

**CWA COMPLIANCE EVALUATION INSPECTION REPORT  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**Purpose:** Compliance Evaluation Inspection Report

**Facility:** U.S. Steel Corporation – Midwest Plant; 6300 U.S. Route 12, Portage, Indiana

**NPDES Permit Number:** IN0000337

**Dates of Inspection:** April 12, 2017 (Recon Inspection)  
April 20, 2017 (Compliance Evaluation Inspection)

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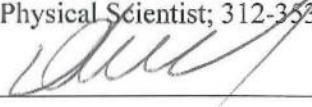
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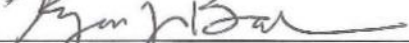
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**Report Date:** 5/4/17

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## I. INTRODUCTION

On April 11, 2017, an incident occurred at the United States Steel Corporation (USS) – Midwest Plant (“facility”) in Portage, Indiana, resulting in a discharge of total chromium and hexavalent chromium to Burns Waterway. See Appendix A for aerial view of the U.S. Steel – Midwest Plant Facility. EPA conducted a recon inspection at the facility on April 12, 2017, which focused on the chromium incident; and returned to the facility on April 20, 2017, to conduct a comprehensive compliance evaluation inspection. Representatives of the Indiana Department of Environmental Management (IDEM) joined EPA for portions of the inspections.

EPA assessed USS’s compliance with the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) permit for the facility. The inspections consisted of the following major activities:

- Inspection opening conferences;
- Interview and discussions with USS representatives regarding the April 11, 2017, chromium discharge incident; the status of NPDES permit-specific reports; operation and maintenance (O&M) of the facility’s wastewater treatment systems; self-monitoring activities; flow monitoring; past self-reported violations; and plant processes.
- Physical inspection of the facility; and
- Closing conferences and areas of concern review.

This report summarizes the results of the inspections. The following personnel were involved in the inspections of the USS facility:

USS: Mark Henry, Environmental Compliance Manager  
Joe Hanning, USS, Director Environmental Control  
Brandon Miller, USS, Environmental Control  
Eric Williams, USS Environmental Affairs  
Greg Mackley, USS Operator  
Tim Sullivan, USS Environmental Engineer  
Ron Kaminski, USS Operations

ALS (USS Contractor): Brandon Frye

EPA Region 5: Dean Maraldo, Inspector/Enforcement Officer  
Brian Lenell, Physical Scientist

IDEM: Nicholas Ream, Wastewater Compliance Inspector  
David Greinke, Emergency Response  
Cathy Csatari, RCRA Inspector

## II. BACKGROUND

The USS facility manufactures steel and related products and is classified under Standard Industrial Classification (SIC) Codes 3316 (Cold Rolled Steel), 3443 (Tin Mill Products), and 2225 (Galvanized Steel). Facility operations include acid pickling, alkaline cleaning, cold rolling, sheet temper milling, continuous annealing, electro-galvanizing and tin electroplating. The facility’s principle products include

hot rolled bands and sheet, cold rolled sheet, electrogalvanized sheet, hot dipped galvanized sheet, low carbon sheets, and tin mill products. USS is authorized to discharge treated wastewater, stormwater, and non-contact cooling water from the facility to Burns Waterway under NPDES permit number IN0000337 (hereinafter, Permit), issued on April 1, 2016. The Permit authorizes discharge via three outfalls on Burns Waterway, three internal outfalls, and a temperature compliance point at the edge of the mixing zone and Burns Waterway.

A description of the outfalls is included in the Permit and summarized below:

**Outfall 002:** The discharge from outfall 002 enters Burns Waterway and is composed of Non-contact Cooling Water (NCCW) and storm water. There is no treatment at this outfall. The average flow is 0.35 million gallons per day (MGD).

**Outfall 003:** The discharge from outfall 003 enters Burns Waterway and is composed of NCCW and storm water. There is no treatment at this outfall. The average flow is 13.45 MGD.

**Outfall 004:** The discharge from outfall 004 enters Burns Waterway and is composed of NCCW, storm water, and process wastewater from administrative outfall 304. The average flow is 14.5 MGD.

**Outfall 104:** The discharge from internal outfall 104 enters Burns Waterway via outfall 004, and is composed of treated process wastewater from the North Final Treatment Plant (NFTP). The NFTP treats process wastewater from the pickling lines, cold reduction, annealing, temper milling, electroplating, hot dip coating and prep lines. The average flow is 8.01 MGD.

**Outfall 204:** The discharge from internal outfall 204 enters Burns Waterway via outfall 004, and is composed of process wastewater from the chrome treatment plant (CTP). The CTP treats hexavalent chromium-bearing wastewaters from the Tin Free Steel Lines, Electroplating Tinning Lines, and Galvanizing Lines via a reduction process (i.e., chromium removal) using sodium bisulfite, sulfuric acid, and sodium hydroxide. The average flow is 0.34 MGD.

**Outfall 304:** Outfall 304 is an administrative compliance point and is where the sum of the mass for internal outfalls 104 and 204 is applied under the Permit. The average flow is 8.35 MGD.

**Outfall 500:** Outfall 500 is the temperature compliance point and is located at the edge of the mixing zone and Burns Waterway, 300' downstream of Outfall 004, in the middle of the channel.

Flow diagrams for plant processes, wastewater treatment, and outfall discharges are provided in Appendix B.

#### *April 11, 2017, Chromium Discharge Incident*

On the morning of April 11, 2017, USS reported a discoloration on Burns Waterway. The discoloration was due to the discharge of process wastewater containing hexavalent chromium and total chromium from outfall 004. USS reported that the discharge involved the failure of an expansion joint on a process wastewater pipeline within the facility.



### III. APRIL 12, 2017, RECON INSPECTION ACTIVITY SUMMARY

#### III. A. Facility Entry

I entered the facility at 9:09 am on April 12, 2017, and presented my EPA-issued Enforcement Officer Credentials to the security office representative. I was shown to a conference room in the AE1 building where USS representatives were providing an update on the chromium incident to a large group of stakeholders, including EPA and IDEM On-Scene Coordinators (OSCs), National Park Service representatives, local water company officials, and local emergency and law enforcement representatives. During the update, Mr. Henry stated that the “leak was contained yesterday.” Mr. Hanning reiterated this and added that USS “shut all operations down yesterday.” He also mentioned that chromium discharge was still possible “as remaining waste leaves the system.”

Mr. Henry provided an update on results from samples collected late on April 11 and in the morning of April 12. The results from outfall 004 are summarized below.

Pollutant	Date/Time	Concentration (ug/l)
Total Chromium	4/11/17 - 9:00 pm	416
Total Chromium	4/11/17 - 11:00 pm	160
Total Chromium	4/12/17 - 1:00 am	1,321
Total Chromium	4/12/17 - 3:00 am	2,231
Total Chromium	4/12/17 - 5:00 am	90
Total Chromium	4/12/17 - 7:00 am	304

Following the USS update, I provide the USS representatives and the stakeholder group with a summary of the recon inspection plan for the day, which included a physical inspection of outfall 004, the NFTP, and the site of the failed expansion joint leading to the chromium incident. Mr. Henry indicated that he would be busy managing the incident response for USS and would ask others on the USS staff to help with the inspection. Mr. Henry asked Mr. Greg Mackley to join me on the inspection of the NFTP and outfall 004.

#### III. B. Physical Facility Inspection

At 10:07 am I began the physical inspection of the NFTP and was joined by Mr. Mackley, Mr. Ream, and Mr. Joseph Magers (National Park Service Park Ranger). Mr. Mackley confirmed most plant processes have been shut down. He also summarized his understanding of the chromium incident and stated that “a pipe expansion pipe broke inside the mill and spilled process water via spray or on the ground to a sewer to the 104 system [pipeline to NFTP].” He also mentioned that the NFTP does not provide chromium treatment.

Mr. Mackley described the wastewater treatment process at the NFTP, which includes two equalization basins, air mix tanks, two sedimentation basins, two thickeners, and two plate and frame filter presses. Photographs referenced in this report are included in the Photo Log (Appendix C). Photograph 1 (MB000215.jpg) provides an overview of the NFTP. As we walked through the plant, Mr. Mackley pointed out that the NFTP “system was upset at the moment due to issues,” referring to the clarity of the effluent in the sedimentation basins.

The group then visited outfall 004. Permit Part 1.B.(1)(c) sets forth the following requirements:

*At all times the discharge from any and all point sources specified within this permit shall not cause receiving waters:*

1. including the mixing zone, to contain substances, materials, floating debris, oil, scum, or other pollutants:
  - a. that will settle to form putrescent or otherwise objectionable deposits;
  - b. that are in amounts sufficient to be unsightly or deleterious;
  - c. that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance.

EPA OSCs observed a green discoloration in the area of outfall 004 on April 11, 2017, see Photograph 2 (Image1.jpg). The effluent discharging from outfall 004 at the time of the inspection looked clear as shown in Photograph 3 (MB000214.jpg).

I completed the physical inspection of the NFTP and outfall 004 at 10:35 am, and returned to the AE1 building.

There were a number of incident management meetings in the late morning and early afternoon between the EPA OSCs, USS representatives, and stakeholders. At 3:03 pm, Mr. Tim Sullivan, USS environmental engineer, was able to join me on an inspection of the Tin Courtyard, the site of the failed wastewater pipeline expansion joint. I asked Mr. Sullivan to guide me through the events of the April 11, 2017, chromium incident. He stated that he was notified of the discharge early in the morning of April 11. Mr. Sullivan said "Once I saw the green discharge out of outfall 004, I had a good idea of where the source might be coming from." He stated that he discovered the leak in the wastewater pipeline expansion joint in the Tin Courtyard area "around 8:30 am" on April 11.

Mr. Sullivan explained the source of the chromium incident was "an expansion joint rupture in a 6-inch pipe within a secondary containment trench in the Tin Courtyard (see Appendix A - aerial view of facility)." The trench and the leaking expansion joint on the 6-inch pipe are shown in Photograph 4 (1.jpg; photograph taken on morning of April 11 by Mr. Henry). Photograph 5 (MB000218.jpg), captures the area of the secondary containment trench (covered at the time of inspection), and the expansion joint rupture. Mr. Sullivan explained that the process wastewater leaked from the expansion joint and flowed north along the bottom of the secondary containment trench. We walked north along the covered trench to the point at which Mr. Sullivan believed the leaked wastewater entered a hole in the bottom of the trench. Photograph 6 (MB000220.jpg), shows the section of the uncovered secondary containment trench where, according to Mr. Sullivan, the leaked wastewater poured through the hole in the bottom of the trench and emptied into a 20-inch pipeline running underneath the trench. In Photograph 7 (2.jpg; photograph taken by Mr. Henry on morning of April 11), discolored liquid is observed pouring into the hole in the bottom of the trench. According to Mr. Sullivan, the acidic wastewater corroded the 20-inch pipeline, creating a hole that allowed the leaked wastewater to pour into the pipeline. At the time of the inspection, USS had sealed the hole in the bottom of the trench with epoxy. Mr. Sullivan stated that the 20-inch pipe carried the leaked wastewater to the equalization basin at the NFTP. I asked Mr. Sullivan if he had any idea how much wastewater leaked from the expansion joint rupture. He said "I have no idea."

I completed the physical inspection of the Tin Courtyard at 3:30 pm, and returned to the AE1 building.

### ***III. C. Recon Inspection Closing Conference***

Given the afternoon's busy schedule of chromium incident management activities, I could not conduct a formal closing conference for the recon inspection. I was able to meet briefly with Mr. Henry at 4:05 pm and let him know I was finished with the recon inspection and planned to return within the next week or two to conduct a follow-up compliance evaluation inspection. I departed the facility at 4:07 pm on April 12, 2017.



#### IV. APRIL 20, 2017, COMPLIANCE EVALUATION INSPECTION ACTIVITY SUMMARY

##### *IV. A. Opening Conference*

I arrived at the AE1 building at 9:10 am on April 20, 2017. The inspection opening conference began with introductions at 9:11 am. In attendance were Mr. Henry, Mr. Hanning, Mr. Miller, and Mr. Williams for USS. Mr. Ream and Ms. Cathy Csatori attended on behalf of IDEM. I was joined by Mr. Brian Lenell, an EPA physical scientist. I presented my EPA-issued Enforcement Officer Credentials to Mr. Henry, the primary facility contact.

I discussed the intent and scope of the inspection. I explained the permittee's rights to claim material as confidential. Mr. Henry and Mr. Williams provided copies of documents requested prior to the inspection including a data summary for the chromium incident, and field logs and discharge monitoring reports for 2016. The group discussed the planned schedule for the day, including interviews, physical facility inspection, and a closing conference. Interview and discussion topics included review of the chromium incident, permit reporting, past violations, sludge handling, operations and maintenance (O&M), storm water pollution prevention plan (SWPPP), self-monitoring, and facility process overview.

##### *IV. B. Interviews*

###### Chromium Incident Follow-up:

I began the interview portion of the inspection with some follow-up questions regarding the April 11, 2017, chromium incident. I asked the USS representatives to explain how the chromium wastewater flowed from the break in the expansion join to the NFTP and eventually through outfall 004 to the Burns Waterway. Mr. Hanning said that the chromium wastewater consisted of "rinse water from plating which normally flows to the chrome treatment plant." Mr. Henry stated the "product ate through the bottom of the trench directly over a pipe." He added that the pipe was a carbon steel pipe that brought wastewater to EQ basin at the NFPT. I asked how the chromium wastewater got into the carbon steel pipe. Mr. Hanning said the "product ate a hole in the pipe." USS provided a safety data sheet for the product, chromium trioxide, which has a pH of 1. This raises a concern about the integrity of the carbon steel pipe which was exposed to an unknown volume of corrosive wastewater.

I asked if trench was designed to carry stormwater. Mr. Williams clarified that the trench was designed "for secondary containment." Mr. Henry added that the trench was made of concrete.

I asked if USS was aware of the breach in the bottom of trench before the incident. Mr. Henry stated that they were not aware of the breach and "if we were aware we would have fixed it." I asked if the trench was routinely monitored for integrity and Mr. Henry replied "it was not looked at for integrity." He also said cleanup crews removed "39 barrels of goo" from the trench.

I raised a concern about potential soil contamination at the site of the breach in the trench. Mr. Hanning said he believed "all of the chromium waste went into the carbon steel pipeline and not into the soil."

I asked about the timing of the interim chromium treatment at the NFTP and if the treatment had any effect on performance of the NFTP. Mr. Henry indicated the treatment started at 3 pm on April 11, 2017, with approval from IDEM, and ended on April 19, 2017. He added USS was able to continue all routine sampling and manage treatment despite issues.

Permit Part I.A.(5) sets maximum daily loading effluent limits for total chromium (7.95 lbs/day) and hexavalent chromium (0.51 lbs/day). Mr. Miller stated USS "exceeded maximum limit for total

chromium on Monday and Tuesday [April 11-12] at outfall 304,” and had a “hexavalent chromium limit violation on Wednesday [April 12] at outfall 304.” Mr. Henry added “all else looks good,” in terms of sampling results.

Mr. Hanning then described USS’ process for calculating the amount of chromium discharged during the incident. Mr. Henry requested the description of the calculation be considered confidential business information (CBI). I agreed to treat the information as CBI and recorded the description on a separate piece of paper which was secured during and after the inspection. According to Mr. Hanning, a total of 346 pounds of total chromium was released from outfall 004, via internal outfall 304, including 298 pounds of hexavalent chromium.

Reporting:

I went over USS’s various reporting requirements under the Permit. No significant issues were identified. Mr. Hanning confirmed he signs the DMRs, and Mr. Henry is the certified Class D operator of record. Mr. Ream added that USS submits DMRs on a timely basis.

Review of Past Violations:

The group went over the history of self-reported violations prior to the April 11, 2017, chromium incident at the facility, going back to 2013. The violations are summarized in Table 1, below. USS provided violation reports for a number of the reported violations.

<b>Report Date</b>	<b>Reported Violation</b>	<b>Violation Type</b>	<b>Permit Reference</b>
1/31/2017	Hex Chromium 304	Effluent Limit	Part 1.A.(5)
12/31/2016	DMR NR Cyanide 204	Non-Reporting	Part 1.C.(2)
4/5/2016	Discoloration 004	Narrative Standard	Part 1.B.(1)(c)
4/1/2016	Discoloration 004	Narrative Standard	Part 1.B.(1)(c)
3/31/2015	Oil & Grease 304	Effluent Limit	Part 1.A.(5)
6/30/2014	Toxicity chronic 004	Effluent Limit	Part 1.A.(3)
5/31/2014	Temp 500	Effluent Limit	Part III.A.
5/31/2014	Toxicity chronic 004	Effluent Limit	Part 1.A.(3)
5/31/2014	Toxicity acute 004	Effluent Limit	Part 1.A.(3)
12/12/13	Discoloration 004	Narrative Standard	Part 1.B.(1)(c)
8/16/2013	Toxicity chronic 004	Effluent Limit	Part 1.A.(3)
02/05/13	T. Chromium 304	Effluent Limit	Part 1.A.(5)

**Table 1. Summary of reported violations, February 2013 – February 2017**

Sludge:

Mr. Henry summarized the sludge handling procedures for the NFTP and CTP. The chromium plant sludge is disposed of offsite, “with shipments about every two weeks.” He estimated the plant generates about 40 tons of hazardous sludge per year. Mr. Henry mentioned that the NFTP includes a filter press process for sludge which generates about 4,000 tons of non-hazardous sludge per year. The sludge is disposed of in a landfill within the facility. Ms. Csatori, IDEM RCRA inspector, asked about the fate of sludge being generated during the chromium incident. Mr. Henry indicated USS is testing sludge samples now to determine if it can be disposed of in the on-site landfill, or requires disposal in an offsite hazardous waste landfill. Ms. Csatori departed the facility upon completion of sludge interview.



#### Operations and Maintenance:

Permit Part II.B.(1) sets forth the following requirements for operations and maintenance:

*The permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for the collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of this permit in accordance with 327 IAC 5-2-8(8).*

To start off the interview, I asked the USS representatives how the NFTP and chromium wastewater plants were operating prior to the chromium incident. Mr. Henry said “the plants were working well.” Mr. Henry summarized training and staffing for wastewater operations. USS has a staff of thirteen assigned to wastewater operations, including four operators at the NFTP and CTP. Mr. Hanning mentioned how both plants were each designed with two treatment trains for redundancy. Mr. Henry added the plants were inspected and cleaned twice a year. I asked if there were written procedures for the inspections and cleaning efforts. Mr. Henry said there were “no written procedures for cleaning and maintenance [of the plants].”

I asked if USS kept records of maintenance and repairs. Mr. Miller said “work orders should be generated for repairs,” and “[USS] is working on a system to auto generate PM [preventive maintenance] work orders.” Mr. Hanning added “its a work in progress to track maintenance,” and “we have a goal to integrate PM orders.” Mr. Henry indicated that Mr. Ron Kaminski directs PM work and arranged for him to join us for the O&M interview.

Mr. Kaminski confirmed the semi-annual cleaning cycle for the wastewater plants. He also confirmed that there is no written plan for wastewater system maintenance and said “we inspect and if we find something deficient, we address it. Everything is based off of inspections.” I asked Mr. Kaminski if he maintains records for maintenance and inspections. He replied “maybe, but not always.” I asked Mr. Kaminski if there was a PM plan or protocol for pipelines. He said “no there is not, maintenance is as needed.”

#### SWPPP:

I began the interview by asking about the status of the SWPPP. According to the Permit, an updated SWPPP was due on March 31, 2017. Mr. Miller provided a draft of the updated SWPPP. He stated that the draft SWPPP had not yet been approved.

I asked for a copy of the 2016 SWPPP annual report, due within twelve months of the previous (2015) annual report (Permit Part I.D.(5)). The 2015 annual report was submitted to IDEM on May 26, 2016. Mr. Miller indicated that USS has yet to submit the 2016 annual report, due May 26, 2017. Mr. Miller provided a copy of the 2014 annual report, which was submitted to IDEM on January 30, 2015. The 2015 annual report was submitted to IDEM on May 26, 2016. Based on the submission date of the 2014 annual report, the 2015 annual report should have been submitted to IDEM by January 30, 2016, pursuant to Permit Part I.D.(5).

The group took a break for lunch at noon and returned to continue the interview at 1:00 pm. Upon returning from lunch, Mr. Miller provided a copy of the updated SWPPP, approved by Mr. Hanning on March 31, 2017. He said that he “was not aware the updated SWPPP was approved.” I concluded the SWPPP portion of the interview and informed the USS representatives that I planned to conduct a review of the updated and approved SWPPP as part of my post-inspection document review.

#### Self-Monitoring:

Mr. Brandon Frye, of ALS, Inc. (USS Contractor), joined the USS representatives to help answer questions related to the USS self-monitoring program. I asked Mr. Frye about flow monitoring at the outfalls. According to Mr. Frye, USS relies on open channel weirs and ISCO 2150 auto flow monitors for the three outfalls (002, 003, and 004) on Burns Waterway. He said the flow monitoring probes are calibrated every year.

I asked Mr. Frye to summarize the procedure for Permit-related sampling and analysis. He said that with the exception of temperature, pH, and chlorine, all samples are analyzed at ALS's laboratory in Valparaiso, Indiana. We discussed Permit sample collection and handling, and equipment calibration procedures. No significant issues were identified. I did not conduct a laboratory audit as part of the inspection.

#### Process Overview:

The final portion of the interview focused on a process overview for the facility. Mr. Henry provided an overview of plant operations. The process begins with the hydrochloric pickle line and three production lines, including cold rolled products, tin mill products, and galvanized products. I noticed a facility process flow diagram on the wall of the meeting room and asked Mr. Henry if it accurately described current facility processes. Mr. Henry confirmed the flow diagram accurately described the facility processes. Based on the flow diagram and the information provided by Mr. Henry, Figure 1, below, summarizes the facility production processes.

See Figure "MW-LDD" in Appendix B for details on wastewater treatment and effluent outfall points for the various processes identified in Figure 1.

I concluded the interview portion of the inspection at 1:45 pm.

