the samples for the SWMUs during one or more of the past sampling events. Comprehensive analytical result tables that provide results for both detected constituents and reporting limits for undetected constituents for the March 2015 sampling event are provided in Appendix A. Figures are provided to indicate the sampling locations within SWMUs 17 and 33.

* * * * *

3.0 GROUNDWATER INVESTIGATION FOR SWMU 17

Prior to the RCRA Facility Investigation (RFI), historical investigations indicated the presence of a chlorinated VOC plume that centered on the former Nail Mill degreaser (SWMU 33). During the RFI, it was determined that the chlorinated VOC plume radiated outward from this area and a monitoring well network was installed across a broad area that included both SWMU 13 (Pickle Liquor Tanks) and SWMU 17 (Wire Mill Rinsewater Neutralization Tank). For this reason, much of the groundwater discussion related to geology, hydrogeology, and groundwater flow direction is presented on an area-wide basis that includes the following SWMUs:

- SWMU 13 – Pickle Liquor Tanks
- SWMU 17 – Wire Mill Rinsewater Neutralization Tank
- SWMU 33 – Nail Mill Degreasing Area

As shown on Figure 3-1, this area is located west and south of a bend in the paved, channelized portion of the Blue River.

3.1 SWMU 17 BACKGROUND

A detailed description of SWMU 17 background and previous investigations are detailed in the CMS Report (BMcD, 2013) and summarized in the QA SAP (BMcD, 2014a).

3.2 SCOPE OF ACTIVITIES COMPLETED

Thirty-two monitoring wells in the SWMUs 17 and 33 network were sampled using low-flow sampling techniques from March 11 through 13, 2015. The sample collection summary is outlined on Table 3-1. Groundwater samples were collected and submitted to TestAmerica-Denver for analysis of VOCs. Field QC samples included three field duplicates, two MS/MSD pairs, two equipment rinse blanks, and one trip blank per cooler. Groundwater sampling forms are presented in Appendix C, and a copy of the field logbook is provided in Appendix D.

On March 13, 2015, the liquid investigation derived waste (IDW) from the March sampling event was sampled. A discrete sample was collected from each drum and submitted to TestAmerica-Denver for analysis of VOCs. Liquid IDW results are presented in Appendix E.

3.3 SWMU 17 GROUNDWATER FLOW DIRECTION

Water levels and total depth measurements for SWMUs 17 and 33 were collected on March 11, 2015. The measurements are presented on Table 3-2. A groundwater contour map for the shallow screened

wells is presented as Figure 3-2; a groundwater contour map for the deep screened well is presented as Figure 3-3. Groundwater flow for the shallow interval was to the northeast, and groundwater flow for the deep interval was to the north, toward the Blue River.

3.4 INVESTIGATION RESULTS

The groundwater sampling results for the March 2015 sampling event at SWMUs 17 and 33 are presented on Table 3-3. Historical groundwater sampling results, including the July, September, and December 2014 events are presented on Table 3-4. A comprehensive data table that presents both constituent detections and the reporting limits for undetected constituents is provided as Table A-1 in Appendix A. Groundwater detections were screened against the Safe Drinking Water Act MCL, and if no MCL was available for the constituent, the USEPA RSL for Tapwater (USEPA, 2015). These values served as both the CMS screening level and media cleanup standard (MCS).

Data for SWMU 33 during the March 2015 sampling event were fairly consistent with historical sampling events. Trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride were the most commonly detected VOCs, which is consistent with previous data. In addition, 1,1-dichloroethane (1,1-DCA) and 1,1-dichloroethene (1,1-DCE) exceeded the CMS screening levels/MCSs in one well each. 1,1-DCA exceedances from the same well previously occurred in 1998, 2007, July 2014, September 2014, and December 2014. 1,1-DCE exceedances from the same well previously occurred in 1998, 2001, and September 2014.

The following CMS screening level/MCS exceedances were noted for the SWMU 33 wells:

- cis-1,2-DCE – Monitoring Wells 33MW02 (7,800 micrograms per liter [µg/l]), 33MW02S (720 µg/l), 33MW05I (560 µg/l), and 33MW08S (77 µg/l);
- TCE – Monitoring Wells 33MW02 (1,400 µg/l), 33MW02S (1,500 µg/l), 33MW03R (5.8 µg/l), 33MW05I (34 µg/l), and 33MW08S (40 µg/l);
- vinyl chloride – Monitoring Wells 33MW02 (3,800 µg/l), 33MW03R (7.7 J [estimated] µg/l), 33MW03R (20 µg/l), and 33MW05I (48 µg/l);
- 1,1-DCA – Monitoring Well 33MW08S (8.7 µg/l; and
- 1,1-DCE – Monitoring Well 33MW02 (57 J µg/l).

No VOCs were detected above the respective screening levels in the SWMU 17 monitoring wells for the March 2015 sampling event, which is consistent with historic events. The following low-level detections were noted for the SWMU 17 wells:

- acetone – Monitoring Wells 17MW1S (52 J µg /l), 17MW2D (3.8 J µg /l), 17MW2I (15 µg /l), and 17MW2S (9.4 J µg /l) and
- cis-1,2-dichloroethene (cis-1,2-DCE) – Monitoring Well 17MW01S (3.7 J µg /l)

Based on the results, a secondary source of VOCs in groundwater is not present at SWMU 17.

3.5 ADDITIONAL GROUNDWATER SAMPLING EVENTS

A summary of detections from the July, September, December 2014, and March 2015 groundwater sampling events is provided on Table 3-4. The March 2015 groundwater sampling event was the fourth of four planned quarterly groundwater sampling events at SWMUs 17 and 33. No additional groundwater sampling events are planned.

* * * * *

4.0 SUMMARY AND CONCLUSIONS

This *March 2015 Groundwater Sampling Report of SWMUs 17 and 33* presents the results of groundwater sampling at SWMUs 17 and 33 at the AK Steel Facility located in Kansas City, Missouri. These activities were performed to collect the data needed to address data gaps identified in the CMS Report (BMcD, 2013).

Thirty-two monitoring wells in the SWMUs 17 and 33 network were sampled using low-flow sampling techniques from March 11 through 13, 2015. The sample collection summary is outlined on Table 3-1. Groundwater samples were collected and submitted to TestAmerica-Denver for analysis of VOCs. Water levels and total depth measurements were collected and are presented on Table 3-2, and groundwater contour maps are presented as Figures 3-2 and 3-3. Groundwater flow for the shallow interval was to the northeast, and groundwater flow for the deep interval was to the north, toward the Blue River.

Sample results for SWMUs 17 and 33 are presented on Table 3-3 and historical results are presented on Table 3-4. Groundwater detections were screened against the Safe Drinking Water Act MCL, and if no MCL was available for the constituent, the USEPA RSL for Tapwater (USEPA, 2015). These values serve as both the CMS screening level and MCS.

Data for SWMU 33 during the March 2015 sampling event were fairly consistent with historical sampling events. TCE, cis-1,2-DCE, and vinyl chloride were the most commonly detected VOCs that exceeded CMS screening levels/MCSs, which is consistent with previous data. In addition, 1,1-DCA and 1,1-DCE exceeded the CMS screening levels/MCSs in one well each. 1,1-DCA exceedances from the same well previously occurred in 1998, 2007, July 2014, September 2014, and December 2014. 1,1-DCE exceedances from the same well previously occurred in 1998, 2001, and September 2014.

No VOCs were detected above the respective screening levels in the SWMU 17 monitoring wells for the March 2015 sampling event, which is consistent with historic events. Acetone and cis-1,2-DCE were detected at low concentrations in the SWMU 17 wells. Based on the results, a secondary source of VOCs in groundwater is not present at SWMU 17.

The March 2015 groundwater sampling event was the fourth of four planned quarterly groundwater sampling events at SWMUs 17 and 33. No additional groundwater sampling events are planned.

* * * * *

5.0 REFERENCES

Burns & McDonnell Engineering Company Inc. (BMcD), 2013. *Draft Corrective Measures Study Report for SWMUs 2, 3, 4, 5, 6, 7, 12, 13, 17, 24, and 33, and AOCs 1, 4, and 8, AK Steel, Kansas City, Missouri.* July.

BMcD, 2014a. *Quality Assurance Sampling and Analysis Plan, Additional Sampling Former Tank Farm and SWMU 17, AK Steel, Kansas City, Missouri.* April.

BMcD, 2014b. *Additional Sampling of Former Tank Farm and SWMU 17, AK Steel, Kansas City, Missouri.* September

Burns & McDonnell Waste Consultants, Inc. (BMWCI), 1999. *RCRA Facility Investigation Report, Armco Kansas City Facility.* September.

USEPA, 2008. *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (NFGO), EPA-540-R-08-01.* June.

USEPA, 2015. *Regional Screening Levels (RSLs) Summary Table. January.* Available from: http://www.epa.gov/region9/superfund/prg/

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TABLES

Table 2-1
Screening Levels and Laboratory Analytical Reporting Limits

March 2015 Groundwater Sampling Report, SWMUs 17 and 33

AK Steel Facility - Kansas City, Missouri

	TestAmerica Denver[1]		CMS Screening Levels[2]		Media Cleanup Standards[3]	
Aqueous Analyses (µg/L)	RL	MDL	Groundwater		Groundwater	
Volatile Organic Compounds						
1,1,1-Trichloroethane	1	0.16	200	MCL	200	MCL
1,1,2-Trichloroethane	1	0.27	5	MCL	5	MCL
1,1-Dichloroethane	1	0.22	2.7	RSL	2.7	RSL
1,1-Dichloroethene	1	0.23	7	MCL	7	MCL
1,2-Dichloroethane	1	0.13	5	MCL	5	MCL
cis-1,2-Dichloroethene	1	0.15	70	MCL	70	MCL
trans-1,2-Dichloroethene	1	0.15	100	MCL	100	MCL
1,2-Dichloropropane	1	0.18	5	MCL	5	MCL
4-Methyl-2-pentanone (MIBK)	5	0.98	1,200	RSL	1,200	RSL
Acetone	10	1.9	14,000	RSL	14,000	RSL
Benzene	1	0.16	5	MCL	5	MCL
Carbon disulfide	2	0.45	810	RSL	810	RSL
Carbon tetrachloride	1	0.19	5	MCL	5	MCL
Chloroform	1	0.16	80 a	MCL	80 a	MCL
Ethylbenzene	1	0.16	700	MCL	700	MCL
Methylene Chloride	2	0.32	5	MCL	5	MCL
Tetrachloroethene	1	0.20	5	MCL	5	MCL
Toluene	1	0.17	1,000	MCL	1,000	MCL
Trichloroethene	1	0.16	5	MCL	5	MCL
Vinyl acetate	3	0.94	410	RSL	410	RSL
Vinyl chloride	1	0.1	2	MCL	2	MCL
Xylenes, Total	2	0.19	10,000	MCL	10,000	MCL

Notes:

a = Value is for total trihalomethanes: bromodichloromethane, bromoform, chloroform, and dibromochloromethane.

[1]Laboratory RLs and MDLs provided by TestAmerica-Denver on January 17, 2014.

[2]CMS Screening Levels provided in Tables 2-1 and 2-3 of the *Draft CMS Report for SWMUs 2, 3, 4, 5, 6, 7, 12, 13, 17, 24, and 33, and AOCs 1, 4, and 8* (BMcD, 2013)

[3]Media Cleanup Standards provided in Tables 4-1 and 2-3 of the *Draft CMS Report for SWMUs 2, 3, 4, 5, 6, 7, 12, 13, 17, 24, and 33, and AOCs 1, 4, and 8* (BMcD, 2013)

CMS - Corrective Measures Study

MCL = Safe Drinking Water Act Maximum Contaminant Level (USEPA, 2009)

MDL = Method Detection Limit

RL = Reporting Limit

RSL = Regional Screening Level for Tap Water (USEPA, January 2015)

µg/L = micrograms per liter

Table 3-1
Groundwater Sampling Summary
March 2015 Groundwater Sampling Report, SWMUs 17 and 33
AK Steel Facility - Kansas City, Missouri

Sample Point	Sample and QA/QC Designators	Date Collected	Screen Placement	QA/QC Sample Type*	Analysis VOCs
Quarterly Event #4					
17MW01S	GW08	3/12/2015	Shallow		X
17MW01S	GW08D	3/12/2015	Shallow	Field Duplicate	X
17MW01D	GW08	3/12/2015	Deep		X
17MW02S	GW08	3/12/2015	Shallow		X
17MW02S	GW08MSMSD	3/12/2015	Shallow	MS/MSD	X
17MW02I	GW08	3/12/2015	Intermediate		X
17MW02D	GW08	3/12/2015	Deep		X
33MW02S	GW08	3/13/2015	Shallow		X
33MW02	GW08	3/13/2015	Intermediate		X
33MW03R	GW08	3/13/2015	Deep		X
33MW04S	GW08	3/11/2015	Shallow		X
33MW04	GW08	3/11/2015	Deep		X
33MW05S	GW08	3/13/2015	Shallow		X
33MW05S	GW08D	3/13/2015	Shallow	Field Duplicate	X
33MW05S	GW08R	3/13/2015	Shallow	Equipment Rinsate Blank	X
33MW05I	GW08	3/13/2015	Intermediate		X
33MW05I	GW08R	3/13/2015	Intermediate	Equipment Rinsate Blank	X
33MW05D	GW08	3/13/2015	Deep		X
33MW05D	GW08MSMSD	3/13/2015	Deep	MS/MSD	X
33MW06D	GW08	3/12/2015	Deep		X
33MW07S	GW08	3/12/2015	Shallow		X
33MW07D	GW08	3/12/2015	Deep		X
33MW08S	GW08	3/12/2015	Shallow		X
33MW09S	GW08	3/12/2015	Shallow		X
33MW10S	GW08	3/12/2015	Shallow		X
33MW10D	GW08	3/12/2015	Deep		X
33MW10D	GW08D	3/12/2015	Deep	Field Duplicate	X
33MW11S	GW08	3/12/2015	Shallow		X
33MW11D	GW08	3/12/2015	Deep		X
33MW12S	GW08	3/11/2015	Shallow		X
33MW12D	GW08	3/11/2015	Deep		X
33MW13S	GW08	3/12/2015	Shallow		X
33MW13D	GW08	3/12/2015	Deep		X
33MW14S	GW08	3/11/2015	Shallow		X
33MW14D	GW08	3/11/2015	Deep		X
33MW15S	GW08	3/11/2015	Shallow		X
33MW15D	GW08	3/11/2015	Deep		X
33MW16S	GW08	3/11/2015	Shallow		X
33MW16D	GW08	3/11/2015	Deep		X

Notes:
MS/MSD = Matrix spike/matrix spike duplicate
QA/QC = Quality Assurance/Quality Control
VOCs = Volatile Organic Compounds
Shallow = Screened in the shallow saturated zone.
Intermediate = Screened directly over the semi-confining layer of the deep saturated zone.

Table 3-2
Groundwater Elevation Measurements - March 11, 2015
March 2015 Groundwater Sampling Event, SWMUs 17 and 33
AK Steel Kansas City Facility

Well No.	Date	Easting (corrected)	Northing (corrected)	Ground Elevation (FMSL)	TOC Elevation (FMSL)	Depth to Water (FBTOC)	Water Level Elevation (FMSL)	Measured Well Depth (FBTOC)
Deep Wells								
17MW01D	3/11/2015	501203.50	1070835.20	744.83	744.55	26.61	717.94	66.45
17MW02D	3/11/2015	501353.90	1071042.00	742.61	742.18	26.40	715.78	61.48
33MW03R	3/11/2015	500595.00	1070784.50	746.93	747.33	28.56	718.77	60.15
33MW04	3/11/2015	500354.98	1070983.66	748.12	747.86	32.20	715.66	70.25
33MW05D	3/11/2015	501017.71	1070903.79	746.41	746.02	29.28	716.74	68.80
33MW06D	3/11/2015	500601.87	1071190.10	749.30	751.95	36.15	715.80	71.27
33MW07D	3/11/2015	500668.10	1070606.80	746.97	746.63	27.65	718.98	68.30
33MW10D	3/11/2015	500243.24	1071542.85	746.31	745.87	30.32	715.55	67.15
33MW11D	3/11/2015	501116.48	1071241.41	740.57	740.12	24.31	715.81	60.85
33MW12D	3/11/2015	501227.00	1070666.52	746.87	746.56	27.26	719.30	68.70
33MW13D	3/11/2015	501314.06	1070804.04	745.20	744.90	27.00	717.90	67.55
33MW14D	3/11/2015	500093.56	1070733.07	748.75	748.42	31.71	716.71	68.86
33MW15D	3/11/2015	500287.85	1071198.49	751.37	753.45	38.02	715.43	86.58
33MW16D	3/11/2015	500004.37	1071473.53	750.97	753.23	37.62	715.61	77.80
Intermediate Wells								
17MW02I	3/11/2015	501351.80	1071045.80	742.63	742.25	9.31	732.94	39.80
33MW02	3/11/2015	500602.14	1070791.72	747.22	746.96	9.52	737.44	35.90
33MW05I	3/11/2015	501012.78	1070890.09	746.54	746.27	9.62	736.65	41.00
Shallow Wells								
17MW01S	3/11/2015	501199.00	1070837.50	744.80	744.44	8.89	735.55	18.79
17MW02S	3/11/2015	501349.50	1071049.30	742.71	742.20	7.27	734.93	18.76
33MW02S	3/11/2015	500590.11	1070792.07	747.20	746.98	9.63	737.35	18.77
33MW04S	3/11/2015	500363.55	1070983.16	748.14	747.91	11.32	736.59	17.40
33MW05S	3/11/2015	501016.28	1070896.49	746.59	746.38	9.73	736.65	18.36
33MW07S	3/11/2015	500667.87	1070601.50	746.96	746.59	8.95	737.64	20.48
33MW08S	3/11/2015	500364.47	1070807.40	747.27	747.08	10.20	736.88	16.85
33MW09S	3/11/2015	500691.85	1071320.18	747.44	750.19	15.95	734.24	22.26
33MW10S	3/11/2015	500243.09	1071545.53	746.26	745.93	11.05	734.88	22.25
33MW11S	3/11/2015	501109.05	1071242.97	740.24	739.74	7.71	732.03	17.97
33MW12S	3/11/2015	501218.66	1070667.18	746.84	746.24	10.30	735.94	17.30
33MW13S	3/11/2015	501320.69	1070804.26	745.24	744.79	8.85	735.94	17.30
33MW14S	3/11/2015	500093.51	1070738.25	748.87	748.52	8.60	739.92	17.90
33MW15S	3/11/2015	500288.65	1071203.57	751.09	753.18	13.78	739.40	27.01
33MW16S	3/11/2015	499999.36	1071472.24	751.00	753.52	18.45	735.07	27.67

FMSL - Feet above mean sea level
TOC - Top of casing
FBTOC - Feet below top of casing
Shallow - Screened in the shallow saturated zone.
Intermediate - Intermediate wells were screened directly over the semi-confining layer of the deep saturated zone.
Deep - Deep wells were screened just above bedrock in the deep semi-confined saturated zone.

Table 3-3
Groundwater Analytical Results - March 2015 Event

March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: Units:	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	Acetone µg/L	cis-1,2-Dichloroethene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L
		CMS Screening Level		2.7	7	14,000	70	100	5	2
17MW01D/GW08	17MW1D	3/12/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
17MW01S/GW08	17MW1S	3/12/2015		1.0 U	1.0 U	**52 J**	**3.5 J**	1.0 U	1.0 JU	1.0 U
17MW01S/GW08D	17MW1S	3/12/2015	Duplicate	1.0 U	1.0 U	**19 J**	**3.7 J**	1.0 U	1.0 JU	1.0 U
17MW02D/GW08	17MW2D	3/12/2015		1.0 U	1.0 U	**3.8 J**	1.0 U	1.0 U	1.0 U	1.0 U
17MW02I/GW08	17MW2I	3/12/2015		1.0 U	1.0 U	**15**	1.0 U	1.0 U	1.0 U	1.0 U
17MW02S/GW08	17MW2S	3/12/2015		1.0 U	1.0 U	**9.4 J**	1.0 U	1.0 U	1.0 U	1.0 U
33MW02/GW08	33MW2	3/13/2015		200 U	**57 J**	**590 J**	**7,800**	200 U	**1,400**	**3,800**
33MW02S/GW08	33MW2S	3/13/2015		40 U	40 U	400 U	**720**	40 U	**1,500**	**7.7 J**
33MW03R/GW08	33MW3R	3/13/2015		1.0 U	1.0 U	10 U	**26**	1.0 U	**5.8**	**20**
33MW04/GW08	33MW4	3/11/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW04S/GW08	33MW4S	3/11/2015		1.0 U	1.0 U	10 U	1.0 JU	1.0 U	1.0 U	1.0 U
33MW05D/GW08	33MW5D	3/13/2015		1.0 U	1.0 U	**9.1 J**	1.0 U	1.0 U	1.0 U	1.0 U
33MW05I/GW08	33MW5I	3/13/2015		20 U	20 U	200 U	**560**	**4.2 J**	**34**	**48**
33MW05S/GW08	33MW5S	3/13/2015		1.0 U	1.0 U	10 U	**12**	**0.24 J**	1.0 U	**0.70 J**
33MW05S/GW08D	33MW5S	3/13/2015	Duplicate	1.0 U	1.0 U	10 U	**12**	**0.23 J**	1.0 U	**0.73 J**
33MW06D/GW08	33MW6D	3/12/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	**0.35 J**
33MW07D/GW08	33MW7D	3/12/2015		1.0 U	1.0 U	**16**	1.0 U	1.0 U	1.0 U	1.0 U
33MW07S/GW08	33MW7S	3/12/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW08S/GW08	33MW8S	3/12/2015		**8.7**	**0.95 J**	20 U	**77**	**1.1 J**	**40**	**0.34 J**
33MW09S/GW08	33MW9S	3/12/2015		**0.62**	1.0 U	**24**	**0.87 J**	1.0 U	**0.17 J**	1.0 U
33MW10D/GW08	33MW10D	3/12/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW10D/GW08D	33MW10D	3/12/2015	Duplicate	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW10S/GW08	33MW10S	3/12/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW11D/GW08	33MW11D	3/12/2015		1.0 U	1.0 U	**18 J**	1.0 U	1.0 U	1.0 U	1.0 U
33MW11S/GW08	33MW11S	3/12/2015		1.0 U	1.0 U	**22 J**	1.0 JU	1.0 U	1.0 U	1.0 U
33MW12D/GW08	33MW12D	3/11/2015		**0.29 J**	1.0 U	10 U	1.0 JU	1.0 U	1.0 U	1.0 U
33MW12S/GW08	33MW12S	3/11/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW13D/GW08	33MW13D	3/12/2015		1.0 U	1.0 U	**19**	1.0 U	1.0 U	1.0 U	1.0 U
33MW13S/GW08	33MW13S	3/12/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW14D/GW08	33MW14D	3/11/2015		1.0 U	1.0 U	10 JU	1.0 U	1.0 U	1.0 U	1.0 U
33MW14S/GW08	33MW14S	3/11/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 JU	1.0 U
33MW15D/GW08	33MW15D	3/11/2015		1.0 U	1.0 U	**2.9 J**	1.0 U	1.0 U	1.0 U	1.0 U
33MW15S/GW08	33MW15S	3/11/2015		1.0 U	1.0 U	**2.3 J**	1.0 U	1.0 U	1.0 U	1.0 U
33MW16D/GW08	33MW16D	3/11/2015		1.0 U	1.0 U	10 U	1.0 JU	1.0 U	1.0 U	1.0 U
33MW16S/GW08	33MW16S	3/11/2015		1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 JU	1.0 U