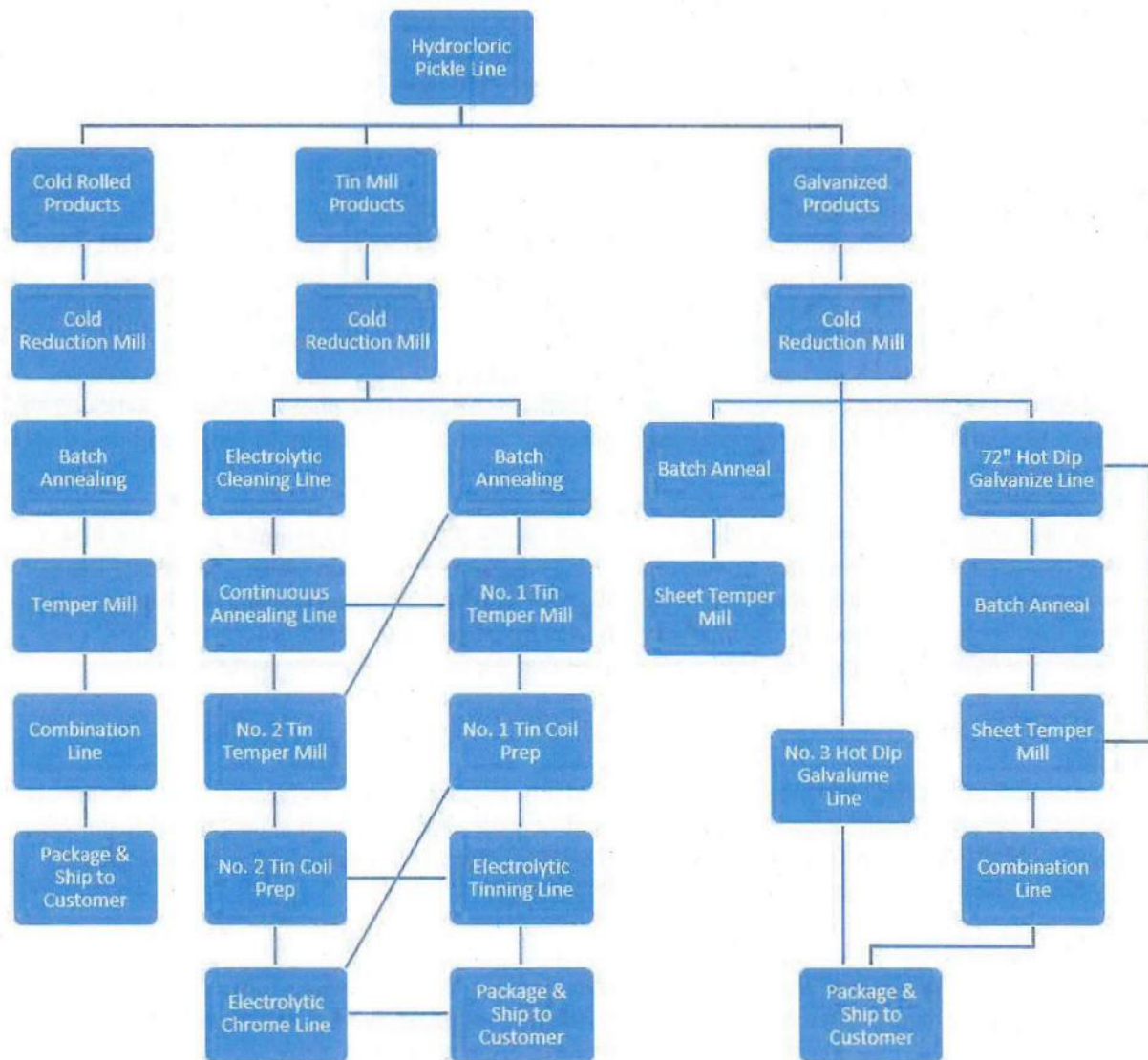
#### ***IV. C. Physical Facility Inspection***

At 1:48 pm, I began the physical inspection of the facility and was joined by Mr. Henry, Mr. Hanning, Mr. Miller, Mr. Ream, and Mr. Lenell. We discussed the physical inspection plan and agreed on the order of sites, including the AMROX Co. area, CTP, NFTP; and outfalls 004, 003, and 002. Photographs referenced in this report are included in the Photo Log (Appendix C). See Appendix A for an aerial photograph of the facility and locations of physical inspection sites.

#### American Iron Oxide Company Facility:

According to Mr. Henry, the American Iron Oxide Company (AMROX) leases a portion of the USS facility and operates a plant which produces a mixed pickle product for USS. I identified the AMROX plant as a potential area of concern based on review of aerial photographs (see Appendix D for an aerial photograph of the AMROX plant). Mr. Henry described the AMROX process and identified the red dust on the ground in the vicinity of the AMROX plant as an iron oxide. He also mentioned that AMROX collects stormwater for reuse. I noticed red dust on the ground as we walked around the perimeter of the plant (see photograph 8 – MB000223.jpg). I commented on the presence of red dust on the facility access road that runs parallel to the plant (see photograph 9 – MB000224.jpg). Mr. Henry stated that USS "required scrubbing of the road in the past," and "there are no open stormwater inlets in the vicinity."





**Figure 1. Summary of Facility Processes.**

I did not observe the area under wet weather conditions and, as a result, could not assess the potential for stormwater impacts. However, I did mention to Mr. Henry that I would consider the AMROX area a potential area of concern for stormwater impact, due to the presence of red dust on the ground outside of the perimeter of the plant.

Chrome Treatment Plant:

The group entered the CTP control room. I asked Mr. Henry to provide a summary of the plant's treatment process. Mr. Henry mentioned the CPT was 5 or 6 years old, had an average flow rate of 250,000-300,000 gallons per day, and normally operated 24 hours per day, seven days a week. He reiterated that the plant was designed with two treatment trains. The plant relies of pH adjustment to treat chromium-bearing wastewater. The treatment train includes equalization basins, pH adjustment tanks, clarifiers, and filters. I asked Mr. Henry how the plant was operating. He said it was operating "pretty good." I asked Mr. Henry if the plant operators are able to monitor influent flow. He indicated that the

plant was not designed with influent flow monitoring. I mentioned that influent flow monitoring would be helpful for detecting reductions in influent flow, and could provide an early warning in situations similar to the recent chromium discharge incident. I did not conduct a physical inspection of the individual CTP treatment components.

#### NFTP and Outfall 004:

I conducted a physical inspection of the NFTP treatment train. Mr. Henry described the parallel treatment process which included equalization basins (300,000 gallons), oil skimmers, air blowers, mix tanks (for sulfuric acid, lime, coagulant, and polymer treatment), sedimentation basins, and flocculation basins. Photographs 10 (MB000225.jpg) and 11 (MB000226.jpg) capture the south and north equalization basins, and photograph 12 (MB000227.jpg) captures the flocculation tank. The sedimentation basins are shown in photograph 13 (MB000228.jpg) and in photograph 14 (MB000229.jpg), including the final effluent troughs. I noticed some buildup and debris in the final effluent troughs (see photograph 15 – MB000230). I mentioned the buildup to Mr. Henry and he said operators “hose down the troughs frequently and that they appear to be due now.”

The group then walked to the utility building that housed the ISCO 4700 auto sampler for outfall 104. I noted that the sampler tubes were free of debris and without sags (see photograph 16 - MB000231.jpg). The group continued to the walkway above outfall 004. The discharge appeared clear. Mr. Henry mentioned that the boom in place in Burns Waterway was installed at the request of the EPA OSC (see photograph 17 – MB000232.jpg). Mr. Henry also stated that the average flow for outfall 004 was 9.5 MGD.

#### Outfall 003:

I observed outfall 003 which discharges stormwater and non-contact cooling water into Burns Waterway. I noticed some pitting and corrosion on the side of the flow weir channel, which appeared to create some turbulence in the effluent flow (see photograph 18 – MB000233.jpg). The discharge is captured from a walkway above the outfall in photograph 19 – MB000234.jpg).

#### Outfall 002:

I observed outfall 002 which also discharges stormwater and non-contact cooling water into Burns Waterway. I noticed a significant amount of debris on the bottom of the flow weir channel (see photograph 20 – MB000235.jpg). The discharge is captured from a walkway above the outfall in photograph 21 - MB000236.jpg).

I completed the Physical Facility Inspection at 3:13 pm.

#### ***IV. D. Closing Conference***

The group returned to the AE1 building and I began the closing conference at 3:20 pm. I briefly summarized the preliminary potential areas of concern for the USS representatives. The preliminary potential areas of concern included:

- Effluent limit exceedances related to the April 11, 2017, chromium incident.
- Self-reported effluent limit exceedances, and potential narrative standard and reporting violations from 2013 to February 2017.
- Operations and maintenance concerns related to the NFTP, Burns Waterway outfall weirs, and secondary containment trenches and pipelines associated with the April 11, 2017, chromium incident.
- Potential stormwater concerns related to the presence of iron oxide dust on the ground and along the road adjacent to AMROX plant.

- Lack of a comprehensive operations and maintenance plan, including preventive maintenance, for wastewater, stormwater, and non-contact cooling water treatments plants and conveyances.

I asked Mr. Ream if he had any other potential areas of concern. He stated that he did not. I provided the group with an estimated timeframe for completion of the inspection report, and asked the USS representatives if they had any questions or comments. Mr. Miller added that USS is working towards developing an integrated operations and maintenance plan. I reminded the USS representatives that I may identify additional areas of concern after reviewing my notes, the SWPPP, and data, documents and records collected as part of the inspections.

I concluded the closing conference and departed the facility, along with Mr. Lenell, at 3:39 pm.

## V. DOCUMENTS RECEIVED

Documents received during the inspections:

- USS data related to April 11, 2017, chromium incident
- 2016 Field logs (ALS)
- USS Discharge Notification Reports to IDEM, 2012-2017
- Map of April 11, 2017, chromium incident sampling locations
- Used oil, waste minimization and wastewater modernization diagram (USS requested treatment as CBI)
- April 2017 flow data summary
- SWPPP, dated March 31, 2017
- 2015 SWPPP Annual Report
- ISCO 2150 Area Velocity Module Fact Sheet
- Plant layout diagram
- DMRs, 3/2016 – 2/2017
- 2014 SWPPP Annual Report

Document received after the inspections:

- Chromium dioxide safety data sheet (provided by OSCs Andy Maguire and Mike Beslow who received the document from Mr. Henry)

## VI. DOCUMENT REVIEW

After the inspections, I reviewed my inspection notes and information provided by USS during the inspections, including chromium incident data, DMRs, field logs, SWPPP, and SWPPP annual reports. I identified the following additional areas of concerns (see Appendix E for chromium incident data summaries and figures).

### Review of DMRs and Daily Field Logs

I reviewed DMRs and daily field logs from November 2016 – February 2017. I identified the following additional areas of concern:

- pH, non-reporting. No weekly pH reported from 11/22/16 – 12/4/16 for outfall 002. [Permit Part I.A.(1); see copy of Monthly Monitoring Report in Appendix F]
- pH, non-reporting. No weekly pH reported from 11/22/16 – 12/4/16 for outfall 003. [Permit Part I.A.(2); see copy of Monthly Monitoring Report in Appendix F]



- Non-reporting, multiple parameters. No reported daily sample results for TSS, oil & grease, pH, zinc, total chromium, and total cyanide (5x/weekly), from 12/23/16 – 12/27/16, for outfall 204. [Permit Part I.A.(4); see copy of Monthly Monitoring Report in Appendix F]
- Non-reporting, multiple parameters. No reported daily sample results for TSS, oil & grease, total cyanide, zinc, and total chromium (5x/weekly), from 12/23/16 – 12/27/16, for outfall 304. [Permit Part I.A.(5); see copy of Monthly Monitoring Report in Appendix F]

#### Review of SWPPP

I reviewed the facility SWPPP, dated March 31, 2017, for compliance with the requirements in the Permit Part I.E.

I identified the following deficiencies:

- Permit Part I.E.(2)(b)(3)(B): Site Map. Missing or could not locate “Location and extent of significant structures and impervious surfaces.”
- Permit Part I.E.(2)(b)(3)(C): Site Map. Missing or could not locate “Directions of stormwater flow.”
- Permit Part I.E.(2)(b)(3)(F): Site Map. Missing or could not locate all “Locations of all stormwater conveyances including ditches, pipes, and swales.” Update to include updated information on inlets in the vicinity of AMROX plant.
- Permit Part I.E.(2)(b)(3)(H): Site Map. Missing or could not locate “Locations where significant spills or leaks identified have occurred.”
- Permit Part I.E.(2)(b)(3)(I): Site Map. Missing or could not locate “Locations of all stormwater monitoring points.”
- Permit Part I.E.(2)(b)(3)(J): Site Map. Missing or could not locate “Locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2), indicating if you are treating one or more outfalls as “substantially identical”, and an approximate outline of the areas draining to each outfall.”
- Permit Part I.E.(2)(b)(3)(L): Site Map. Missing or could not locate “Areas of federally-listed critical habitat for endangered or threatened species, if applicable.”
- Permit Part I.E.(2)(b)(3)(O): Site Map. Missing or could not locate “Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to waters of the United States.”
- Permit Part I.E.(2)(d)(2): Schedules and Procedures. Missing or could not locate “Maintenance – Preventative maintenance procedures, including regular inspections, testing, maintenance and repair of all control measures to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line. The SWPPP shall include the schedule or frequency for maintaining all control measures used to comply with the storm water requirements.”
- Permit Part I.E.(2)(d)(5): Schedules and Procedures. Missing or could not locate “Employee Training – The elements of your employee training plan shall include all, but not be limited to, the requirements set forth in Permit Part.I.D., and also the following:
  - (a) The content of the training; The frequency/schedule of training for employees who have duties in areas of industrial activities subject to this permit;
  - (b) A log of the dates on which specific employees received training.”

## VII. AREAS OF CONCERN

I identified several areas of concern, based on the inspection findings and review of documents provided by USS. The areas of concern are summarized in the table below.

Area of Concern	Finding	Permit/Regulatory Reference
Effluent limit exceedances and discoloration – Chromium Incident	<p>Effluent limit exceedances related to the April 11, 2017, chromium incident. Total chromium and hexavalent chromium effluent limit (maximum daily load) exceedances for outfall 304, April 11-12, 2017.</p> <p>EPA OSCs observed a green discoloration in the area of outfall 004 on April 11, 2017, see Photograph 2 (Image1.jpg).</p>	<p>Permit Part I.A.(5) sets maximum daily loading effluent limits for outfall 304, for total chromium (7.95 lbs/day) and hexavalent chromium (0.51 lbs/day).</p> <p>Permit Part I.B. sets water quality standard requirements for outfalls.</p>
Effluent limit exceedances, and potential narrative standard and reporting violations	<p>Self-reported effluent limit exceedances, and potential narrative standard and reporting violations from 2013 to February 2017.</p> <p>See summary in Table 1 (page 6), Section VI (page 11), and Appendix F.</p>	<p>Permit Part I.A. sets effluent limits for outfalls.</p> <p>Permit Part I.B. sets water quality standard requirements for outfalls.</p> <p>Permit Part I.C. sets monitoring and reporting requirements for outfalls.</p>
Operations and Maintenance Issues	<p>See Section IV.B., unless noted otherwise. Operations and maintenance issues identified during the inspections include:</p> <ul style="list-style-type: none"> <li>• The source of the chromium incident was an expansion joint rupture in a 6-inch pipe.</li> <li>• Lack of preventive maintenance and poor condition of secondary containment trenches. An undetected hole in the bottom of a secondary containment trench created a pathway for leaked wastewater to flow into the subsurface and into a 20-inch carbon steel. See photograph 7 (2.jpg).</li> <li>• During the chromium incident, a 20-inch carbon steel pipeline was exposed to an unknown quantity of highly corrosive (pH 1) wastewater. This raises a concern about the integrity of the carbon steel wastewater pipeline.</li> </ul>	<p>Permit Part II.B.(1). “Proper Operation and Maintenance: The permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for the collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of this permit</p>

Area of Concern	Finding	Permit/Regulatory Reference
	<ul style="list-style-type: none"> <li>• Secondary containment trenches are not routinely monitored for integrity.</li> <li>• Lack of a comprehensive written plan for cleaning and maintenance of the wastewater infrastructure.</li> <li>• Maintenance and inspection activities are not always recorded.</li> <li>• Lack of a preventive maintenance plan, maintenance done on as needed basis.</li> <li>• Lack of influent flow monitoring at the Chromium Treatment Plant. Influent flow monitoring would be helpful for detecting reductions in influent flow, and could provide an early warning in situations similar to the recent chromium discharge incident (see Section IV.C).</li> <li>• Buildup of debris in the NFTP final effluent troughs (see photograph 15 – MB000230, and Section IV.C).</li> <li>• Pitting and corrosion on the side of the flow weir channel at outfall 003, which appeared to create some turbulence in the effluent flow (see photograph 18 – MB000233.jpg, and Section IV.C).</li> <li>• Debris on the bottom of the flow weir channel at outfall 002 (see photograph 20 – MB000235.jpg, and Section IV.C).</li> </ul>	in accordance with 327 IAC 5-2-8(8).”
Late Submittal of 2015 SWPPP Annual Report	The 2015 SWPPP annual report was submitted to IDEM on May 26, 2016. The 2015 annual SWPPP report was due to be submitted to IDEM by January 30, 2016, within twelve months of the date of submittal for the 2014 SWPPP Annual Report (see Section IV.B.).	Permit Part I.D.(5)
SWPPP Deficiencies	SWPPP components, including Site Map, and Schedules and Procedures requirements, missing or could not be located (see Section VI).	Permit Part I.E.(2)(b)(3) – Site map requirements.  Permit Part I.E.(2)(d) – Schedules and procedures.
SWPPP Good Housekeeping - AMROX	Potential stormwater concerns related to the presence of iron oxide dust on the ground and along the road adjacent to AMROX plant.	Permit Part I.D.(4)(b) – Good Housekeeping.

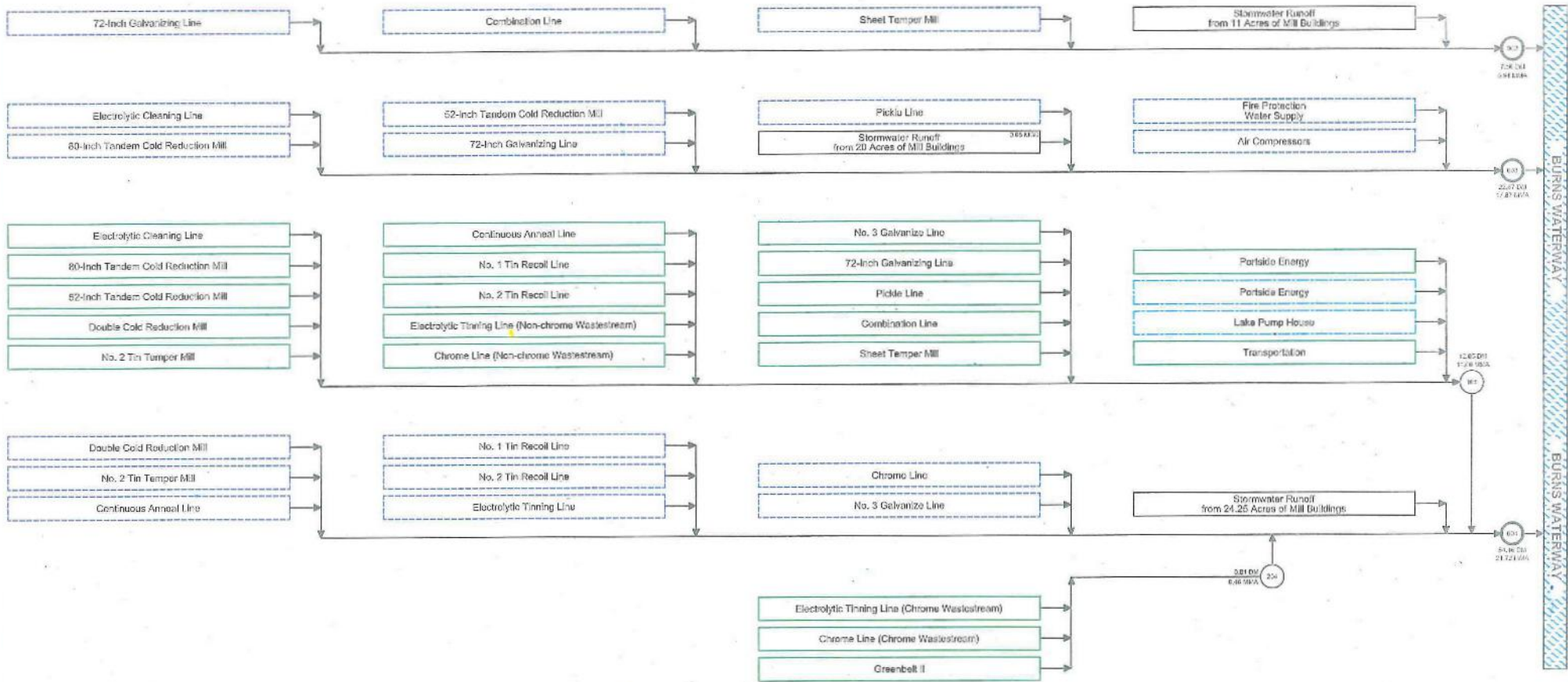


**Appendix A: Aerial View of the U.S. Steel – Midwest Plant Facility**  
*Annotated Google Earth® aerial image of the Facility, dated October 13, 2016.*



## Appendix B: Wastewater and Stormwater Process Flow Diagrams





LEGEND:  
 MGD - MILLION GALLONS PER DAY  
 DM - DAILY MAX FLOW  
 MMA - MAXIMUM MONTHLY AVERAGE FLOW

NOTE:  
 FLOW AVERAGES BASED ON MARCH 2011 THROUGH MAY 2015 FLOW DATA.