Bold - Constituent was detected.
Shaded - Constituent exceeded screening level.
CMS - Corrective Measures Study (BMcD, 2013)
J - estimated value
MCS - media cleanup standard
U - not detected
µg/L - micrograms per liter

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloroethene µg/L	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L
		CMS Screening Level		200	5	2.7	7	5	130	14,000	5	810	80	70
17MW01D/GW05	17MW1D	7/2/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	**0.57**	1.0 U	1.0 U
17MW01D/GW06	17MW1D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	**0.27 J**	1.0 U
17MW01D/GW07	17MW1D	12/18/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
17MW01D/GW08	17MW1D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
17MW01S/GW05	17MW1S	7/2/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	**0.38 J**	**0.52 J**
17MW01S/GW05D	17MW1S	7/2/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	**0.36 J**	**0.55 J**
17MW01S/GW06D	17MW1S	9/23/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	**0.21 J+**	**1.8**
17MW01S/GW06	17MW1S	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	**0.20 J**	**2.0**
17MW01S/GW07D	17MW1S	12/18/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**2.1**
17MW01S/GW07	17MW1S	12/18/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**2.2**
17MW01S/GW08D	17MW1S	3/12/2015	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**19 J**	1.0 U	2.0 U	1.0 U	**3.7 J**
17MW01S/GW08	17MW1S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**52 J**	1.0 U	2.0 U	1.0 U	**3.5 J**
17MW02D/GW05	17MW2D	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
17MW02D/GW06	17MW2D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
17MW02D/GW07	17MW2D	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
17MW02D/GW08	17MW2D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**3.8 J**	1.0 U	2.0 U	1.0 U	1.0 U
17MW02I/GW05	17MW2I	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	**0.46 J**	1.0 U
17MW02I/GW06	17MW2I	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
17MW02I/GW07	17MW2I	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
17MW02I/GW08	17MW2I	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**15**	1.0 U	2.0 U	1.0 U	1.0 U
17MW02S/GW05	17MW2S	7/2/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	**0.37 J**	1.0 U
17MW02S/GW06	17MW2S	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**4.8 J**	1.0 U	2.0 U	1.0 U	1.0 U
17MW02S/GW07	17MW2S	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
17MW02S/GW08	17MW2S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**9.4 J**	1.0 U	2.0 U	1.0 U	1.0 U
33MW2/GW1	33MW2	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	963 D
33MW2/GW2	33MW2	7/17/1998		5 U	**2.7 J**	20.2	90.8	5 U	NA	100 U	5 U	5 U	5 U	3,100 D
33MW2/GW3	33MW2	2/2/2001		5 UD	5 UD	31 D	34 D	5 UD	NA	NA	5 UD	NA	5 UD	2,800 D
33MW2/GW4	33MW2	10/5/2007		50 U	50 U	11 J	**5.1 J**	50 U	NA	250 U	10 U	50 U	50 U	630
33MW02/GW05	33MW2	7/2/2014		200 U	200 U	200 U	200 U	200 U	NA	2,000 U	200 U	400 U	200 U	5,900
33MW02/GW06	33MW2	9/24/2014		100 U	100 U	100 U	47 J	100 U	NA	1,000 U	100 U	200 U	100 U	5,300
33MW02/GW07	33MW2	12/18/2014		400 U	400 U	400 U	400 U	400 U	NA	4,000 U	400 U	800 U	400 U	6,600
33MW02/GW08	33MW2	3/13/2015		200 U	200 U	200 U	57 J	200 U	NA	**590 J**	200 U	400 U	200 U	7,800
33MW2S/GW1	33MW2S	5/12/1997		**50.8**	80.7	103	369 DJ	18.6	NA	100 U	5 U	5 U	**57.5**	8,400 D
33MW2S/GW2	33MW2S	7/17/1998		**75 J***	42.4 J*	126 J*	2,500 DUJ*	15.1 J*	NA	100 UJ*	**2.02 J**	5 UJ*	**42.7 J***	58,700 DJ*
33MW2S/GW3	33MW2S	2/2/2001		500 UD	500 UD	500 UD	500 UD	500 UD	NA	NA	500 UD	NA	500 UD	62,000 D
33MW2S/GW4	33MW2S	10/5/2007		50 U	50 U	50 U	11 J	50 U	NA	250 U	10 U	50 U	50 U	1,800
33MW02S/GW05	33MW2S	7/2/2014		50 U	50 U	50 U	50 U	50 U	NA	500 U	50 U	100 U	50 U	650
33MW02S/GW06	33MW2S	9/24/2014		50 U	50 U	50 U	50 U	50 U	NA	500 U	50 U	100 U	50 U	680
33MW02S/GW07	33MW2S	12/18/2014		20 U	20 U	20 U	20 U	20 U	NA	200 U	20 U	40 U	20 U	240
33MW02S/GW08	33MW2S	3/13/2015		40 U	40 U	40 U	40 U	40 U	NA	400 U	40 U	80 U	40 U	720
33MW3/GW1	33MW3	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	**21.9**
33MW3/GW1D	33MW3	5/12/1997	Duplicate	5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	**19.1**
33MW3/GW2	33MW3	7/17/1998		5 U	5 U	5 U	**2.42 J**	5 U	NA	100 U	5 U	5 U	5 U	326 D
33MW3/GW3	33MW3	2/2/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	130 D
33MW3/GW4	33MW3	10/4/2007		10 U	10 U	**1.8 J**	8.8 J	10 U	NA	50 U	2 U	10 U	10 U	940

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloroethene µg/L	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L
			CMS Screening Level	200	5	2.7	7	5	130	14,000	5	810	80	70
33MW03R/GW05	33MW3R	7/2/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**4.0 J**	1.0 U	2.0 U	1.0 U	**18**
33MW03R/GW06	33MW3R	9/24/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**17**
33MW03R/GW07	33MW3R	12/18/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**20**
33MW03R/GW08	33MW3R	3/13/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**26**
33MW4/GW1	33MW4	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW4/GW2	33MW4	7/16/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW4/GW3	33MW4	2/2/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW4/GW4	33MW4	9/26/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW04/GW05	33MW4	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW04/GW06	33MW4	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW04/GW07	33MW4	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW04/GW08	33MW4	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW4S/GW1	33MW4S	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW4S/GW2	33MW4S	7/15/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW4S/GW3	33MW4S	2/2/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW4S/GW4	33MW4S	10/1/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW04S/GW05	33MW4S	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW04S/GW06	33MW4S	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW04S/GW07	33MW4S	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW04S/GW08	33MW4S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 JU
33MW5D/GW1	33MW5D	5/30/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW5D/GW2	33MW5D	7/16/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW5D/GW4	33MW5D	9/26/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	**0.3 J**	5 U	5 U	5 U
33MW05D/GW05	33MW5D	7/2/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW05D/GW06	33MW5D	9/24/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW05D/GW07	33MW5D	12/18/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW05D/GW08	33MW5D	3/13/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**9.1 J**	1.0 U	2.0 U	1.0 U	1.0 U
33MW5I/GW2	33MW5I	7/17/1998		5 U	5 U	**5.49**	**10.5**	5 U	NA	100 U	5 U	5 U	5 U	**1,150 D**
33MW5I/GW4	33MW5I	10/4/2007		25 U	25 U	25 U	25 U	25 U	NA	130 U	5 U	25 U	25 U	**560**
33MW05I/GW05	33MW5I	7/2/2014		20 U	20 U	20 U	20 U	20 U	NA	200 U	20 U	40 U	20 U	**530**
33MW05I/GW06	33MW5I	9/24/2014		10 U	10 U	10 U	**2.3 J**	10 U	NA	100 U	10 U	20 U	10 U	**480**
33MW05I/GW07	33MW5I	12/18/2014		20 U	20 U	20 U	20 U	20 U	NA	200 U	20 U	40 U	20 U	**450**
33MW05I/GW08	33MW5I	3/13/2015		20 U	20 U	20 U	20 U	20 U	NA	200 U	20 U	40 U	20 U	**560**
33MW5S/GW1	33MW5S	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	**403 D**
33MW5S/GW2	33MW5S	7/17/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	**386 D**
33MW5S/GW2D	33MW5S	7/17/1998	Duplicate	5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	**350 D**
33MW5S/GW4	33MW5S	10/4/2007		5 U	5 U	5 U	5 U	5 U	NA	25 U	**0.26 J**	5 U	5 U	**53**
33MW5S/GW4D	33MW5S	10/4/2007	Duplicate	5 U	5 U	5 U	5 U	5 U	NA	25 U	**0.27 J**	5 U	5 U	**55**
33MW05S/GW05	33MW5S	7/2/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**16**
33MW05S/GW05D	33MW5S	7/2/2014	Duplicate	1.0 U	1.0 U	**0.22 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**18**
33MW05S/GW06D	33MW5S	9/24/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**18**
33MW05S/GW06	33MW5S	9/24/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**16**
33MW05S/GW07D	33MW5S	12/18/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**13**
33MW05S/GW07	33MW5S	12/18/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**13**
33MW05S/GW08D	33MW5S	3/13/2015	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**12**
33MW05S/GW08	33MW5S	3/13/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**12**

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloroethene µg/L	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L
		CMS Screening Level		200	5	2.7	7	5	130	14,000	5	810	80	70
33MW6D/DW1	33MW6D	4/17/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW6D/GW1	33MW6D	5/30/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW6D/GW2	33MW6D	7/15/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW6D/GW3	33MW6D	2/2/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW6D/GW4	33MW6D	10/1/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW06D/GW05	33MW6D	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW06D/GW06	33MW6D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**3.0 J**	1.0 U	2.0 U	1.0 U	**0.19 J**
33MW06D/GW07	33MW6D	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 JU
33MW06D/GW08	33MW6D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW7D/GW1	33MW7D	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW7D/GW2	33MW7D	7/16/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW7D/GW3	33MW7D	2/2/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW7D/GW4	33MW7D	10/1/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW07D/GW05	33MW7D	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW07D/GW06	33MW7D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW07D/GW07	33MW7D	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW07D/GW08	33MW7D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**16**	1.0 U	2.0 U	1.0 U	1.0 U
33MW7S/GW1	33MW7S	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW7S/GW2	33MW7S	7/16/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW7S/GW3	33MW7S	2/2/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW7S/GW4	33MW7S	10/1/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW07S/GW05	33MW7S	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW07S/GW06	33MW7S	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW07S/GW07	33MW7S	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW07S/GW08	33MW7S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW8S/GW1	33MW8S	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	**10.5**
33MW8S/GW2	33MW8S	7/16/1998		5 U	5 U	4.63 J	**3.14 J**	5 U	NA	100 U	5 U	5 U	5 U	**12.2**
33MW8S/GW4	33MW8S	10/4/2007		5 U	5 U	4.4 J	**1.7 J**	5 U	NA	25 U	1 U	5 U	5 U	**33**
33MW08S/GW05	33MW8S	7/2/2014		2.0 U	2.0 U	6.1	**1.1 J**	2.0 U	NA	20 U	2.0 U	4.0 U	2.0 U	**76**
33MW08S/GW06	33MW8S	9/23/2014		2.0 U	2.0 U	6.5	**0.98 J**	2.0 U	NA	20 U	2.0 U	4.0 U	2.0 U	**64**
33MW08S/GW07	33MW8S	12/17/2014		4.0 U	4.0 U	8.8	4.0 U	4.0 U	NA	40 U	4.0 U	8.0 U	4.0 U	**79**
33MW08S/GW08	33MW8S	3/12/2015		2.0 U	2.0 U	8.7	**0.95 J**	2.0 U	NA	20 U	2.0 U	4.0 U	2.0 U	**77**
33MW9S/GW1	33MW9S	5/12/1997		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW9S/GW2	33MW9S	7/14/1998		5 UJ*	5 UJ*	5 UJ*	5 UJ*	5 UJ*	NA	100 UJ*	5 UJ*	5 UJ*	5 UJ*	**7.15 J***
33MW9S/GW4	33MW9S	10/4/2007		5 U	5 U	**1.3 J**	5 U	5 U	NA	25 U	1 U	5 U	5 U	**1.9 J**
33MW09S/GW05	33MW9S	7/1/2014		1.0 U	1.0 U	**0.63 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.29 J**
33MW09S/GW06	33MW9S	9/23/2014		1.0 U	1.0 U	**0.72 J**	1.0 U	1.0 U	NA	**4.6 J**	1.0 U	2.0 U	1.0 U	**0.50 J**
33MW09S/GW07	33MW9S	12/17/2014		1.0 U	1.0 U	**0.62 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 JU
33MW09S/GW08	33MW9S	3/12/2015		1.0 U	1.0 U	**0.62**	1.0 U	1.0 U	NA	**24**	1.0 U	2.0 U	1.0 U	**0.87 J**

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloroethene µg/L	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L
			CMS Screening Level	200	5	2.7	7	5	130	14,000	5	810	80	70
33MW10D/GW2	33MW10D	7/14/1998		5 U	5 U	**4.32 J**	5 U	5 U	NA	100 U	5 U	5 U	5 U	**74.4**
33MW10D/GW2	33MW10D	9/21/1998		5 U	5 U	**2.9 J**	**2.2 J**	5 U	**65**	5 U	5 U	5 U	5 U	**63**
33MW10D/GW3	33MW10D	2/1/2001		1 U	1 U	**1.5**	1 U	1 U	NA	NA	1 U	NA	1 U	**14**
33MW10D/GW3D	33MW10D	2/1/2001	Duplicate	1 U	1 U	**1.6**	1 U	1 U	NA	NA	1 U	NA	1 U	**14**
33MW10D/GW3QA	33MW10D	2/1/2001		1 U	1 U	**1.2**	1 U	1 U	NA	NA	1 U	NA	1 U	**11.3**
33MW10D/GW4QA	33MW10D	10/3/2007		1 U	1 U	1 U	1 U	1 U	NA	25 U	1 U	1 U	1 U	1 U
33MW10D/GW4	33MW10D	10/3/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW10D/GW4D	33MW10D	10/3/2007	Duplicate	5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW10D/GW05	33MW10D	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW05D	33MW10D	7/1/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW06D	33MW10D	9/23/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW06	33MW10D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW07D	33MW10D	12/17/2014	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW07	33MW10D	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW08D	33MW10D	3/12/2015	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10D/GW08	33MW10D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10S/GW2	33MW10S	7/14/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW10S/GW3	33MW10S	2/1/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW10S/GW4QA	33MW10S	10/3/2007		1 U	1 U	1 U	1 U	1 U	NA	25 U	1 U	1 U	1 U	1 U
33MW10S/GW4	33MW10S	10/3/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW10S/GW05	33MW10S	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW10S/GW06	33MW10S	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10S/GW07	33MW10S	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW10S/GW08	33MW10S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW11D/GW2	33MW11D	7/14/1998		5 U	5 U	**2.92 J**	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW11D/GW3	33MW11D	2/1/2001		1 U	1 U	**1.8**	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW11D/GW4	33MW11D	10/4/2007		5 U	5 U	5 U	5 U	5 U	NA	25 U	1 U	5 U	5 U	5 U
33MW11D/GW05	33MW11D	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW11D/GW06	33MW11D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW11D/GW07	33MW11D	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW11D/GW08	33MW11D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**18 J**	1.0 U	2.0 U	1.0 U	1.0 U
33MW11S/GW2	33MW11S	7/14/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW11S/GW3	33MW11S	2/1/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	1 U
33MW11S/GW4	33MW11S	9/27/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	**0.46 J**	5 U	5 U	**2.3 J**
33MW11S/GW05	33MW11S	7/1/2014		1.0 U	1.0 U	**0.87 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.21 J**
33MW11S/GW06	33MW11S	9/23/2014		1.0 U	1.0 U	**0.40 J+**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.22 J+**
33MW11S/GW07	33MW11S	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 JU
33MW11S/GW08	33MW11S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**22 J**	1.0 U	2.0 U	1.0 U	1.0 JU
33MW12D/GW2	33MW12D	7/16/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW12D/GW4	33MW12D	9/27/2007		5 U	5 U	**0.59 J**	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW12D/GW05	33MW12D	6/30/2014		1.0 U	1.0 U	**0.33 J**	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	**0.25 J**
33MW12D/GW06	33MW12D	9/22/2014		1.0 U	1.0 U	**0.30 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.20 J**
33MW12D/GW07	33MW12D	12/16/2014		1.0 U	1.0 U	**0.41 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.30 J**
33MW12D/GW08	33MW12D	3/11/2015		1.0 U	1.0 U	**0.29 J**	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 JU

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloroethene µg/L	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L
			CMS Screening Level	200	5	2.7	7	5	130	14,000	5	810	80	70
33MW12S/GW2	33MW12S	7/16/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW12S/GW4	33MW12S	9/27/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW12S/GW05	33MW12S	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW12S/GW06	33MW12S	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW12S/GW07	33MW12S	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW12S/GW08	33MW12S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW13D/GW2	33MW13D	7/17/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW13D/GW3	33MW13D	2/1/2001		1 U	1 U	1 U	1 UJ*	1 U	NA	NA	1 U	NA	1 U	1 U
33MW13D/GW4	33MW13D	10/1/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW13D/GW05	33MW13D	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.16 J**
33MW13D/GW06	33MW13D	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW13D/GW07	33MW13D	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 JU
33MW13D/GW08	33MW13D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**19**	1.0 U	2.0 U	1.0 U	1.0 U
33MW13S/GW2	33MW13S	7/17/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW13S/GW3	33MW13S	2/1/2001		1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	1 U	**1.4**
33MW13S/GW4	33MW13S	10/2/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW13S/GW05	33MW13S	7/1/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW13S/GW06	33MW13S	9/23/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW13S/GW07	33MW13S	12/17/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW13S/GW08	33MW13S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW14D/GW2	33MW14D	7/14/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW14D/GW4	33MW14D	10/3/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW14D/GW05	33MW14D	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW14D/GW06	33MW14D	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW14D/GW07	33MW14D	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW14D/GW08	33MW14D	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW14S/GW2	33MW14S	7/14/1998		5 U	5 U	5 U	5 U	5 U	NA	100 U	5 U	5 U	5 U	5 U
33MW14S/GW4	33MW14S	10/3/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW14S/GW05	33MW14S	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW14S/GW06	33MW14S	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW14S/GW07	33MW14S	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW14S/GW08	33MW14S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW15D/GW4	33MW15D	10/2/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW15D/GW05	33MW15D	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW15D/GW06	33MW15D	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW15D/GW07	33MW15D	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW15D/GW08	33MW15D	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**2.9 J**	1.0 U	2.0 U	1.0 U	1.0 U
33MW15S/GW4	33MW15S	10/2/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW15S/GW05	33MW15S	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	1.0 U
33MW15S/GW06	33MW15S	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW15S/GW07	33MW15S	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U
33MW15S/GW08	33MW15S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	**2.3 J**	1.0 U	2.0 U	1.0 U	1.0 U
33MW16D/GW4	33MW16D	10/3/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW16D/GW05	33MW16D	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.19 J**
33MW16D/GW06	33MW16D	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.17 J**
33MW16D/GW07	33MW16D	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.20 J**
33MW16D/GW08	33MW16D	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 JU

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloroethene µg/L	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L
			CMS Screening Level	200	5	2.7	7	5	130	14,000	5	810	80	70
33MW16S/GW4	33MW16S	10/2/2007		5 U	5 U	5 U	5 U	5 U	NA	10 U	5 U	5 U	5 U	5 U
33MW16S/GW05	33MW16S	6/30/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 JU	1.0 U	2.0 U	1.0 U	**0.22 J**
33MW16S/GW06	33MW16S	9/22/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.20 J**
33MW16S/GW07	33MW16S	12/16/2014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	**0.24 J**
33MW16S/GW08	33MW16S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	10 U	1.0 U	2.0 U	1.0 U	1.0 U

Bold - Constituent was detected.
Shaded - Constituent exceeded screening level.
CMS - Corrective Measures Study (BMcD, 2013)
D - dilution
J - qualified as an estimated value
J* - qualified as an estimated value during data evaluation
J+ - qualified as an estimated value, biased high
NA - not analyzed
U - not detected
µg/L - micrograms per liter

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: Units:	Ethylbenzene µg/L	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
		CMS Screening Level		700	5	5	1,000	100	5	2	10,000
17MW01D/GW05	17MW1D	7/2/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW01D/GW06	17MW1D	9/23/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW01D/GW07	17MW1D	12/18/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW01D/GW08	17MW1D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW01S/GW05	17MW1S	7/2/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW01S/GW05D	17MW1S	7/2/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW01S/GW06D	17MW1S	9/23/2014	Duplicate	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	**0.28 J**	**0.16 J**	2.2 U
17MW01S/GW06	17MW1S	9/23/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	**0.36 J**	**0.13 J**	2.2 U
17MW01S/GW07D	17MW1S	12/18/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.31 J**	**0.18 J**	2.2 U
17MW01S/GW07	17MW1S	12/18/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	**0.16 J**	2.2 U
17MW01S/GW08D	17MW1S	3/12/2015	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	1.0 U	2.2 U
17MW01S/GW08	17MW1S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	1.0 U	2.2 U
17MW02D/GW05	17MW2D	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02D/GW06	17MW2D	9/23/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02D/GW07	17MW2D	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02D/GW08	17MW2D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02I/GW05	17MW2I	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02I/GW06	17MW2I	9/23/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02I/GW07	17MW2I	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02I/GW08	17MW2I	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02S/GW05	17MW2S	7/2/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02S/GW06	17MW2S	9/23/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02S/GW07	17MW2S	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
17MW02S/GW08	17MW2S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW2/GW1	33MW2	5/12/1997		5 U	5 U	5 U	5 U	**14.1**	21	1,880 D	NA
33MW2/GW2	33MW2	7/17/1998		5 U	5 U	5 U	5 U	**15.7**	5,230 D	583 D	NA
33MW2/GW3	33MW2	2/2/2001		5 UD	5 UD	5 UD	5 UD	180 D	150 D	370 D	12 U
33MW2/GW4	33MW2	10/5/2007		50 U	50 U	50 U	50 U	50 U	270	1,500	150 U
33MW02/GW05	33MW2	7/2/2014		200 U	400 U	200 U	200 U	200 U	6,000	610	450 U
33MW02/GW06	33MW2	9/24/2014		100 U	200 UJ	100 U	100 U	**15 J**	5,100	630	220 U
33MW02/GW07	33MW2	12/18/2014		400 U	800 U	400 U	400 U	400 U	3,500	970	890 U
33MW02/GW08	33MW2	3/13/2015		200 U	400 U	200 U	200 U	200 U	1,400	3,800	450 U
33MW2S/GW1	33MW2S	5/12/1997		5 U	5 U	10.1	**15.4**	106	132,000 D	64.4	NA
33MW2S/GW2	33MW2S	7/17/1998		5 UJ*	5.93 J*	23.1 J*	**14.8 J***	2,500 DUJ*	67,700 DJ*	1,100 DJ*	NA
33MW2S/GW3	33MW2S	2/2/2001		500 UD	500 UD	500 UD	500 UD	500 UD	52,000 D	500 UD	1,200 U
33MW2S/GW4	33MW2S	10/5/2007		50 U	50 U	50 U	50 U	50 U	1,100	150	150 U
33MW02S/GW05	33MW2S	7/2/2014		50 U	100 U	50 U	50 U	50 U	1,300	50 U	110 U
33MW02S/GW06	33MW2S	9/24/2014		50 U	100 UJ	50 U	50 U	50 U	1,700	12 J	110 U
33MW02S/GW07	33MW2S	12/18/2014		20 U	40 U	20 U	20 U	20 U	480	20 U	45 U
33MW02S/GW08	33MW2S	3/13/2015		40 U	80 U	40 U	40 U	40 U	1,500	7.7 J	89 U
33MW3/GW1	33MW3	5/12/1997		5 U	5 U	5 U	5 U	5 U	32.1	19.1	NA
33MW3/GW1D	33MW3	5/12/1997	Duplicate	5 U	5 U	5 U	5 U	5 U	26.3	17.6	NA
33MW3/GW2	33MW3	7/17/1998		5 U	5 U	5 U	5 U	5 U	35.1	148	NA
33MW3/GW3	33MW3	2/2/2001		1 U	1 U	1 U	1 U	**3.8**	31	32	2.4 U
33MW3/GW4	33MW3	10/4/2007		10 U	10 U	10 U	10 U	**3.5 J**	480	60	30 U

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: Units:	Ethylbenzene µg/L	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
		CMS Screening Level		700	5	5	1,000	100	5	2	10,000
33MW03R/GW05	33MW3R	7/2/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	12	2.2 U
33MW03R/GW06	33MW3R	9/24/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14	2.2 U
33MW03R/GW07	33MW3R	12/18/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	20	2.2 U
33MW03R/GW08	33MW3R	3/13/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	5.8	20	2.2 U
33MW4/GW1	33MW4	5/12/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW4/GW2	33MW4	7/16/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW4/GW3	33MW4	2/2/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW4/GW4	33MW4	9/26/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW04/GW05	33MW4	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW04/GW06	33MW4	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.2 U
33MW04/GW07	33MW4	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW04/GW08	33MW4	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW4S/GW1	33MW4S	5/12/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW4S/GW2	33MW4S	7/15/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW4S/GW3	33MW4S	2/2/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW4S/GW4	33MW4S	10/1/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW04S/GW05	33MW4S	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW04S/GW06	33MW4S	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.2 U
33MW04S/GW07	33MW4S	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW04S/GW08	33MW4S	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW5D/GW1	33MW5D	5/30/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW5D/GW2	33MW5D	7/16/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW5D/GW4	33MW5D	9/26/2007		**0.61 J**	5 U	5 U	5 U	5 U	5 U	2 U	**0.81 J**
33MW05D/GW05	33MW5D	7/2/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW05D/GW06	33MW5D	9/24/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	2.2 U
33MW05D/GW07	33MW5D	12/18/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW05D/GW08	33MW5D	3/13/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW5I/GW2	33MW5I	7/17/1998		5 U	5 U	5 U	5 U	**6.19**	806 D	12.4	NA
33MW5I/GW4	33MW5I	10/4/2007		25 U	25 U	25 U	25 U	**3.7 J**	77	66	75 U
33MW05I/GW05	33MW5I	7/2/2014		20 U	14 J	20 U	20 U	**4.5 J**	13 J	68	45 U
33MW05I/GW06	33MW5I	9/24/2014		10 U	20 UJ	10 U	10 U	**4.1 J**	16	80	22 U
33MW05I/GW07	33MW5I	12/18/2014		20 U	40 U	20 U	20 U	**3.5 J**	6.8 J	100	45 U
33MW05I/GW08	33MW5I	3/13/2015		20 U	40 U	20 U	20 U	**4.2 J**	34	48	45 U
33MW5S/GW1	33MW5S	5/12/1997		5 U	5 U	5 U	5 U	5 U	279	30.6	NA
33MW5S/GW2	33MW5S	7/17/1998		5 U	5 U	5 U	5 U	5 U	19.2	26.6	NA
33MW5S/GW2D	33MW5S	7/17/1998	Duplicate	5 U	5 U	5 U	5 U	**2.96 J**	19.6	24.3	NA
33MW5S/GW4	33MW5S	10/4/2007		5 U	5 U	5 U	5 U	5 U	**2.4 J**	4.1 J	15 U
33MW5S/GW4D	33MW5S	10/4/2007	Duplicate	5 U	5 U	5 U	5 U	**0.51 J**	**3.2 J**	4.2 J	15 U
33MW05S/GW05	33MW5S	7/2/2014		1.0 U	2.0 U	1.0 U	1.0 U	**0.29 J**	1.0 U	1.0 U	2.2 U
33MW05S/GW05D	33MW5S	7/2/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	**0.32 J**	1.0 U	**1.0**	2.2 U
33MW05S/GW06D	33MW5S	9/24/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	**0.23 J**	1.0 U	**0.71 J**	2.2 U
33MW05S/GW06	33MW5S	9/24/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	**0.22 J**	1.0 U	**0.62 J**	2.2 U
33MW05S/GW07D	33MW5S	12/18/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	**0.20 J**	1.0 U	**0.84 J**	2.2 U
33MW05S/GW07	33MW5S	12/18/2014		1.0 U	2.0 U	1.0 U	1.0 U	**0.18 J**	1.0 U	**0.72 J**	2.2 U
33MW05S/GW08D	33MW5S	3/13/2015	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	**0.23 J**	1.0 U	**0.73 J**	2.2 U
33MW05S/GW08	33MW5S	3/13/2015		1.0 U	2.0 U	1.0 U	1.0 U	**0.24 J**	1.0 U	**0.70 J**	2.2 U

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	Ethylbenzene µg/L	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
		CMS Screening Level		700	5	5	1,000	100	5	2	10,000
33MW6D/DW1	33MW6D	4/17/1997		5 U	5 U	5 U	5 U	5 U	5 U	60.9	NA
33MW6D/GW1	33MW6D	5/30/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW6D/GW2	33MW6D	7/15/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW6D/GW3	33MW6D	2/2/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW6D/GW4	33MW6D	10/1/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW06D/GW05	33MW6D	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	2.2 U
33MW06D/GW06	33MW6D	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW06D/GW07	33MW6D	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.31 J**	2.2 U
33MW06D/GW08	33MW6D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.35 J**	2.2 U
33MW7D/GW1	33MW7D	5/12/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW7D/GW2	33MW7D	7/16/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW7D/GW3	33MW7D	2/2/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW7D/GW4	33MW7D	10/1/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW07D/GW05	33MW7D	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW07D/GW06	33MW7D	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW07D/GW07	33MW7D	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW07D/GW08	33MW7D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW7S/GW1	33MW7S	5/12/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW7S/GW2	33MW7S	7/16/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW7S/GW3	33MW7S	2/2/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW7S/GW4	33MW7S	10/1/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW07S/GW05	33MW7S	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW07S/GW06	33MW7S	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW07S/GW07	33MW7S	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW07S/GW08	33MW7S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW8S/GW1	33MW8S	5/12/1997		5 U	5 U	5 U	5 U	5 U	26	2 U	NA
33MW8S/GW2	33MW8S	7/16/1998		5 U	5 U	5 U	5 U	5 U	51.7	2 U	NA
33MW8S/GW4	33MW8S	10/4/2007		5 U	5 U	5 U	5 U	5 U	130	**0.89 J**	15 U
33MW08S/GW05	33MW8S	7/2/2014		2.0 U	4.0 U	2.0 U	2.0 U	**1.0 J**	79	**0.62 J**	4.5 U
33MW08S/GW06	33MW8S	9/23/2014		2.0 U	4.0 UJ	2.0 U	2.0 U	**1.1 J**	56	**0.40 J**	4.5 U
33MW08S/GW07	33MW8S	12/17/2014		4.0 U	8.0 U	4.0 U	4.0 U	**1.2 J**	45	**0.44 J**	8.9 U
33MW08S/GW08	33MW8S	3/12/2015		2.0 U	4.0 U	2.0 U	2.0 U	**1.1 J**	40	**0.34 J**	4.5 U
33MW9S/GW1	33MW9S	5/12/1997		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW9S/GW2	33MW9S	7/14/1998		5 UJ*	5 UJ*	5 UJ*	5 UJ*	5 UJ*	5 UJ*	2 UJ*	NA
33MW9S/GW4	33MW9S	10/4/2007		5 U	5 U	5 U	5 U	5 U	**1.4 J**	5 U	15 U
33MW09S/GW05	33MW9S	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.27 J**	1.0 U	2.2 U
33MW09S/GW06	33MW9S	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.23 J**	1.0 U	2.2 U
33MW09S/GW07	33MW9S	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	1.0 U	2.2 U
33MW09S/GW08	33MW9S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**	1.0 U	2.2 U

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	Ethylbenzene µg/L	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
		CMS Screening Level		700	5	5	1,000	100	5	2	10,000
33MW10D/GW2	33MW10D	7/14/1998		5 U	5 U	5 U	5 U	5 U	5 U	9.05	NA
33MW10D/GW2	33MW10D	9/21/1998		5 U	5 U	5 U	5 U	5 U	5 U	4.1	NA
33MW10D/GW3	33MW10D	2/1/2001		1 U	1 U	1 U	1 U	**1.1**	1 U	22	2.4 U
33MW10D/GW3D	33MW10D	2/1/2001	Duplicate	1 U	1 U	1 U	1 U	**1**	1 U	22	2.4 U
33MW10D/GW3QA	33MW10D	2/1/2001		1 U	1 U	1 U	1 U	1 U	1 U	16.4	3 U
33MW10D/GW4QA	33MW10D	10/3/2007		1 U	1 U	1 U	1 U	1 U	1 U	**0.8 J**	3 U
33MW10D/GW4	33MW10D	10/3/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW10D/GW4D	33MW10D	10/3/2007	Duplicate	5 U	5 U	5 U	5 U	5 U	5 U	**0.88 J**	10 U
33MW10D/GW05	33MW10D	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.41 J**	2.2 U
33MW10D/GW05D	33MW10D	7/1/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	2.2 U
33MW10D/GW06D	33MW10D	9/23/2014	Duplicate	1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10D/GW06	33MW10D	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10D/GW07D	33MW10D	12/17/2014	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.94 J**	2.2 U
33MW10D/GW07	33MW10D	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.1**	2.2 U
33MW10D/GW08D	33MW10D	3/12/2015	Duplicate	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10D/GW08	33MW10D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10S/GW2	33MW10S	7/14/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW10S/GW3	33MW10S	2/1/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW10S/GW4QA	33MW10S	10/3/2007		1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
33MW10S/GW4	33MW10S	10/3/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW10S/GW05	33MW10S	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10S/GW06	33MW10S	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10S/GW07	33MW10S	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW10S/GW08	33MW10S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW11D/GW2	33MW11D	7/14/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW11D/GW3	33MW11D	2/1/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW11D/GW4	33MW11D	10/4/2007		5 U	5 U	5 U	5 U	5 U	5 U	5 U	15 U
33MW11D/GW05	33MW11D	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW11D/GW06	33MW11D	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW11D/GW07	33MW11D	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW11D/GW08	33MW11D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW11S/GW2	33MW11S	7/14/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW11S/GW3	33MW11S	2/1/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW11S/GW4	33MW11S	9/27/2007		**0.65 J**	5 U	5 U	5 U	5 U	**1.8 J**	2 U	**0.86 J**
33MW11S/GW05	33MW11S	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.46 J**	1.0 U	2.2 U
33MW11S/GW06	33MW11S	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.34 J+**	1.0 U	2.2 U
33MW11S/GW07	33MW11S	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW11S/GW08	33MW11S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW12D/GW2	33MW12D	7/16/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW12D/GW4	33MW12D	9/27/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW12D/GW05	33MW12D	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.13 J**	2.2 U
33MW12D/GW06	33MW12D	9/22/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	**0.13 J**	2.2 U
33MW12D/GW07	33MW12D	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW12D/GW08	33MW12D	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	Ethylbenzene µg/L	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
		CMS Screening Level		700	5	5	1,000	100	5	2	10,000
33MW12S/GW2	33MW12S	7/16/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW12S/GW4	33MW12S	9/27/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW12S/GW05	33MW12S	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW12S/GW06	33MW12S	9/22/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW12S/GW07	33MW12S	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW12S/GW08	33MW12S	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13D/GW2	33MW13D	7/17/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW13D/GW3	33MW13D	2/1/2001		1 U	1 U	1 U	1 UJ*	1 U	1 U	1 U	2.4 U
33MW13D/GW4	33MW13D	10/1/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW13D/GW05	33MW13D	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13D/GW06	33MW13D	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13D/GW07	33MW13D	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13D/GW08	33MW13D	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13S/GW2	33MW13S	7/17/1998		5 U	5 U	5 U	5 U	5 U	3.79 JU*	2 U	NA
33MW13S/GW3	33MW13S	2/1/2001		1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4 U
33MW13S/GW4	33MW13S	10/2/2007		5 U	5 U	5 U	5 U	5 U	5 U	**0.73 J**	10 U
33MW13S/GW05	33MW13S	7/1/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13S/GW06	33MW13S	9/23/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13S/GW07	33MW13S	12/17/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW13S/GW08	33MW13S	3/12/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW14D/GW2	33MW14D	7/14/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW14D/GW4	33MW14D	10/3/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW14D/GW05	33MW14D	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW14D/GW06	33MW14D	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.2 U
33MW14D/GW07	33MW14D	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW14D/GW08	33MW14D	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW14S/GW2	33MW14S	7/14/1998		5 U	5 U	5 U	5 U	5 U	5 U	2 U	NA
33MW14S/GW4	33MW14S	10/3/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW14S/GW05	33MW14S	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW14S/GW06	33MW14S	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.2 U
33MW14S/GW07	33MW14S	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW14S/GW08	33MW14S	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	1.0 U	2.2 U
33MW15D/GW4	33MW15D	10/2/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW15D/GW05	33MW15D	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW15D/GW06	33MW15D	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.2 U
33MW15D/GW07	33MW15D	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW15D/GW08	33MW15D	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW15S/GW4	33MW15S	10/2/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW15S/GW05	33MW15S	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW15S/GW06	33MW15S	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	2.2 U
33MW15S/GW07	33MW15S	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW15S/GW08	33MW15S	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW16D/GW4	33MW16D	10/3/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW16D/GW05	33MW16D	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW16D/GW06	33MW16D	9/22/2014		1.0 U	2.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U
33MW16D/GW07	33MW16D	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.14 J**	2.2 U
33MW16D/GW08	33MW16D	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2 U

Table 3-4
Groundwater Analytical Results - All Events
March 2015 Groundwater Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Point	Sample Date	Analyte: / Units:	Ethylbenzene µg/L	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
			CMS Screening Level	700	5	5	1,000	100	5	2	10,000
33MW16S/GW4	33MW16S	10/2/2007		5 U	5 U	5 U	5 U	5 U	5 U	2 U	10 U
33MW16S/GW05	33MW16S	6/30/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	1.0 U	2.2 U
33MW16S/GW06	33MW16S	9/22/2014		1.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U	**0.43 J**	1.0 U	2.2 U
33MW16S/GW07	33MW16S	12/16/2014		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	**0.39 J**	1.0 U	2.2 U
33MW16S/GW08	33MW16S	3/11/2015		1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	1.0 U	2.2 U

Bold - Constituent was detected.
Shaded - Constituent exceeded screening level.
CMS - Corrective Measures Study (BMcD, 2013)
D - dilution
J - qualified as an estimated value
J* - qualified as an estimated value during data evaluation
J+ - qualified as an estimated value, biased high
NA - not analyzed
U - not detected
µg/L - micrograms per liter

FIGURES

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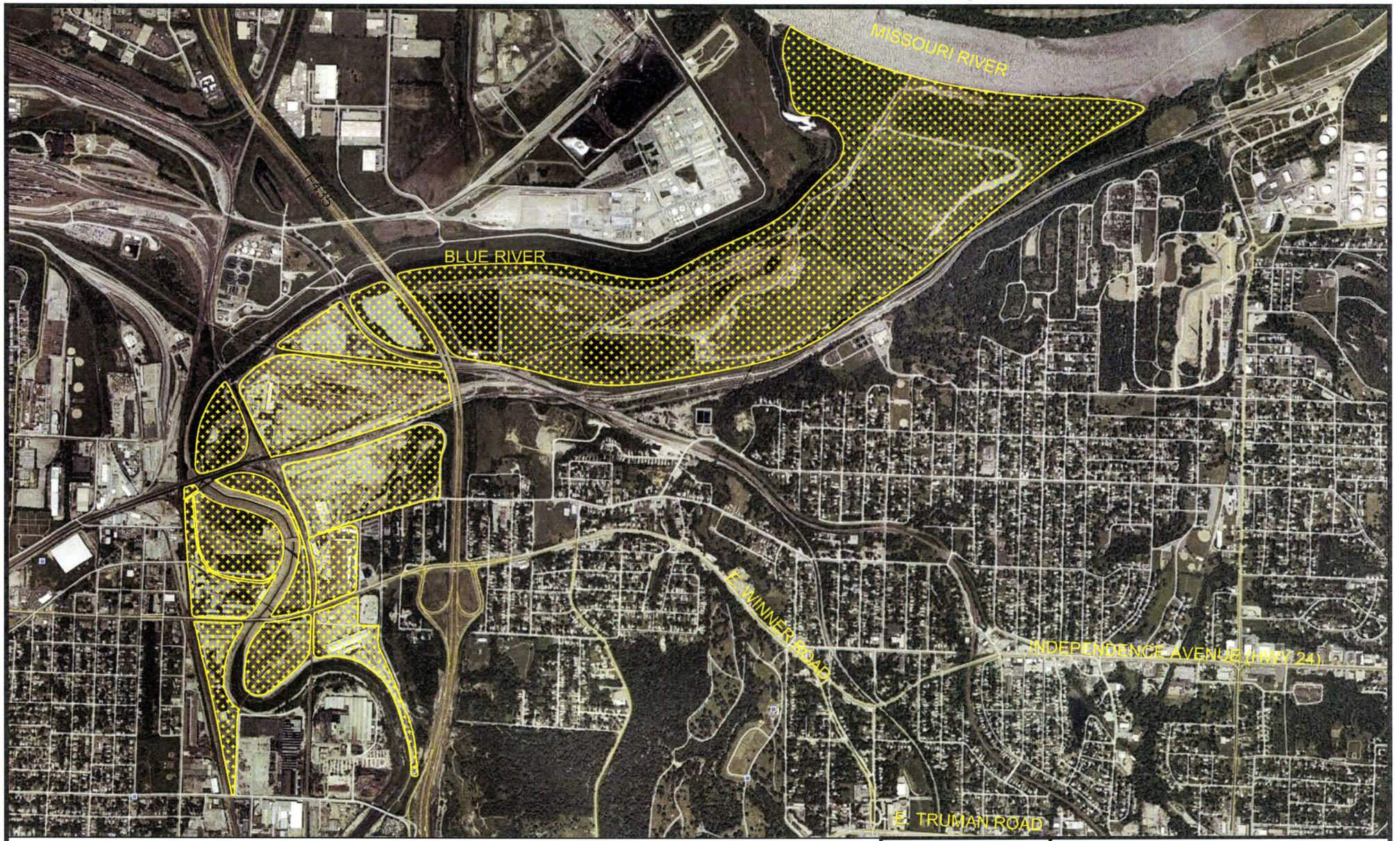

LEGEND:

RCRA FACILITY BOUNDARY

NORTH

0 2000' 4000'