---	NON-CONTACT COOLING WATER	
---	CONDENSATE	⊠ PUMP STATION
---	BACKWASH, WASHDOWN, BLOWDOWN	⊙ INTERNAL MONITORING OR DISCHARGE POINT
---	PROCESS WATER	⊕ OUTFALL

REVIEW DATE:	07/14/2015
REVISION DATE:	07/14/2015
FILE PATH:	USSM\Drawings\LDDs\20xx\xxxx
FILE NAME:	MW-LDD

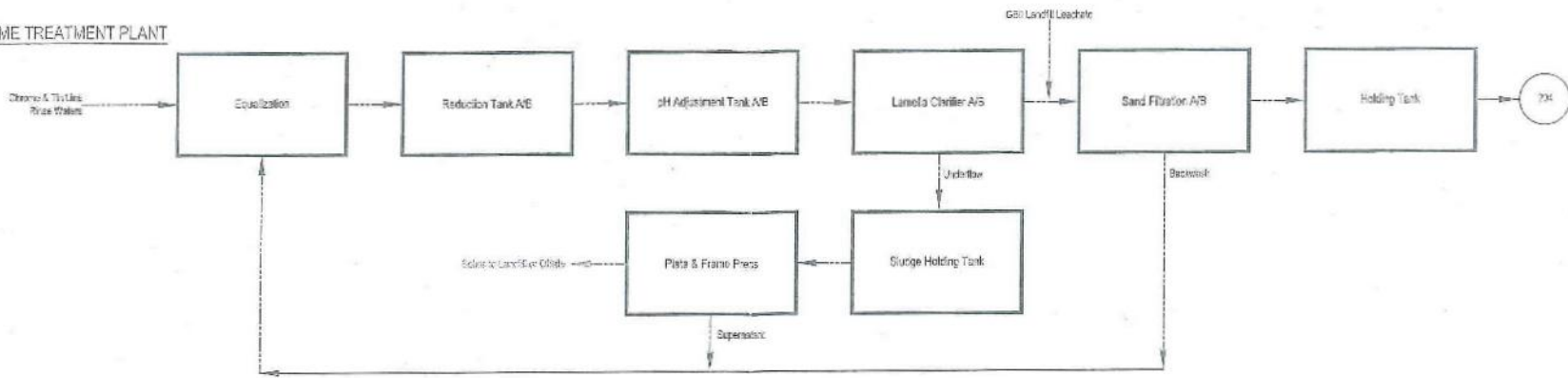
**FIGURE MW-LDD**  
 U.S. Steel - Midwest Plant Line Discharge Diagram  
 Outfalls: 002, 003 and 004



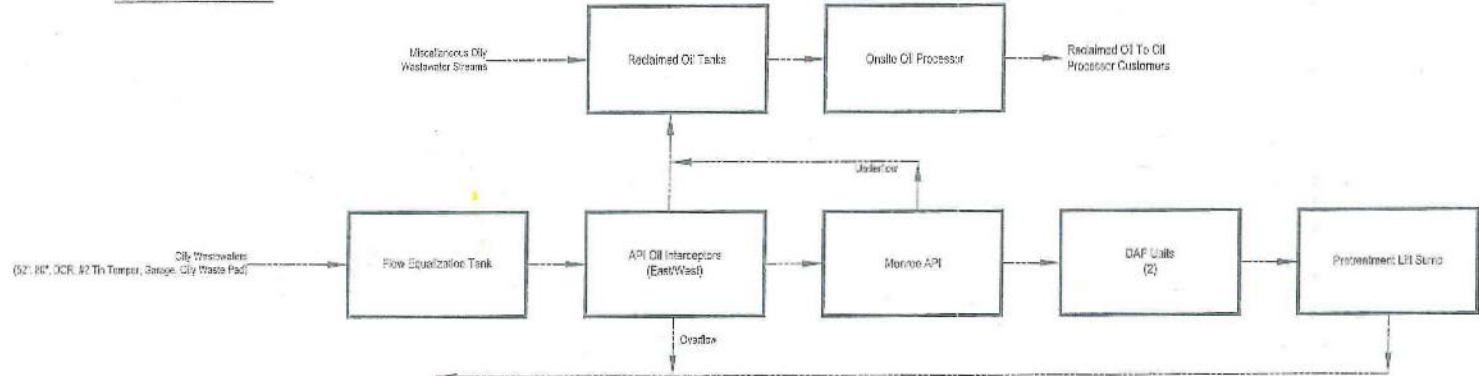
PRINTED COPIES ARE UNCONTROLLED DOCUMENTS - SEE ENVIRONMENTAL CONTROL FOR CURRENT VERSION

112

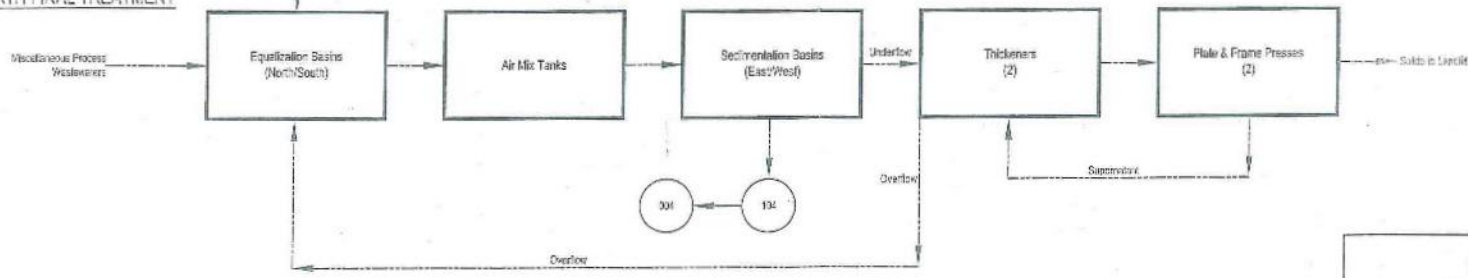
**CHROME TREATMENT PLANT**



**OIL PRETREATMENT**



**NORTH FINAL TREATMENT**



**Outfalls 104 and 204**  
**Wastewater Treatment Processes**  
**U.S. Steel - Midwest Plant NPDES Permit Renewal**

	REVIEW DATE: 07/14/2015
	REVISION DATE: 07/14/2015
	FILE PATH: USSMWDrawings
	FILE NAME: USS MW WWT Flow Diagram.dwg

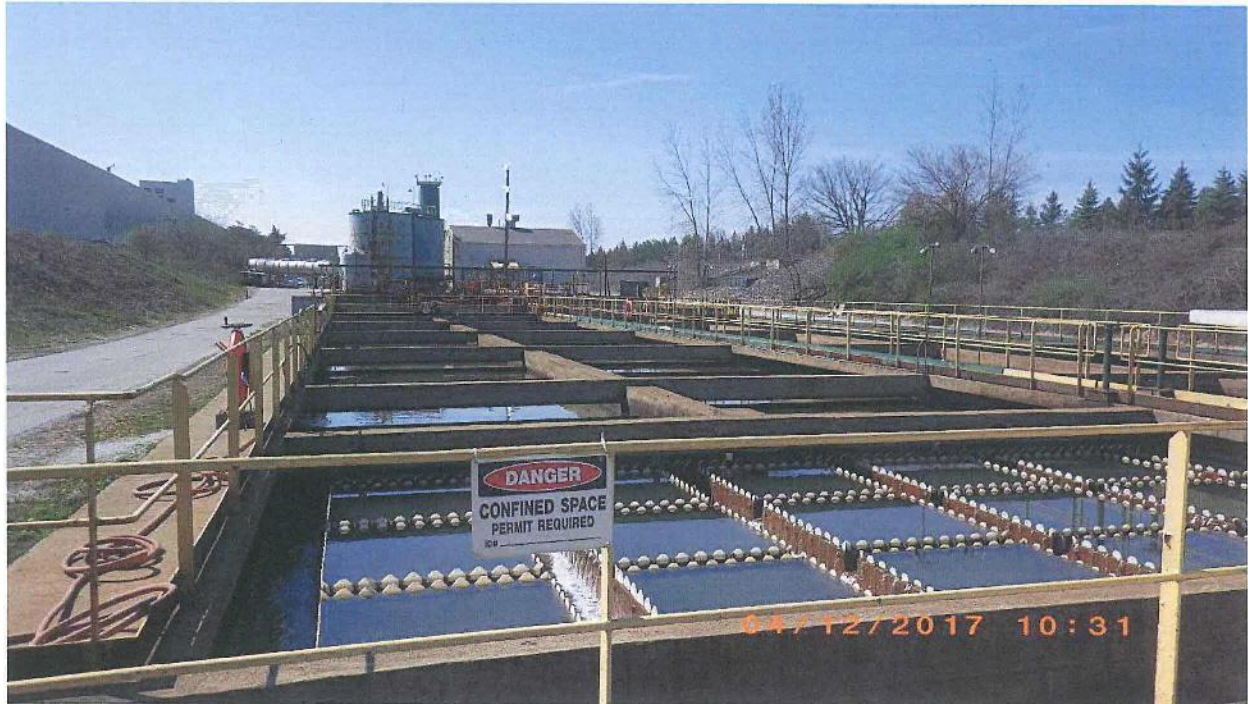
PO Box 2967  
 Chester, IL 61014  
 Phone: 219/623-0312  
 Fax: 219/623-6212

## Appendix C: Photo Log



**U.S. Steel Corporation – Midwest Plant  
EPA Recon Inspection April 12, 2017  
EPA CEI Inspection April 20, 2017**

**All times in Central Time Zone**



1: MB000215.jpg

Description: Overview of the NFTP.

Location: U.S. Steel – Midwest Plant

Camera Direction: 197°

Date/Time: April 12, 2017; 10:31 am.

Photo Taken by: Dean Maraldo

Camera: RICOH WG-4 GPS



2: image1.jpg

Description: Green discoloration in the area of outfall 004 on April 11, 2017.

Location: U.S. Steel – Midwest Plant

Camera Direction: N/A

Date/Time: April 11, 2017; 11:20 am.

Photo Taken by: Tom Mendez, EPA OSC

Camera: EPA iPhone 6





3: MB000214.jpg

Description: Effluent discharging from outfall 004 at the time of the inspection.

Location: U.S. Steel – Midwest Plant

Camera Direction: 251°

Date/Time: April 12, 2017; 10:29 am.

Photo Taken by: Dean Maraldo

Camera: RICOH WG-4 GPS



4: 1.jpg

Description: Secondary containment trench and leaking expansion joint in the Tin Courtyard.

Location: U.S. Steel – Midwest Plant

Camera Direction: N/A

Date/Time: April 11, 2017; morning.

Photo Taken by: Mr. Mark Henry (USS), and provided to EPA OSC.

Camera: Unknown





5: MB000218.jpg

Description: The area of the secondary containment trench (covered at the time of inspection), and the expansion joint rupture.

Location: U.S. Steel – Midwest Plant

Camera Direction: 335°

Date/Time: April 12, 2017; 3:13 pm.

Photo Taken by: Dean Maraldo

Camera: RICOH WG-4 GPS





6: MB000220.jpg

Description: The uncovered section of the secondary containment trench where leaked wastewater poured through the hole in the bottom of the trench and emptied into a 20-inch pipeline running underneath the trench.

Location: U.S. Steel – Midwest Plant

Camera Direction: 333°

Date/Time: April 12, 2017; 3:22 pm.

Photo Taken by: Dean Maraldo

Camera: RICOH WG-4 GPS



7: 2.jpg

Description: Discolored liquid is observed pouring into the hole in the bottom of the secondary containment trench, and, according to USS, into a 20-inch pipeline below.

Location: U.S. Steel – Midwest Plant

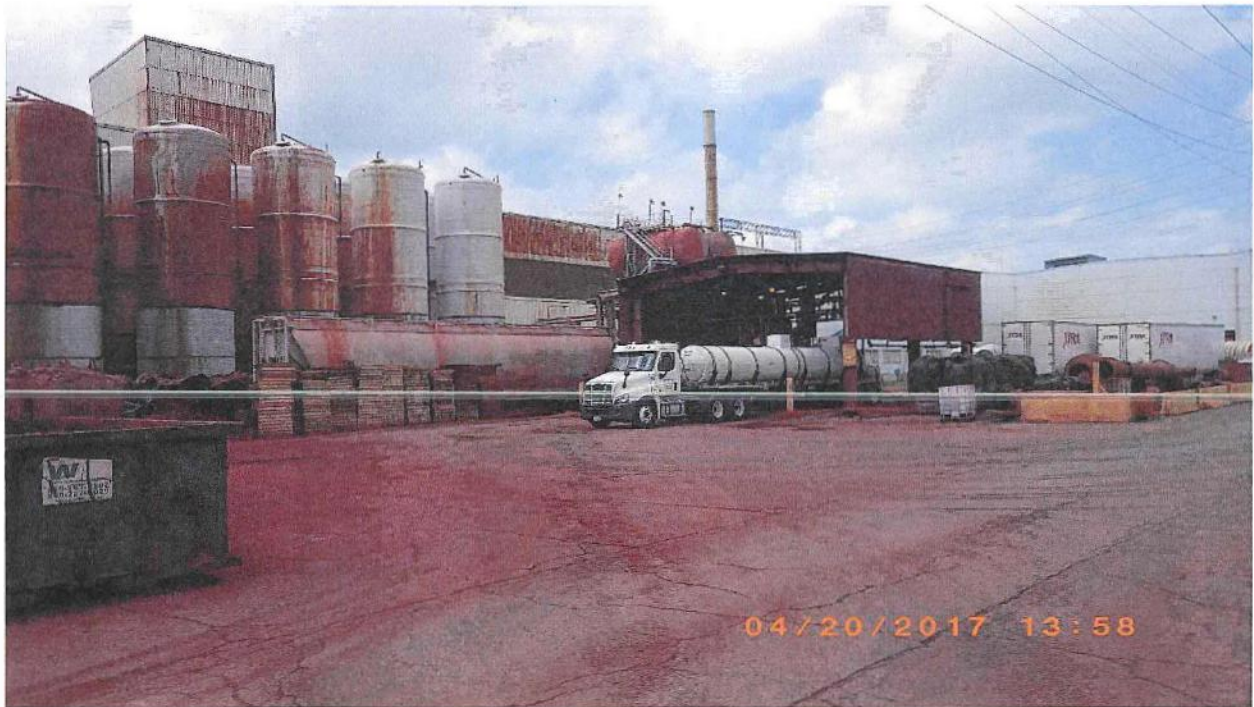
Camera Direction: N/A

Date/Time: April 11, 2017; morning.

Photo Taken by: Mr. Mark Henry (USS), and provided to EPA OSC.

Camera: Unknown





8: MB000223.jpg

Description: Red iron oxide dust on the ground, around the perimeter of the AMROX plant.

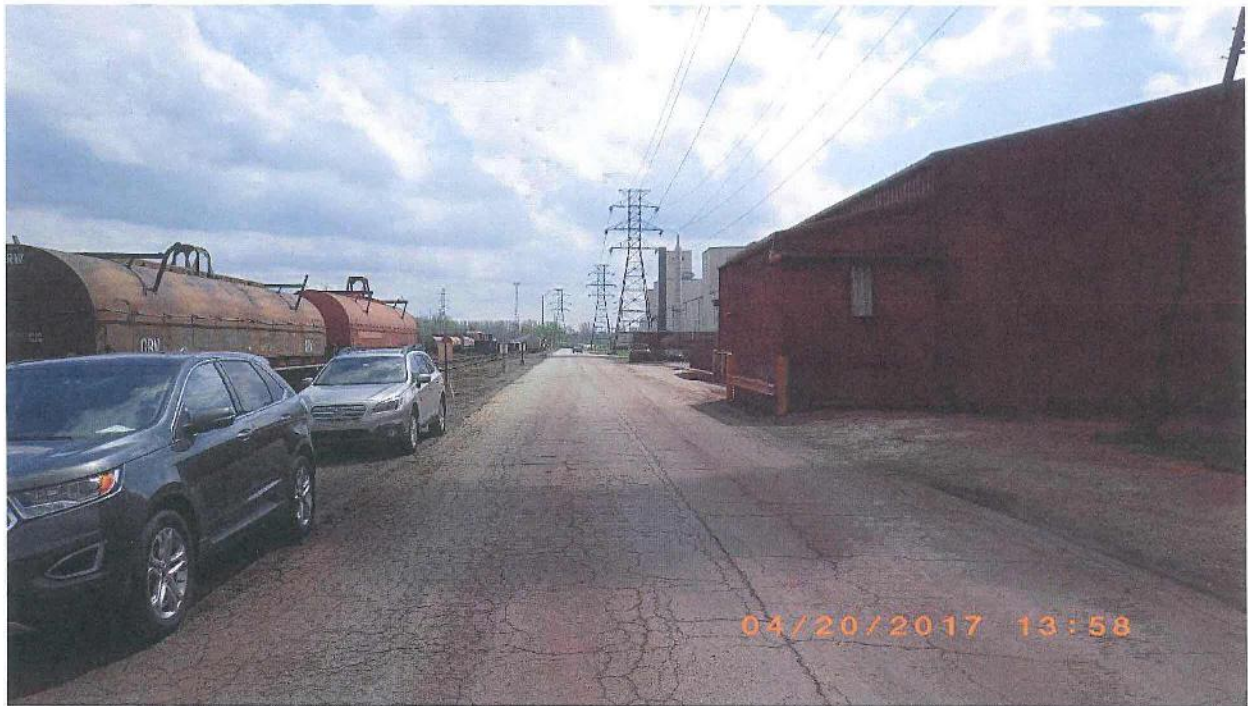
Location: U.S. Steel – Midwest Plant, AMROX Plant

Camera Direction: 335°

Date/Time: April 20, 2017; 1:58 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



9: MB000224.jpg

Description: Red iron oxide dust on the facility access road that runs parallel to the AMROX plant.

Location: U.S. Steel – Midwest Plant, AMROX Plant

Camera Direction: 168°

Date/Time: April 20, 2017; 1:58 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS





10: MB000225.jpg

Description: NFTP south equalization basin.

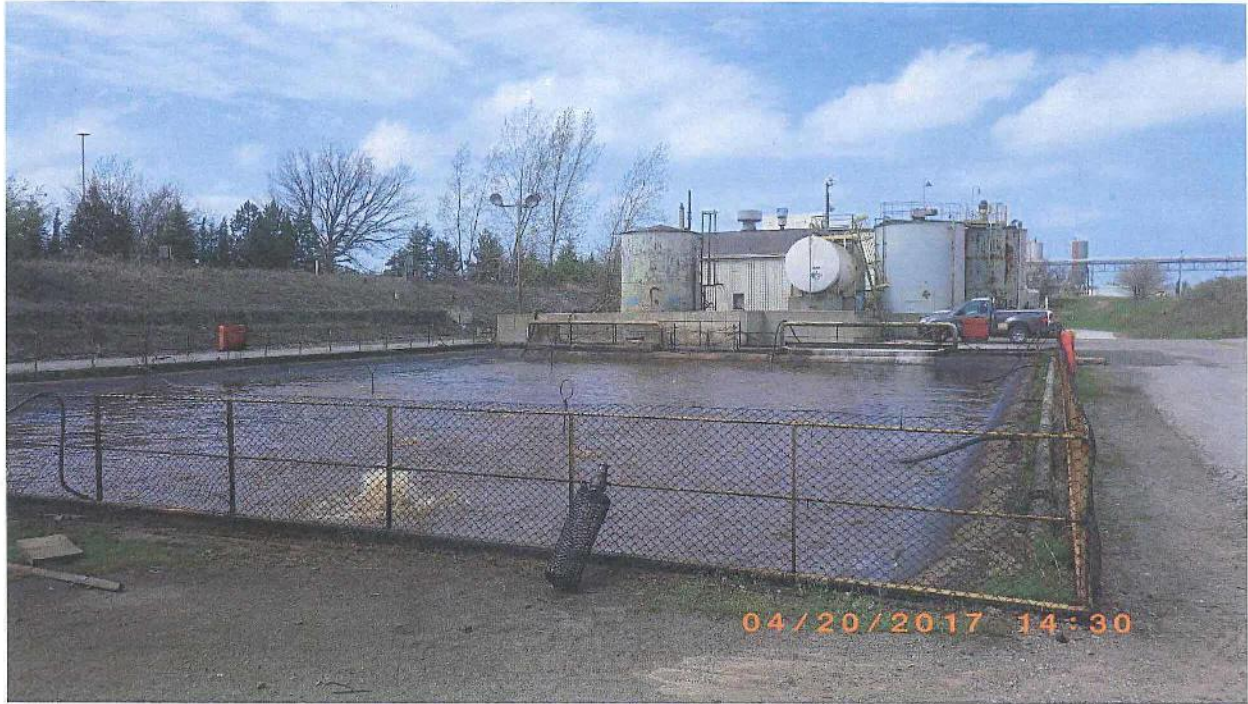
Location: U.S. Steel – Midwest Plant

Camera Direction: 267°

Date/Time: April 20, 2017; 2:29 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



11: MB000226.jpg

Description: NFTP north equalization basin.

Location: U.S. Steel – Midwest Plant

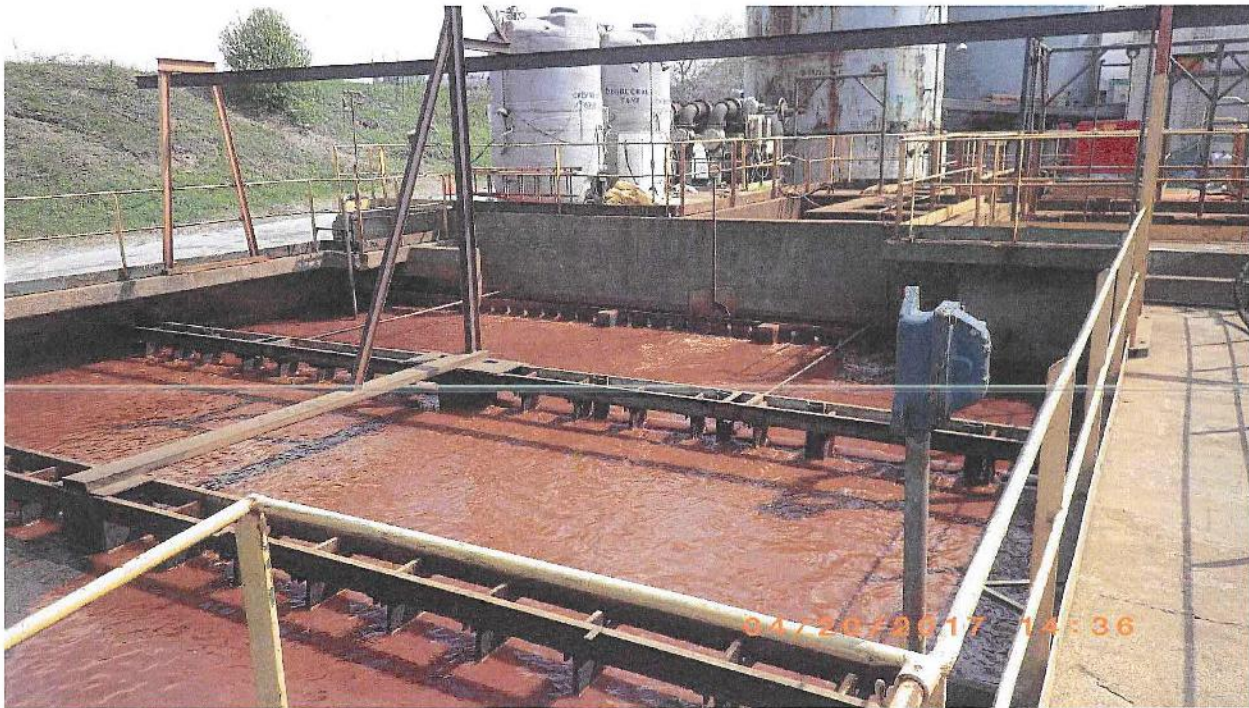
Camera Direction: 350°

Date/Time: April 20, 2017; 2:30 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS





12: MB000227.jpg

Description: NFTP flocculation tank.

Location: U.S. Steel – Midwest Plant

Camera Direction: 147°

Date/Time: April 20, 2017; 2:36 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



13: MB000228.jpg

Description: NFTP sedimentation basins.

Location: U.S. Steel – Midwest Plant

Camera Direction: 165°

Date/Time: April 20, 2017; 2:38 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS





14: MB000229.jpg

Description: NFTP sedimentation basin effluent troughs.

Location: U.S. Steel – Midwest Plant

Camera Direction: 71°

Date/Time: April 20, 2017; 2:39 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



15: MB000230.jpg

Description: Debris buildup in the NFTP sedimentation basin final effluent troughs.

Location: U.S. Steel – Midwest Plant

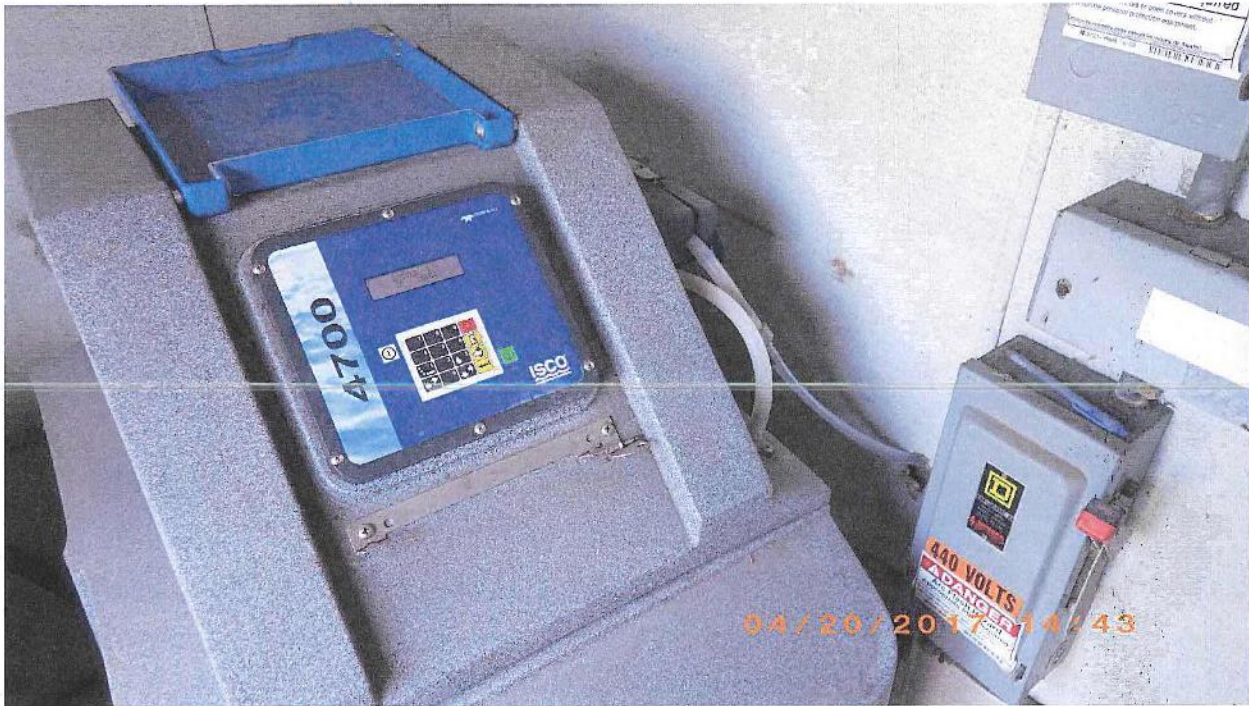
Camera Direction: 104°

Date/Time: April 20, 2017; 2:41 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS





16: MB000231.jpg

Description: ISCO 4700 auto sampler for outfall 104.