SCALE IN FEET

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Figure 1-1

FACILITY LOCATION MAP
AK STEEL
KANSAS CITY, MISSOURI

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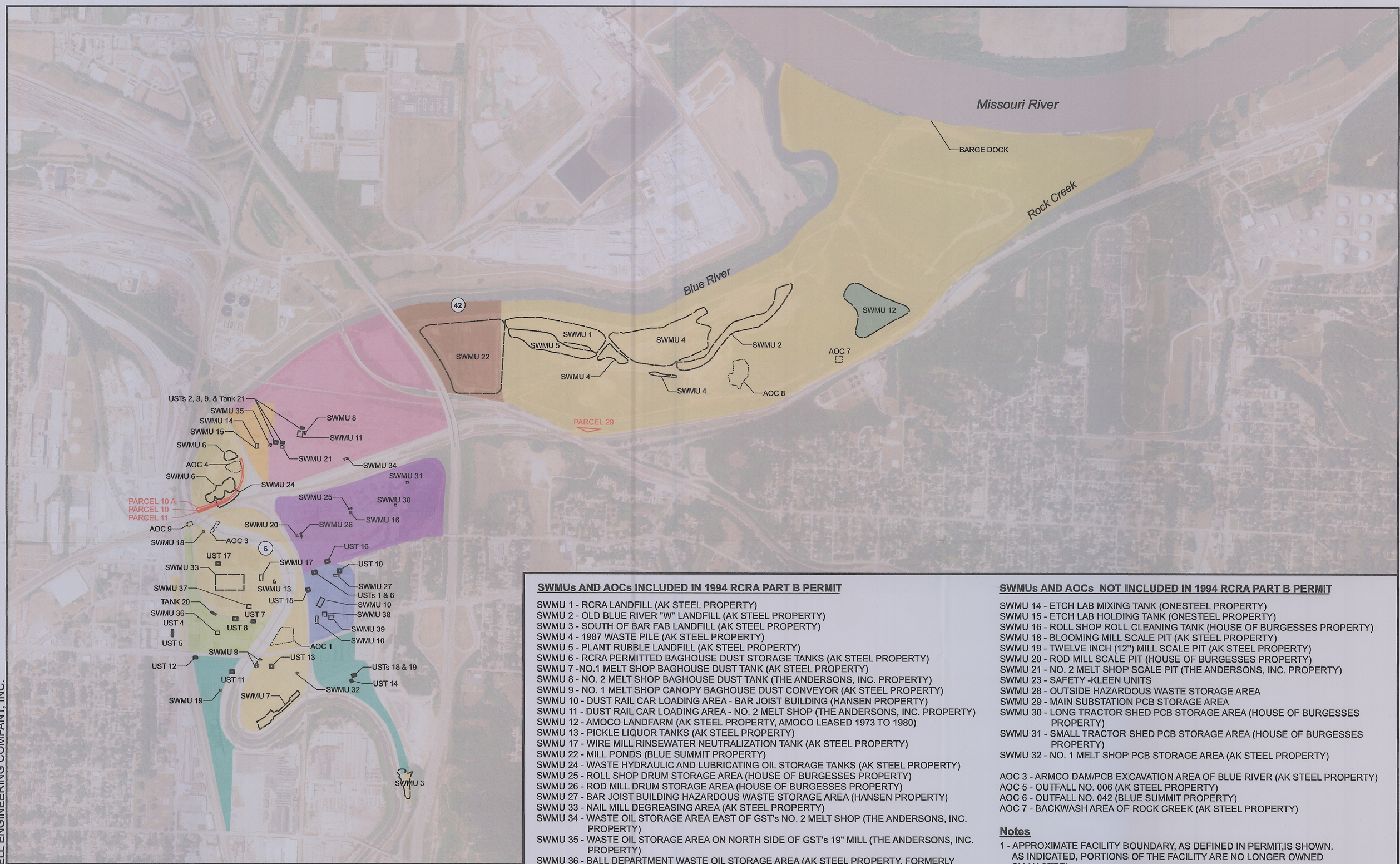

SWMUs AND AOCs INCLUDED IN 1994 RCRA PART B PERMIT

SWMU 1 - RCRA LANDFILL (AK STEEL PROPERTY)
SWMU 2 - OLD BLUE RIVER "W" LANDFILL (AK STEEL PROPERTY)
SWMU 3 - SOUTH OF BAR FAB LANDFILL (AK STEEL PROPERTY)
SWMU 4 - 1987 WASTE PILE (AK STEEL PROPERTY)
SWMU 5 - PLANT RUBBLE LANDFILL (AK STEEL PROPERTY)
SWMU 6 - RCRA PERMITTED BAGHOUSE DUST STORAGE TANKS (AK STEEL PROPERTY)
SWMU 7 -NO.1 MELT SHOP BAGHOUSE DUST TANK (AK STEEL PROPERTY)
SWMU 8 - NO. 2 MELT SHOP BAGHOUSE DUST TANK (THE ANDERSONS, INC. PROPERTY)
SWMU 9 - NO. 1 MELT SHOP CANOPY BAGHOUSE DUST CONVEYOR (AK STEEL PROPERTY)
SWMU 10 - DUST RAIL CAR LOADING AREA - BAR JOIST BUILDING (HANSEN PROPERTY)
SWMU 11 - DUST RAIL CAR LOADING AREA - NO. 2 MELT SHOP (THE ANDERSONS, INC. PROPERTY)
SWMU 12 - AMOCO LANDFARM (AK STEEL PROPERTY, AMOCO LEASED 1973 TO 1980)
SWMU 13 - PICKLE LIQUOR TANKS (AK STEEL PROPERTY)
SWMU 17 - WIRE MILL RINSEWATER NEUTRALIZATION TANK (AK STEEL PROPERTY)
SWMU 22 - MILL PONDS (BLUE SUMMIT PROPERTY)
SWMU 24 - WASTE HYDRAULIC AND LUBRICATING OIL STORAGE TANKS (AK STEEL PROPERTY)
SWMU 25 - ROLL SHOP DRUM STORAGE AREA (HOUSE OF BURGESSES PROPERTY)
SWMU 26 - ROD MILL DRUM STORAGE AREA (HOUSE OF BURGESSES PROPERTY)
SWMU 27 - BAR JOIST BUILDING HAZARDOUS WASTE STORAGE AREA (HANSEN PROPERTY)
SWMU 33 - NAIL MILL DEGREASING AREA (AK STEEL PROPERTY)
SWMU 34 - WASTE OIL STORAGE AREA EAST OF GST's NO. 2 MELT SHOP (THE ANDERSONS, INC. PROPERTY)
SWMU 35 - WASTE OIL STORAGE AREA ON NORTH SIDE OF GST's 19" MILL (THE ANDERSONS, INC. PROPERTY)
SWMU 36 - BALL DEPARTMENT WASTE OIL STORAGE AREA (AK STEEL PROPERTY, FORMERLY GST LEASED)
SWMU 37 - WIRE MILL WASTE OIL STORAGE AREA (AK STEEL PROPERTY)
SWMU 38 - BAR JOIST TEMPORARY GREASE STORAGE AREA (HANSEN PROPERTY)
SWMU 39 - BAR JOIST WASTE OIL AND GREASE STORAGE AREA (HANSEN PROPERTY)

AOC 1 - ABANDONED FUEL OIL STORAGE TANK (AK STEEL PROPERTY)
AOC 2 - UNDERGROUND STORAGE TANKS (USTs AK STEEL, MILE RAIL, HANSEN, CTE PROPERTIES, AND HOUSE OF BURGESSES LLC PROPERTIES)
AOC 4 - BOILER FURNACE AREA (AK STEEL PROPERTY)
AOC 8 - "OWL GUN CLUB" SHOOTING PARK (AK STEEL PROPERTY)
AOC 9 - BOILER HOUSE (AK STEEL PROPERTY)

SWMUs AND AOCs NOT INCLUDED IN 1994 RCRA PART B PERMIT

SWMU 14 - ETCH LAB MIXING TANK (ONESTEEL PROPERTY)
SWMU 15 - ETCH LAB HOLDING TANK (ONESTEEL PROPERTY)
SWMU 16 - ROLL SHOP ROLL CLEANING TANK (HOUSE OF BURGESSES PROPERTY)
SWMU 18 - BLOOMING MILL SCALE PIT (AK STEEL PROPERTY)
SWMU 19 - TWELVE INCH (12") MILL SCALE PIT (AK STEEL PROPERTY)
SWMU 20 - ROD MILL SCALE PIT (HOUSE OF BURGESSES PROPERTY)
SWMU 21 - NO. 2 MELT SHOP SCALE PIT (THE ANDERSONS, INC. PROPERTY)
SWMU 23 - SAFETY -KLEEN UNITS
SWMU 28 - OUTSIDE HAZARDOUS WASTE STORAGE AREA
SWMU 29 - MAIN SUBSTATION PCB STORAGE AREA
SWMU 30 - LONG TRACTOR SHED PCB STORAGE AREA (HOUSE OF BURGESSES PROPERTY)
SWMU 31 - SMALL TRACTOR SHED PCB STORAGE AREA (HOUSE OF BURGESSES PROPERTY)
SWMU 32 - NO. 1 MELT SHOP PCB STORAGE AREA (AK STEEL PROPERTY)

AOC 3 - ARMCO DAM/PCB EXCAVATION AREA OF BLUE RIVER (AK STEEL PROPERTY)
AOC 5 - OUTFALL NO. 006 (AK STEEL PROPERTY)
AOC 6 - OUTFALL NO. 042 (BLUE SUMMIT PROPERTY)
AOC 7 - BACKWASH AREA OF ROCK CREEK (AK STEEL PROPERTY)

Notes

1 - APPROXIMATE FACILITY BOUNDARY, AS DEFINED IN PERMIT,IS SHOWN. AS INDICATED, PORTIONS OF THE FACILITY ARE NO LONGER OWNED BY AK STEEL.
2 - AREAS HISTORICALLY DECOMMISSIONED AND DEMOLISHED: NO. 1 MELT SHOP, ROD MILL, ROLL SHOP, AND NO. 2 MELT SHOP.
3 - LOCATIONS OF SWMUS AND AOCS NOT INCLUDED IN THE 1994 RCRA PART B PERMIT ARE APPROXIMATE AND NOT BASED ON SURVEY INFORMATION. THE LOCATIONS OF THESE SWMUS AND AOCS ARE BASED UPON FIG. 6 OF THE RCRA FACILITY ASSESSMENT (TETRA TECH, 1992).
4 - ONLY OUTFALLS IDENTIFIED IN THE RCRA FACILITY ASSESSMENT ARE INCLUDED ON THIS FIGURE.
5 - THE LOCATIONS OF SWMUS 23, 28, AND 29 ARE UNKNOWN.

Legend

- (6) OUTFALL
- AOC BOUNDARY
- SWMU BOUNDARY
- LOCATION OF FORMER USTs BELONGING TO AOC 2; TANK
- CITY OWNED PARCEL
- AK STEEL PROPERTY
- THE ANDERSONS, INC. PROPERTY (FORMERLY GST)
- AK STEEL PROPERTY FORMERLY LEASED TO GST
- AK STEEL PROPERTY FORMERLY LEASED TO AMOCO
- HANSEN PROPERTY DEVELOPMENT, INC. (FORMERLY GST) D.B.A. U-PICK-IT OF KANSAS CITY
- HOUSE OF BURGESSES LLC PROPERTY (FORMERLY GST) D.B.A. MIDWEST SCRAP MANAGEMENT
- CTE PROPERTIES LLC OR CTE PROPERTIES II LLC (FORMERLY GST) D.B.A. CUSTOM TRUCK & EQUIPMENT
- ONE STEEL GRINDING SYSTEMS LLC (FORMERLY GST)
- BLUE SUMMIT LLC (FORMERLY GST)

1,000 500 0 1,000
Feet

Data Source = ESRI and Burns & McDonnell Engineering Company, Inc.

NORTH

BURNS McDONNELL

Figure 1-2

FACILITY OWNERSHIP MAP

AK STEEL FACILITY
KANSAS CITY, MISSOURI

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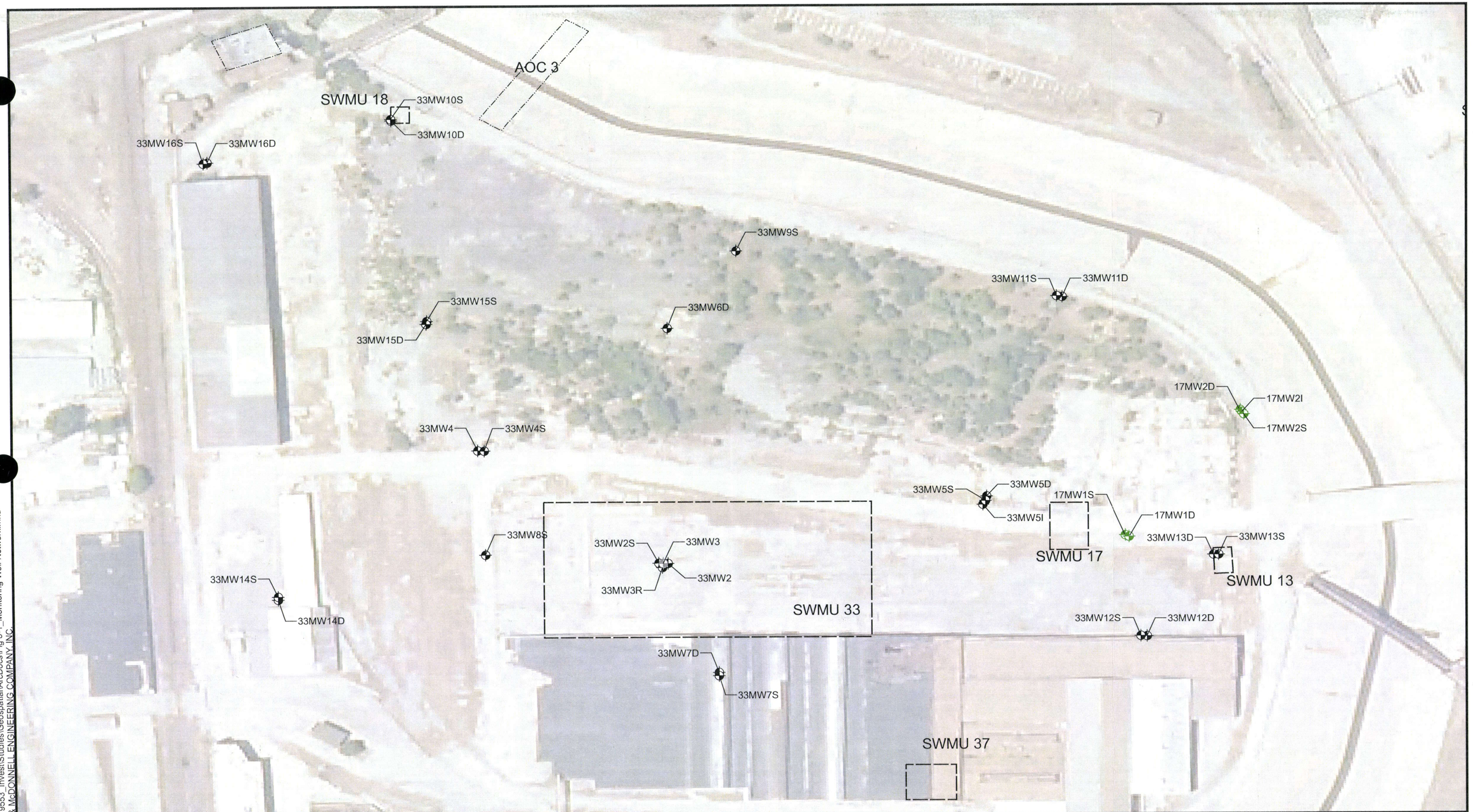

Legend

- Former Monitoring Well
- Monitoring Well
- Monitoring Well - Installed 2014
- AOC Boundary
- SWMU Boundary

Notes

1 - Monitoring Well 33MW3 was abandoned in 2011 and replaced with 33MW3R.

0 75 150 300 Feet

N

Source: ESRI and Burns & McDonnell Engineering.

BURNS McDONNELL

Figure 3-1
SWMU 13, SWMU 17, AND SWMU 33 MONITORING WELL NETWORK
AK STEEL FACILITY
KANSAS CITY, MISSOURI

Issued: January, 20 2015

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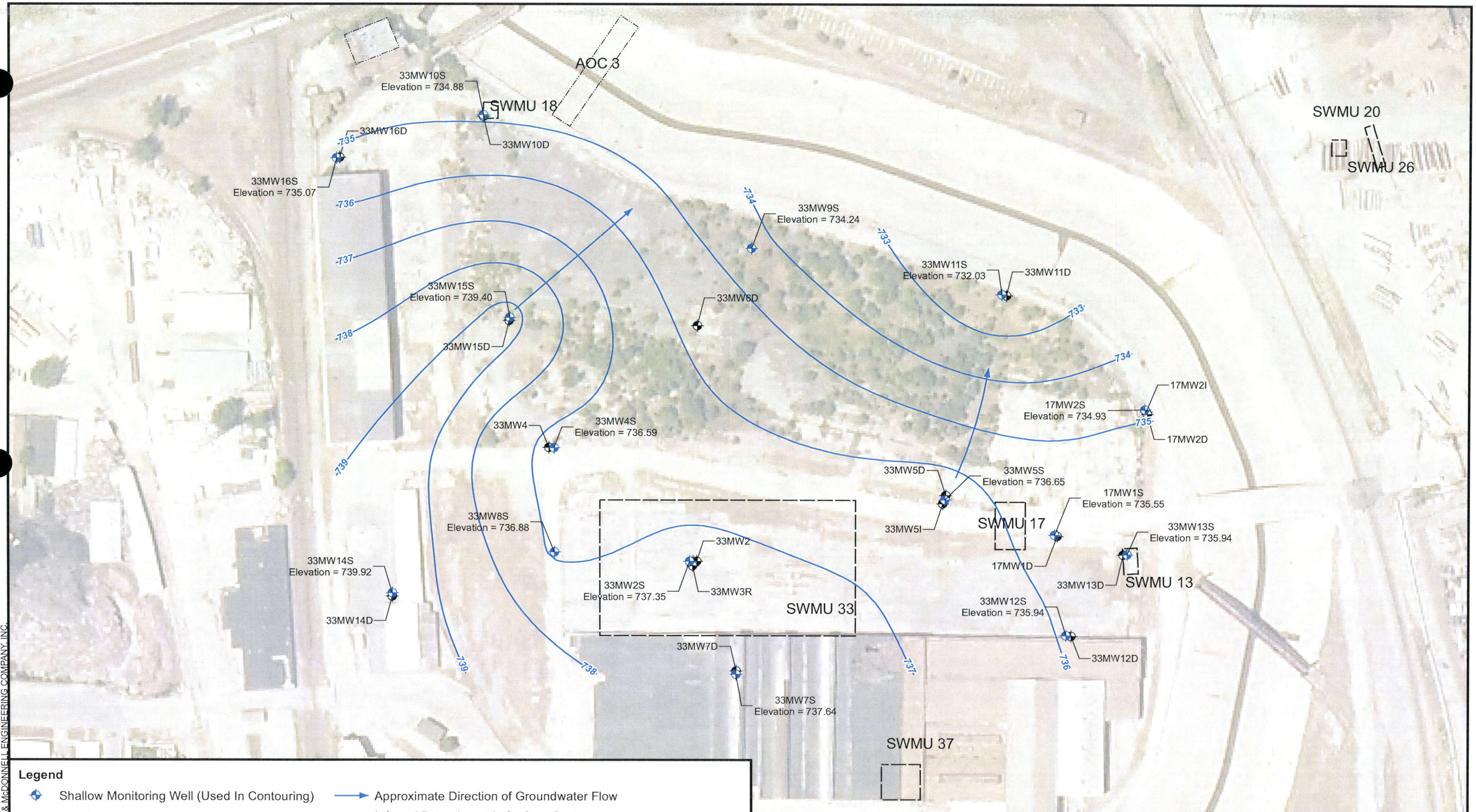

Legend

- Shallow Monitoring Well (Used In Contouring)
- Monitoring Well (Not Used in Contouring)
- Former Monitoring Well
- Approximate Direction of Groundwater Flow
- Inferred Potentiometric Surface Contour
- AOC Boundary
- SWMU Boundary

Note

1 - Monitoring Well 33MW3 was abandoned in 2011 and replaced with 33MW3R.
2 - Potentiometric surface contours are inferred using March 11, 2015 groundwater gauging data.

0 75 150 300 Feet

N

Source: ESRI and Burns & McDonnell Engineering.

BURNS McDONNELL

Figure 3-2
POTENTIOMETRIC SURFACE MAP - SHALLOW INTERVAL SWMUS 13, 17, AND 33
AK STEEL FACILITY
KANSAS CITY, MISSOURI

Issued: April, 22 2015

Path: Z:\Clients\ENV\...\179553_Invest\Studies\Geospatial\ArcDocs\Groundwater Contours\March 2015\Fig 3-2 March 2015 Shallow Potentiometric Surface Map.mxd
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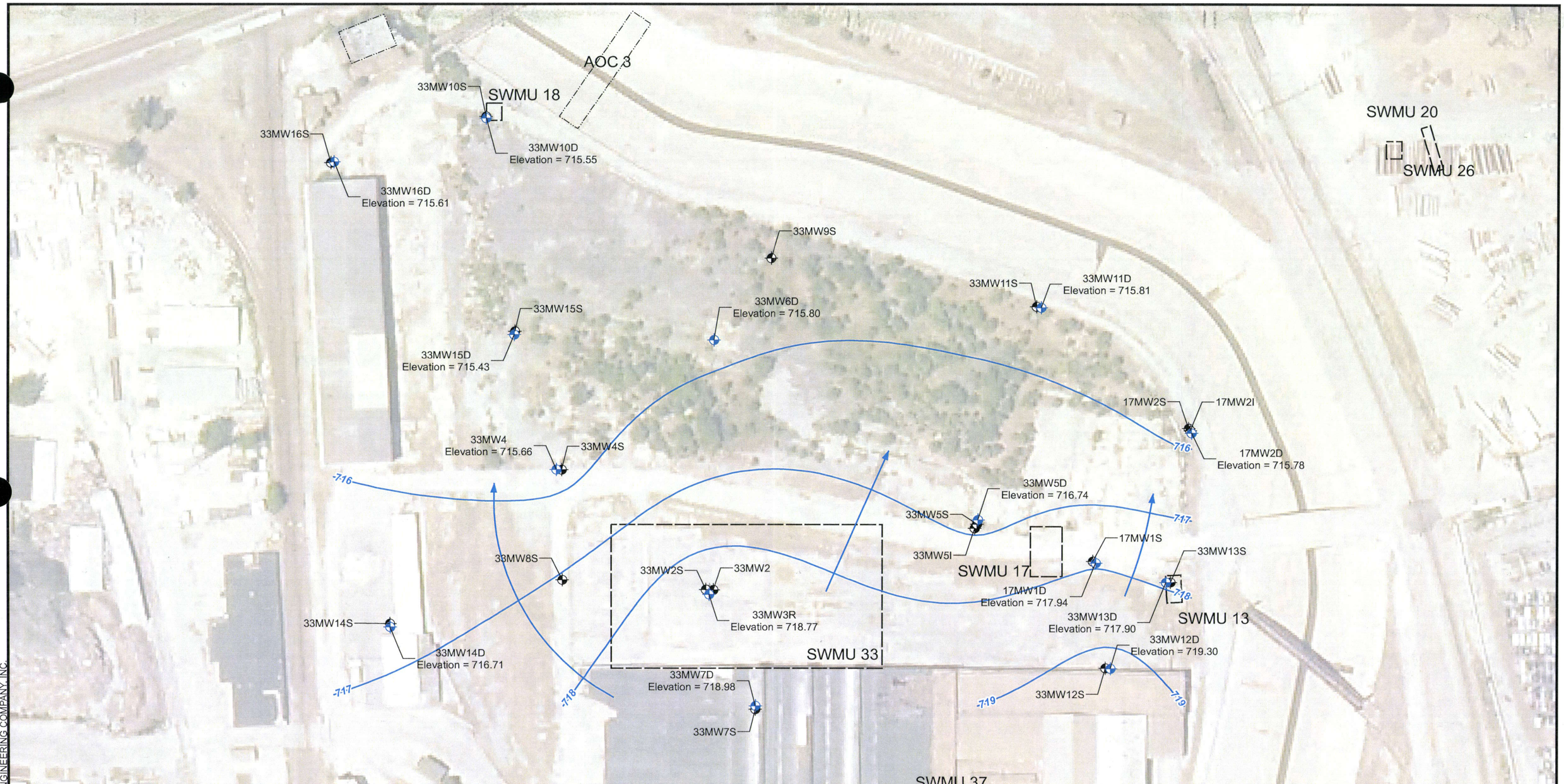

Legend

- Deep Monitoring Well (Used In Contouring)
- Monitoring Well (Not Used In Contouring)
- Former Monitoring Well
- Approximate Direction of Groundwater Flow
- Inferred Potentiometric Surface Contour
- AOC Boundary
- SWMU Boundary

Note

1 - Monitoring Well 33MW3 was abandoned in 2011 and replaced with 33MW3R.
2 - Potentiometric surface contours are inferred using March 11, 2015 groundwater gauging data.