Location: U.S. Steel – Midwest Plant

Camera Direction: 245°

Date/Time: April 20, 2017; 2:43 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



17: MB000232.jpg

Description: Outfall 004 discharge. Note boom in place.

Location: U.S. Steel – Midwest Plant

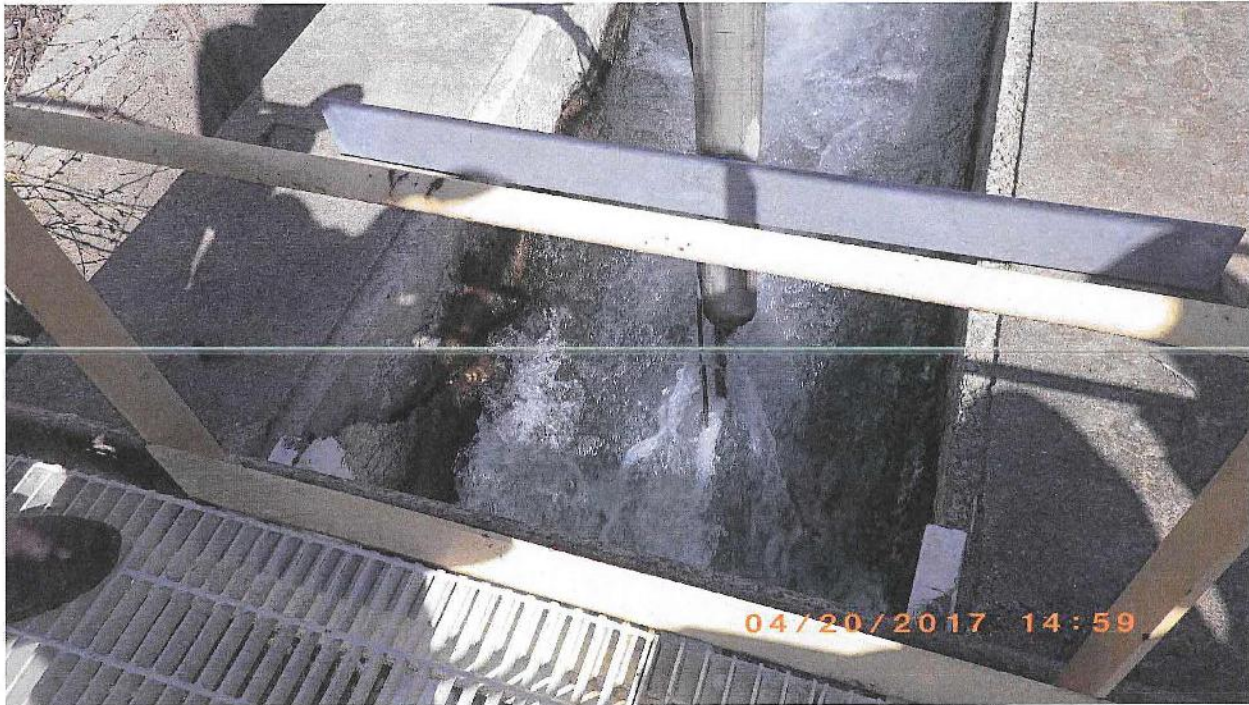
Camera Direction: 213°

Date/Time: April 20, 2017; 2:46 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS





18: MB000233.jpg

Description: Outfall 003 flow weir channel. Notice pitting and corrosion on the side of the channel, which appeared to create some turbulence in the effluent flow.

Location: U.S. Steel – Midwest Plant

Camera Direction: 333°

Date/Time: April 20, 2017; 2:59 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



19: MB000234.jpg

Description: Outfall 003 discharge to Burns Waterway.

Location: U.S. Steel – Midwest Plant

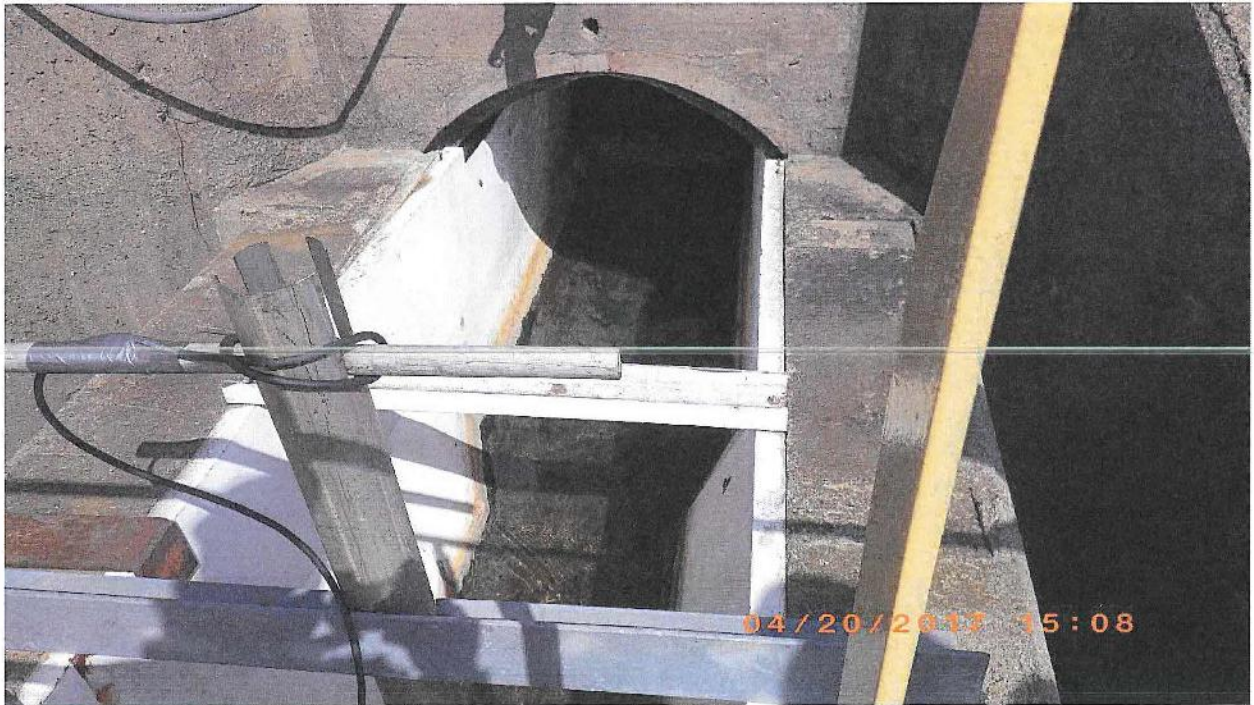
Camera Direction: 254°

Date/Time: April 20, 2017; 3:00 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS





20: MB000235.jpg

Description: Outfall 002 flow weir channel. Noticed significant amount of debris on the bottom of the flow weir channel.

Location: U.S. Steel – Midwest Plant

Camera Direction: 349°

Date/Time: April 20, 2017; 3:08 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



21: MB000236.jpg

Description: Outfall 002 discharge to Burns Waterway.

Location: U.S. Steel – Midwest Plant

Camera Direction: 213°

Date/Time: April 20, 2017; 3:09 pm.

Photo Taken by: Brian Lenell

Camera: RICOH WG-4 GPS



**Appendix D: Aerial View of the AMROX Facility**  
*Google Earth*<sup>®</sup> aerial image of the Facility, dated October 13, 2016.



## **Appendix E: April 11, 2017, Chromium Incident Data Summaries and Figures**

**USS Data Summary (provided during inspection)**



#1

		Latitude	Longitude
A	West	41.618213	-87.176589
	Center	41.618206	-87.176361
	East	41.618201	-87.176133
B	West	41.629441	-87.176652
	Center	41.629441	-87.176317
	East	41.629449	-87.175960
C	West	41.630841	-87.176878
	Center	41.630823	-87.176526
	East	41.630827	-87.176148
D	West	41.63176	-87.17787
	Center	41.63168	-87.17696
	East	41.63169	-87.17667
E	West	41.63247	-87.17818
	Center	41.63221	-87.17728
	East	41.63215	-87.17667
F	West	41.63305	-87.17780
	Center	41.63287	-87.17725
	East	41.63278	-87.17672
G	West	41.63337	-87.17750
	Center	41.63342	-87.17696
	East	41.63332	-87.17638
OF 500		41.630817	-87.176033

Date Sample Taken	Time Sample Taken	Date Sample Analyzed	Time Sample Analyzed	Sample ID	Parameter	Location	West/Center/East	Depth	Result (ug/L)	Qualifier Duplicate?	Lab	Lab ID	Method
4/11/2017		4/11/2017	20:30	1704564-01	Hex	AW Intake			<2	U N	ALS	1704564-01	SM 3500
4/11/2017		4/11/2017	20:30	1404564-02	Hex	AW Wetwell			3.1,<2 (rerun)	J (initial), U (rerun) N	ALS	1404564-02	SM 3500
4/11/2017		4/11/2017	20:30	1704564-03	Hex	AW Cleanwell			<2	U N	ALS	1704564-03	SM 3500
4/11/2017		4/11/2017	20:30	1704565-01	Hex	A	West	Surface	<2	U N	ALS	1704565-01	SM 3500
4/11/2017		4/11/2017	20:30	1704565-02	Hex	A	Center	Surface	<2	U N	ALS	1704565-02	SM 3500
4/11/2017		4/11/2017	20:30	1704565-03	Hex	B	West	Surface	<2	U N	ALS	1704565-03	SM 3500
4/11/2017		4/11/2017	20:30	1704565-04	Hex	B	Center	Surface	<2	U N	ALS	1704565-04	SM 3500
4/11/2017		4/11/2017	20:30	1704565-05	Hex	C	West	Surface	<2	U N	ALS	1704565-05	SM 3500
4/11/2017		4/11/2017	20:30	1704565-06	Hex	C	Center	Surface	<2	U N	ALS	1704565-06	SM 3500
4/11/2017		4/11/2017	20:30	1704565-07	Hex	D	West	Surface	3.1	J N	ALS	1704565-07	SM 3500
4/11/2017		4/11/2017	20:30	1704565-08	Hex	D	Center	Surface	<2	U N	ALS	1704565-08	SM 3500
4/11/2017		4/11/2017	20:30	1704565-09	Hex	E	West	Surface	18	N	ALS	1704565-09	SM 3500
4/11/2017		4/11/2017	20:30	1704565-10	Hex	E	Center	Surface	<2	U N	ALS	1704565-10	SM 3500
4/11/2017		4/11/2017	20:30	1704563-01	Hex	E	Center	Surface	<2	U Y	ALS	1704563-01	SM 3500
4/11/2017		4/11/2017	20:30	1704563-02	Hex	F	West	Surface	<2	U N	ALS	1704563-02	SM 3500
4/11/2017		4/11/2017	20:30	1704563-03	Hex	F	Center	Surface	<2	U N	ALS	1704563-03	SM 3500
4/11/2017		4/11/2017	20:30	1704563-04	Hex	G	West	Surface	3.1	J N	ALS	1704563-04	SM 3500
4/11/2017		4/11/2017	20:30	1704563-05	Hex	G	Center	Surface	17	N	ALS	1704563-05	SM 3500
4/12/2017	10:55	4/12/2017		1704657-01	Hex	A	West	Surface	<2	U N	ALS	1704657-01	SM 3500
4/12/2017	10:55	4/12/2017		1704657-02	Hex	A	West	Mid Depth	<2	U N	ALS	1704657-02	SM 3500
4/12/2017	10:57	4/12/2017		1704657-03	Hex	A	Center	Surface	<2	U N	ALS	1704657-03	SM 3500
4/12/2017	10:57	4/12/2017		1704657-04	Hex	A	Center	Mid Depth	<2	U N	ALS	1704657-04	SM 3500
4/12/2017	10:59	4/12/2017		1704657-05	Hex	A	East	Surface	<2	U N	ALS	1704657-05	SM 3500
4/12/2017	10:59	4/12/2017		1704657-06	Hex	A	East	Mid Depth	3.1	J N	ALS	1704657-06	SM 3500
4/12/2017	10:55	4/12/2017		1704657-01	Total	A	West	Surface	1.3	J N	ALS	1704657-01	SM 200.8
4/12/2017	10:55	4/12/2017		1704657-02	Total	A	West	Mid Depth	1.7	J N	ALS	1704657-02	SM 200.8
4/12/2017	10:57	4/12/2017		1704657-03	Total	A	Center	Surface	1.4	J N	ALS	1704657-03	SM 200.8
4/12/2017	10:57	4/12/2017		1704657-04	Total	A	Center	Mid Depth	1.4	J N	ALS	1704657-04	SM 200.8
4/12/2017	10:59	4/12/2017		1704657-05	Total	A	East	Surface	1.7	J N	ALS	1704657-05	SM 200.8
4/12/2017	10:59	4/12/2017		1704657-06	Total	A	East	Mid Depth	1.4	J N	ALS	1704657-06	SM 200.8
4/12/2017	11:19	4/12/2017		1704657-07	Hex	B	West	Surface	4.4	N	ALS	1704657-07	SM 3500
4/12/2017	11:19	4/12/2017		1704657-08	Hex	B	West	Mid Depth	5.6	N	ALS	1704657-08	SM 3500
4/12/2017	11:17	4/12/2017		1704657-09	Hex	B	Center	Surface	<2	U N	ALS	1704657-09	SM 3500
4/12/2017	11:17	4/12/2017		1704657-10	Hex	B	Center	Mid Depth	<2	U N	ALS	1704657-10	SM 3500
4/12/2017	11:15	4/12/2017		1704657-11	Hex	B	East	Surface	<2	N	ALS	1704657-11	SM 3500
4/12/2017	11:15	4/12/2017		1704657-12	Hex	B	East	Mid Depth	3.1	J N	ALS	1704657-12	SM 3500
4/12/2017	11:19	4/12/2017		1704657-07	Total	B	West	Surface	1.5	J N	ALS	1704657-07	SM 200.8
4/12/2017	11:19	4/12/2017		1704657-08	Total	B	West	Mid Depth	1.5	J N	ALS	1704657-08	SM 200.8
4/12/2017	11:17	4/12/2017		1704657-09	Total	B	Center	Surface	1.4	J N	ALS	1704657-09	SM 200.8
4/12/2017	11:17	4/12/2017		1704657-10	Total	B	Center	Mid Depth	1.5	J N	ALS	1704657-10	SM 200.8
4/12/2017	11:15	4/12/2017		1704657-11	Total	B	East	Surface	1.3	J N	ALS	1704657-11	SM 200.8
4/12/2017	11:15	4/12/2017		1704657-12	Total	B	East	Mid Depth	1.5	J N	ALS	1704657-12	SM 200.8
4/12/2017	12:11	4/12/2017		1704657-13	Hex	C	West	Surface	<2	U N	ALS	1704657-13	SM 3500
4/12/2017	12:11	4/12/2017		1704657-14	Hex	C	West	Mid Depth	3.1	J N	ALS	1704657-14	SM 3500
4/12/2017	12:13	4/12/2017		1704657-15	Hex	C	Center	Surface	3.1	J N	ALS	1704657-15	SM 3500
4/12/2017	12:13	4/12/2017		1704657-16	Hex	C	Center	Mid Depth	<2	U N	ALS	1704657-16	SM 3500
4/12/2017	12:09	4/12/2017		1704657-17	Hex	C	East	Surface	<2	U N	ALS	1704657-17	SM 3500
4/12/2017	12:09	4/12/2017		1704657-18	Hex	C	East	Mid Depth	<2	U N	ALS	1704657-18	SM 3500
4/12/2017	12:11	4/12/2017		1704657-13	Total	C	West	Surface	1.2	J N	ALS	1704657-13	SM 200.8
4/12/2017	12:11	4/12/2017		1704657-14	Total	C	West	Mid Depth	1.3	J N	ALS	1704657-14	SM 200.8
4/12/2017	12:13	4/12/2017		1704657-15	Total	C	Center	Surface	1.2	J N	ALS	1704657-15	SM 200.8
4/12/2017	12:13	4/12/2017		1704657-16	Total	C	Center	Mid Depth	1.2	J N	ALS	1704657-16	SM 200.8
4/12/2017	12:09	4/12/2017		1704657-17	Total	C	East	Surface	25	N	ALS	1704657-17	SM 200.8
4/12/2017	12:09	4/12/2017		1704657-18	Total	C	East	Mid Depth	22	N	ALS	1704657-18	SM 200.8
4/12/2017	11:58	4/12/2017		1704657-19	Hex	D	West	Surface	<2	U N	ALS	1704657-19	SM 3500
4/12/2017	11:58	4/12/2017		1704657-20	Hex	D	West	Mid Depth	<2	U N	ALS	1704657-20	SM 3500



4/12/2017	12:02	4/12/2017	1704657-21	Hex	D	Center	Surface	<2	U N	ALS	1704657-21	SM 3500
4/12/2017	12:02	4/12/2017	1704657-22	Hex	D	Center	Mid Depth	<2	U N	ALS	1704657-22	SM 3500
4/12/2017	12:04	4/12/2017	1704657-23	Hex	D	East	Surface	<2	U N	ALS	1704657-23	SM 3500
4/12/2017	12:04	4/12/2017	1704657-24	Hex	D	East	Mid Depth	<2	U N	ALS	1704657-24	SM 3500
4/12/2017	11:58	4/12/2017	1704657-19	Total	D	West	Surface	2.1	J N	ALS	1704657-19	SM 200.8
4/12/2017	11:58	4/12/2017	1704657-20	Total	D	West	Mid Depth	2.1	J N	ALS	1704657-20	SM 200.8
4/12/2017	12:02	4/12/2017	1704657-21	Total	D	Center	Surface	1.3	J N	ALS	1704657-21	SM 200.8
4/12/2017	12:02	4/12/2017	1704657-22	Total	D	Center	Mid Depth	1.3	J N	ALS	1704657-22	SM 200.8
4/12/2017	12:04	4/12/2017	1704657-23	Total	D	East	Surface	5.5	N	ALS	1704657-23	SM 200.8
4/12/2017	12:04	4/12/2017	1704657-24	Total	D	East	Mid Depth	5.6	N	ALS	1704657-24	SM 200.8
4/12/2017	11:56	4/12/2017	1704657-25	Hex	E	West	Surface	<2	U N	ALS	1704657-25	SM 3500
4/12/2017	11:56	4/12/2017	1704657-26	Hex	E	West	Mid Depth	<2	U N	ALS	1704657-26	SM 3500
4/12/2017	11:54	4/12/2017	1704657-27	Hex	E	Center	Surface	<2	U N	ALS	1704657-27	SM 3500
4/12/2017	11:54	4/12/2017	1704657-28	Hex	E	Center	Mid Depth	<2	U N	ALS	1704657-28	SM 3500
4/12/2017	11:51	4/12/2017	1704657-29	Hex	E	East	Surface	<2	U N	ALS	1704657-29	SM 3500
4/12/2017	11:51	4/12/2017	1704657-30	Hex	E	East	Mid Depth	<2	U N	ALS	1704657-30	SM 3500
4/12/2017	11:56	4/12/2017	1704657-25	Total	E	West	Surface	1.6	J N	ALS	1704657-25	SM 200.8
4/12/2017	11:56	4/12/2017	1704657-26	Total	E	West	Mid Depth	1.6	J N	ALS	1704657-26	SM 200.8
4/12/2017	11:54	4/12/2017	1704657-27	Total	E	Center	Surface	1.8	J N	ALS	1704657-27	SM 200.8
4/12/2017	11:54	4/12/2017	1704657-28	Total	E	Center	Mid Depth	1.7	J N	ALS	1704657-28	SM 200.8
4/12/2017	11:51	4/12/2017	1704657-29	Total	E	East	Surface	4.7	J N	ALS	1704657-29	SM 200.8
4/12/2017	11:51	4/12/2017	1704657-30	Total	E	East	Mid Depth	3.6	J N	ALS	1704657-30	SM 200.8
4/12/2017	11:28	4/12/2017	1704657-31	Hex	F	West	Surface	<2	U N	ALS	1704657-31	SM 3500
4/12/2017	11:28	4/12/2017	1704657-32	Hex	F	West	Mid Depth	<2	U N	ALS	1704657-32	SM 3500
4/12/2017	11:45	4/12/2017	1704657-33	Hex	F	Center	Surface	<2	U N	ALS	1704657-33	SM 3500
4/12/2017	11:45	4/12/2017	1704657-34	Hex	F	Center	Mid Depth	<2	U N	ALS	1704657-34	SM 3500
4/12/2017	11:47	4/12/2017	1704657-35	Hex	F	East	Surface	<2	U N	ALS	1704657-35	SM 3500
4/12/2017	11:47	4/12/2017	1704657-36	Hex	F	East	Mid Depth	<2	U N	ALS	1704657-36	SM 3500
4/12/2017	11:28	4/12/2017	1704657-31	Total	F	West	Surface	1.7	J N	ALS	1704657-31	SM 200.8
4/12/2017	11:28	4/12/2017	1704657-32	Total	F	West	Mid Depth	2.4	J N	ALS	1704657-32	SM 200.8
4/12/2017	11:45	4/12/2017	1704657-33	Total	F	Center	Surface	1.3	J N	ALS	1704657-33	SM 200.8
4/12/2017	11:45	4/12/2017	1704657-34	Total	F	Center	Mid Depth	1.1	J N	ALS	1704657-34	SM 200.8
4/12/2017	11:47	4/12/2017	1704657-35	Total	F	East	Surface	4.1	J N	ALS	1704657-35	SM 200.8
4/12/2017	11:47	4/12/2017	1704657-36	Total	F	East	Mid Depth	5.6	N	ALS	1704657-36	SM 200.8
4/12/2017	11:30	4/12/2017	1704657-37	Hex	G	West	Surface	<2	U N	ALS	1704657-37	SM 3500
4/12/2017	11:30	4/12/2017	1704657-38	Hex	G	West	Mid Depth	4.4	J N	ALS	1704657-38	SM 3500
4/12/2017	11:43	4/12/2017	1704657-39	Hex	G	Center	Surface	3.1	J N	ALS	1704657-39	SM 3500
4/12/2017	11:43	4/12/2017	1704657-40	Hex	G	Center	Mid Depth	<2	U N	ALS	1704657-40	SM 3500
4/12/2017	11:40	4/12/2017	1704657-41	Hex	G	East	Surface	<2	U N	ALS	1704657-41	SM 3500
4/12/2017	11:40	4/12/2017	1704657-42	Hex	G	East	Mid Depth	4.4	J N	ALS	1704657-42	SM 3500
4/12/2017	11:30	4/12/2017	1704657-37	Total	G	West	Surface	2.2	J N	ALS	1704657-37	SM 200.8
4/12/2017	11:30	4/12/2017	1704657-38	Total	G	West	Mid Depth	4.2	J N	ALS	1704657-38	SM 200.8
4/12/2017	11:43	4/12/2017	1704657-39	Total	G	Center	Surface	4.6	J N	ALS	1704657-39	SM 200.8
4/12/2017	11:43	4/12/2017	1704657-40	Total	G	Center	Mid Depth	4.7	J N	ALS	1704657-40	SM 200.8
4/12/2017	11:40	4/12/2017	1704657-41	Total	G	East	Surface	5.3	N	ALS	1704657-41	SM 200.8
4/12/2017	11:40	4/12/2017	1704657-42	Total	G	East	Mid Depth	4.9	J N	ALS	1704657-42	SM 200.8
4/12/2017	11:32	4/12/2017	1704657-43	Hex	H	West	Surface	<2	U N	ALS	1704657-43	SM 3500
4/12/2017	11:32	4/12/2017	1704657-44	Hex	H	West	Mid Depth	<2	U N	ALS	1704657-44	SM 3500
4/12/2017	11:35	4/12/2017	1704657-45	Hex	H	Center	Surface	<2	U N	ALS	1704657-45	SM 3500
4/12/2017	11:35	4/12/2017	1704657-46	Hex	H	Center	Mid Depth	<2	U N	ALS	1704657-46	SM 3500
4/12/2017	11:38	4/12/2017	1704657-47	Hex	H	East	Surface	<2	U N	ALS	1704657-47	SM 3500
4/12/2017	11:38	4/12/2017	1704657-48	Hex	H	East	Mid Depth	<2	U N	ALS	1704657-48	SM 3500
4/12/2017	11:32	4/12/2017	1704657-43	Total	H	West	Surface	5.7	N	ALS	1704657-43	SM 200.8
4/12/2017	11:32	4/12/2017	1704657-44	Total	H	West	Mid Depth	3.3	J N	ALS	1704657-44	SM 200.8
4/12/2017	11:35	4/12/2017	1704657-45	Total	H	Center	Surface	7.3	N	ALS	1704657-45	SM 200.8
4/12/2017	11:35	4/12/2017	1704657-46	Total	H	Center	Mid Depth	9.3	N	ALS	1704657-46	SM 200.8
4/12/2017	11:38	4/12/2017	1704657-47	Total	H	East	Surface	6.4	N	ALS	1704657-47	SM 200.8
4/12/2017	11:38	4/12/2017	1704657-48	Total	H	East	Mid Depth	5.7	N	ALS	1704657-48	SM 200.8
4/12/2017	12:40	4/12/2017	1704657-49	Hex	Intake A			<2	U N	ALS	1704657-49	SM 3500
4/12/2017	12:40	4/12/2017	1704657-50	Hex	Intake A - Dup			3.1	J N	ALS	1704657-50	SM 3500