0 75 150 300 Feet

N

Source: ESRI and Burns & McDonnell Engineering.

BURNS McDONNELL

Figure 3-3
POTENTIOMETRIC SURFACE MAP - DEEP INTERVAL SWMUS 13, 17, AND 33
AK STEEL FACILITY
KANSAS CITY, MISSOURI

Issued: April, 22 2015

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APPENDIX A

Comprehensive Analytical Results Table

Table A-1
Comprehensive Groundwater Results - March 2015 Event
March 2015 Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Location	Sample Date	Analyte: / Units:	1,1,1-Trichloroethane µg/L	1,1,2-Trichloroethane µg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene µg/L	1,2-Dichloroethane µg/L	1,2-Dichloropropane µg/L	4-Methyl-2-pentanone µg/L
			CMS Screening Level	200	5	2.7	7	5	5	1,200
17MW01D/GW08	17MW1D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
17MW01S/GW08	17MW1S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
17MW01S/GW08D	17MW1S	3/12/2015	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
17MW02D/GW08	17MW2D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
17MW02I/GW08	17MW2I	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
17MW02S/GW08	17MW2S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW02/GW08	33MW2	3/13/2015		200 U	200 U	200 U	**57 J**	200 U	200 U	1,000 U
33MW02S/GW08	33MW2S	3/13/2015		40 U	40 U	40 U	40 U	40 U	40 U	200 U
33MW03R/GW08	33MW3R	3/13/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW04/GW08	33MW4	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW04S/GW08	33MW4S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW05D/GW08	33MW5D	3/13/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW05I/GW08	33MW5I	3/13/2015		20 U	20 U	20 U	20 U	20 U	20 U	100 U
33MW05S/GW08	33MW5S	3/13/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW05S/GW08D	33MW5S	3/13/2015	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW06D/GW08	33MW6D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW07D/GW08	33MW7D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW07S/GW08	33MW7S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW08S/GW08	33MW8S	3/12/2015		2.0 U	2.0 U	**8.7**	**0.95 J**	2.0 U	2.0 U	10 U
33MW09S/GW08	33MW9S	3/12/2015		1.0 U	1.0 U	**0.62**	1.0 U	1.0 U	1.0 U	5.0 U
33MW10D/GW08	33MW10D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW10D/GW08D	33MW10D	3/12/2015	Duplicate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW10S/GW08	33MW10S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW11D/GW08	33MW11D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW11S/GW08	33MW11S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW12D/GW08	33MW12D	3/11/2015		1.0 U	1.0 U	**0.29 J**	1.0 U	1.0 U	1.0 U	5.0 U
33MW12S/GW08	33MW12S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW13D/GW08	33MW13D	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW13S/GW08	33MW13S	3/12/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW14D/GW08	33MW14D	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW14S/GW08	33MW14S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW15D/GW08	33MW15D	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW15S/GW08	33MW15S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW16D/GW08	33MW16D	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
33MW16S/GW08	33MW16S	3/11/2015		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U

Bold - Constituent was detected.
Shaded - Constituent exceeded screening level.
CMS - Corrective Measures Study (BMcD, 2013)
MCS - media cleanup level
µg/L - micrograms per liter

Table A-1
Comprehensive Groundwater Results - March 2015 Event

March 2015 Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Location	Sample Date	Analyte: / Units:	Acetone µg/L	Benzene µg/L	Carbon disulfide µg/L	Carbon tetrachloride µg/L	Chloroform µg/L	cis-1,2-Dichloroethene µg/L	Ethylbenzene µg/L
		CMS Screening Level		14,000	5	810	5	80	70	700
17MW01D/GW08	17MW1D	3/12/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
17MW01S/GW08	17MW1S	3/12/2015		**52 J**	1.0 U	2.0 U	1.0 U	1.0 U	**3.5 J**	1.0 U
17MW01S/GW08D	17MW1S	3/12/2015	Duplicate	**19 J**	1.0 U	2.0 U	1.0 U	1.0 U	**3.7 J**	1.0 U
17MW02D/GW08	17MW2D	3/12/2015		**3.8 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
17MW02I/GW08	17MW2I	3/12/2015		**15**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
17MW02S/GW08	17MW2S	3/12/2015		**9.4 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW02/GW08	33MW2	3/13/2015		**590 J**	200 U	400 U	200 U	200 U	7,800	200 U
33MW02S/GW08	33MW2S	3/13/2015		400 U	40 U	80 U	40 U	40 U	720	40 U
33MW03R/GW08	33MW3R	3/13/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	**26**	1.0 U
33MW04/GW08	33MW4	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW04S/GW08	33MW4S	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 JU	1.0 U
33MW05D/GW08	33MW5D	3/13/2015		**9.1 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW05I/GW08	33MW5I	3/13/2015		200 U	20 U	40 U	20 U	20 U	560	20 U
33MW05S/GW08	33MW5S	3/13/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	**12**	1.0 U
33MW05S/GW08D	33MW5S	3/13/2015	Duplicate	10 U	1.0 U	2.0 U	1.0 U	1.0 U	**12**	1.0 U
33MW06D/GW08	33MW6D	3/12/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW07D/GW08	33MW7D	3/12/2015		**16**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW07S/GW08	33MW7S	3/12/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW08S/GW08	33MW8S	3/12/2015		20 U	2.0 U	4.0 U	2.0 U	2.0 U	77	2.0 U
33MW09S/GW08	33MW9S	3/12/2015		**24**	1.0 U	2.0 U	1.0 U	1.0 U	**0.87 J**	1.0 U
33MW10D/GW08	33MW10D	3/12/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW10D/GW08D	33MW10D	3/12/2015	Duplicate	10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW10S/GW08	33MW10S	3/12/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW11D/GW08	33MW11D	3/12/2015		**18 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW11S/GW08	33MW11S	3/12/2015		**22 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 JU	1.0 U
33MW12D/GW08	33MW12D	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 JU	1.0 U
33MW12S/GW08	33MW12S	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW13D/GW08	33MW13D	3/12/2015		**19**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW13S/GW08	33MW13S	3/12/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW14D/GW08	33MW14D	3/11/2015		10 JU	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW14S/GW08	33MW14S	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW15D/GW08	33MW15D	3/11/2015		**2.9 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW15S/GW08	33MW15S	3/11/2015		**2.3 J**	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
33MW16D/GW08	33MW16D	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 JU	1.0 U
33MW16S/GW08	33MW16S	3/11/2015		10 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Bold - Constituent was detected.
Shaded - Constituent exceeded screening level.
CMS - Corrective Measures Study (BMcD, 2013)
MCS - media cleanup level
µg/L - micrograms per liter

Table A-1
Comprehensive Groundwater Results - March 2015 Event
March 2015 Sampling Event - SWMUs 17 and 33
AK Steel Kansas City Facility

Sample Name	Sample Location	Sample Date	Analyte: Units:	Methylene chloride µg/L	Tetrachloroethene µg/L	Toluene µg/L	trans-1,2-Dichloroethene µg/L	Trichloroethene µg/L	Vinyl acetate µg/L	Vinyl chloride µg/L	Xylenes, Total µg/L
		CMS Screening Level		5	5	1,000	100	5	410	2	10,000
17MW01D/GW08	17MW1D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
17MW01S/GW08	17MW1S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	3.0 U	1.0 U	2.2 U
17MW01S/GW08D	17MW1S	3/12/2015	Duplicate	2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	3.0 U	1.0 U	2.2 U
17MW02D/GW08	17MW2D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
17MW02I/GW08	17MW2I	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
17MW02S/GW08	17MW2S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW02/GW08	33MW2	3/13/2015		400 U	200 U	200 U	200 U	1,400	600 U	3,800	450 U
33MW02S/GW08	33MW2S	3/13/2015		80 U	40 U	40 U	40 U	1,500	120 U	7.7 J	89 U
33MW03R/GW08	33MW3R	3/13/2015		2.0 U	1.0 U	1.0 U	1.0 U	9.8	3.0 U	20	2.2 U
33MW04/GW08	33MW4	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW04S/GW08	33MW4S	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW05D/GW08	33MW5D	3/13/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW05I/GW08	33MW5I	3/13/2015		40 U	20 U	20 U	**4.2 J**	34	60 U	48	45 U
33MW05S/GW08	33MW5S	3/13/2015		2.0 U	1.0 U	1.0 U	**0.24 J**	1.0 U	3.0 U	**0.70 J**	2.2 U
33MW05S/GW08D	33MW5S	3/13/2015	Duplicate	2.0 U	1.0 U	1.0 U	**0.23 J**	1.0 U	3.0 U	**0.73 J**	2.2 U
33MW06D/GW08	33MW6D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	**0.35 J**	2.2 U
33MW07D/GW08	33MW7D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW07S/GW08	33MW7S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW08S/GW08	33MW8S	3/12/2015		4.0 U	2.0 U	2.0 U	**1.1 J**	40	6.0 U	**0.34 J**	4.5 U
33MW09S/GW08	33MW9S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	**0.17 J**	3.0 U	1.0 U	2.2 U
33MW10D/GW08	33MW10D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW10D/GW08D	33MW10D	3/12/2015	Duplicate	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW10S/GW08	33MW10S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW11D/GW08	33MW11D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW11S/GW08	33MW11S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW12D/GW08	33MW12D	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW12S/GW08	33MW12S	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW13D/GW08	33MW13D	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW13S/GW08	33MW13S	3/12/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW14D/GW08	33MW14D	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW14S/GW08	33MW14S	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	3.0 U	1.0 U	2.2 U
33MW15D/GW08	33MW15D	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW15S/GW08	33MW15S	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW16D/GW08	33MW16D	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	2.2 U
33MW16S/GW08	33MW16S	3/11/2015		2.0 U	1.0 U	1.0 U	1.0 U	1.0 JU	3.0 U	1.0 U	2.2 U

Bold - Constituent was detected.
Shaded - Constituent exceeded screening level.
CMS - Corrective Measures Study (BMcD, 2013)
MCS - media cleanup level
µg/L - micrograms per liter

APPENDIX B

QA/QC Review of Analytical Data

Memorandum

BURNS McDONNELL

Date: April 9, 2015

To: Sharon Shelton

From: Jordan Maddox

Re: Quality Assurance/Quality Control (QA/QC) Review of Analytical Data
March 2015 Quarterly Groundwater Sampling Event
AK Steel, Kansas City, MO
Project No. 79553

Groundwater and investigation derived waste (IDW) samples were collected during sampling activities conducted March 11-13, 2015 at AK Steel in Kansas City, MO (Site). Samples were submitted to TestAmerica of Arvada, Colorado (TestAmerica Denver) for analysis as indicated on Table 1. Data verification and validation were performed as outlined in the *Quality Assurance Sampling and Analysis Plan, Additional Sampling Former Tank Farm and SWMU 17, AK Steel – Kansas City, Missouri* (Burns & McDonnell, 2014). A summary of qualifiers assigned during the data review are provided on Table 2. Results of the data review are presented in the following sections.

1. Chain-of-Custody (COC) – TestAmerica Denver noted the following discrepancies on the COC for data package 280-66558-1:

   - One of the three volatile organic compound (VOC) vials for each of samples 33MW15S/GW08, 17MW02D/GW08, and 33MW10D/GW08D (280-6658-1, 280-66558-10, and 280-66558-25) were received by TestAmerica Denver broken. Sufficient sample volume remained from the other two VOC vials and all requested analyses were completed. No further actions were necessary.

   - TestAmerica Denver noted on the case narrative the COC was not relinquished. Upon further review, the COC was relinquished and all appropriate signatures were present. No further actions were necessary.

2. Requested Analyses Completed – All analyses were completed as requested.

3. Holding Times – All samples were analyzed within method holding times.

4. Sample Preservation – One sample cooler was received by TestAmerica Denver below the recommended sample preservation temperature of 4 degrees Celsius (°C) ± 2 °C. Since these samples were not in a frozen state, they are considered viable. The samples were placed in a cooler at 4°C ± 2 °C upon arrival to the laboratory. As such, no adverse impact to data quality was noted.

5. Blanks – Blank samples are evaluated to review possible cross-contamination between samples, equipment, and/or instrumentation. The blank samples which were evaluated during this data review are discussed in the following text. All blank detections and any samples qualified for possible cross-contamination are discussed below.

Method Blanks
Method blanks are laboratory blanks prepared on a per-batch basis. These are used to assess potential cross-contamination in sample preparation and/or analysis.

Methylene chloride was detected in method blank MB (280-269022/6) at a concentration of 0.422 J ug/L. All associated samples were non-detect for methylene chloride and possible cross-contamination was not a concern. No qualifiers were needed.

No other target analytes were detected in laboratory method blanks.

Trip Blanks
Trip blanks are field QC samples which are submitted with each sample cooler containing VOC vials. Trip blanks accompany VOC samples through sample collection, packing, and shipment to evaluate possible cross-contamination.

No target analytes were detected in the trip blanks.

Rinsate Blanks
Rinsate blanks are collected following sample equipment decontamination. These blanks are analyzed for the same analytes as their associated samples to evaluate possible cross-contamination/carryover between non-dedicated field equipment. Two equipment rinsate blanks were collected from bladder pumps used for groundwater sampling on March 13, 2015. Non-dedicated bladder pumps were used to collect each rinsate sample. Any qualifications added during the rinsate review were based off the specific pump used to collect each rinsate sample.

Acetone (11 ug/L), cis-1,2-dichloroethene (1.5 ug/L), vinyl chloride (0.21 J ug/L) and trichloroethene (1.6 ug/L) were detected in rinsate sample 33MW05I/GW08R (280-66558-34). No target analytes were detected in rinsate sample 33MW05S/GW08R (280-66558-37).

Any estimated (J) detections in the associated samples of the VOC analytes listed above that are less than five times the respective rinsate blank detections (cis-1,2-dichloroethene and trichloroethene) or less than ten times the rinsate blank detection of common contaminate(s) (acetone) were disregarded as false positive and qualified as undetected (U). Any detections in the associated samples of the VOC analytes listed above that are less than five times the respective rinsate blank detections (cis-1,2-dichloroethene and trichloroethene) or less than ten times the respective rinsate blank detection of common contaminate(s) (acetone) were qualified as estimated (J). Note, all associated samples were either non-detect or greater than five times the rinsate concentration for vinyl chloride; no qualifiers were needed.

The following detections received (U) qualification:

- Acetone: 33MW14D/GW08 (280-66558-15).

- cis-1,2-dichloroethene: 33MW16D/GW08 (280-66558-16), 33MW04S/GW08 (280-66558-19), 33MW12D/GW08 (280-66558-20), and 33MW11S/GW08 (280-66558-26).

- Trichloroethene: 33MW14S/GW08 (280-66558-14), 33MW16S/GW08 (280-66558-17), 17MW01S/GW08 (280-66558-28), and 17MW01S/GW08D (280-66558-29).

The following detections received (J) qualification:

- Acetone: 33MW11S/GW08 (280-66558-26), 33MW11D/GW08 (280-66558-27) (acetone), 17MW01S/GW08 (280-66558-28), and 17MW01S/GW08D (280-66558-29).

- cis-1,2-dichloroethene: 17MW01S/GW08 (280-66558-28) and 17MW01S/GW08D (280-66558-29).

6. Surrogates – Surrogates are added for organic analyses. Surrogates are compounds not normally found in the environment that are added (spiked) into samples and analyzed for percent recovery (REC). The laboratory sets maximum and minimum limits on the REC for the method used.

   All surrogate RECs were within their respective QC limits.

7. Laboratory Control Sample/Lab Control Sample Duplicate (LCS/LCSD) – The LCS contains a matrix similar to that of the sample that has been spiked with known concentrations of target analytes. The LCS is prepared and analyzed by the same method as the samples. As a measure of analytical accuracy, the results of the LCS are compared against the known analyte concentrations in the spike to determine REC. The purpose of the LCS is to determine the performance of the laboratory with respect to analyte recovery, independent of field sample matrix interference. A laboratory control sample duplicate LCSD is a duplicate sample of the LCS. The difference between the LCS/LCSD RECs is calculated for precision and reported as the relative percent difference (RPD).

   All LCS/LCSD RECs and/or RPDs were within their respective QC limits.

8. Matrix Spike/Matrix Spike Duplicates (MS/MSD) – MS/MSDs are typically run for organic and inorganic analyses. A sample is split into three portions (original, MS and MSD), and a known amount of a target analyte is added (spiked) to two portions (MS and MSD) of the sample. The results of these two portions are compared with each other for reproducibility using the RPD. They are also compared against the unspiked portion of the sample for REC of the spike. Typically, MS/MSD review (and addition of data qualifiers) is limited to site-specific samples. The following site-specific MS/MSDs were evaluated during this review:

   - 17MW02S/GW08 (280-66558-8): 17MW02S/GW08 was used as a site-specific MS/MSD for VOC QC Batch 280-268644. All MS/MSD results reported for this parent sample were within their respective QC limits.

- 33MW05D/GW08 (280-66558-13): 33MW05D/GW08 was used as a site-specific MS/MSD for VOC QC Batch 280-268876. All MS/MSD RECs reported for this parent sample were within their respective QC limits; however, an RPD exceedance was noted for 4-methyl-2-pentanone. The parent sample, was non-detect for 4-methyl-2-pentanone, and no qualifiers were needed for the RPD exceedance.

- 33MW16S/GW08 (280-66558-17): 33MW16S/GW08 was used as a site-specific MS/MSD for VOC QC Batch 280-268828. While all MS/MSD RECs were within QC limits, several RPD exceedances were noted. Trichloroethene (0.40 J ug/L) was detected in the parent sample (33MW16S/GW08), but was previously qualified as estimated (J) by the lab. All other analytes with an elevated RPD were non-detect and no qualifiers were necessary.

- 33MW02/GW08 and 33MW05I/GW08 (280-66558-31 and 280-66558-33): 33MW02/GW08 and 33MW05I/GW08 (280-66558-31 and 280-66558-33) were used for site-specific MS/MSD for VOC QC Batches 280-268835 and 280-269071. Several analytes had both spike concentrations that were less than the ¼ sample concentration criteria. This is due to high levels of target analytes detected in the parent sample. Analytical assessment was made by review of the associated surrogate, LCS and/or LCSD results. No qualifiers were needed as a result of these omissions.

9. Field Duplicate Results – Field duplicate results provide information on the ability to reproduce field results and account for error introduced from handling, shipping, storage, preparation, and analysis of field samples. There are no specific United States Environmental Protection Agency (USEPA) criteria for qualifying data from field duplicate results. Depending upon the sample concentration, one of the following criteria based upon the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (NFGI) is applicable:

   - Is the compound detected in both portions?
   - If the sample concentrations are greater than five times the detection limit, then the maximum allowable RPD is 20 percent for water samples.
   - If the sample concentrations are less than five times the detection limit, then a sensitivity test is applied. For the sensitivity test, the sample concentrations must agree within plus or minus (±) the lower detection limit for water samples.

   The field duplicate pairs that were collected during this sampling event are presented below:

   - 17MW01S/GW08 (280-66558-28) and 17MW01S/GW08D (280-66558-29). A sensitivity test failure was noted for acetone. Acetone was previously qualified as non-detect due to possible cross-contamination in the associated rinsate blank. As a result, no additional qualifiers were added.

   - 33MW05S/GW08 (280-66558-35) and 33MW05S/GW08D (280-66558-36). All analytes for this field duplicate pair were replicated appropriately.

- 33MW10D/GW08 (280-66558-24) and 33MW10D/GW08D (280-66558-25). All analytes for this field duplicate pair were replicated appropriately.

10. Laboratory Duplicate Results – No laboratory duplicate analyses were performed within these data packages; MS/MSDs were used for precision evaluation.

11. Detection and Quantitation Limits – Due to target analyte concentrations, samples 33MW08S/GW08 (280-66558-11), 33MW02S/GW08 (280-66558-12), 33MW02/GW08 (280-66558-31), 33MW05I (280-66558-33) and IDW2/GW08 (280-66558-39) were analyzed for VOCs at a reduced initial volume and the reporting limits were adjusted accordingly.

    Due to excessive foaming at the time of purging sample IDW01/GW08 (280-66558-38) was analyzed for VOCs at a reduced initial volume and the reporting limits were adjusted accordingly.

12. Method Requirements – TestAmerica Denver flagged any detection between the method detection limit (MDL) and the practical quantitation limit (PQL [reported as the reporting limit by TestAmerica Denver]) with a "J" to indicate the reported value was estimated. Any detection reported with this "J" qualifier should be used as reported by the lab, unless otherwise noted during this QA/QC evaluation.

    Due to excessive foaminess in QC Batch 268644, associated samples 33MW15S/GW08, 33MW09S/GW08, 17MW02S/GW08 (including associated MS/MSD), 17MW02I/GW08, 17MW02D/GW08, 33MW05D/GW08 (including associated MS/MSD), 33MW14S/GW08, and 33MW14D/GW08 (280-66558-1, 280-66558-7, 280-66558-8, 280-66558-9, 280-66558-10, 280-66558-13, 280-66558-14, and 280-66558-15) required 1-5 microliters (uL) of anti-foam to be added prior to purging to protect the equipment. The associated method blank also had anti-foam added to it to show there was no contamination added from the use of the anti-foam. No qualifiers were added based on this method adjustment.

13. Conclusion – The data were reviewed for achievement of any method-specified QA/QC criteria. Data qualifiers added as a result of this review are included on Table 2. No data were rejected (R). The data are valid for use, as qualified, in reporting the results of this investigation.