4/12/2017	12:40	4/12/2017	1704657-51	Hex	Intake B	<2	U	N	ALS	1704657-51	SM 3500
4/12/2017	12:40	4/12/2017	1704657-49	Total	Intake A	0.68	J	N	ALS	1704657-49	SM 200.8
4/12/2017	12:40	4/12/2017	1704657-50	Total	Intake A - Dup	0.69	J	Y	ALS	1704657-50	SM 200.8
4/12/2017	12:40	4/12/2017	1704657-51	Total	Intake B	0.72	J	N	ALS	1704657-51	SM 200.8
4/12/2017	13:20	4/12/2017	1704657-52	Hex	500 Yards West A	<2	U	N	ALS	1704657-52	SM 3500
4/12/2017	13:20	4/12/2017	1704657-53	Hex	500 Yards West B	<2	U	N	ALS	1704657-53	SM 3500
4/12/2017	13:30	4/12/2017	1704657-54	Hex	250 Yards West A	<2	U	N	ALS	1704657-54	SM 3500
4/12/2017	13:30	4/12/2017	1704657-55	Hex	250 Yards West B	<2	U	N	ALS	1704657-55	SM 3500
4/12/2017	13:40	4/12/2017	1704657-56	Hex	250 Yards East A	<2	U	N	ALS	1704657-56	SM 3500
4/12/2017	13:40	4/12/2017	1704657-57	Hex	250 Yards East B	<2	U	N	ALS	1704657-57	SM 3500
4/12/2017	13:20	4/12/2017	1704657-52	Total	500 Yards West A	3.3	J	N	ALS	1704657-52	SM 200.8
4/12/2017	13:20	4/12/2017	1704657-53	Total	500 Yards West B	3.4	J	N	ALS	1704657-53	SM 200.8
4/12/2017	13:30	4/12/2017	1704657-54	Total	250 Yards West A	3.5	J	N	ALS	1704657-54	SM 200.8
4/12/2017	13:30	4/12/2017	1704657-55	Total	250 Yards West B	3.5	J	N	ALS	1704657-55	SM 200.8
4/12/2017	13:40	4/12/2017	1704657-56	Total	250 Yards East A	3.1	J	N	ALS	1704657-56	SM 200.8
4/12/2017	13:40	4/12/2017	1704657-57	Total	250 Yards East B	3.1	J	N	ALS	1704657-57	SM 200.8
4/12/2017		4/12/2017	1704662-1	Hex	EQ Out	3.1	J	N	ALS	1704662-1	SM 3500
4/12/2017		4/12/2017	1704662-2	Hex	004 Outfall	11	N	N	ALS	1704662-2	SM 3500
4/12/2017		4/12/2017	1704662-3	Hex	Mix Effluent	8.2	N	N	ALS	1704662-3	SM 3500
4/12/2017		4/12/2017	1704662-1	Total	EQ Out	51	N	N	ALS	1704662-1	SM 200.8
4/12/2017		4/12/2017	1704662-2	Total	004 Outfall	25	N	N	ALS	1704662-2	SM 200.8
4/12/2017		4/12/2017	1704662-3	Total	Mix Effluent	36	N	N	ALS	1704662-3	SM 200.8
4/12/2017		4/12/2017	1704662-1	Dissolved	EQ Out	2.6	J	N	ALS	1704662-1	SM 200.8
4/12/2017		4/12/2017	1704662-2	Dissolved	004 Outfall	12	N	N	ALS	1704662-2	SM 200.8
4/12/2017		4/12/2017	1704662-3	Dissolved	Mix Effluent	9.7	N	N	ALS	1704662-3	SM 200.8
4/12/2017	19:00	4/12/2017	1704663-1	Hex	004	17	N	N	ALS	1704663-1	SM 3500
4/12/2017	19:00	4/12/2017	1704663-2	Hex	104	48	N	N	ALS	1704663-2	SM 3500
4/12/2017	19:00	4/12/2017	1704663-3	Hex	204	3.1	J	N	ALS	1704663-3	SM 3500
4/12/2017	21:00	4/12/2017	1704663-4	Hex	004	11	N	N	ALS	1704663-4	SM 3500
4/12/2017	21:00	4/12/2017	1704663-5	Hex	104	4.4	J	N	ALS	1704663-5	SM 3500
4/12/2017	21:00	4/12/2017	1704663-6	Hex	204	4.4	J	N	ALS	1704663-6	SM 3500
4/12/2017	19:00	4/12/2017	1704663-1	Total	004	64	N	N	ALS	1704663-1	SM 200.8
4/12/2017	19:00	4/12/2017	1704663-2	Total	104	68	N	N	ALS	1704663-2	SM 200.8
4/12/2017	19:00	4/12/2017	1704663-3	Total	204	24	N	N	ALS	1704663-3	SM 200.8
4/12/2017	21:00	4/12/2017	1704663-4	Total	004	56	N	N	ALS	1704663-4	SM 200.8
4/12/2017	21:00	4/12/2017	1704663-5	Total	104	24	N	N	ALS	1704663-5	SM 200.8
4/12/2017	21:00	4/12/2017	1704663-6	Total	204	57	N	N	ALS	1704663-6	SM 200.8
4/12/2017	19:00	4/12/2017	1704663-1	Dissolved	004	28	N	N	ALS	1704663-1	SM 200.8
4/12/2017	19:00	4/12/2017	1704663-2	Dissolved	104	47	N	N	ALS	1704663-2	SM 200.8
4/12/2017	19:00	4/12/2017	1704663-3	Dissolved	204	8.1	N	N	ALS	1704663-3	SM 200.8
4/12/2017	21:00	4/12/2017	1704663-4	Dissolved	004	<0.55	U	N	ALS	1704663-4	SM 200.8
4/12/2017	21:00	4/12/2017	1704663-5	Dissolved	104	<0.55	U	N	ALS	1704663-5	SM 200.8
4/12/2017	21:00	4/12/2017	1704663-6	Dissolved	204	<0.55	U	N	ALS	1704663-6	SM 200.8
4/13/2017	1:00	4/13/2017	1704684-1	Hex	004	3.1	J	N	ALS	1704684-1	SM 3500
4/13/2017	1:00	4/13/2017	1704684-2	Hex	104	<2	U	N	ALS	1704684-2	SM 3500
4/13/2017	3:00	4/13/2017	1704684-3	Hex	004	<2	U	N	ALS	1704684-3	SM 3500
4/13/2017	3:00	4/13/2017	1704684-4	Hex	104	<2	U	N	ALS	1704684-4	SM 3500
4/13/2017	5:00	4/13/2017	1704684-5	Hex	004	<2	U	N	ALS	1704684-5	SM 3500
4/13/2017	5:00	4/13/2017	1704684-6	Hex	104	<2	U	N	ALS	1704684-6	SM 3500
4/13/2017	8:00	4/13/2017	1704684-7	Hex	004	<2	U	N	ALS	1704684-7	SM 3500
4/13/2017	8:00	4/13/2017	1704684-8	Hex	104	<2	U	N	ALS	1704684-8	SM 3500
4/13/2017	10:00	4/13/2017	1704684-9	Hex	004	<2	U	N	ALS	1704684-9	SM 3500
4/13/2017	10:00	4/13/2017	1704684-10	Hex	104	<2	U	N	ALS	1704684-10	SM 3500
4/13/2017	12:00	4/13/2017	1704684-11	Hex	104	<2	U	N	ALS	1704684-11	SM 3500
4/13/2017	12:00	4/13/2017	1704684-12	Hex	004	<2	U	N	ALS	1704684-12	SM 3500
4/13/2017	14:00	4/13/2017	1704684-13	Hex	104	<2	U	N	ALS	1704684-13	SM 3500
4/13/2017	14:00	4/13/2017	1704684-14	Hex	004	<2	U	N	ALS	1704684-14	SM 3500



4/13/2017	14:00	4/13/2017	1704684-15	Hex	Intake	<2	U	N	ALS	1704684-15	SM	3500	
4/13/2017	15:15	4/13/2017	1704684-16	Hex	South Flocc Basin Grab	<2	U	N	ALS	1704684-16	SM	3500	
4/13/2017	15:15	4/13/2017	1704684-17	Hex	North Flocc Basin Grab	<2	U	N	ALS	1704684-17	SM	3500	
4/13/2017	15:15	4/13/2017	1704684-18	Hex	Center Flocc Basin Grab	<2	U	N	ALS	1704684-18	SM	3500	
4/13/2017	16:00	4/13/2017	1704684-19	Hex	004	<2	U	N	ALS	1704684-19	SM	3500	
4/13/2017	16:00	4/13/2017	1704684-20	Hex	104	<2	U	N	ALS	1704684-20	SM	3500	
4/13/2017	18:00	4/13/2017	1704684-21	Hex	004	<2	U	N	ALS	1704684-21	SM	3500	
4/13/2017	18:00	4/13/2017	1704684-22	Hex	104	<2	U	N	ALS	1704684-22	SM	3500	
4/13/2017	20:00	4/14/2017	1704684-23	Hex	104	<2	U	N	ALS	1704684-23	SM	3500	
4/13/2017	20:00	4/14/2017	1704684-24	Hex	004	<2	U	N	ALS	1704684-24	SM	3500	
4/13/2017	22:00	4/14/2017	1704684-25	Hex	104	<2	U	N	ALS	1704684-25	SM	3500	
4/13/2017	22:00	4/14/2017	1704684-26	Hex	004	<2	U	N	ALS	1704684-26	SM	3500	
4/14/2017	0:00	4/14/2017	1704684-27	Hex	104	<2	U	N	ALS	1704684-27	SM	3500	
4/14/2017	0:00	4/14/2017	1704684-28	Hex	004	<2	U	N	ALS	1704684-28	SM	3500	
4/14/2017	2:00	4/14/2017	1704684-29	Hex	104	<2	U	N	ALS	1704684-29	SM	3500	
4/14/2017	2:00	4/14/2017	1704684-30	Hex	004	<2	U	N	ALS	1704684-30	SM	3500	
4/14/2017	4:00	4/14/2017	1704684-31	Hex	104	<2	U	N	ALS	1704684-31	SM	3500	
4/14/2017	4:00	4/14/2017	1704684-32	Hex	004	<2	U	N	ALS	1704684-32	SM	3500	
4/14/2017	6:00	4/14/2017	1704684-33	Hex	104	<2	U	N	ALS	1704684-33	SM	3500	
4/14/2017	6:00	4/14/2017	1704684-34	Hex	004	<2	U	N	ALS	1704684-34	SM	3500	
4/14/2017	8:00	4/14/2017	1704789-1	Hex	104	<2	U	N	ALS	1704789-1	SM	3500	
4/14/2017	8:00	4/14/2017	1704789-2	Hex	004	<2	U	N	ALS	1704789-2	SM	3500	
4/14/2017	10:00	4/14/2017	1704789-3	Hex	104	<2	U	N	ALS	1704789-3	SM	3500	
4/14/2017	10:00	4/14/2017	1704789-4	Hex	004	<2	U	N	ALS	1704789-4	SM	3500	
4/14/2017	12:00	4/14/2017	1704789-5	Hex	104	<2	U	N	ALS	1704789-5	SM	3500	
4/14/2017	12:00	4/14/2017	1704789-6	Hex	004	<2	U	N	ALS	1704789-6	SM	3500	
4/14/2017	14:00	4/14/2017	1704789-7	Hex	104	<2	U	N	ALS	1704789-7	SM	3500	
4/14/2017	14:00	4/14/2017	1704789-8	Hex	004	<2	U	N	ALS	1704789-8	SM	3500	
4/14/2017	13:50	4/14/2017	1704789-9	Hex	FINAL TREAT INF SUMP	<2	U	N	ALS	1704789-9	SM	3500	
4/14/2017	16:00	4/14/2017	1704789-10	Hex	104	<2	U	N	ALS	1704789-10	SM	3500	
4/14/2017	16:00	4/14/2017	1704789-11	Hex	004	<2	U	N	ALS	1704789-11	SM	3500	
4/13/2017	1:00	4/13/2017	1704684-1	Total	004	14		N	ALS	1704684-1	SM	200.8	
4/13/2017	1:00	4/13/2017	1704684-2	Total	104	24		N	ALS	1704684-2	SM	200.8	
4/13/2017	3:00	4/13/2017	1704684-3	Total	004	2.2		J	N	ALS	1704684-3	SM	200.8
4/13/2017	3:00	4/13/2017	1704684-4	Total	104	12		N	ALS	1704684-4	SM	200.8	
4/13/2017	5:00	4/13/2017	1704684-5	Total	004	1.7		J	N	ALS	1704684-5	SM	200.8
4/13/2017	5:00	4/13/2017	1704684-6	Total	104	25		N	ALS	1704684-6	SM	200.8	
4/13/2017	8:00	4/13/2017	1704684-7	Total	004	2.1		J	N	ALS	1704684-7	SM	200.8
4/13/2017	8:00	4/13/2017	1704684-8	Total	104	15		N	ALS	1704684-8	SM	200.8	
4/13/2017	10:00	4/13/2017	1704684-9	Total	004	83		N	ALS	1704684-9	SM	200.8	
4/13/2017	10:00	4/13/2017	1704684-10	Total	104	3.1		J	N	ALS	1704684-10	SM	200.8
4/13/2017	12:00	4/13/2017	1704684-11	Total	104	1.8		J	N	ALS	1704684-11	SM	200.8
4/13/2017	12:00	4/13/2017	1704684-12	Total	004	3.4		J	N	ALS	1704684-12	SM	200.8
4/13/2017	14:00	4/13/2017	1704684-13	Total	104	2.5		J	N	ALS	1704684-13	SM	200.8
4/13/2017	14:00	4/13/2017	1704684-14	Total	004	30		N	ALS	1704684-14	SM	200.8	
4/13/2017	14:00	4/13/2017	1704684-15	Total	Intake	0.81		J	N	ALS	1704684-15	SM	200.8
4/13/2017	15:15	4/13/2017	1704684-16	Total	South Flocc Basin Grab	26		N	ALS	1704684-16	SM	200.8	
4/13/2017	15:15	4/13/2017	1704684-17	Total	North Flocc Basin Grab	17		N	ALS	1704684-17	SM	200.8	
4/13/2017	15:15	4/13/2017	1704684-18	Total	Center Flocc Basin Grab	23		N	ALS	1704684-18	SM	200.8	
4/13/2017	16:00	4/13/2017	1704684-19	Total	004	10		N	ALS	1704684-19	SM	200.8	
4/13/2017	16:00	4/13/2017	1704684-20	Total	104	4.0		J	N	ALS	1704684-20	SM	200.8
4/13/2017	18:00	4/13/2017	1704684-21	Total	004	2.7		J	N	ALS	1704684-21	SM	200.8
4/13/2017	18:00	4/13/2017	1704684-22	Total	104	4.4		J	N	ALS	1704684-22	SM	200.8
4/13/2017	20:00	4/14/2017	1704684-23	Total	104	2.2		J	N	ALS	1704684-23	SM	200.8
4/13/2017	20:00	4/14/2017	1704684-24	Total	004	7.5		N	ALS	1704684-24	SM	200.8	
4/13/2017	22:00	4/14/2017	1704684-25	Total	104	2.0		J	N	ALS	1704684-25	SM	200.8
4/13/2017	22:00	4/14/2017	1704684-26	Total	004	49		N	ALS	1704684-26	SM	200.8	
4/14/2017	0:00	4/14/2017	1704684-27	Total	104	1.4		J	N	ALS	1704684-27	SM	200.8
4/14/2017	0:00	4/14/2017	1704684-28	Total	004	40		N	ALS	1704684-28	SM	200.8	
4/14/2017	2:00	4/14/2017	1704684-29	Total	104	1.6		J	N	ALS	1704684-29	SM	200.8

4/14/2017	2:00	4/14/2017	1704684-30	Total	004			6.3	N	ALS	1704684-30	SM 200.8
4/14/2017	4:00	4/14/2017	1704684-31	Total	104			1.5	J N	ALS	1704684-31	SM 200.8
4/14/2017	4:00	4/14/2017	1704684-32	Total	004			11	N	ALS	1704684-32	SM 200.8
4/14/2017	6:00	4/14/2017	1704684-33	Total	104			1.9	J N	ALS	1704684-33	SM 200.8
4/14/2017	6:00	4/14/2017	1704684-34	Total	004			5.7	N	ALS	1704684-34	SM 200.8
4/14/2017	8:00	4/14/2017	1704789-1	Total	104			4.9	J N	ALS	1704789-1	SM 200.8
4/14/2017	8:00	4/14/2017	1704789-2	Total	004			2.4	J N	ALS	1704789-2	SM 200.8
4/14/2017	10:00	4/14/2017	1704789-3	Total	104			5.0	N	ALS	1704789-3	SM 200.8
4/14/2017	10:00	4/14/2017	1704789-4	Total	004			2.2	J N	ALS	1704789-4	SM 200.8
4/14/2017	12:00	4/14/2017	1704789-5	Total	104			10	N	ALS	1704789-5	SM 200.8
4/14/2017	12:00	4/14/2017	1704789-6	Total	004			1.9	J N	ALS	1704789-6	SM 200.8
4/14/2017	14:00	4/14/2017	1704789-7	Total	104			20	N	ALS	1704789-7	SM 200.8
4/14/2017	14:00	4/14/2017	1704789-8	Total	004			5.2	N	ALS	1704789-8	SM 200.8
4/14/2017	14:00	4/14/2017	1704789-9	Total	FINAL TREAT INF SUMP			9.7	N	ALS	1704789-9	SM 200.8
4/14/2017	16:00	4/14/2017	1704789-10	Total	104			11	N	ALS	1704789-10	SM 200.8
4/14/2017	16:00	4/14/2017	1704789-11	Total	004			2.7	N	ALS	1704789-11	SM 200.8
4/13/2017	1:00	4/13/2017	1704684-1	Dissolved	004			<0.11	N	ALS	1704684-1	SM 200.8
4/13/2017	1:00	4/13/2017	1704684-2	Dissolved	104			<0.11	N	ALS	1704684-2	SM 200.8
4/13/2017	3:00	4/13/2017	1704684-3	Dissolved	204			<0.11	N	ALS	1704684-3	SM 200.8
4/13/2017	3:00	4/13/2017	1704684-4	Dissolved	004			0.89	N	ALS	1704684-4	SM 200.8
4/13/2017	5:00	4/13/2017	1704684-5	Dissolved	104			<0.11	N	ALS	1704684-5	SM 200.8
4/13/2017	5:00	4/13/2017	1704684-6	Dissolved	204			1.8	J N	ALS	1704684-6	SM 200.8
4/13/2017	8:00	4/13/2017	1704684-7	Dissolved	104			<0.11	N	ALS	1704684-7	SM 200.8
4/13/2017	8:00	4/13/2017	1704684-8	Dissolved	204			1.9	J N	ALS	1704684-8	SM 200.8
4/13/2017	11:08	4/14/2017	1704744-01	Hex	A	West	Surface	<2	U N	ALS	1704744-01	SM 3500
4/13/2017	11:08	4/14/2017	1704744-02	Hex	A	West	Mid Depth	<2	U N	ALS	1704744-02	SM 3500
4/13/2017	11:05	4/14/2017	1704744-03	Hex	A	Center	Surface	<2	U N	ALS	1704744-03	SM 3500
4/13/2017	11:05	4/14/2017	1704744-04	Hex	A	Center	Mid Depth	<2	U N	ALS	1704744-04	SM 3500
4/13/2017	11:00	4/14/2017	1704744-05	Hex	A	East	Surface	<2	U N	ALS	1704744-05	SM 3500
4/13/2017	11:00	4/14/2017	1704744-06	Hex	A	East	Surface	<2	U Y	ALS	1704744-06	SM 3500
4/13/2017	11:00	4/14/2017	1704744-07	Hex	A	East	Mid Depth	<2	U N	ALS	1704744-07	SM 3500
4/13/2017	11:08	4/14/2017	1704744-01	Total	A	West	Surface	0.93	J N	ALS	1704744-01	SM 200.8
4/13/2017	11:08	4/14/2017	1704744-02	Total	A	West	Mid Depth	1.3	J N	ALS	1704744-02	SM 200.8
4/13/2017	11:05	4/14/2017	1704744-03	Total	A	Center	Surface	1.1	J N	ALS	1704744-03	SM 200.8
4/13/2017	11:05	4/14/2017	1704744-04	Total	A	Center	Mid Depth	1.2	J N	ALS	1704744-04	SM 200.8
4/13/2017	11:00	4/14/2017	1704744-05	Total	A	East	Surface	0.88	J N	ALS	1704744-05	SM 200.8
4/13/2017	11:00	4/14/2017	1704744-06	Total	A	East	Surface	1.3	J Y	ALS	1704744-06	SM 200.8
4/13/2017	11:00	4/14/2017	1704744-07	Total	A	East	Mid Depth	1.3	J N	ALS	1704744-07	SM 3500
4/13/2017	11:22	4/14/2017	1704744-08	Hex	B	West	Surface	<2	U N	ALS	1704744-08	SM 3500
4/13/2017	11:22	4/14/2017	1704744-09	Hex	B	West	Mid Depth	<2	U N	ALS	1704744-09	SM 3500
4/13/2017	11:20	4/14/2017	1704744-10	Hex	B	Center	Surface	<2	U N	ALS	1704744-10	SM 3500
4/13/2017	11:20	4/14/2017	1704744-11	Hex	B	Center	Mid Depth	<2	U N	ALS	1704744-11	SM 3500
4/13/2017	11:18	4/14/2017	1704744-75	Hex	B	East	Surface	<2	U N	ALS	1704744-75	SM 3500
4/13/2017	11:18	4/14/2017	1704744-76	Hex	B	East	Mid Depth	<2	U N	ALS	1704744-76	SM 3500
4/13/2017	11:22	4/14/2017	1704744-08	Total	B	West	Surface	0.96	J N	ALS	1704744-08	SM 200.8
4/13/2017	11:22	4/14/2017	1704744-09	Total	B	West	Mid Depth	2.4	J N	ALS	1704744-09	SM 200.8
4/13/2017	11:20	4/14/2017	1704744-10	Total	B	Center	Surface	0.99	J N	ALS	1704744-10	SM 200.8
4/13/2017	11:20	4/14/2017	1704744-11	Total	B	Center	Mid Depth	1.2	J N	ALS	1704744-11	SM 200.8
4/13/2017	11:18	4/14/2017	1704744-75	Total	B	East	Surface	0.94	J N	ALS	1704744-75	SM 200.8
4/13/2017	11:18	4/14/2017	1704744-76	Total	B	East	Mid Depth	1.1	J N	ALS	1704744-76	SM 200.8
4/13/2017	12:30	4/14/2017	1704744-12	Hex	C	West	Surface	<2	U N	ALS	1704744-12	SM 3500
4/13/2017	12:30	4/14/2017	1704744-13	Hex	C	West	Mid Depth	<2	U N	ALS	1704744-13	SM 3500
4/13/2017	12:26	4/14/2017	1704744-14	Hex	C	Center	Surface	<2	U N	ALS	1704744-14	SM 3500
4/13/2017	12:26	4/14/2017	1704744-15	Hex	C	Center	Mid Depth	<2	U N	ALS	1704744-15	SM 3500
4/13/2017	12:30	4/14/2017	1704744-16	Hex	C	West	Surface	<2	U FD	ALS	1704744-16	SM 3500
4/13/2017	12:22	4/14/2017	1704744-17	Hex	C	East	Surface	<2	U N	ALS	1704744-17	SM 3500
4/13/2017	12:22	4/14/2017	1704744-18	Hex	C	East	Mid Depth	<2	U N	ALS	1704744-18	SM 3500
4/13/2017	12:30	4/14/2017	1704744-12	Total	C	West	Surface	1.1	J N	ALS	1704744-12	SM 200.8
4/13/2017	12:30	4/14/2017	1704744-13	Total	C	West	Mid Depth	0.89	J N	ALS	1704744-13	SM 200.8