Attachments

Table 1 – Sample Collection Summary – March 2015
Table 2 – Data Summary

Table 1
Sample Collection Summary - March 2015
Quarterly Groundwater Sampling Event SWMU 17
AK Steel Facility - Kansas City, Missouri

Area	Location	Sample ID	Date Sampled	Matrix	Sample Depth	Description	Data Package	Lab ID	Analysis
									VOCs
SWMU 17	17MW01D	17MW01D/GW08	3/12/2015 16:20	Aqueous	Deep		280-66558-1	280-66558-30	X
	17MW01S	17MW01S/GW08	3/12/2015 15:10	Aqueous	Shallow		280-66558-1	280-66558-28	X
	17MW01S	17MW01S/GW08D	3/12/2015 0:00	Aqueous	Shallow	Dup of 17MW01S/GW08	280-66558-1	280-66558-29	X
	17MW02D	17MW02D/GW08	3/12/2015 15:20	Aqueous	Deep		280-66558-1	280-66558-10	X
	17MW02I	17MW02I/GW08	3/12/2015 14:25	Aqueous	Intermediate		280-66558-1	280-66558-9	X
	17MW02S	17MW02S/GW08	3/12/2015 13:30	Aqueous	Shallow	Site-Specific MS/MSD	280-66558-1	280-66558-8	X
SWMU 33	33MW02	33MW02/GW08	3/13/2015 8:00	Aqueous	Intermediate	Site-Specific MS/MSD	280-66558-1	280-66558-31	X
	33MW02S	33MW02S/GW08	3/13/2015 8:05	Aqueous	Shallow		280-66558-1	280-66558-12	X
	33MW03R	33MW03R/GW08	3/13/2015 8:50	Aqueous	Deep		280-66558-1	280-66558-32	X
	33MW04	33MW04/GW08	3/11/2015 14:45	Aqueous	Deep		280-66558-1	280-66558-18	X
	33MW04S	33MW04S/GW08	3/11/2015 15:55	Aqueous	Shallow		280-66558-1	280-66558-19	X
	33MW05D	33MW05D/GW08	3/13/2015 9:35	Aqueous	Deep	Site-Specific MS/MSD	280-66558-1	280-66558-13	X
	33MW05I	33MW05I/GW08	3/13/2015 9:50	Aqueous	Intermediate	Site-Specific MS/MSD	280-66558-1	280-66558-33	X
	33MW05S	33MW05S/GW08	3/13/2015 10:30	Aqueous	Shallow		280-66558-1	280-66558-35	X
	33MW05S	33MW05S/GW08D	3/13/2015 0:00	Aqueous	Shallow	Dup of 33MW05S/GW08	280-66558-1	280-66558-36	X
	33MW06D	33MW06D/GW08	3/12/2015 11:25	Aqueous	Deep		280-66558-1	280-66558-6	X
	33MW07D	33MW07D/GW08	3/12/2015 9:30	Aqueous	Deep		280-66558-1	280-66558-5	X
	33MW07S	33MW07S/GW08	3/12/2015 9:25	Aqueous	Shallow		280-66558-1	280-66558-22	X
	33MW08S	33MW08S/GW08	3/12/2015 16:20	Aqueous	Shallow		280-66558-1	280-66558-11	X
	33MW09S	33MW09S/GW08	3/12/2015 12:35	Aqueous	Shallow		280-66558-1	280-66558-7	X
	33MW10D	33MW10D/GW08	3/12/2015 11:35	Aqueous	Deep		280-66558-1	280-66558-24	X
	33MW10D	33MW10D/GW08D	3/12/2015 0:00	Aqueous	Deep	Dup of 33MW10D/GW07	280-66558-1	280-66558-25	X
	33MW10S	33MW10S/GW08	3/12/2015 10:45	Aqueous	Shallow		280-66558-1	280-66558-23	X
	33MW11D	33MW11D/GW08	3/12/2015 14:05	Aqueous	Deep		280-66558-1	280-66558-27	X
	33MW11S	33MW11S/GW08	3/12/2015 12:50	Aqueous	Shallow		280-66558-1	280-66558-26	X
	33MW12D	33MW12D/GW08	3/11/2015 16:45	Aqueous	Deep		280-66558-1	280-66558-20	X
	33MW12S	33MW12S/GW08	3/11/2015 16:30	Aqueous	Shallow		280-66558-1	280-66558-3	X
	33MW13D	33MW13D/GW08	3/12/2015 8:30	Aqueous	Deep		280-66558-1	280-66558-4	X
	33MW13S	33MW13S/GW08	3/12/2015 8:25	Aqueous	Shallow		280-66558-1	280-66558-21	X
	33MW14D	33MW14D/GW08	3/11/2015 11:30	Aqueous	Deep		280-66558-1	280-66558-15	X
	33MW14S	33MW14S/GW08	3/11/2015 10:20	Aqueous	Shallow		280-66558-1	280-66558-14	X
	33MW15D	33MW15D/GW08	3/11/2015 15:20	Aqueous	Deep		280-66558-1	280-66558-2	X
	33MW15S	33MW15S/GW08	3/11/2015 14:15	Aqueous	Shallow		280-66558-1	280-66558-1	X
	33MW16D	33MW16D/GW08	3/11/2015 12:35	Aqueous	Deep		280-66558-1	280-66558-16	X
	33MW16S	33MW16S/GW08	3/11/2015 13:35	Aqueous	Shallow	Site-Specific MS/MSD	280-66558-1	280-66558-17	X

Table 1
Sample Collection Summary - March 2015
Quarterly Groundwater Sampling Event SWMU 17
AK Steel Facility - Kansas City, Missouri

Area	Location	Sample ID	Date Sampled	Matrix	Sample Depth	Description	Data Package	Lab ID	Analysis
									VOCs
Investigation Derived Waste		IDW01/GW08	3/13/2015 11:05	Aqueous		IDW	280-66558-1	280-66558-38	X
		IDW02/GW08	3/13/2015 11:00	Aqueous		IDW	280-66558-1	280-66558-39	X
Field QC Samples		TB-01	3/11/2015 8:00	Aqueous		Trip Blank	280-66558-1	280-66558-40	X
		TB-02	3/12/2015 8:00	Aqueous		Trip Blank	280-66558-1	280-66558-41	X
		33MW05I/GW08R	3/13/2015 10:25	Aqueous		Equipment Rinsate	280-66558-1	280-66558-34	X
		33MW05S/GW08R	3/13/2015 10:50	Aqueous		Equipment Rinsate	280-66558-1	280-66558-37	X

Notes:
Dup - field duplicate
ID - identification
IDW - investigation derived waste
MS/MSD - matrix spike/matrix spike duplicate
QC - quality control
TB - trip blank
VOC - volatile organic compound

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Acetone	J			2.3	J	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW15S/GW08	280-66558-1	3/11/2015 14:15	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW02D/GW08	280-66558-10	3/12/2015 15:20	SW-846 8260B	Initial	Acetone	J			3.8	J	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Vinyl chloride	J			0.34	J	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	1,1-Dichloroethene	J			0.95	J	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	trans-1,2-Dichloroethene	J			1.1	J	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	1,1-Dichloroethane				8.7		ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	1,2-Dichloroethane	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	1,2-Dichloropropane	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			10	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Acetone	U			20	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Benzene	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Carbon disulfide	U			4.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Carbon tetrachloride	U			2.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Chloroform	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Ethylbenzene	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Methylene chloride	U			4.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Tetrachloroethene	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Toluene	U			2.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Vinyl acetate	U			6.0	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Xylenes, Total	U			4.5	U	ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	Trichloroethene				40		ug/L
33MW08S/GW08	280-66558-11	3/12/2015 16:20	SW-846 8260B	Initial	cis-1,2-Dichloroethene				77		ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	1,1-Dichloroethane	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	1,1-Dichloroethene	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	1,2-Dichloroethane	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	1,2-Dichloropropane	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			200	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Acetone	U			400	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Benzene	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Carbon disulfide	U			80	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Carbon tetrachloride	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Chloroform	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Ethylbenzene	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Methylene chloride	U			80	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Tetrachloroethene	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Toluene	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			40	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Vinyl acetate	U			120	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Xylenes, Total	U			89	U	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Vinyl chloride	J			7.7	J	ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	cis-1,2-Dichloroethene				720		ug/L
33MW02S/GW08	280-66558-12	3/13/2015 8:05	SW-846 8260B	Initial	Trichloroethene				1,500		ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	4-Methyl-2-pentanone	UF2			5.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW05D/GW08	280-66558-13	3/13/2015 9:35	SW-846 8260B	Initial	Acetone	J			9.1	J	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Trichloroethene	J	U	Rinsate Blank	0.23	JU	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW14S/GW08	280-66558-14	3/11/2015 10:20	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Acetone	J	U	Rinsate Blank	2.5	JU	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW14D/GW08	280-66558-15	3/11/2015 11:30	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	cis-1,2-Dichloroethene	J	U	Rinsate Blank	0.15	JU	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW16D/GW08	280-66558-16	3/11/2015 12:35	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	cis-1,2-Dichloroethene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Trichloroethene	JF2	U	Rinsate Blank and MS/MSD RPD	0.40	JU	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	1,1,1-Trichloroethane	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	1,1-Dichloroethane	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	1,1-Dichloroethene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	1,2-Dichloroethane	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	1,2-Dichloropropane	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Benzene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Carbon disulfide	UF2			2.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Carbon tetrachloride	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Chloroform	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Ethylbenzene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Methylene chloride	UF2			2.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Tetrachloroethene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Toluene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	trans-1,2-Dichloroethene	UF2			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW16S/GW08	280-66558-17	3/11/2015 13:35	SW-846 8260B	Initial	Xylenes, Total	UF2			2.2	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW04/GW08	280-66558-18	3/11/2015 14:45	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L

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Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	cis-1,2-Dichloroethene	J	U	Rinsate Blank	0.22	JU	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW04S/GW08	280-66558-19	3/11/2015 15:55	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Acetone	J			2.9	J	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW15D/GW08	280-66558-2	3/11/2015 15:20	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	1,1-Dichloroethane	J			0.29	J	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	cis-1,2-Dichloroethene	J	U	Rinsate Blank	0.26	JU	ug/L
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L

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Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW12D/GW08	280-66558-20	3/11/2015 16:45	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW13S/GW08	280-66558-21	3/12/2015 8:25	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW07S/GW08	280-66558-22	3/12/2015 9:25	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW10S/GW08	280-66558-23	3/12/2015 10:45	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW10D/GW08	280-66558-24	3/12/2015 11:35	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW10D/GW08D	280-66558-25	3/12/2015	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Acetone		J	Rinsate Blank	22	J	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	cis-1,2-Dichloroethene	J	U	Rinsate Blank	0.32	JU	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW11S/GW08	280-66558-26	3/12/2015 12:50	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	Acetone		J	Rinsate Blank	18	J	ug/L
33MW11D/GW08	280-66558-27	3/12/2015 14:05	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Acetone		J	Rinsate Blank	52	J	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	cis-1,2-Dichloroethene		J	Rinsate Blank	3.5	J	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Trichloroethene	J	U	Rinsate Blank	0.73	JU	ug/L
17MW01S/GW08	280-66558-28	3/12/2015 15:10	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Acetone		J	Rinsate Blank	19	J	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	cis-1,2-Dichloroethene		J	Rinsate Blank	3.7	J	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Trichloroethene	J	U	Rinsate Blank	0.91	JU	ug/L
17MW01S/GW08D	280-66558-29	3/12/2015	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW12S/GW08	280-66558-3	3/11/2015 16:30	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L

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AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
17MW01D/GW08	280-66558-30	3/12/2015 16:20	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	1,1-Dichloroethane	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	1,2-Dichloroethane	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	1,2-Dichloropropane	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			1,000	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Benzene	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Carbon disulfide	U			400	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Carbon tetrachloride	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Chloroform	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Ethylbenzene	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Methylene chloride	U			400	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Tetrachloroethene	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Toluene	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			200	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Acetone	J			590	J	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Vinyl acetate	U			600	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Xylenes, Total	U			450	U	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	cis-1,2-Dichloroethene				7,800		ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	1,1-Dichloroethene	J			57	J	ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Trichloroethene				1,400		ug/L
33MW02/GW08	280-66558-31	3/13/2015 8:00	SW-846 8260B	Initial	Vinyl chloride				3,800		ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	cis-1,2-Dichloroethene				26		ug/L

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Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Trichloroethene				5.8		ug/L
33MW03R/GW08	280-66558-32	3/13/2015 8:50	SW-846 8260B	Initial	Vinyl chloride				20		ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	1,1-Dichloroethane	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	1,1-Dichloroethene	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	1,2-Dichloroethane	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	1,2-Dichloropropane	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			100	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Acetone	U			200	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Benzene	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Carbon disulfide	U			40	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Carbon tetrachloride	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Chloroform	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Ethylbenzene	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Methylene chloride	U			40	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Tetrachloroethene	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Toluene	U			20	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Vinyl acetate	U			60	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Xylenes, Total	U			45	U	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	trans-1,2-Dichloroethene	J			4.2	J	ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	cis-1,2-Dichloroethene				560		ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Trichloroethene				34		ug/L
33MW05I/GW08	280-66558-33	3/13/2015 9:50	SW-846 8260B	Initial	Vinyl chloride				48		ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Acetone				11		ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	cis-1,2-Dichloroethene				1.5		ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Trichloroethene				1.6		ug/L
33MW05I/GW08R	280-66558-34	3/13/2015 10:25	SW-846 8260B	Initial	Vinyl chloride	J			0.21	J	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	trans-1,2-Dichloroethene	J			0.24	J	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Vinyl chloride	J			0.70	J	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW05S/GW08	280-66558-35	3/13/2015 10:30	SW-846 8260B	Initial	cis-1,2-Dichloroethene				12		ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	trans-1,2-Dichloroethene	J			0.23	J	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Vinyl chloride	J			0.73	J	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW05S/GW08D	280-66558-36	3/13/2015	SW-846 8260B	Initial	cis-1,2-Dichloroethene				12		ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW05S/GW08R	280-66558-37	3/13/2015 10:50	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Trichloroethene	J			0.54	J	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	cis-1,2-Dichloroethene	J			1.2	J	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	1,1-Dichloroethane	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	1,1-Dichloroethene	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	1,2-Dichloroethane	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	1,2-Dichloropropane	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			10	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Acetone	U			20	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Benzene	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Carbon disulfide	U			4.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Carbon tetrachloride	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Chloroform	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Ethylbenzene	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Methylene chloride	U			4.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Tetrachloroethene	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Toluene	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Vinyl acetate	U			6.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Vinyl chloride	U			2.0	U	ug/L
IDW01/GW08	280-66558-38	3/13/2015 11:05	SW-846 8260B	Initial	Xylenes, Total	U			4.5	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Trichloroethene				170		ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Vinyl chloride				190		ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	cis-1,2-Dichloroethene				560		ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	1,1-Dichloroethane	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	1,1-Dichloroethene	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	1,2-Dichloroethane	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	1,2-Dichloropropane	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			100	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Acetone	U			200	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Benzene	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Carbon disulfide	U			40	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Carbon tetrachloride	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Chloroform	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Ethylbenzene	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Methylene chloride	U			40	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Tetrachloroethene	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Toluene	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			20	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Vinyl acetate	U			60	U	ug/L
IDW02/GW08	280-66558-39	3/13/2015 11:00	SW-846 8260B	Initial	Xylenes, Total	U			45	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Acetone				19		ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L

Table 2
Data Summary - March 2015
Quarterly Groundwater Sampling Event - SWMU 17
AK Steel Facility - Kansas City, Missouri

Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW13D/GW08	280-66558-4	3/12/2015 8:30	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
TB-01	280-66558-40	3/11/2015 8:00	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
TB-02	280-66558-41	3/12/2015 8:00	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L

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Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW07D/GW08	280-66558-5	3/12/2015 9:30	SW-846 8260B	Initial	Acetone				16		ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Vinyl chloride	J			0.35	J	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Acetone	U			10	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW06D/GW08	280-66558-6	3/12/2015 11:25	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Trichloroethene	J			0.17	J	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	1,1-Dichloroethane	J			0.62	J	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	cis-1,2-Dichloroethene	J			0.87	J	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Acetone				24		ug/L

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Sample ID	Lab ID	Sample Date and Time	Analysis	Test Type	Compound	Lab Qualifier	Validation Qualifier	Reason for Validation Qualifier	Result	Final Qualifier	Units
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
33MW09S/GW08	280-66558-7	3/12/2015 12:35	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW02S/GW08	280-66558-8	3/12/2015 13:30	SW-846 8260B	Initial	Acetone	J			9.4	J	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	1,1,1-Trichloroethane	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	1,1,2-Trichloroethane	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	1,1-Dichloroethane	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	1,1-Dichloroethene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	1,2-Dichloroethane	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	1,2-Dichloropropane	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	4-Methyl-2-pentanone	U			5.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Benzene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Carbon disulfide	U			2.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Carbon tetrachloride	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Chloroform	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	cis-1,2-Dichloroethene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Ethylbenzene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Methylene chloride	U			2.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Tetrachloroethene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Toluene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	trans-1,2-Dichloroethene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Trichloroethene	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Vinyl acetate	U			3.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Vinyl chloride	U			1.0	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Xylenes, Total	U			2.2	U	ug/L
17MW02I/GW08	280-66558-9	3/12/2015 14:25	SW-846 8260B	Initial	Acetone				15		ug/L

Notes:

ID = identification
J = estimated value
JU = qualified as not detected during validation
U = not detected
ug/L = micrograms per liter
MS/MSD = Matrix Spike/Matrix Spike Duplicate
RPD = Relative Percent Difference

Z:\Clients\ENV\AKSteel\79553_Invest\Support\Data\Data Validation\201503 Event\Table 2_Data Summary.xlsx

APPENDIX C

Groundwater Sampling Forms

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, sun, Mid 70's

WELL NUMBER: ~~3~~ 17MW01S

DEPTH TO WATER (ft): 8.65 TOTAL DEPTH (ft): 18.79 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1440	~~1.0~~ ~~200~~	~~1~~ 200	6.39	16.51	2.179	Orange	-14.4	4.0	8.73
1445	1.0 ~~200~~	200	5.79	15.50	2.059	436	5.3	2.32	8.73
1450	2.0	200	5.68	15.24	1.996	236	12.1	1.46	8.73
1455	2.9	200	5.67	15.22	1.967	128	12.9	1.21	8.73
1500	3.0	200	5.65	15.31	1.941	84.8	13.7	1.07	8.73
1505	3.5	200	5.61	15.46	1.936	50.5	14.3	0.98	8.73
1510	4.0	200	5.63	15.47	1.938	43.3	14.7	0.90	8.73

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1510	4.0	5.63	15.47	1.938	43.3	14.7	0.90	8.73	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 8.73 TIME FINAL DEPTH TAKEN: 1510

SAMPLE ID: 17MW01S/GW08 SAMPLE ID FOR QC: ~~33MW~~ 17MW01S/GW08D

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 4.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, sun, Mid 70's

WELL NUMBER: 17MW01D

DEPTH TO WATER (ft): 26.61 TOTAL DEPTH (ft): 66.45 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1545	I	200	6.76	17.45	1.016	305	-39.8	5.36	26.61
1550	.25	200	6.43	16.86	1.160	309	-45.1	1.16	26.60
1555	.50	200	6.09	16.81	1.143	269	-26.9	0.91	26.60
1600	.75	200	6.05	16.81	1.140	191	-24.7	0.86	26.60
1605	1.0	200	5.91	16.78	1.137	166	-17.5	0.80	26.60
1610	1.5	200	5.79	16.80	1.128	121	-10.6	0.86	26.60
1615	1.75	200	5.75	16.77	1.124	83.7	-9.3	0.84	26.60
1620	2.0	200	5.74	16.81	1.125	41.7	-7.2	0.84	26.60

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other: _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1620	2.0	5.74	16.81	1.125	41.7	-7.2	0.84	26.60	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 26.60 TIME FINAL DEPTH TAKEN: 1625

SAMPLE ID: 17MW01D SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.0 Flow Through Cell Model Number: _____

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70's

WELL NUMBER

33# 17MW2S

DEPTH TO WATER (ft): 7.50

TOTAL DEPTH (ft): 18.76 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1310	I	200	6.75	16.33	1.532	14.9	41.2	4.34	8.50
1315	.20	100	6.31	16.21	1.672	13.5	62.8	4.18	9.20
1320	.30	100	6.01	16.16	1.713	12.2	68.7	3.83	9.70
1325	.40	100	5.98	16.24	1.721	12.7	67.6	3.78	9.70
1330	.50	100	6.02	16.30	1.727	13.0	66.5	3.71	9.70

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1330	.50	6.02	16.30	1.727	13.0	66.5	3.71	9.70	—

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 9.70 TIME FINAL DEPTH TAKEN: 1345

SAMPLE ID: 17MW02S/GW08 SAMPLE ID FOR QC: 17MW02S/GW08 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: .50 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70's

WELL NUMBER: 17MW2I DEPTH TO WATER (ft): 9.80

TOTAL DEPTH (ft): 39.80 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump ~~Nondedicated Bladder Pump~~ Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1400	I	200	6.52	16.95	1.617	21.1	33.1	3.04	10.10
1405	.200	200	6.02	16.67	1.701	15.9	62.0	2.79	11.40
1410	.30	100	6.00	16.88	1.717	14.1	60.2	2.87	11.70
1415	.40	100	6.08	16.91	1.720	13.8	58.6	2.96	11.70
1420	.50	100	6.14	17.10	1.722	12.8	57.5	3.01	11.70
1425	.60	100	6.17	17.17	1.725	12.1	57.8	3.03	11.70

Continued on back (circle one) yes / (no)

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1425	.60	6.17	17.17	1.725	12.1	57.8	3.03	11.70	—

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 11.70 TIME FINAL DEPTH TAKEN: 1430

SAMPLE ID: 17MW02I/GW08 SAMPLE ID FOR QC: —

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: .60 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70s

WELL NUMBER

17MW2D

DEPTH TO WATER (ft): 26.40

TOTAL DEPTH (ft): 61.48 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump ~~Nondedicated Bladder Pump~~ Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1450	I	200	6.71	17.87	1.036	65.2	54.6	3.35	26.40
1455	.20	200	5.90	17.40	1.182	199	93.0	2.23	26.40
1500	.40	200	5.35	17.36	1.206	173	95.2	2.25	26.40
1505	.60	200	5.49	17.27	1.204	98.7	86.3	2.31	26.40
1510	.80	200	5.58	17.38	1.203	69.4	83.0	2.34	26.40
1515	1.00	200	5.60	17.44	1.199	51.0	79.4	2.38	26.40
1520	1.20	200	5.63	17.51	1.197	39.5	78.0	2.40	26.40

Continued on back (circle one) yes / no

SAMPLING Equipment Used: ~~Same as above~~ Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1520	1.20	5.63	17.51	1.197	39.5	78.0	2.40	26.40	

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 26.40 TIME FINAL DEPTH TAKEN: 1530

SAMPLE ID: 17MW02D/GW08 SAMPLE ID FOR QC: —

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.20 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-13-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 11.1