4/13/2017	12:26	4/14/2017	1704744-14	Total	C	Center	Surface	0.83	J N	ALS	1704744-14	SM 200.8
4/13/2017	12:26	4/14/2017	1704744-15	Total	C	Center	Mid Depth	0.88	J N	ALS	1704744-15	SM 200.8
4/13/2017	12:30	4/14/2017	1704744-16	Total	C	West	Surface	0.85	J Y	ALS	1704744-16	SM 200.8
4/13/2017	12:22	4/14/2017	1704744-17	Total	C	East	Surface	1.6	J N	ALS	1704744-17	SM 200.8
4/13/2017	12:22	4/14/2017	1704744-18	Total	C	East	Mid Depth	1.5	J N	ALS	1704744-18	SM 200.8
4/13/2017	12:10	4/14/2017	1704744-19	Hex	D	West	Surface	<2	U N	ALS	1704744-19	SM 3500
4/13/2017	12:10	4/14/2017	1704744-20	Hex	D	West	Mid Depth	<2	U N	ALS	1704744-20	SM 3500
4/13/2017	12:14	4/14/2017	1704744-21	Hex	D	Center	Surface	<2	U N	ALS	1704744-21	SM 3500
4/13/2017	12:14	4/14/2017	1704744-22	Hex	D	Center	Mid Depth	<2	U N	ALS	1704744-22	SM 3500
4/13/2017	12:18	4/14/2017	1704744-23	Hex	D	East	Surface	<2	U N	ALS	1704744-23	SM 3500
4/13/2017	12:18	4/14/2017	1704744-24	Hex	D	East	Mid Depth	<2	U N	ALS	1704744-24	SM 3500
4/13/2017	12:10	4/14/2017	1704744-19	Total	D	West	Surface	0.97	J N	ALS	1704744-19	SM 200.8
4/13/2017	12:10	4/14/2017	1704744-20	Total	D	West	Mid Depth	<0.11	N	ALS	1704744-20	SM 200.8
4/13/2017	12:14	4/14/2017	1704744-21	Total	D	Center	Surface	0.70	J N	ALS	1704744-21	SM 200.8
4/13/2017	12:14	4/14/2017	1704744-22	Total	D	Center	Mid Depth	1.0	J N	ALS	1704744-22	SM 200.8
4/13/2017	12:18	4/14/2017	1704744-23	Total	D	East	Surface	0.87	J N	ALS	1704744-23	SM 200.8
4/13/2017	12:18	4/14/2017	1704744-24	Total	D	East	Mid Depth	0.90	J N	ALS	1704744-24	SM 200.8
4/13/2017	12:10	4/14/2017	1704744-25	Hex	E	West	Surface	<2	U N	ALS	1704744-25	SM 3500
4/13/2017	12:00	4/14/2017	1704744-26	Hex	E	West	Mid Depth	<2	U N	ALS	1704744-26	SM 3500
4/13/2017	12:06	4/14/2017	1704744-27	Hex	E	Center	Surface	<2	U N	ALS	1704744-27	SM 3500
4/13/2017	12:06	4/14/2017	1704744-28	Hex	E	Center	Mid Depth	<2	U N	ALS	1704744-28	SM 3500
4/13/2017	12:02	4/14/2017	1704744-29	Hex	E	East	Surface	<2	U N	ALS	1704744-29	SM 3500
4/13/2017	12:02	4/14/2017	1704744-30	Hex	E	East	Mid Depth	<2	U N	ALS	1704744-30	SM 3500
4/13/2017	12:10	4/14/2017	1704744-25	Total	E	West	Surface	2.0	J N	ALS	1704744-25	SM 200.8
4/13/2017	12:00	4/14/2017	1704744-26	Total	E	West	Mid Depth	2.0	J N	ALS	1704744-26	SM 200.8
4/13/2017	12:06	4/14/2017	1704744-27	Total	E	Center	Surface	0.99	J N	ALS	1704744-27	SM 200.8
4/13/2017	12:06	4/14/2017	1704744-28	Total	E	Center	Mid Depth	1.4	J N	ALS	1704744-28	SM 200.8
4/13/2017	12:02	4/14/2017	1704744-29	Total	E	East	Surface	1.1	J N	ALS	1704744-29	SM 200.8
4/13/2017	12:02	4/14/2017	1704744-30	Total	E	East	Mid Depth	1.4	J N	ALS	1704744-30	SM 200.8
4/13/2017	11:50	4/14/2017	1704744-31	Hex	F	West	Surface	<2	U N	ALS	1704744-31	SM 3500
4/13/2017	11:50	4/14/2017	1704744-32	Hex	F	West	Mid Depth	<2	U N	ALS	1704744-32	SM 3500
4/13/2017	11:50	4/14/2017	1704744-33	Hex	F	West	Mid Depth	<2	U Y	ALS	1704744-33	SM 3500
4/13/2017	11:54	4/14/2017	1704744-34	Hex	F	Center	Surface	<2	U N	ALS	1704744-34	SM 3500
4/13/2017	11:54	4/14/2017	1704744-35	Hex	F	Center	Mid Depth	<2	U N	ALS	1704744-35	SM 3500
4/13/2017	11:58	4/14/2017	1704744-36	Hex	F	East	Surface	<2	U N	ALS	1704744-36	SM 3500
4/13/2017	11:58	4/14/2017	1704744-37	Hex	F	East	Mid Depth	<2	U N	ALS	1704744-37	SM 3500
4/13/2017	11:58	4/14/2017	1704744-38	Hex	F	East	Surface	<2	U Y	ALS	1704744-38	SM 3500
4/13/2017	11:50	4/14/2017	1704744-31	Total	F	West	Surface	1.2	J N	ALS	1704744-31	SM 200.8
4/13/2017	11:50	4/14/2017	1704744-32	Total	F	West	Mid Depth	1.4	J N	ALS	1704744-32	SM 200.8
4/13/2017	11:50	4/14/2017	1704744-33	Total	F	West	Mid Depth	1.3	J Y	ALS	1704744-33	SM 200.8
4/13/2017	11:54	4/14/2017	1704744-34	Total	F	Center	Surface	1.6	J N	ALS	1704744-34	SM 200.8
4/13/2017	11:54	4/14/2017	1704744-35	Total	F	Center	Mid Depth	1.7	J N	ALS	1704744-35	SM 200.8
4/13/2017	11:58	4/14/2017	1704744-36	Total	F	East	Surface	1.5	J N	ALS	1704744-36	SM 200.8
4/13/2017	11:58	4/14/2017	1704744-37	Total	F	East	Mid Depth	1.5	J N	ALS	1704744-37	SM 200.8
4/13/2017	11:58	4/14/2017	1704744-38	Total	F	East	Surface	2.2	J Y	ALS	1704744-38	SM 200.8
4/13/2017	11:48	4/14/2017	1704744-39	Hex	G	West	Surface	<2	U N	ALS	1704744-39	SM 3500
4/13/2017	11:48	4/14/2017	1704744-40	Hex	G	West	Mid Depth	<2	U N	ALS	1704744-40	SM 3500
4/13/2017	11:48	4/14/2017	1704744-74	Hex	G	West	Mid Depth	<2	U Y	ALS	1704744-74	SM 3500
4/13/2017	11:44	4/14/2017	1704744-41	Hex	G	Center	Surface	<2	U N	ALS	1704744-41	SM 3500
4/13/2017	11:44	4/14/2017	1704744-42	Hex	G	Center	Mid Depth	<2	U N	ALS	1704744-42	SM 3500
4/13/2017	11:42	4/14/2017	1704744-43	Hex	G	East	Surface	<2	U N	ALS	1704744-43	SM 3500
4/13/2017	11:42	4/14/2017	1704744-44	Hex	G	East	Mid Depth	<2	U N	ALS	1704744-44	SM 3500
4/13/2017	11:48	4/14/2017	1704744-39	Total	G	West	Surface	1.5	J N	ALS	1704744-39	SM 200.8
4/13/2017	11:48	4/14/2017	1704744-40	Total	G	West	Mid Depth	1.3	J N	ALS	1704744-40	SM 200.8
4/13/2017	11:48	4/14/2017	1704744-74	Total	G	West	Mid Depth	1.4	J Y	ALS	1704744-74	SM 200.8
4/13/2017	11:44	4/14/2017	1704744-41	Total	G	Center	Surface	1.7	J N	ALS	1704744-41	SM 200.8
4/13/2017	11:44	4/14/2017	1704744-42	Total	G	Center	Mid Depth	1.8	J N	ALS	1704744-42	SM 200.8
4/13/2017	11:42	4/14/2017	1704744-43	Total	G	East	Surface	2.0	J N	ALS	1704744-43	SM 200.8
4/13/2017	11:42	4/14/2017	1704744-44	Total	G	East	Mid Depth	2.0	J N	ALS	1704744-44	SM 200.8
4/13/2017	11:30	4/14/2017	1704744-45	Hex	H	West	Surface	<2	U N	ALS	1704744-45	SM 3500

4/13/2017	11:30	4/14/2017	1704744-46	Hex	H	West	Mid Depth	<2	U N	ALS	1704744-46	SM 3500
4/13/2017	11:33	4/14/2017	1704744-47	Hex	H	Center	Surface	<2	U N	ALS	1704744-47	SM 3500
4/13/2017	11:33	4/14/2017	1704744-48	Hex	H	Center	Mid Depth	<2	U N	ALS	1704744-48	SM 3500
4/13/2017	11:36	4/14/2017	1704744-49	Hex	H	East	Surface	<2	U N	ALS	1704744-49	SM 3500
4/13/2017	11:36	4/14/2017	1704744-50	Hex	H	East	Mid Depth	<2	U N	ALS	1704744-50	SM 3500
4/13/2017	11:30	4/14/2017	1704744-45	Total	H	West	Surface	1.7	J N	ALS	1704744-45	SM 200.8
4/13/2017	11:30	4/14/2017	1704744-46	Total	H	West	Mid Depth	1.7	J N	ALS	1704744-46	SM 200.8
4/13/2017	11:33	4/14/2017	1704744-47	Total	H	Center	Surface	2.0	J N	ALS	1704744-47	SM 200.8
4/13/2017	11:33	4/14/2017	1704744-48	Total	H	Center	Mid Depth	1.1	N	ALS	1704744-48	SM 200.8
4/13/2017	11:36	4/14/2017	1704744-49	Total	H	East	Surface	0.91	J N	ALS	1704744-49	SM 200.8
4/13/2017	11:36	4/14/2017	1704744-50	Total	H	East	Mid Depth	1.0	J N	ALS	1704744-50	SM 200.8
4/13/2017	12:43	4/14/2017	1704744-51	Hex	Intake A			<2	U N	ALS	1704744-51	SM 3500
4/13/2017	12:43	4/14/2017	1704744-52	Hex	Intake A - Dup			<2	U Y	ALS	1704744-52	SM 3500
4/13/2017	12:43	4/14/2017	1704744-53	Hex	Intake B			<2	U N	ALS	1704744-53	SM 3500
4/13/2017	12:43	4/14/2017	1704744-51	Total	Intake A			0.94	J N	ALS	1704744-51	SM 200.8
4/13/2017	12:43	4/14/2017	1704744-52	Total	Intake A - Dup			0.97	J Y	ALS	1704744-52	SM 200.8
4/13/2017	12:43	4/14/2017	1704744-53	Total	Intake B			1.0	J N	ALS	1704744-53	SM 200.8
4/13/2017	12:55	4/14/2017	1704744-54	Hex	500 Yards West A			<2	U N	ALS	1704744-54	SM 3500
4/13/2017	12:55	4/14/2017	1704744-56	Hex	500 Yards West A - DUP			<2	U Y	ALS	1704744-56	SM 3500
4/13/2017	12:55	4/14/2017	1704744-57	Hex	500 Yards West B - DUP			<2	U Y	ALS	1704744-57	SM 3500
4/13/2017	12:55	4/14/2017	1704744-58	Hex	500 Yards West B			<2	U N	ALS	1704744-58	SM 3500
4/13/2017	13:15	4/14/2017	1704744-61	Hex	250 Yards West A			<2	U N	ALS	1704744-61	SM 3500
4/13/2017	13:15	4/14/2017	1704744-62	Hex	250 Yards West B			<2	U N	ALS	1704744-62	SM 3500
4/13/2017	13:15	4/14/2017	1704744-65	Hex	250 Yards West B - DUP			<2	U Y	ALS	1704744-65	SM 3500
4/13/2017	12:55	4/14/2017	1704744-54	Total	500 Yards West A			0.80	J N	ALS	1704744-54	SM 200.8
4/13/2017	12:55	4/14/2017	1704744-56	Total	500 Yards West A - DUP			0.87	J Y	ALS	1704744-56	SM 200.8
4/13/2017	12:55	4/14/2017	1704744-57	Total	500 Yards West B - DUP			0.88	J Y	ALS	1704744-57	SM 200.8
4/13/2017	12:55	4/14/2017	1704744-58	Total	500 Yards West B				N	ALS	1704744-58	SM 200.8
4/13/2017	13:15	4/14/2017	1704744-61	Total	250 Yards West A			0.78	J N	ALS	1704744-61	SM 200.8
4/13/2017	13:15	4/14/2017	1704744-62	Total	250 Yards West B			0.86	J N	ALS	1704744-62	SM 200.8
4/13/2017	13:15	4/14/2017	1704744-65	Total	250 Yards West B - DUP			1.0	J Y	ALS	1704744-65	SM 200.8
4/13/2017	13:15	4/14/2017	1704744-66	Hex	250 Yards East A			<2	U N	ALS	1704744-66	SM 3500
4/13/2017	13:15	4/14/2017	1704744-67	Hex	250 Yards East A - DUP			<2	U N	ALS	1704744-67	SM 3500
4/13/2017	13:28	4/14/2017	1704744-68	Hex	250 Yards East B			<2	U N	ALS	1704744-68	SM 3500
4/13/2017	13:28	4/14/2017	1704744-69	Hex	500 Yards East A			<2	U N	ALS	1704744-69	SM 3500
4/13/2017	13:39	4/14/2017	1704744-71	Hex	500 Yards East B			<2	U N	ALS	1704744-71	SM 3500
4/13/2017	13:39	4/14/2017	1704744-73	Hex	500 Yards East B - Dup			<2	U Y	ALS	1704744-73	SM 3500
4/13/2017	13:15	4/14/2017	1704744-66	Total	250 Yards East A			0.79	J N	ALS	1704744-66	SM 200.8
4/13/2017	13:15	4/14/2017	1704744-67	Total	250 Yards East A - DUP			0.77	J N	ALS	1704744-67	SM 200.8
4/13/2017	13:28	4/14/2017	1704744-68	Total	250 Yards East B			0.73	J N	ALS	1704744-68	SM 200.8
4/13/2017	13:28	4/14/2017	1704744-69	Total	500 Yards East A			0.77	J N	ALS	1704744-69	SM 200.8
4/13/2017	13:39	4/14/2017	1704744-71	Total	500 Yards East B			0.69	J N	ALS	1704744-71	SM 200.8
4/13/2017	13:39	4/14/2017	1704744-73	Total	500 Yards East B - Dup			0.77	J Y	ALS	1704744-73	SM 200.8
4/14/2017	16:00	4/14/2017	1704789-10	Hex	004			<2	U N	ALS	1704789-10	SM 3500
4/14/2017	16:00	4/14/2017	1704789-11	Hex	Basin EFF			<2	U N	ALS	1704789-11	SM 3500
4/14/2017	16:00	4/14/2017	1704789-12	Hex	Final Treat INF Sump			<2	U N	ALS	1704789-12	SM 3500
4/14/2017	18:00	4/14/2017	1704789-13	Hex	004			<2	U N	ALS	1704789-13	SM 3500
4/14/2017	18:00	4/14/2017	1704789-14	Hex	Basin EFF			<2	U N	ALS	1704789-14	SM 3500
4/14/2017	18:00	4/14/2017	1704789-15	Hex	Final Treat INF Sump			<2	U N	ALS	1704789-15	SM 3500
4/14/2017	20:00	4/14/2017	1704789-16	Hex	004			<2	U N	ALS	1704789-16	SM 3500
4/14/2017	20:00	4/14/2017	1704789-17	Hex	Basin EFF			<2	U N	ALS	1704789-17	SM 3500
4/14/2017	20:00	4/14/2017	1704789-18	Hex	Final Treat INF Sump			<2	U N	ALS	1704789-18	SM 3500
4/14/2017	22:00	4/14/2017	1704789-19	Hex	004			<2	U N	ALS	1704789-19	SM 3500
4/14/2017	22:00	4/14/2017	1704789-20	Hex	Basin EFF			<2	U N	ALS	1704789-20	SM 3500
4/14/2017	22:00	4/14/2017	1704789-21	Hex	Final Treat INF Sump			<2	U N	ALS	1704789-21	SM 3500
4/15/2017	0:00	4/15/2017	1704789-22	Hex	004			<2	U N	ALS	1704789-22	SM 3500
4/15/2017	0:00	4/15/2017	1704789-23	Hex	Basin EFF			<2	U N	ALS	1704789-23	SM 3500
4/15/2017	0:00	4/15/2017	1704789-24	Hex	Final Treat INF Sump			<2	U N	ALS	1704789-24	SM 3500