PROJECT NUMBER: 79553 WEATHER: Partly Cloudy, Mid 50's

WELL NUMBER

33MW2S

DEPTH TO WATER (ft): 9.63

TOTAL DEPTH (ft): 18.77 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump ~~Nondedicated Bladder Pump~~ Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0740	I	200	4.12	13.01	0.539	18.1	148.3	3.90	9.80
0745	.20	200	5.16	13.44	0.563	13.4	101.9	2.96	10.10
0750	.40	200	5.75	13.28	0.567	10.1	96.6	2.61	10.10
0755	.60	200	5.62	13.14	0.568	6.06	101.9	2.41	10.10
0800	.80	200	5.63	12.98	0.570	4.48	104.9	2.32	10.10
0805	1.00	200	5.60	13.00	0.571	3.97	103.5	2.29	10.10

Continued on back (circle one) yes / (no)

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0805	1.00	5.60	13.00	0.571	3.97	103.5	2.29	10.10	

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 10.10 TIME FINAL DEPTH TAKEN: 810

SAMPLE ID: 33MW02S /GW08 SAMPLE ID FOR QC: —

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.00 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-13-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/13/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 98.2

PROJECT NUMBER: 79553 WEATHER: sunrise, cloudy, upper 50's

WELL NUMBER: 33MW002

DEPTH TO WATER (ft): 9.53 TOTAL DEPTH (ft): 35.90 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0740	1	200	8.30	13.88	0.793	38.0	110.9	8.83	9.90
0745	.25	100	6.04	15.19	0.913	33.7	65.9	4.40	9.90
0750	.5	100	5.85	15.31	0.911	26.1	56.5	3.24	9.90
0755	.75	100	5.80	15.43	0.918	21.4	42.4	2.25	9.90
0800	1.0	100	5.83	15.53	0.917	18.6	40.2	2.20	9.90

Continued on back (circle one) yes no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0800	1.0	5.83	15.53	0.917	18.6	40.2	2.20	9.90	clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 9.90 TIME FINAL DEPTH TAKEN: 0800

SAMPLE ID: 33MW002/GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/13/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/13/15 SITE: 4K Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: cloudy, sun, Low 60's

WELL NUMBER: 33MW03K

DEPTH TO WATER (ft): 28.56 TOTAL DEPTH (ft): 60.15 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0830	I	200	6.33	14.37	2.151	18.3	-14.0	5.45	28.30
0835	.5	200	6.03	15.67	2.232	17.0	-26.3	2.22	28.80
0840	1.0	200	5.98	15.78	2.013	17.8	-28.5	1.91	28.30
0845	1.5	200	5.97	15.89	2.072	21.7	-34.5	1.83	28.80
0850	2.0	200	5.99	15.90	2.071	19.0	-30.4	1.82	28.30

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0850	2.0	5.99	15.90	2.071	19.0	-30.4	1.82	28.30	clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 28.30 TIME FINAL DEPTH TAKEN: 0850

SAMPLE ID: 33MW03K/GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/13/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: clear, sun, Low 70's

WELL NUMBER: 33MW04S

DEPTH TO WATER (ft): 11.20 TOTAL DEPTH (ft): 17.40 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1505	I	200	7.86	15.97	0.596	900	3.5	7.32	11.25
1510	.25	200	7.33	15.26	0.592	827	22.8	6.36	11.30
1515	.50	200	6.27	14.72	0.593	700	63.8	3.12	11.35
1520	1.0	200	6.08	14.54	0.594	974	74.3	3.19	11.35
1525	1.25	200	6.00	14.72	0.596	744	83.3	3.49	11.35
1530	1.5	200	5.97	14.70	0.597	591	85.5	2.63	11.35
1535	2.0	200	5.90	14.66	0.599	419	90.1	1.96	11.35
1540	2.5	200	5.90	14.66	0.601	292	92.1	1.65	11.35
1545	3.0	200	5.88	14.69	0.601	247	92.7	1.57	11.35
1550	3.5	200	5.88	14.74	0.604	191	93.6	1.43	11.35
1555	4.0	200	5.87	14.79	0.607	146	94.4	1.46	11.35

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1555	4.0	5.87	14.79	0.607	146	94.4	1.46	11.35	cloudy

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 11.35 TIME FINAL DEPTH TAKEN: 1555

SAMPLE ID: 33MW04S/GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 4D Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/11/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, sun, Low 20's

WELL NUMBER: 33MW04

DEPTH TO WATER (ft): 32.20 TOTAL DEPTH (ft): 70.25 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1425	I	200	6.87	21.45	0.942	202	-73.2	10.02	32.25
1430	.25	200	6.95	17.25	1.164	148	-87.2	1.66	32.25
1435	.5	200	7.03	17.22	1.183	61.7	-93.6	0.91	32.25
1440	.75	200	7.01	17.20	1.189	40.4	-95.4	0.89	32.25
1445	1.0	200	7.02	17.20	1.190	29.1	-97.4	0.85	32.25

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1445	1.0	7.02	17.20	1.190	29.1	-97.4	0.85	32.25	Clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 32.25 TIME FINAL DEPTH TAKEN: 1445

SAMPLE ID: 33MW04/GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/11/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3-13-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 78553 WEATHER: Clear, Mid 60s

WELL NUMBER: 33MW 55

DEPTH TO WATER (ft): 9.73 TOTAL DEPTH (ft): 18.36 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): — DEPTH TO TOP OF YSI (ft): — (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1005	F	200	6.56	13.85	1.065	424	95.5	2.93	9.90
1010	.20	200	6.20	14.34	1.100	517	91.6	1.68	9.90
1015	.40	200	6.27	14.46	1.107	425	87.7	1.56	9.90
1020	.60	200	6.42	14.79	1.115	218	84.8	1.51	9.90
1025	.80	200	6.40	14.84	1.117	85.8	85.4	1.51	9.90
1030	1.00	200	6.41	14.89	1.118	48.7	85.2	1.54	9.90

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1030	1.00	6.41	14.89	1.118	48.7	85.2	1.54	9.90	

Ferrous Iron (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 9.90 TIME FINAL DEPTH TAKEN: 1040

SAMPLE ID: 33MW05S/GW08 SAMPLE ID FOR QC: 33MW05S/GW08D

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.00 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-13-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/13/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Sun, clear, Mid 60's

WELL NUMBER: 33MW05I

DEPTH TO WATER (ft): 10.11 TOTAL DEPTH (ft): 41.00 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0920	I	200	6.87	14.70	0.656	26.3	3.3	6.03	10.11
0925	.25	200	6.25	15.25	0.671	21.2	10.4	2.51	10.11
0930	.5	200	5.90	15.75	0.802	17.0	17.3	2.11	10.11
0935	.75	200	5.87	15.96	0.951	15.1	10.2	1.07	10.11
0940	1.0	200	5.89	16.04	1.012	14.3	5.4	1.08	10.11
0945	1.5	200	5.92	16.10	1.013	13.0	5.1	1.05	10.11
0950	2.0	200	5.93	16.17	1.015	11.4	5.7	1.11	10.11

Continued on back (circle one) yes no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0950	2.0	5.93	16.17	1.015	11.4	5.7	1.11	10.11	Clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 10.11 TIME FINAL DEPTH TAKEN: 0950

SAMPLE ID: 33MW05I / GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/13/15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-13-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Low 60's

WELL NUMBER

33MW5D

DEPTH TO WATER (ft): 28.28

TOTAL DEPTH (ft): 68.80 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0840	F	200	5.63	14.29	1.512	977	86.3	2.70	29.30
0845	.20	200	6.24	14.82	1.749	741	68.4	1.75	29.30
0850	.40	200	6.25	14.91	1.803	558	72.3	1.78	29.30
0855	.60	200	6.18	15.01	1.878	357	76.1	1.74	29.30
0900	.80	200	6.13	14.97	1.867	260	78.3	1.83	29.30
0905	1.00	200	6.10	14.96	1.875	205	80.2	1.85	29.30
0910	1.20	200	6.10	14.96	1.923	112	80.4	1.98	29.30
0915	1.40	200	6.16	14.97	1.934	91.8	78.4	2.02	29.30
0920	1.60	200	6.20	14.97	1.941	84.0	77.9	2.02	29.30
0925	1.80	200	6.23	14.88	1.954	69.6	78.3	1.99	29.30
0930	2.00	200	6.24	14.95	1.961	53.5	76.9	1.93	29.30
0935	2.20	200	6.26	14.89	1.965	47.3	78.4	1.84	29.30

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0935	2.20	6.26	14.89	1.965	47.3	78.4	1.84	29.30	-

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 29.30 TIME FINAL DEPTH TAKEN: 0945

SAMPLE ID: 33MW05D/GW08 SAMPLE ID FOR QC: 33MW05D/GW08 MS/MSD

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.20 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-13-15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 78553 WEATHER: Clear, Mid 60's

WELL NUMBER

33MW 6D

DEPTH TO WATER (ft): 36.15

TOTAL DEPTH (ft): 71.27 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1020	I	200	6.71	15.00	1.627	671	73.5	2.75	36.15
1025	.20	200	6.39	15.23	1.790	458	77.9	1.95	36.15
1030	.40	200	6.32	15.25	1.815	243	79.8	1.98	36.15
1035	.60	200	6.23	15.32	1.875	98.8	80.1	2.44	36.15
1040	.80	200	6.25	15.36	1.891	126	79.6	2.42	36.15
1045	1.00	200	6.25	15.39	1.897	308	79.3	2.51	36.15
1050	1.20	200	6.22	15.46	1.204	410	80.0	2.55	36.15
1055	1.40	200	6.31	15.52	1.215	533	78.1	2.60	36.15
1100	1.60	200	6.37	15.61	1.220	587	76.8	2.61	36.15
1105	1.80	200	6.41	15.71	1.227	406	75.5	2.64	36.15
1110	2.00	200	6.43	15.81	1.234	347	77.4	2.72	36.15
1115	2.20	200	6.40	15.86	1.239	289	81.4	2.76	36.15
1120	2.40	200	6.38	15.91	1.243	265	80.5	2.74	36.15
1125	2.60	200	6.34	15.94	1.248	251	78.2	2.71	36.15

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1125	2.60	6.34	15.94	1.248	251	78.2	2.71	36.15	

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 36.15 TIME FINAL DEPTH TAKEN: 1135

SAMPLE ID: 33MW06D/GW08 SAMPLE ID FOR QC: —

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.60 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, sun, High 50's

WELL NUMBER: 33MW07S

DEPTH TO WATER (ft): 9.00 TOTAL DEPTH (ft): 20.48 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0905	1	200	6.23	11.39	0.726	85.7	18.9	7.51	9.10
0910	.25	200	6.17	12.71	0.698	55.2	21.1	2.92	9.15
0915	.5	200	6.10	12.84	0.699	49.9	26.5	2.76	9.15
0920	1.0	200	6.05	13.01	0.706	42.6	34.5	2.78	9.15
0925	1.5	200	6.05	13.06	0.710	39.8	36.7	2.72	9.15

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0925	1.5	6.05	13.06	0.710	39.8	36.7	2.72	9.15	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 9.15 TIME FINAL DEPTH TAKEN: 0925

SAMPLE ID: 33MW07S/GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Upper 50s

WELL NUMBER

33MW7D

DEPTH TO WATER (ft): 27.65

TOTAL DEPTH (ft): 66.45 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump ~~Nondedicated Bladder Pump~~ Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0905	I	200	6.09	12.16	1.553	>1000	70.9	5.63	27.70
0910	.20	200	6.09	12.71	1.795	>1000	62.8	2.92	27.70
0915	.40	200	6.37	12.91	1.863	383	56.2	2.26	27.70
0920	.60	200	6.32	13.00	1.865	164	62.0	2.18	27.70
0925	.80	200	6.24	13.03	1.857	90.1	68.3	2.31	27.70
0930	1.00	200	6.22	13.04	1.856	48.7	69.2	2.31	27.70

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
930	1.00	6.22	13.04	1.856	48.7	69.2	2.31	27.70	–

FERROUS IRON (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 27.70 TIME FINAL DEPTH TAKEN: 940

SAMPLE ID: 33MW07D/GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.00 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70's

WELL NUMBER

33MW08S

DEPTH TO WATER (ft): 10.20

TOTAL DEPTH (ft): 16.85 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: — ft of water in casing X — gallons/foot = — total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1600	I	200	6.55	13.65	1.253	275	102.3	6.77	10.75
1605	.20	200	5.56	12.75	1.308	148	115.5	3.84	10.75
1610	.40	200	5.47	12.73	1.313	66.1	106.5	2.71	10.75
1615	.60	200	5.52	12.69	1.314	50.6	104.6	2.63	10.75
1620	.80	200	5.54	12.73	1.310	45.0	100.8	2.53	10.75

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1620	.80	5.54	12.73	1.310	45.0	100.8	2.53	10.75	

FERROUS IRON (mg/L): —

FINAL DEPTH TO WATER (ft TOC): 10.75 TIME FINAL DEPTH TAKEN: 1630

SAMPLE ID: 33MW08S / GW08 SAMPLE ID FOR QC: —

PARAMETERS REQUESTED FOR ANALYSIS: VOC

PDW TOTAL: .80 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUND-WATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Low 70's

WELL NUMBER

33MW9S

DEPTH TO WATER (ft): 15.95

TOTAL DEPTH (ft): 22.26 WELL DIAMETER (inches): 2

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1210	I	200	7.33	15.13	0.718	186	96.7	6.58	16.00
1215	.20	200	7.15	14.68	0.759	97.3	100.9	4.14	16.00
1220	.40	200	6.74	14.50	0.765	35.3	103.0	2.90	16.00
1225	.60	200	6.71	14.57	0.765	17.7	100.7	1.50	16.00
1230	.80	200	6.68	14.53	0.765	8.09	98.3	1.48	16.00
1235	1.00	200	6.65	14.49	0.764	6.78	97.2	1.41	16.00

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1235	1.00	6.65	14.49	0.764	6.78	97.2	1.41	16.00	–

FERROUS IRON (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 16.00 TIME FINAL DEPTH TAKEN: 1240

SAMPLE ID: 33MW09S / GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.00 Flow through cell model number.: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Eorhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: clear, sun

WELL NUMBER: 33MW10S

DEPTH TO WATER (ft): 11.13 TOTAL DEPTH (ft): 22.25 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1010	I	200	6.23	13.99	1.751	Orange	74.4	4.73	11.34
1015	.25	200	5.94	14.66	1.803	494	76.4	1.88	11.60
1020	.5	100	5.85	14.73	1.798	302	79.4	1.44	11.60
1025	.75	100	5.72	14.81	1.798	198	84.6	1.23	11.60
1030	1.0	100	5.61	14.87	1.799	133	90.7	1.03	11.60
1035	1.5	100	5.55	14.94	1.798	85.0	96.4	0.88	11.60
1040	1.75	100	5.54	14.97	1.798	60.5	98.5	0.85	11.60
1045	2.0	100	5.54	14.99	1.796	46.9	99.2	0.83	11.60

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1045	2.0	5.54	14.99	1.796	46.9	99.2	0.83	11.60	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 11.60 TIME FINAL DEPTH TAKEN: 1045

SAMPLE ID: 33MW10S/GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: clear, sun, upper 60's

WELL NUMBER: 33MW10D

DEPTH TO WATER (ft): 30.44 TOTAL DEPTH (ft): 67.15 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
15 ~~1015~~	I	200	6.63	18.19	0.902	115	-30.0	5.78	30.45
1120	.25	100	6.84	16.91	0.911	72.6	-64.9	1.21	30.40
1125	.5	100	6.89	16.88	0.912	39.8	-75.1	0.75	30.40
1130	.75	100	6.86	16.90	0.913	26.3	-77.5	0.62	30.40
1135	1.0	100	6.82	16.91	0.914	24.1	-76.6	0.69	30.40

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1135	1.0	6.82	16.91	0.914	24.1	-76.6	0.69	30.40	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 30.40 TIME FINAL DEPTH TAKEN: 11.35

SAMPLE ID: 33MW10D/GW08 SAMPLE ID FOR QC: 33MW10D/GW08D

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/14 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, sun, Low 70's

WELL NUMBER: 33MW11S

DEPTH TO WATER (ft): 7.42 TOTAL DEPTH (ft): 17.97 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1225	I	200	7.24	15.52	0.548	312	21.9	9.21	8.25
1230	.25	100	5.80	14.69	0.550	319	59.7	3.06	8.20
1235	.5	100	5.58	14.40	0.555	171	56.8	1.64	8.20
1240	.75	100	5.54	14.38	0.560	127	51.9	1.08	8.20
1245	1.0	100	5.55	14.39	0.564	75.1	44.2	0.77	8.20
1250	1.5	100	5.56	14.35	0.567	48.8	37.7	0.66	8.20

Continued on back (circle one) yes / (no)

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1250	1.5	5.56	14.35	0.567	48.8	37.7	0.66	8.20	Clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 8.20 TIME FINAL DEPTH TAKEN: 1250

SAMPLE ID: 33MW11S/GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: clear, sun, Mid 70's

WELL NUMBER: ~~33MW10D~~ 33MW11D

DEPTH TO WATER (ft): 24.31 TOTAL DEPTH (ft): 60.85 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1325	I	200	6.76	17.16	2.708	994	-63.1	5.45	24.11
1330	.10	200	6.12	16.71	2.921	>range	-33.2	2.12	24.36
1335	.25	200	5.93	16.78	2.880	>range	-22.0	1.72	24.36
1340	.5	200	5.88	16.76	2.814	>range	-18.5	1.72	24.36
1345	.75	200	5.86	16.78	2.792	>range	-18.3	1.76	24.36
1350	1.0	200	5.90	16.86	2.777	>range	-21.3	1.66	24.36
1355	1.5	200	5.92	16.89	2.780	938	-23.6	1.59	24.36
1400	2.0	200	5.96	16.81	2.777	800	-27.5	1.46	24.36
1405	2.5	200	5.96	16.84	2.779	657	-27.7	1.45	24.36

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1405	2.5	5.96	16.84	2.779	657	-27.7	1.45	24.36	Cloudy

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 24.36 TIME FINAL DEPTH TAKEN: 1405

SAMPLE ID: 33MW11D|QW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Muddox	Jordan Muddox	3/12/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3-11-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70s

WELL NUMBER: 33MW125

DEPTH TO WATER (ft): 10.30 TOTAL DEPTH (ft): 17.30 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1610	I	200	5.85	14.79	0.337	122	104.0	6.10	10.40
1615	.80	200	4.45	12.83	0.316	76.1	136.0	4.80	10.40
1620	.40	200	4.37	12.20	0.309	33.5	142.1	3.31	10.40
1625	.60	200	4.42	12.11	0.309	19.0	131.6	3.23	10.40
1630	.80	200	4.38	12.04	0.317	11.5	120.6	3.31	10.40

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1630	.80	4.38	12.04	0.317	11.5	120.6	3.31	10.40	Clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 10.40 TIME FINAL DEPTH TAKEN: 1640

SAMPLE ID: 33MW125/GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: .80 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-11-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Low 70's

WELL NUMBER: 33MW12D

DEPTH TO WATER (ft): 27.30 TOTAL DEPTH (ft): 68.70 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1625	I	200	6.43	15.50	0.810	45.1	50.4	5.01	27.31
1630	.25	200	6.63	14.99	0.908	17.5	-3.8	1.87	27.31
1635	.5	200	6.72	14.79	0.938	13.1	-33.2	1.16	27.31
1640	1.0	200	6.75	14.73	0.947	8.04	-41.5	0.99	27.31
1645	1.5	200	6.78	14.69	0.958	9.09	-40.6	0.98	27.31

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1645	1.5	6.78	14.69	0.958	9.09	-40.6	0.98	27.31	clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 27.31 TIME FINAL DEPTH TAKEN: 1645

SAMPLE ID: 33MW12D SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/11/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/12/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: _____ WEATHER: Clear, Mid 50's

WELL NUMBER: 33MW135

DEPTH TO WATER (ft): 8.95 TOTAL DEPTH (ft): 17.30 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0805	I	200	7.37	12.63	1.537	98.9	-52.6	6.00	9.00
0810	.25	100	5.30	13.76	1.525	43.9	15.7	3.66	9.10
0815	.75	100	5.19	13.79	1.523	28.1	28.3	2.77	9.10
0820	1.0	100	5.17	13.77	1.523	22.6	32.9	2.57	9.10
0825	1.25	100	5.19	13.86	1.524	18.7	30.3	2.58	9.10

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
0825	1.25	5.19	13.86	1.524	18.7	30.3	2.58	9.10	clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 9.10 TIME FINAL DEPTH TAKEN: 0825

SAMPLE ID: 33MW135/GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.25 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/12/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3-12-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Partly Cloudy, Low 50s

WELL NUMBER: 33MW13D

DEPTH TO WATER (ft): 27.00 TOTAL DEPTH (ft): 62.55 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0740	I	200	5.47	12.54	1.181	8.68	550	4.14	27.00
745	.20	200	6.24	14.17	1.242	757	36.6	3.10	27.00
0750	.40	200	6.21	14.20	1.243	664	44.4	3.03	27.00
0755	.60	200	6.16	14.28	1.240	480	53.7	2.94	27.00
0800	.80	200	6.08	14.36	1.236	320	63.1	2.57	27.00
0805	1.00	200	6.07	14.43	1.235	224	66.1	2.62	27.00
0810	1.20	200	6.01	14.41	1.234	172	71.2	2.71	27.00
0815	1.40	200	5.98	14.34	1.234	117	74.4	2.90	27.00
0820	1.60	200	5.95	14.28	1.233	81.5	76.5	3.04	27.00
0825	1.80	200	5.93	14.31	1.233	61.7	78.5	3.17	27.00
0830	2.00	200	5.92	14.34	1.233	48.4	79.0	3.20	27.00

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
830	2.00	5.92	14.34	1.233	48.4	79.0	3.20	27.00	-

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 27.00 TIME FINAL DEPTH TAKEN: 840

SAMPLE ID: 33MW13D / GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOCs

IDW TOTAL: 2.00 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-12-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, cool, Mid 50's

WELL NUMBER: 33MW14S

DEPTH TO WATER (ft): 8.60 TOTAL DEPTH (ft): 17.90 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump (Nondedicated Bladder Pump) Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
0955	1	300	6.22	13.42	0.856	422	-6.3	3.88	8.65
1000	.5	300	5.71	13.45	0.850	192	9.2	4.00	8.65
1005	1.0	300	5.38	13.37	0.858	106	23.4	5.36	8.65
1010	1.5	300	5.34	13.33	0.851	70.0	28.7	5.78	8.65
1015	2.0	300	5.35	13.28	0.850	40.5	28.8	5.76	8.65
1020	2.5	300	5.34	13.28	0.854	40.7	22.7	5.79	8.65

Continued on back (circle one) yes / (no)

SAMPLING Equipment Used: (Same as above) Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1020	2.5	5.34	13.28	0.854	40.7	22.7	5.79	8.65	clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 8.65 TIME FINAL DEPTH TAKEN: 1020

SAMPLE ID: 33MW14S | GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 2.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/11/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: clear, cold, Mid 50's

WELL NUMBER: 33MW14D

DEPTH TO WATER (ft): 31.71 TOTAL DEPTH (ft): 68.36 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1055	I	200	6.14	13.29	0.943	296	42.6	8.81	31.70
1100		100	6.79	14.19	0.957	396	11.2	4.14	31.70
1105		100	6.88	14.52	0.963	355	5.1	2.22	31.70
1110		100	6.90	14.71	0.959	227	2.0	1.55	31.70
1115		100	6.91	14.89	0.958	136	-6.8	1.17	31.70
1120		100	6.91	14.94	0.944	88.1	-11.7	1.08	31.70
1125		100	6.90	15.04	0.940	67.0	-12.6	1.10	31.70
1130	1.5	100	6.90	15.14	0.935	45.3	-23.3	1.13	31.70

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1130	1.5	6.90	15.14	0.935	45.3	-23.3	1.13	31.70	clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 31.70 TIME FINAL DEPTH TAKEN: 1130

SAMPLE ID: 33MW14D/GW08 SAMPLE ID FOR QC: ~~VO~~ —

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/11/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3-11-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70's

WELL NUMBER: 33MW15S

DEPTH TO WATER (ft): 13.78 TOTAL DEPTH (ft): 27.01 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): - DEPTH TO TOP OF YSI (ft): - (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: - ft of water in casing X - gallons/foot = - total gallons/casing volume

Equipment Used: Dedicated Bladder Pump ~~Nondedicated Bladder Pump~~ Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1350	I	250	7.59	17.37	0.467	7.85	86.4	7.60	14.20
1355	.20	250	6.79	16.76	0.454	5.73	109.1	5.39	15.72
1400	.30	100	6.28	17.36	0.459	4.11	110.0	4.66	15.85
1405	.40	100	5.96	17.59	0.460	3.65	109.1	4.10	15.90
1410	.50	100	5.97	17.73	0.459	2.97	106.7	3.75	15.90
1415	.60	100	5.97	17.84	0.455	2.58	105.6	3.41	15.90

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1415	.60	5.97	17.84	0.455	2.58	105.6	3.41	15.90	clear

Ferrous Iron (mg/L): -

FINAL DEPTH TO WATER (ft TOC): 15.90 TIME FINAL DEPTH TAKEN: 1420

SAMPLE ID: 33MW15S / GW08 SAMPLE ID FOR QC: -

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: .60 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Earhart	[signature]	3-11-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3-11-15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, Mid 70's

WELL NUMBER: 33MW15D

DEPTH TO WATER (ft): 38.02 TOTAL DEPTH (ft): 86.58 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1445	I	200	6.79	18.07	1.407	186	-23.3	2.71	38.00
1450	.20	200	6.33	17.57	1.552	221	22.6	2.43	38.00
1455	.40	200	6.05	17.59	1.585	174	32.7	2.51	38.00
1500	.60	200	5.87	17.46	1.602	136	35.9	2.55	38.00
1505	.80	200	5.73	17.34	1.622	102.1	38.6	2.43	38.00
1510	1.00	200	5.76	17.48	1.630	74.4	38.7	2.38	38.00
1515	1.20	200	5.98	17.51	1.634	61.0	31.9	2.41	38.00
1520	1.40	200	6.03	17.47	1.637	45.9	32.7	2.45	38.00

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1520	1.40	6.03	17.47	1.637	45.9	32.7	2.45	38.00	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 38.00 TIME FINAL DEPTH TAKEN: 1525

SAMPLE ID: 33MW15D /GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.40 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Daniel Eorhart	[signature]	3-11-15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: Clear, sun, Low 70's

WELL NUMBER: 33MW16S

DEPTH TO WATER (ft): 18.11 TOTAL DEPTH (ft): 27.67 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: – ft of water in casing X – gallons/foot = – total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1300	I	200	7.49	14.27	0.409	292	-14.9	4.67	18.25
1305	.15	100	6.45	14.18	0.402	283	42.6	1.31	18.30
1310	.25	100	6.11	14.22	0.404	196	64.3	1.81	18.40
1315	.30	100	5.99	14.20	0.405	137	73.9	2.10	18.40
1320	.50	100	5.95	14.23	0.404	112	76.4	1.93	18.40
1325	.75	100	5.90	14.24	0.397	71.2	68.9	1.66	18.40
1330	1.0	100	5.89	14.19	0.395	57.3	69.3	1.58	18.40
1335	1.5	100	5.87	14.22	0.395	47.7	72.3	1.52	18.40

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1335	1.5	5.87	14.22	0.395	47.7	72.3	1.52	18.40	Clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 18.40 TIME FINAL DEPTH TAKEN: 1335

SAMPLE ID: 33MW16S/GW08 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.5 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Maddox	Jordan Maddox	3/11/15
REVIEWED:			

FIELD GROUNDWATER SAMPLING REPORT

DATE: 3/11/15 SITE: AK Steel PID READING at WELL HEAD (ppm): 0.0

PROJECT NUMBER: 79553 WEATHER: clear, sun, Low 70s

WELL NUMBER: 33MW160D

DEPTH TO WATER (ft): 37.64 TOTAL DEPTH (ft): 77.80 WELL DIAMETER (inches): 2

DEPTH TO TOP OF PUMP (ft): – DEPTH TO TOP OF YSI (ft): – (for downhole DO measurement)

PURGING

CASING VOLUME CALCULATION: _____ ft of water in casing X _____ gallons/foot = _____ total gallons/casing volume

Equipment Used: Dedicated Bladder Pump Nondedicated Bladder Pump Bailer Other _____

Time (24 hr)	Amount Purged (gals)	Flow Rate (ml/min)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)
1215	I	100	7.18	14.01	0.995	47.0	-54.1	8.75	37.65
1220	.25	100	6.86	14.45	1.085	53.8	-61.0	1.75	37.65
1225	.5	100	6.90	14.60	1.078	52.7	-71.7	1.05	37.65
1230	.75	100	6.92	14.66	1.068	39.4	-74.2	0.84	37.65
1235	1.0	100	6.90	14.65	1.062	30.7	-75.1	0.86	37.65

Continued on back (circle one) yes / no

SAMPLING Equipment Used: Same as above Other _____

Sample Time (24 hr)	Total Purged (gals)	pH	Temp (C)	Conductivity (mS/cm)	Turbidity (NTUs)	ORP (mV)	D.O. (mg/L)	Depth to Water (ft TOC)	Obs.
1235	1.0	6.90	14.65	1.062	30.7	-75.1	0.86	37.65	clear

Ferrous Iron (mg/L): –

FINAL DEPTH TO WATER (ft TOC): 37.65 TIME FINAL DEPTH TAKEN: 1235

SAMPLE ID: 33MW160D/GW008 SAMPLE ID FOR QC: –

PARAMETERS REQUESTED FOR ANALYSIS: VOC

IDW TOTAL: 1.0 Flow Through Cell Model Number: YSI 556

	NAME	SIGNATURE	DATE
PREPARED:	Jordan Waddox	Jordan Waddox	3/11/15
REVIEWED:			

APPENDIX D

Field Logbook

12-18-14 79553 D. EARHART

1045 EMPTY IDW.

1100 SET UP AT 33MW5I.

1110 BEGIN PURGING 33MW5I

1130 COLLECT 33MW05I/GW07 FOR VOC'S @ 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
6.49	15.42	0.986	4.83	97.0	0.65

1140 DECON PUMP

1150 SET UP AT 33MW05S.

1201 BEGIN PURGING 33MW5S.

1221 COLLECT 33MW05S/GW07 33MW05S/GW07D FOR VOC'S

pH	TEMP	COND	TURB	ORP	DO
6.69	16.23	0.895	28.1	-130.1	0.46

1230 DECON PUMP.

1250 COLLECT 33MW05S/GW07R FOR VOC'S.

1330 PACK COOLERS.

1340 D. EARHART & J. MADDOX OFFSITE.

1415 ARRIVE AT HOXMEG BUILDING TO UNLOAD TRUCK.

12-18-14

WEDNESDAY, MARCH 11, 2015

TASK: QUARTERLY GROUNDWATER SAMPLING

WEATHER: CLEAR, LOW 70'S

PERSONNEL: DANIEL EARHART

0830: D. EARHART ONSITE. J. MADDOX ALREADY ONSITE.

0915. D. EARHART OFFSITE TO GET EQUIPMENT

1035: D. EARHART ONSITE. BUMP TEST PID w 100 ppm ISO 102.1 / 100 ppm. PREPARE FOR ROUND OF WATER LEVELS

TIME	WELL	WL	TD	PID	COMMENT
1050	33MW14S	8.60	17.90	0.0	—
1052	33MW14D	31.71	68.36	0.0	—
1100	33MW16S	18.45	27.67	0.0	—
1103	33MW16D	37.62	77.80	0.0	—
1110	33MW15S	13.78	27.01	0.0	—
1112	33MW15D	38.02	86.58	0.0	—
1117	33MW10D	30.32	67.15	0.0	—
1120	33MW10S	11.05	22.25	0.0	—
1125	33MW9S	15.95	22.26	0.0	—
1128	33MW6D	36.15	71.27	0.0	—
1134	33MW11D	24.31	60.85	0.0	—
1136	33MW11S	7.71	17.97	0.0	—
1142	1733MW2S	7.27	18.76	0.0	—
1145	1733MW2I	9.31	39.80	0.0	—
1146	1733MW2D	26.40	61.48	0.0	—
1152	33MW13S	8.85	17.30	0.0	—
1153	33MW13D	27.00	67.55	0.0	—

3-11-15 29553 D.EARHART

TIME	WELL	WL	TD	PID	COMMENT
1201	17MW1S	8.89	18.79	0.0	—
1202	17MW1D	26.61	66.45	0.0	—
1210	33MW12D	27.26	68.70	0.0	WATER IN VAULT
1211	33MW12S	10.30	17.30	0.0	WATER IN VAULT
1222	33MW7S	8.95	20.48	0.0	—
1224	33MW7D	27.65	68.30	0.0	—
1231	33MW2S	9.63 ~~28.56~~	18.77	11.9	—
1232	33MW2	9.52	35.90	98.2	—
1235	33MW3R	28.56	60.15	0.0	—
1243	33MW8S	10.20	16.85	0.0	—
1246	33MW4	32.20	70.25	0.0	Broken cover
1248	33MW4S	11.32	17.40	0.0	—
1256	33MW5S	9.73	18.36	0.0	—
1258	33MW5J	9.62	41.00	0.0	—
1259	33MW5D	29.28	68.80	0.0	—

1320 SET UP AT 33MW15S. J. MADDOX CALIBRATED YSI 556 & TURBIDITY METER, SEE OTHER LOGBOOK FOR CALIBRATION RESULTS.

1350 BEGIN PURGING 33MW15S.

1415 COLLECT 33MW15S/GW08 FOR VOC's. AT 100 mL/min

pH	TEMP	COND	TURB	ORP	DO
5.97	17.84	0.455	2.58	105.6	3.41

1420 DECON PUMP

1435 SET UP AT 33MW15D.

3-11-15 29553 D.EARHART

1445 BEGIN PURGING 33MW15D.

1520 COLLECT 33MW15D/GW08 FOR VOC's AT 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
6.03	17.47	1.637	45.9	32.7	2.45

1535 DECON PUMP.

1600 SET UP AT 33MW12S.

1610 BEGIN PURGING 33MW12S.

1630 COLLECT 33MW12S/GW08 FOR VOC's AT 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
4.38	12.04	0.317	11.5	120.6	3.31

1640 DECON PUMP.

1655 EMPTY IDW.

1710 D.EARHART & J. MADDOX OFFSITE

4-11-15

79553

THURSDAY, MARCH 12, 2015

TASK: QUARTERLY GROUNDWATER SAMPLING

WEATHER: PARTLY CLOUDY, UPPER 60's

PERSONNEL: DANIEL EARHART

0700 D. EARHART ONSITE, BEGIN CALIBRATION of EQUIPMENT. pH: 3.98/4.00 7.00/7.00 10.00/10.00

COND: 1.408/1.409 DO: 98% TURB: 1.80/<1 15.3/15 101/100 755/750

0725 SET UP AT 33MW13D.

0740 BEGIN PURGING 33MW13D.

0830 COLLECT [MW3313D/GW08] FOR VOC's AT 200 mL/min

pH	TEMP	COND	TURB	DO	ORP
5.92	14.34	1.233	484	3.20	

0840 DECON PUMP.

0900 SET UP AT 33MW07D.

0905 BEGIN PURGING 33MW07D.

0930 COLLECT [33MW07D/GW08] FOR VOC's AT 200 mL/min

pH	TEMP	COND	TURB	DO
6.22	13.04	1.856	49.7	2.31

0940 DECON PUMP.

1005 SET UP AT 33MW06D.

1020 BEGIN PURGING 33MW06D.

1125 COLLECT [33MW06D/GW08] FOR VOC's AT 200 mL/min

pH	TEMP	COND	TURB	DO	ORP
6.34	15.94	1.248	251	2.71	78.2

1135 DECON PUMP.

3-12-15 79553 D.EARHART

1150 SET UP AT 33MW09S.

1210 BEGIN PURGING 33MW09S.

1235 COLLECT [33MW09S/GW08] FOR VOC AT 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
6.65	14.49	0.764	6.78	97.2	1.41

1245 DECON PUMP.

1300 SET UP AT 17MW02S.

1310 BEGIN PURGING 17MW02S.

1330 COLLECT [17MW02S/GW08] [MS/MSD] FOR VOC's AT 100 mL/min.

pH	TEMP	COND	TURB	ORP	DO
6.02	16.30	1.727	13.0	66.5	3.71

1340 DECON PUMP

1350 SET UP AT 17MW02I.

1400 BEGIN PURGING 17MW02I.

1425 COLLECT [17MW02I/GW08] FOR VOC's AT 100 mL/min

pH	TEMP	COND	TURB	ORP	DO
6.17	17.17	1.725	12.1	57.8	3.03

1435 DECON PUMP

1445 SET UP AT 17MW02D.

1450 BEGIN PURGING 17MW02D.

1520 COLLECT [17MW02D/GW08] FOR VOC's AT 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
5.65	17.51	1.187	39.5	78.0	2.40

1530 DECON PUMP

3-12-15 79553 D. EARHART

1550 SET UP AT 33MW8S.

1600 BEGIN PURGING 33MW8S.

1620 COLLECT 33MW8S/GW08 FOR VOC'S AT 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
5.54	12.73	1.310	45.2	100.8	2.53

1635 DECON PUMP.

1650 EMPTY IDW.

1700 D. EARHART OFFSITE.

3-12-15

79553

FRIDAY, MARCH 13, 2015

TASK: QUARTERLY GROUNDWATER SAMPLING

WEATHER: PARTLY CLOUDY, LOW 70's

PERSONNEL: DANIEL EARHART

0700 D. EARHART & J. MADDOX ONSITE, BEGIN

CALIBRATIONS 4.00/4.00 7.00/7.00 9.92/10.00

COND: 1.409/1.409 DO: TURB: 4.73/3.1 15.7/15 98.3/100 755/750

0735 SET UP AT 33MW2S

0740 BEGIN PURGING 33MW2S.

0805 COLLECT 33MW02S/GW08 FOR VOC'S AT 200 mL/min.

pH	TEMP	COND	TURB	ORP	DO
5.60	13.00	0.571	3.97	103.5	2.29

815 DECON PUMP.

0825 SET UP AT 33MW5D.

0840 BEGIN PURGING 33MW5D.

0935 COLLECT 33MW05D/GW08 MS/MSD FOR VOC'S AT 200 mL/min.

pH	TEMP	COND	TURB	ORP	DO.
6.26	14.89	1.965	47.3	78.41	1.84

0945 DECON PUMP.

1000 SET UP AT 33MW5S.

1005 BEGIN PURGING 33MW5S.

1030 COLLECT 33MW05S/GW08 33MW05S/GW08D FOR VOC'S AT 200 mL/min

pH	TEMP	COND	TURB	ORP	DO
6.41	14.89	1.118	48.7	85.2	1.54

3-13-15 79553 D.EARHART.

1040 DECON PUMP.

1050 COLLECT RINSATE, 33MW055/GW08R FOR VOC's.

1130 LOAD TRUCK AND CLEAN UP.

1215 D.EARHART OFFSITE. J. MADDOX TO DROP OFF COOLERS AT FEDEX.

1300 D.EARHART ARRIVED AT KC OFFICE.

3-13-15

12/18/14 79553

1220: Collect [33MW05D | GW07R] for VOC.
1250: Collect [IDW01 | GW07] for VOC.
1255: Collect [IDW02 | GW07] for VOC.
1310: Fill out COC. Pack one cooler for TestAmerica.
1340: Off site. Head to Matheson.
1350: Drop off gas.
1405: Drop off one cooler for overnight delivery to TestAmerica.
1440: Arrive at Holmes. Unload truck. Done for the day.

JMM
12/18/14

79553

Date: Wednesday March 11, 2015
Task: 40 GW collection SWMU
33 GW Sampling
Weather: Clear, low 50's.
Personnel: J. Maddox and D. Earhart.
0730: Arrive at Holmes and load truck with field equipment and sample bottles/coolers.
0805: Leave Holmes and head to get gas.
0820: Arrive at Matheson Gas and pick up 2 gas cylinders.
0840: Pick up ice from QT.
0850: Arrive onsite. Arrive at 33MW16D. Calibrate equipment
pH= 3.99/4.0 7.0/7.0 10.01/10.0
cond= 1.407/1.409 ORP= 222.0/220.0
turb= 10.2/10.0 20.0/20.0
99.0/100.0 793/800
turb= 0.0/0.0 15.0/15.0 100/100 750/750
pH= 3.99/4.0 7.0/7.0 10.01/10.0
cond= 1.408/1.409 ORP= 220.0/220.0
0933: Arrive at 33MW14S. Set up field equipment. Decon bladder.
0955: Begin purging 33MW14S
1020: Collect [33MW14S | GW08] for VOC.

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1033: Decon bladder
1055: Begin Purging 33MW14D
1130: Collect 33MW14D/GW08 for VOC
1145: Decon bladder
1155: Change out batteries in backpack controller.
1203: Arrive at 33MW16D.
1215: Begin purging 33MW16D
1235: Collect 33MW16D/GW08 for VOC.
1245: Decon bladder.
1300: Begin purging 33MW16S.
1335: Collect 33MW16S/GW08 for VOC.
1345: Decon bladder.
1355: Dump IDW ~10 gallons.
1400: Off site
1410: Return on site
1415: Arrive at 33MW04.
1425: Begin purging 33MW04.
1445: Collect 33MW04/GW08 for VOC.
1455: Decon bladder
1500: Arrive at 33MW04S
1505: Begin purging 33MW04S.
1555: Collect 33MW04S/GW08 for VOC.
1610: Decon bladder
1620: Set up at 33MW12D

3/11/15 79553

1625: Begin purging 33MW12D.
1645: Collect 33MW12D/GW08 for VOC.
1655: Decon bladder.
1700: Dump IDW ~6 gallons.
1710: Off site. Done for the day.

J. Maddox
3/11/15

J. Maddox

79553

Date: Thursday March 12, 2015
Task: SWMU 33 GW Sampling
Weather: Sunrise, Cloudy, Cool
Personnel: J. Maddox and D. Earhart.
0700: Pick up ice
0730: Arrive on site.
0735: Set up at 33MW13S
Calibrate field equipment.
turb = 10.2/10.0 20.4/20.0
104/100 804/800
ORP = 220.4/220.0 cond = 1.407/1.409
pH = 3.99/4.00 7.01/7.0 10.2/10.0
0800: Change out bladder
0805: Begin purging 33MW13S.
0825: Collect 33MW13S/GW08 for VOC
0835: Decon bladder
0850: Arrive at 33MW07S
0905: Begin purging 33MW07S.
0925: Collect 33MW07S/GW08 for VOC.
0940: Decon bladder.
0955: Dump IDW ~ 8 gallons
1010: Begin purging 33MW10S
1045: Collect 33MW10S/GW08 for VOC
1055: Decon bladder
1115: Begin purging 33MW10D

J. Maddox

3/12/15 79553

1135: Collect 33MW10D/GW08 and 33MW10D/GW08D for VOC
1145: Decon bladder.
1159: Dump ~5 gallons of IDW.
1205: Off site.
1215: On site. Arrive at 33MW11S
1225: Begin purging 33MW11S
1250: Collect 33MW11S/GW08 for VOC
1300: Decon bladder.
1325: Begin purging 33MW11D.
1405: Collect 33MW11D/GW08 for VOC
1415: Decon bladder.
1422: Dump IDW ~ 6 gallons
1430: Set up at 17MW01S
1440: Begin purging 17MW01S
1510: Collect 17MW01S/GW08 and 17MW01S/GW08D for VOC.
1520: Decon bladder.
1545: Begin purging 17MW01D.
1620: Collect 17MW01D/GW08 for VOC
1635: Decon bladder
1645: Dump IDW ~ 8 gallons.
1650: Off site. Done for the day.

JMM 3/12/15

J. Maddox

79553

Date: Friday March 13, 2015
Task: SWMU 33 GW Sampling
Weather: Sunrise, cool, cloudy
Personnel: J. Maddox, D. Earhart
0700: Pick up ice
0705: Arrive on site.
Calibrate equipment
turb= 10.2|10.0 20.4|20.0
108|100 806|800
cond= 1.409|1.409 ORP= 220.0|220.0
pH= 4.0|4.0 7.0|7.0 10.0|10.0
0740: Begin purging 33MW02.
0800: Collect 33MW02/GW08 for VOC.
0810: Decon bladder.
0830: Begin purging 33MW03R.
0850: Collect 33MW03R/GW08 for VOC.
0900: Decon bladder.
0920: Begin purging 33MW05I.
0950: Collect 33MW05I/GW08 for VOC.
1000: Decon bladder.
1025: Collect 33MW05I/GW08R for VOC.
1100: Collect IDW02/GW08 for VOC
1105: Collect IDW01/GW08 for VOC

J. Maddox

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1115: Fill out COC. Load coolers with ice and sample bottles.
1200: Off site. Head to FedEX and Matheson Gas.
1215: Drop off 2 coolers for overnight saturday delivery at FedEX to Test America Denver.
1225: Drop off gas cylinders at Matheson.
1300: Arrive at Holmes. Unload truck. Done for the day.

JMM
3/13/15