4/15/2017	2:00	4/15/2017	1704789-25	Hex	004	<2	U N	ALS	1704789-25	SM 3500
4/15/2017	2:00	4/15/2017	1704789-26	Hex	Basin EFF	<2	U N	ALS	1704789-26	SM 3500
4/15/2017	2:00	4/15/2017	1704789-27	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-27	SM 3500
4/15/2017	4:00	4/15/2017	1704789-28	Hex	004	<2	U N	ALS	1704789-28	SM 3500
4/15/2017	4:00	4/15/2017	1704789-29	Hex	Basin EFF	<2	U N	ALS	1704789-29	SM 3500
4/15/2017	4:00	4/15/2017	1704789-30	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-30	SM 3500
4/15/2017	6:00	4/15/2017	1704789-31	Hex	004	<2	U N	ALS	1704789-31	SM 3500
4/15/2017	6:00	4/15/2017	1704789-32	Hex	Basin EFF	<2	U N	ALS	1704789-32	SM 3500
4/15/2017	6:00	4/15/2017	1704789-33	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-33	SM 3500
4/14/2017	16:00	4/14/2017	1704789-10	Total	004	11	N	ALS	1704789-10	SM 200.8
4/14/2017	16:00	4/14/2017	1704789-11	Total	Basin EFF	2.7	N	ALS	1704789-11	SM 200.8
4/14/2017	16:00	4/14/2017	1704789-12	Total	Final Treat INF Sump	62	N	ALS	1704789-12	SM 200.8
4/14/2017	18:00	4/14/2017	1704789-13	Total	004	7.6	N	ALS	1704789-13	SM 200.8
4/14/2017	18:00	4/14/2017	1704789-14	Total	Basin EFF	2.6	N	ALS	1704789-14	SM 200.8
4/14/2017	18:00	4/14/2017	1704789-15	Total	Final Treat INF Sump	63	N	ALS	1704789-15	SM 200.8
4/14/2017	20:00	4/14/2017	1704789-16	Total	004	6.0	N	ALS	1704789-16	SM 200.8
4/14/2017	20:00	4/14/2017	1704789-17	Total	Basin EFF	3.6	N	ALS	1704789-17	SM 200.8
4/14/2017	20:00	4/14/2017	1704789-18	Total	Final Treat INF Sump	61	N	ALS	1704789-18	SM 200.8
4/14/2017	22:00	4/14/2017	1704789-19	Total	004	61	N	ALS	1704789-19	SM 200.8
4/14/2017	22:00	4/14/2017	1704789-20	Total	Basin EFF	3.3	N	ALS	1704789-20	SM 200.8
4/14/2017	22:00	4/14/2017	1704789-21	Total	Final Treat INF Sump	40	N	ALS	1704789-21	SM 200.8
4/15/2017	0:00	4/15/2017	1704789-22	Total	004	4.9	N	ALS	1704789-22	SM 200.8
4/15/2017	0:00	4/15/2017	1704789-23	Total	Basin EFF	2.2	N	ALS	1704789-23	SM 200.8
4/15/2017	0:00	4/15/2017	1704789-24	Total	Final Treat INF Sump	39	N	ALS	1704789-24	SM 200.8
4/15/2017	2:00	4/15/2017	1704789-25	Total	004	210	N	ALS	1704789-25	SM 200.8
4/15/2017	2:00	4/15/2017	1704789-26	Total	Basin EFF	2.0	N	ALS	1704789-26	SM 200.8
4/15/2017	2:00	4/15/2017	1704789-27	Total	Final Treat INF Sump	47	N	ALS	1704789-27	SM 200.8
4/15/2017	4:00	4/15/2017	1704789-28	Total	004	4.5	N	ALS	1704789-28	SM 200.8
4/15/2017	4:00	4/15/2017	1704789-29	Total	Basin EFF	1.1	N	ALS	1704789-29	SM 200.8
4/15/2017	4:00	4/15/2017	1704789-30	Total	Final Treat INF Sump	33	N	ALS	1704789-30	SM 200.8
4/15/2017	6:00	4/15/2017	1704789-31	Total	004	7.0	N	ALS	1704789-31	SM 200.8
4/15/2017	6:00	4/15/2017	1704789-32	Total	Basin EFF	0.67	N	ALS	1704789-32	SM 200.8
4/15/2017	6:00	4/15/2017	1704789-33	Total	Final Treat INF Sump	28	N	ALS	1704789-33	SM 200.8
4/15/2017	8:00	4/15/2017	1704789-34	Hex	004	<2	U N	ALS	1704789-34	SM 3500
4/15/2017	8:00	4/15/2017	1704789-35	Hex	Basin EFF	<2	U N	ALS	1704789-35	SM 3500
4/15/2017	8:00	4/15/2017	1704789-36	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-36	SM 3500
4/15/2017	10:00	4/15/2017	1704789-37	Hex	004	<2	U N	ALS	1704789-37	SM 3500
4/15/2017	10:00	4/15/2017	1704789-38	Hex	Basin EFF	<2	U N	ALS	1704789-38	SM 3500
4/15/2017	10:00	4/15/2017	1704789-39	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-39	SM 3500
4/15/2017	12:00	4/15/2017	1704789-40	Hex	004	<2	U N	ALS	1704789-40	SM 3500
4/15/2017	12:00	4/15/2017	1704789-41	Hex	Basin EFF	<2	U N	ALS	1704789-41	SM 3500
4/15/2017	12:00	4/15/2017	1704789-42	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-42	SM 3500
4/15/2017	14:00	4/15/2017	1704789-43	Hex	004	<2	U N	ALS	1704789-43	SM 3500
4/15/2017	14:00	4/15/2017	1704789-44	Hex	Basin EFF	<2	U N	ALS	1704789-44	SM 3500
4/15/2017	14:00	4/15/2017	1704789-45	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-45	SM 3500
4/15/2017	16:00	4/15/2017	1704789-46	Hex	004	<2	U N	ALS	1704789-46	SM 3500
4/15/2017	16:00	4/15/2017	1704789-47	Hex	Basin EFF	<2	U N	ALS	1704789-47	SM 3500
4/15/2017	16:00	4/15/2017	1704789-48	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-48	SM 3500
4/15/2017	18:00	4/15/2017	1704789-49	Hex	004	<2	U N	ALS	1704789-49	SM 3500
4/15/2017	18:00	4/15/2017	1704789-50	Hex	Basin EFF	<2	U N	ALS	1704789-50	SM 3500
4/15/2017	18:00	4/15/2017	1704789-51	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-51	SM 3500
4/15/2017	20:00	4/15/2017	1704789-52	Hex	004	<2	U N	ALS	1704789-52	SM 3500
4/15/2017	20:00	4/15/2017	1704789-53	Hex	Basin EFF	<2	U N	ALS	1704789-53	SM 3500
4/15/2017	20:00	4/15/2017	1704789-54	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-54	SM 3500
4/15/2017	22:00	4/15/2017	1704789-55	Hex	004	<2	U N	ALS	1704789-55	SM 3500
4/15/2017	22:00	4/15/2017	1704789-56	Hex	Basin EFF	<2	U N	ALS	1704789-56	SM 3500
4/15/2017	22:00	4/15/2017	1704789-57	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-57	SM 3500
4/16/2017	0:00	4/16/2017	1704789-58	Hex	004	<2	U N	ALS	1704789-58	SM 3500
4/16/2017	0:00	4/16/2017	1704789-59	Hex	Basin EFF	<2	U N	ALS	1704789-59	SM 3500
4/16/2017	0:00	4/16/2017	1704789-60	Hex	Final Treat INF Sump	<2	U N	ALS	1704789-60	SM 3500





4/17/2017	18:00	4/17/2017	1704867-22	Hex	004	<2	U N	ALS	1704867-22	SM 3500
4/17/2017	18:00	4/17/2017	1704867-23	Hex	Basin EFF	<2	U N	ALS	1704867-23	SM 3500
4/17/2017	18:00	4/17/2017	1704867-24	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-24	SM 3500
4/17/2017	20:00	4/17/2017	1704867-25	Hex	004	<2	U N	ALS	1704867-25	SM 3500
4/17/2017	20:00	4/17/2017	1704867-26	Hex	Basin EFF	<2	U N	ALS	1704867-26	SM 3500
4/17/2017	20:00	4/17/2017	1704867-27	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-27	SM 3500
4/17/2017	0:00	4/18/2017	1704867-28	Hex	004	<2	U N	ALS	1704867-28	SM 3500
4/17/2017	0:00	4/18/2017	1704867-29	Hex	Basin EFF	<2	U N	ALS	1704867-29	SM 3500
4/17/2017	0:00	4/18/2017	1704867-30	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-30	SM 3500
4/17/2017	2:00	4/18/2017	1704867-28	Hex	004	<2	U N	ALS	1704867-28	SM 3500
4/17/2017	2:00	4/18/2017	1704867-29	Hex	Basin EFF	<2	U N	ALS	1704867-29	SM 3500
4/17/2017	2:00	4/18/2017	1704867-30	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-30	SM 3500
4/17/2017	4:00	4/18/2017	1704867-31	Hex	004	<2	U N	ALS	1704867-31	SM 3500
4/17/2017	4:00	4/18/2017	1704867-32	Hex	Basin EFF	<2	U N	ALS	1704867-32	SM 3500
4/17/2017	4:00	4/18/2017	1704867-33	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-33	SM 3500
4/17/2017	6:00	4/18/2017	1704867-34	Hex	004	<2	U N	ALS	1704867-34	SM 3500
4/17/2017	6:00	4/18/2017	1704867-35	Hex	Basin EFF	<2	U N	ALS	1704867-35	SM 3500
4/17/2017	6:00	4/18/2017	1704867-36	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-36	SM 3500
4/17/2017	8:00	4/18/2017	1704867-37	Hex	004	<2	U N	ALS	1704867-37	SM 3500
4/17/2017	8:00	4/18/2017	1704867-38	Hex	Basin EFF	<2	U N	ALS	1704867-38	SM 3500
4/17/2017	8:00	4/18/2017	1704867-39	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-39	SM 3500
4/17/2017	10:00	4/18/2017	1704867-40	Hex	004	<2	U N	ALS	1704867-40	SM 3500
4/17/2017	10:00	4/18/2017	1704867-41	Hex	Basin EFF	<2	U N	ALS	1704867-41	SM 3500
4/17/2017	10:00	4/18/2017	1704867-42	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-42	SM 3500
4/17/2017	12:00	4/18/2017	1704867-43	Hex	004	<2	U N	ALS	1704867-43	SM 3500
4/17/2017	12:00	4/18/2017	1704867-44	Hex	Basin EFF	<2	U N	ALS	1704867-44	SM 3500
4/17/2017	12:00	4/18/2017	1704867-45	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-45	SM 3500
4/17/2017	14:00	4/18/2017	1704867-46	Hex	004	<2	U N	ALS	1704867-46	SM 3500
4/17/2017	14:00	4/18/2017	1704867-47	Hex	Basin EFF	<2	U N	ALS	1704867-47	SM 3500
4/17/2017	14:00	4/18/2017	1704867-48	Hex	Final Treat INF Sump	<2	U N	ALS	1704867-48	SM 3500

4/13/2017	11:52		1704855-02A	Hex	USS-SW-KB02-041317	<2	U	ALS	1704855-02A	SM 3500
4/13/2017	12:22		1704855-03A	Hex	USS-SW-PB02-041317	<2	U	ALS	1704855-03A	SM 3500
4/13/2017	13:26		1704855-04A	Hex	USS-SW-BB02-041317	<2	U	ALS	1704855-04A	SM 3500
4/13/2017	13:26		1704855-05A	Hex	USS-SW-BB02-041317-DUP	<2	U	ALS	1704855-05A	SM 3500
4/13/2017	14:34		1704855-06A	Hex	USS-SW-WB02-041317	<2	U	ALS	1704855-06A	SM 3500
4/13/2017	15:10		1704855-07A	Hex	USS-SW-OD02-041317	<2	U	ALS	1704855-07A	SM 3500
4/13/2017	15:45		1704855-08A	Hex	USS-SW-PL02-041317	<2	U	ALS	1704855-08A	SM 3500
4/14/2017	13:19		1704855-09A	Hex	USS-SW-DB02-041417	<2	U	ALS	1704855-09A	SM 3500
4/14/2017	13:35		1704855-10A	Hex	USS-SW-KB02-041417	<2	U	ALS	1704855-10A	SM 3500
4/14/2017	14:08		1704855-11A	Hex	USS-SW-PB02-041417	<2	U	ALS	1704855-11A	SM 3500
4/14/2017	15:02		1704855-12A	Hex	USS-SW-BB02-041417	<2	U	ALS	1704855-12A	SM 3500
4/14/2017	12:05		1704855-13A	Hex	USS-SW-WB02-041417	<2	U	ALS	1704855-13A	SM 3500
4/14/2017	11:26		1704855-14A	Hex	USS-SW-OD02-041417	<2	U	ALS	1704855-14A	SM 3500
4/14/2017	12:45		1704855-15A	Hex	USS-SW-PL02-041417	<2	U	ALS	1704855-15A	SM 3500
4/14/2017	12:05		1704855-16A	Hex	USS-SW-WB02-041417-DUP	<2	U	ALS	1704855-16A	SM 3500
4/15/2017	11:10		1704855-17A	Hex	USS-SW-WB02-041517	<2	U	ALS	1704855-17A	SM 3500
4/15/2017	11:50		1704855-18A	Hex	USS-SW-OD02-041517	<2	U	ALS	1704855-18A	SM 3500
4/15/2017	12:27		1704855-19A	Hex	USS-SW-PL02-041517	<2	U	ALS	1704855-19A	SM 3500
4/15/2017	13:10		1704855-20A	Hex	USS-SW-DB02-041517	<2	U	ALS	1704855-20A	SM 3500
4/15/2017	13:33		1704855-21A	Hex	USS-SW-KB02-041517	<2	U	ALS	1704855-21A	SM 3500
4/15/2017	14:13		1704855-22A	Hex	USS-SW-PB02-041517	<2	U	ALS	1704855-22A	SM 3500
4/15/2017	14:55		1704855-23A	Hex	USS-SW-BB02-041517	<2	U	ALS	1704855-23A	SM 3500
4/15/2017	13:10		1704855-24A	Hex	USS-SW-DB02-041517 DUP	<2	U	ALS	1704855-24A	SM 3500
4/16/2017	8:55		1704855-25A	Hex	USS-SW-DB02-041617	<2	U	ALS	1704855-25A	SM 3500
4/16/2017	9:08		1704855-26A	Hex	USS-SW-KB02-041617	<2	U	ALS	1704855-26A	SM 3500
4/16/2017	9:25		1704855-27A	Hex	USS-SW-PB02-041617	<2	U	ALS	1704855-27A	SM 3500
4/16/2017	10:31		1704855-28A	Hex	USS-SW-BB02-041617	<2	U	ALS	1704855-28A	SM 3500
4/16/2017	11:18		1704855-29A	Hex	USS-SW-WB02-041617	<2	U	ALS	1704855-29A	SM 3500

4/16/2017	11:46	1704855-30A	Hex	USS-SW-OD02-041617		<2	U	ALS	1704855-30A	SM 3500
4/16/2017	12:10	1704855-31A	Hex	USS-SW-PL02-041617		<2	U	ALS	1704855-31A	SM 3500
4/16/2017	9:25	1704855-32A	Hex	USS-SW-PB02-041617-DUP		<2	U	ALS	1704855-32A	SM 3500
4/17/2017	10:42	1704908-73	Hex	DB02		<2	U N	ALS	1704908-73	SM 3500
4/17/2017	10:57	1704908-74	Hex	KB02		<2	U N	ALS	1704908-74	SM 3500
4/17/2017	11:58	1704908-75	Hex	BB02		<2	U N	ALS	1704908-75	SM 3500
4/17/2017	12:45	1704908-76	Hex	WB02		<2	U N	ALS	1704908-76	SM 3500
4/17/2017	13:13	1704908-77	Hex	OD02		<2	U N	ALS	1704908-77	SM 3500
4/17/2017	13:38	1704908-78	Hex	PL02		<2	U N	ALS	1704908-78	SM 3500
4/17/2017	12:45	1704908-80	Hex	WB02 DUP		<2	U Y	ALS	1704908-80	SM 3500
4/17/2017	11:20	1704908-84	Hex	PB02		<2	U N	ALS	1704908-84	SM 3500
4/18/2017	10:27	1704989-73A	Hex	WB02		<2	U N	ALS	1704989-73A	SM 3500
4/18/2017	10:54	1704989-74A	Hex	OD02		<2	U N	ALS	1704989-74A	SM 3500
4/18/2017	11:14	1704989-75A	Hex	PL02		<2	U N	ALS	1704989-75A	SM 3500
4/18/2017	11:52	1704989-76A	Hex	PB02		<2	U N	ALS	1704989-76A	SM 3500
4/18/2017	11:34	1704989-77A	Hex	BB02		<2	U N	ALS	1704989-77A	SM 3500
4/18/2017	11:14	1704989-78A	Hex	PL02 DUP		<2	U Y	ALS	1704989-78A	SM 3500

4/15/2017	13:34	1704856-1	Hex	A	West	Surface	<2	U N	ALS	1704856-1	SM 3500
4/15/2017	13:34	1704856-2	Hex	A	West	Mid Depth	<2	U N	ALS	1704856-2	SM 3500
4/15/2017	13:31	1704856-3	Hex	A	Center	Surface	<2	U N	ALS	1704856-3	SM 3500
4/15/2017	13:31	1704856-4	Hex	A	Center	Mid Depth	<2	U N	ALS	1704856-4	SM 3500
4/15/2017	13:28	1704856-5	Hex	A	East	Surface	<2	U N	ALS	1704856-5	SM 3500
4/15/2017	13:28	1704856-6	Hex	A	East	Mid Depth	<2	U N	ALS	1704856-6	SM 3500
4/15/2017	13:34	1704856-1	Total	A	West	Surface	0.32	J N	ALS	1704856-1	SM 200.8
4/15/2017	13:34	1704856-2	Total	A	West	Mid Depth	0.35	J N	ALS	1704856-2	SM 200.8
4/15/2017	13:31	1704856-3	Total	A	Center	Surface	0.37	J N	ALS	1704856-3	SM 200.8
4/15/2017	13:31	1704856-4	Total	A	Center	Mid Depth	0.48	J N	ALS	1704856-4	SM 200.8
4/15/2017	13:28	1704856-5	Total	A	East	Surface	0.52	J N	ALS	1704856-5	SM 200.8
4/15/2017	13:28	1704856-6	Total	A	East	Mid Depth	0.68	J N	ALS	1704856-6	SM 3500
4/15/2017	13:42	1704856-7	Hex	B	West	Surface	<2	U N	ALS	1704856-7	SM 3500
4/15/2017	13:42	1704856-8	Hex	B	West	Mid Depth	<2	U N	ALS	1704856-8	SM 3500
4/15/2017	13:40	1704856-9	Hex	B	Center	Surface	<2	U N	ALS	1704856-9	SM 3500
4/15/2017	13:40	1704856-10	Hex	B	Center	Surface	<2	U N	ALS	1704856-10	SM 3500
4/15/2017	13:38	1704856-11	Hex	B	East	Mid Depth	<2	U N	ALS	1704856-11	SM 3500
4/15/2017	13:38	1704856-12	Hex	B	East	Mid Depth	<2	U N	ALS	1704856-12	SM 3500
4/15/2017	13:42	1704856-7	Total	B	West	Surface	0.43	J N	ALS	1704856-7	SM 200.8
4/15/2017	13:42	1704856-8	Total	B	West	Mid Depth	0.47	J N	ALS	1704856-8	SM 200.8
4/15/2017	13:40	1704856-9	Total	B	Center	Surface	0.44	J N	ALS	1704856-9	SM 200.8
4/15/2017	13:40	1704856-10	Total	B	Center	Mid Depth	0.40	J N	ALS	1704856-10	SM 200.8
4/15/2017	13:38	1704856-11	Total	B	East	Surface	0.36	J N	ALS	1704856-11	SM 200.8
4/15/2017	13:38	1704856-12	Total	B	East	Mid Depth	0.37	J N	ALS	1704856-12	SM 200.8
4/15/2017	14:23	1704856-13	Hex	C	West	Surface	<2	U N	ALS	1704856-13	SM 3500
4/15/2017	14:23	1704856-14	Hex	C	West	Mid Depth	<2	U N	ALS	1704856-14	SM 3500
4/15/2017	14:21	1704856-15	Hex	C	Center	Surface	<2	U N	ALS	1704856-15	SM 3500
4/15/2017	14:21	1704856-16	Hex	C	Center	Mid Depth	<2	U N	ALS	1704856-16	SM 3500
4/15/2017	14:19	1704856-17	Hex	C	East	Surface	<2	U N	ALS	1704856-17	SM 3500
4/15/2017	14:19	1704856-18	Hex	C	East	Mid Depth	<2	U N	ALS	1704856-18	SM 3500
4/15/2017	14:23	1704856-13	Total	C	West	Surface	0.43	J N	ALS	1704856-13	SM 200.8
4/15/2017	14:23	1704856-14	Total	C	West	Mid Depth	0.36	J N	ALS	1704856-14	SM 200.8
4/15/2017	14:21	1704856-15	Total	C	Center	Surface	0.51	J N	ALS	1704856-15	SM 200.8
4/15/2017	14:21	1704856-16	Total	C	Center	Mid Depth	0.38	J N	ALS	1704856-16	SM 200.8
4/15/2017	14:19	1704856-17	Total	C	East	Surface	0.39	J N	ALS	1704856-17	SM 200.8
4/15/2017	14:19	1704856-18	Total	C	East	Mid Depth	0.37	J N	ALS	1704856-18	SM 200.8
4/15/2017	14:13	1704856-19	Hex	D	West	Surface	<2	U N	ALS	1704856-19	SM 3500
4/15/2017	14:13	1704856-20	Hex	D	West	Mid Depth	<2	U N	ALS	1704856-20	SM 3500
4/15/2017	14:15	1704856-21	Hex	D	Center	Surface	<2	U N	ALS	1704856-21	SM 3500
4/15/2017	14:15	1704856-22	Hex	D	Center	Mid Depth	<2	U N	ALS	1704856-22	SM 3500
4/15/2017	14:17	1704856-23	Hex	D	East	Surface	<2	U N	ALS	1704856-23	SM 3500



4/15/2017	14:17	1704856-24	Hex	D	East	Mid Depth	<2	U N	ALS	1704856-24	SM 3500
4/15/2017	14:13	1704856-19	Total	D	West	Surface	0.60	J N	ALS	1704856-19	SM 200.8
4/15/2017	14:13	1704856-20	Total	D	West	Mid Depth	0.56	J N	ALS	1704856-20	SM 200.8
4/15/2017	14:15	1704856-21	Total	D	Center	Surface	0.33	J N	ALS	1704856-21	SM 200.8
4/15/2017	14:15	1704856-22	Total	D	Center	Mid Depth	0.43	J N	ALS	1704856-22	SM 200.8
4/15/2017	14:17	1704856-23	Total	D	East	Surface	6.8	N	ALS	1704856-23	SM 200.8
4/15/2017	14:17	1704856-24	Total	D	East	Mid Depth	8.0	N	ALS	1704856-24	SM 200.8
4/15/2017	14:11	1704856-25	Hex	E	West	Surface	<2	U N	ALS	1704856-25	SM 3500
4/15/2017	14:11	1704856-26	Hex	E	West	Mid Depth	<2	U N	ALS	1704856-26	SM 3500
4/15/2017	14:09	1704856-27	Hex	E	Center	Surface	<2	U N	ALS	1704856-27	SM 3500
4/15/2017	14:09	1704856-28	Hex	E	Center	Mid Depth	<2	U N	ALS	1704856-28	SM 3500
4/15/2017	14:07	1704856-29	Hex	E	East	Surface	<2	U N	ALS	1704856-29	SM 3500
4/15/2017	14:07	1704856-30	Hex	E	East	Mid Depth	<2	U N	ALS	1704856-30	SM 3500
4/15/2017	14:11	1704856-25	Total	E	West	Surface	0.49	J N	ALS	1704856-25	SM 200.8
4/15/2017	14:11	1704856-26	Total	E	West	Mid Depth	0.57	J N	ALS	1704856-26	SM 200.8
4/15/2017	14:09	1704856-27	Total	E	Center	Surface	0.33	J N	ALS	1704856-27	SM 200.8
4/15/2017	14:09	1704856-28	Total	E	Center	Mid Depth	0.40	J N	ALS	1704856-28	SM 200.8
4/15/2017	14:07	1704856-29	Total	E	East	Surface	0.43	J N	ALS	1704856-29	SM 200.8
4/15/2017	14:07	1704856-30	Total	E	East	Mid Depth	0.47	J N	ALS	1704856-30	SM 200.8
4/15/2017	14:01	1704856-31	Hex	F	West	Surface	<2	U N	ALS	1704856-31	SM 3500
4/15/2017	14:01	1704856-32	Hex	F	West	Mid Depth	<2	U N	ALS	1704856-32	SM 3500
4/15/2017	14:03	1704856-33	Hex	F	Center	Surface	<2	U N	ALS	1704856-33	SM 3500
4/15/2017	14:03	1704856-34	Hex	F	Center	Mid Depth	<2	U N	ALS	1704856-34	SM 3500
4/15/2017	14:05	1704856-35	Hex	F	East	Surface	<2	U N	ALS	1704856-35	SM 3500
4/15/2017	14:05	1704856-36	Hex	F	East	Mid Depth	<2	U N	ALS	1704856-36	SM 3500
4/15/2017	14:01	1704856-31	Total	F	West	Surface	0.44	J N	ALS	1704856-31	SM 200.8
4/15/2017	14:01	1704856-32	Total	F	West	Mid Depth	0.40	J N	ALS	1704856-32	SM 200.8
4/15/2017	14:03	1704856-33	Total	F	Center	Surface	0.61	J N	ALS	1704856-33	SM 200.8
4/15/2017	14:03	1704856-34	Total	F	Center	Mid Depth	0.53	J N	ALS	1704856-34	SM 200.8
4/15/2017	14:05	1704856-35	Total	F	East	Surface	0.79	J N	ALS	1704856-35	SM 200.8
4/15/2017	14:05	1704856-36	Total	F	East	Mid Depth		J N	ALS	1704856-36	SM 200.8
4/15/2017	13:59	1704856-37	Hex	G	West	Surface	<2	U N	ALS	1704856-37	SM 3500
4/15/2017	13:59	1704856-38	Hex	G	West	Mid Depth	<2	U N	ALS	1704856-38	SM 3500
4/15/2017	13:57	1704856-39	Hex	G	Center	Surface	<2	U N	ALS	1704856-39	SM 3500
4/15/2017	13:57	1704856-40	Hex	G	Center	Mid Depth	<2	U N	ALS	1704856-40	SM 3500
4/15/2017	13:55	1704856-41	Hex	G	East	Surface	<2	U N	ALS	1704856-41	SM 3500
4/15/2017	13:55	1704856-42	Hex	G	East	Mid Depth	<2	U N	ALS	1704856-42	SM 3500
4/15/2017	13:59	1704856-37	Total	G	West	Surface	0.47	J N	ALS	1704856-37	SM 200.8
4/15/2017	13:59	1704856-38	Total	G	West	Mid Depth	0.54	J N	ALS	1704856-38	SM 200.8
4/15/2017	13:57	1704856-39	Total	G	Center	Surface	0.48	J N	ALS	1704856-39	SM 200.8
4/15/2017	13:57	1704856-40	Total	G	Center	Mid Depth	0.46	J N	ALS	1704856-40	SM 200.8
4/15/2017	13:55	1704856-41	Total	G	East	Surface	1.1	J N	ALS	1704856-41	SM 200.8
4/15/2017	13:55	1704856-42	Total	G	East	Mid Depth	1.3	J N	ALS	1704856-42	SM 200.8
4/15/2017	13:49	1704856-43	Hex	H	West	Surface	<2	U N	ALS	1704856-43	SM 3500
4/15/2017	13:49	1704856-44	Hex	H	West	Mid Depth	<2	U N	ALS	1704856-44	SM 3500
4/15/2017	13:51	1704856-45	Hex	H	Center	Surface	<2	U N	ALS	1704856-45	SM 3500
4/15/2017	13:51	1704856-46	Hex	H	Center	Mid Depth	<2	U N	ALS	1704856-46	SM 3500
4/15/2017	13:53	1704856-47	Hex	H	East	Surface	<2	U N	ALS	1704856-47	SM 3500
4/15/2017	13:53	1704856-48	Hex	H	East	Mid Depth	<2	U N	ALS	1704856-48	SM 3500
4/15/2017	13:49	1704856-43	Total	H	West	Surface	0.46	J N	ALS	1704856-43	SM 200.8
4/15/2017	13:49	1704856-44	Total	H	West	Mid Depth	0.43	J N	ALS	1704856-44	SM 200.8
4/15/2017	13:51	1704856-45	Total	H	Center	Surface	0.41	J N	ALS	1704856-45	SM 200.8
4/15/2017	13:51	1704856-46	Total	H	Center	Mid Depth	0.75	J N	ALS	1704856-46	SM 200.8
4/15/2017	13:53	1704856-47	Total	H	East	Surface	0.73	J N	ALS	1704856-47	SM 200.8
4/15/2017	13:53	1704856-48	Total	H	East	Mid Depth	1.2	J N	ALS	1704856-48	SM 200.8
4/15/2017	10:29	1704856-49	Hex	Intake A			<2	U N	ALS	1704856-49	SM 3500
4/15/2017	10:29	1704856-50	Hex	Intake B			<2	U N	ALS	1704856-50	SM 3500
4/15/2017	10:49	1704856-51	Hex	002A			<2	U N	ALS	1704856-51	SM 3500
4/15/2017	10:49	1704856-52	Hex	002B			<2	U N	ALS	1704856-52	SM 3500
4/15/2017	10:53	1704856-53	Hex	003A			<2	U N	ALS	1704856-53	SM 3500

4/15/2017	10:53	1704856-54	Hex	003B				<2	U N	ALS	1704856-54	SM 3500
4/15/2017	11:32	1704856-55	Hex	004A				<2	U N	ALS	1704856-55	SM 3500
4/15/2017	11:32	1704856-56	Hex	004B				<2	U N	ALS	1704856-56	SM 3500
4/15/2017	10:29	1704856-49	Total	Intake A			0.19	J N	ALS	1704856-49	SM 200.8	
4/15/2017	10:29	1704856-50	Total	Intake B			0.14	J N	ALS	1704856-50	SM 200.8	
4/15/2017	10:49	1704856-51	Total	002A			0.16	J N	ALS	1704856-51	SM 200.8	
4/15/2017	10:49	1704856-52	Total	002B			0.19	J N	ALS	1704856-52	SM 200.8	
4/15/2017	10:53	1704856-53	Total	003A			0.16	J N	ALS	1704856-53	SM 200.8	
4/15/2017	10:53	1704856-54	Total	003B			0.14	J N	ALS	1704856-54	SM 200.8	
4/15/2017	11:32	1704856-55	Total	004A			0.13	J N	ALS	1704856-55	SM 200.8	
4/15/2017	11:32	1704856-56	Total	004B			0.16	J N	ALS	1704856-56	SM 200.8	
4/15/2017	11:36	1704856-57	Hex	005A			<2	U N	ALS	1704856-57	SM 3500	
4/15/2017	11:36	1704856-58	Hex	005B			<2	U N	ALS	1704856-58	SM 3500	
4/15/2017	10:44	1704856-59	Hex	006A			<2	U N	ALS	1704856-59	SM 3500	
4/15/2017	10:44	1704856-60	Hex	006B			<2	U N	ALS	1704856-60	SM 3500	
4/15/2017	10:37	1704856-61	Hex	007A			<2	U N	ALS	1704856-61	SM 3500	
4/15/2017	10:37	170456-62	Hex	007B			<2	U N	ALS	170456-62	SM 3500	
4/15/2017	11:50	1704856-63	Hex	008A			<2	U N	ALS	1704856-63	SM 3500	
4/15/2017	11:50	1704856-64	Hex	008B			<2	U N	ALS	1704856-64	SM 3500	
4/15/2017	11:54	1704856-65	Hex	009A			<2	U N	ALS	1704856-65	SM 3500	
4/15/2017	11:54	1704856-66	Hex	009B			<2	U N	ALS	1704856-66	SM 3500	
4/15/2017	11:36	1704856-57	Total	005A			0.11	J N	ALS	1704856-57	SM 200.8	
4/15/2017	11:36	1704856-58	Total	005B			0.17	J N	ALS	1704856-58	SM 200.8	
4/15/2017	10:44	1704856-59	Total	006A			0.13	J N	ALS	1704856-59	SM 200.8	
4/15/2017	10:44	1704856-60	Total	006B			0.18	J N	ALS	1704856-60	SM 200.8	
4/15/2017	10:37	1704856-61	Total	007A			0.15	J N	ALS	1704856-61	SM 200.8	
4/15/2017	10:37	170456-62	Total	007B			0.18	J N	ALS	170456-62	SM 200.8	
4/15/2017	11:50	1704856-63	Total	008A			0.15	J N	ALS	1704856-63	SM 200.8	
4/15/2017	11:50	1704856-64	Total	008B			0.14	J N	ALS	1704856-64	SM 200.8	
4/15/2017	11:54	1704856-65	Total	009A			0.13	J N	ALS	1704856-65	SM 200.8	
4/15/2017	11:54	1704856-66	Total	009B			0.13	J N	ALS	1704856-66	SM 200.8	
4/15/2017	12:03	1704856-67	Hex	010A			<2	U N	ALS	1704856-67	SM 3500	
4/15/2017	12:03	1704856-68	Hex	010B			<2	U N	ALS	1704856-68	SM 3500	
4/15/2017	12:08	1704856-69	Hex	11A			<2	U N	ALS	1704856-69	SM 3500	
4/15/2017	12:08	1704856-70	Hex	11B			<2	U N	ALS	1704856-70	SM 3500	
4/15/2017	12:15	1704856-71	Hex	12A			<2	U N	ALS	1704856-71	SM 3500	
4/15/2017	12:15	1704856-72	Hex	12B			<2	U N	ALS	1704856-72	SM 3500	
4/15/2017	12:03	1704856-67	Total	010A			0.20	J N	ALS	1704856-67	SM 200.8	
4/15/2017	12:03	1704856-68	Total	010B			0.31	J N	ALS	1704856-68	SM 200.8	
4/15/2017	12:08	1704856-69	Total	11A			0.33	J N	ALS	1704856-69	SM 200.8	
4/15/2017	12:08	1704856-70	Total	11B			0.37	J N	ALS	1704856-70	SM 200.8	
4/15/2017	12:15	1704856-71	Total	12A			0.46	J N	ALS	1704856-71	SM 200.8	
4/15/2017	12:15	1704856-72	Total	12B			0.51	J N	ALS	1704856-72	SM 200.8	
4/15/2017	11:50	1704856-73	Hex	008A DUP			<2	U Y	ALS	1704856-73	SM 3500	
4/15/2017	12:15	1704856-74	Hex	012A DUP			<2	U Y	ALS	1704856-74	SM 3500	
4/15/2017	11:32	1704856-75	Hex	004A DUP			<2	U Y	ALS	1704856-75	SM 3500	
4/15/2017	14:23	1704856-76	Hex	C1B DUP			<2	U Y	ALS	1704856-76	SM 3500	
4/15/2017	14:15	1704856-77	Hex	D2A DUP			<2	U Y	ALS	1704856-77	SM 3500	
4/15/2017	13:40	1704856-78	Hex	B2A DUP			<2	U Y	ALS	1704856-78	SM 3500	
4/15/2017	14:09	1704856-79	Hex	E2A DUP			<2	U Y	ALS	1704856-79	SM 3500	

4/16/2017	9:45	1704861-1	Hex	A	West	Surface		<2	U N	ALS	1704861-1	SM 3500
4/16/2017	9:45	1704861-2	Hex	A	West	Mid Depth		<2	U N	ALS	1704861-2	SM 3500
4/16/2017	9:52	1704861-3	Hex	A	Center	Surface		<2	U N	ALS	1704861-3	SM 3500
4/16/2017	9:52	1704861-4	Hex	A	Center	Mid Depth		<2	U N	ALS	1704861-4	SM 3500
4/16/2017	9:50	1704861-5	Hex	A	East	Surface		<2	U Y	ALS	1704861-5	SM 3500
4/16/2017	9:50	1704861-6	Hex	A	East	Mid Depth		<2	U N	ALS	1704861-6	SM 3500
4/16/2017	9:45	1704861-1	Total	A	West	Surface		0.31	J N	ALS	1704861-1	SM 200.8
4/16/2017	9:45	1704861-2	Total	A	West	Mid Depth		0.56	J N	ALS	1704861-2	SM 200.8

4/16/2017	9:52	1704861-3	Total	A	Center	Surface	0.32	J	N	ALS	1704861-3	SM 200.8
4/16/2017	9:52	1704861-4	Total	A	Center	Mid Depth	0.58	J	N	ALS	1704861-4	SM 200.8
4/16/2017	9:50	1704861-5	Total	A	East	Surface			Y	ALS	1704861-5	SM 200.8
4/16/2017	9:50	1704861-6	Total	A	East	Mid Depth			N	ALS	1704861-6	SM 3500
4/16/2017	10:01	1704861-7	Hex	B	West	Surface	<2	U	N	ALS	1704861-7	SM 3500
4/16/2017	10:01	1704861-8	Hex	B	West	Mid Depth	<2	U	N	ALS	1704861-8	SM 3500
4/16/2017	9:59	1704861-9	Hex	B	Center	Surface	<2	U	N	ALS	1704861-9	SM 3500
4/16/2017	9:59	1704861-10	Hex	B	Center	Surface	<2	U	N	ALS	1704861-10	SM 3500
4/16/2017	9:57	1704861-11	Hex	B	East	Mid Depth	<2	U	N	ALS	1704861-11	SM 3500
4/16/2017	9:57	1704861-12	Hex	B	East	Mid Depth	<2	U	N	ALS	1704861-12	SM 3500
4/16/2017	10:01	1704861-7	Total	B	West	Surface			N	ALS	1704861-7	SM 200.8
4/16/2017	10:01	1704861-8	Total	B	West	Mid Depth			N	ALS	1704861-8	SM 200.8
4/16/2017	9:59	1704861-9	Total	B	Center	Surface			N	ALS	1704861-9	SM 200.8
4/16/2017	9:59	1704861-10	Total	B	Center	Mid Depth			N	ALS	1704861-10	SM 200.8
4/16/2017	9:57	1704861-11	Total	B	East	Surface			N	ALS	1704861-11	SM 200.8
4/16/2017	9:57	1704861-12	Total	B	East	Mid Depth			N	ALS	1704861-12	SM 200.8
4/16/2017	10:54	1704861-13	Hex	C	West	Surface	<2	U	N	ALS	1704861-13	SM 3500
4/16/2017	10:54	1704861-14	Hex	C	West	Mid Depth	<2	U	N	ALS	1704861-14	SM 3500
4/16/2017	10:57	1704861-15	Hex	C	Center	Surface	<2	U	N	ALS	1704861-15	SM 3500
4/16/2017	10:57	1704861-16	Hex	C	Center	Mid Depth	<2	U	N	ALS	1704861-16	SM 3500
4/16/2017	11:00	1704861-17	Hex	C	East	Surface	<2	U	N	ALS	1704861-17	SM 3500
4/16/2017	11:00	1704861-18	Hex	C	East	Mid Depth	<2	U	N	ALS	1704861-18	SM 3500
4/16/2017	10:54	1704861-13	Total	C	West	Surface			N	ALS	1704861-13	SM 200.8
4/16/2017	10:54	1704861-14	Total	C	West	Mid Depth			N	ALS	1704861-14	SM 200.8
4/16/2017	10:57	1704861-15	Total	C	Center	Surface			N	ALS	1704861-15	SM 200.8
4/16/2017	10:57	1704861-16	Total	C	Center	Mid Depth			N	ALS	1704861-16	SM 200.8
4/16/2017	11:00	1704861-17	Total	C	East	Surface			N	ALS	1704861-17	SM 200.8
4/16/2017	11:00	1704861-18	Total	C	East	Mid Depth			N	ALS	1704861-18	SM 200.8
4/16/2017	10:45	1704861-19	Hex	D	West	Surface	<2	U	N	ALS	1704861-19	SM 3500
4/16/2017	10:45	1704861-20	Hex	D	West	Mid Depth	<2	U	N	ALS	1704861-20	SM 3500
4/16/2017	10:48	1704861-21	Hex	D	Center	Surface	<2	U	N	ALS	1704861-21	SM 3500
4/16/2017	10:48	1704861-22	Hex	D	Center	Mid Depth	<2	U	N	ALS	1704861-22	SM 3500
4/16/2017	10:51	1704861-23	Hex	D	East	Surface	<2	U	N	ALS	1704861-23	SM 3500
4/16/2017	10:51	1704861-24	Hex	D	East	Mid Depth	<2	U	N	ALS	1704861-24	SM 3500
4/16/2017	10:45	1704861-19	Total	D	West	Surface			N	ALS	1704861-19	SM 200.8
4/16/2017	10:45	1704861-20	Total	D	West	Mid Depth			N	ALS	1704861-20	SM 200.8
4/16/2017	10:48	1704861-21	Total	D	Center	Surface			N	ALS	1704861-21	SM 200.8
4/16/2017	10:48	1704861-22	Total	D	Center	Mid Depth			N	ALS	1704861-22	SM 200.8
4/16/2017	10:51	1704861-23	Total	D	East	Surface			N	ALS	1704861-23	SM 200.8
4/16/2017	10:51	1704861-24	Total	D	East	Mid Depth			N	ALS	1704861-24	SM 200.8
4/16/2017	10:42	1704861-25	Hex	E	West	Surface	<2	U	N	ALS	1704861-25	SM 3500
4/16/2017	10:42	1704861-26	Hex	E	West	Mid Depth	<2	U	N	ALS	1704861-26	SM 3500
4/16/2017	10:39	1704861-27	Hex	E	Center	Surface	<2	U	N	ALS	1704861-27	SM 3500
4/16/2017	10:39	1704861-28	Hex	E	Center	Mid Depth	<2	U	N	ALS	1704861-28	SM 3500
4/16/2017	10:36	1704861-29	Hex	E	East	Surface	<2	U	N	ALS	1704861-29	SM 3500
4/16/2017	10:36	1704861-30	Hex	E	East	Mid Depth	<2	U	N	ALS	1704861-30	SM 3500
4/16/2017	10:42	1704861-25	Total	E	West	Surface			N	ALS	1704861-25	SM 200.8
4/16/2017	10:42	1704861-26	Total	E	West	Mid Depth			N	ALS	1704861-26	SM 200.8
4/16/2017	10:39	1704861-27	Total	E	Center	Surface			N	ALS	1704861-27	SM 200.8
4/16/2017	10:39	1704861-28	Total	E	Center	Mid Depth			N	ALS	1704861-28	SM 200.8
4/16/2017	10:36	1704861-29	Total	E	East	Surface			N	ALS	1704861-29	SM 200.8
4/16/2017	10:36	1704861-30	Total	E	East	Mid Depth			N	ALS	1704861-30	SM 200.8
4/16/2017	10:07	1704861-31	Hex	F	West	Surface	<2	U	N	ALS	1704861-31	SM 3500
4/16/2017	10:27	1704861-32	Hex	F	West	Mid Depth	<2	U	N	ALS	1704861-32	SM 3500
4/16/2017	10:30	1704861-33	Hex	F	Center	Surface	<2	U	N	ALS	1704861-33	SM 3500
4/16/2017	10:30	1704861-34	Hex	F	Center	Mid Depth	<2	U	N	ALS	1704861-34	SM 3500
4/16/2017	10:33	1704861-35	Hex	F	East	Surface	<2	U	N	ALS	1704861-35	SM 3500
4/16/2017	10:33	1704861-36	Hex	F	East	Mid Depth	<2	U	N	ALS	1704861-36	SM 3500
4/16/2017	10:07	1704861-31	Total	F	West	Surface			N	ALS	1704861-31	SM 200.8
4/16/2017	10:27	1704861-32	Total	F	West	Mid Depth			N	ALS	1704861-32	SM 200.8



4/16/2017	10:30	1704861-33	Total	F	Center	Surface		N	ALS	1704861-33	SM 200.8
4/16/2017	10:30	1704861-34	Total	F	Center	Mid Depth		N	ALS	1704861-34	SM 200.8
4/16/2017	10:33	1704861-35	Total	F	East	Surface		N	ALS	1704861-35	SM 200.8
4/16/2017	10:33	1704861-36	Total	F	East	Mid Depth		N	ALS	1704861-36	SM 200.8
4/16/2017	10:24	1704861-37	Hex	G	West	Surface	<2	U N	ALS	1704861-37	SM 3500
4/16/2017	10:24	1704861-38	Hex	G	West	Mid Depth	<2	U N	ALS	1704861-38	SM 3500
4/16/2017	10:22	1704861-39	Hex	G	Center	Surface	<2	U N	ALS	1704861-39	SM 3500
4/16/2017	10:22	1704861-40	Hex	G	Center	Mid Depth	<2	U N	ALS	1704861-40	SM 3500
4/16/2017	10:20	1704861-41	Hex	G	East	Surface	<2	U N	ALS	1704861-41	SM 3500
4/16/2017	10:20	1704861-42	Hex	G	East	Mid Depth	<2	U N	ALS	1704861-42	SM 3500
4/16/2017	10:24	1704861-37	Total	G	West	Surface		N	ALS	1704861-37	SM 200.8
4/16/2017	10:24	1704861-38	Total	G	West	Mid Depth		N	ALS	1704861-38	SM 200.8
4/16/2017	10:22	1704861-39	Total	G	Center	Surface		N	ALS	1704861-39	SM 200.8
4/16/2017	10:22	1704861-40	Total	G	Center	Mid Depth		N	ALS	1704861-40	SM 200.8
4/16/2017	10:20	1704861-41	Total	G	East	Surface		N	ALS	1704861-41	SM 200.8
4/16/2017	10:20	1704861-42	Total	G	East	Mid Depth		N	ALS	1704861-42	SM 200.8
4/16/2017	10:13	1704861-43	Hex	H	West	Surface	<2	U N	ALS	1704861-43	SM 3500
4/16/2017	10:13	1704861-44	Hex	H	West	Mid Depth	<2	U N	ALS	1704861-44	SM 3500
4/16/2017	10:15	1704861-45	Hex	H	Center	Surface	<2	U N	ALS	1704861-45	SM 3500
4/16/2017	10:15	1704861-46	Hex	H	Center	Mid Depth	<2	U N	ALS	1704861-46	SM 3500
4/16/2017	10:17	1704861-47	Hex	H	East	Surface	<2	U N	ALS	1704861-47	SM 3500
4/16/2017	10:17	1704861-48	Hex	H	East	Mid Depth	<2	U N	ALS	1704861-48	SM 3500
4/16/2017	10:13	1704861-43	Total	H	West	Surface		N	ALS	1704861-43	SM 200.8
4/16/2017	10:13	1704861-44	Total	H	West	Mid Depth		N	ALS	1704861-44	SM 200.8
4/16/2017	10:15	1704861-45	Total	H	Center	Surface		N	ALS	1704861-45	SM 200.8
4/16/2017	10:15	1704861-46	Total	H	Center	Mid Depth		N	ALS	1704861-46	SM 200.8
4/16/2017	10:17	1704861-47	Total	H	East	Surface		N	ALS	1704861-47	SM 200.8
4/16/2017	10:17	1704861-48	Total	H	East	Mid Depth		N	ALS	1704861-48	SM 200.8
4/16/2017	7:55	1704861-49	Hex	Intake A			<2	U N	ALS	1704861-49	SM 3500
4/16/2017	7:55	1704861-50	Hex	Intake B			<2	U N	ALS	1704861-50	SM 3500
4/16/2017	8:04	1704861-51	Hex	002A			<2	U N	ALS	1704861-51	SM 3500
4/16/2017	8:04	1704861-52	Hex	002B			<2	U Y	ALS	1704861-52	SM 3500
4/16/2017	8:08	1704861-53	Hex	003A			<2	U Y	ALS	1704861-53	SM 3500
4/16/2017	8:08	1704861-54	Hex	003B			<2	U N	ALS	1704861-54	SM 3500
4/16/2017	8:55	1704861-55	Hex	004A			<2	U N	ALS	1704861-55	SM 3500
4/16/2017	8:55	1704861-56	Hex	004B			<2	U N	ALS	1704861-56	SM 3500
4/16/2017	7:55	1704861-49	Total	Intake A				N	ALS	1704861-49	SM 200.8
4/16/2017	7:55	1704861-50	Total	Intake B				N	ALS	1704861-50	SM 200.8
4/16/2017	8:04	1704861-51	Total	002A				N	ALS	1704861-51	SM 200.8
4/16/2017	8:04	1704861-52	Total	002B				Y	ALS	1704861-52	SM 200.8
4/16/2017	8:08	1704861-53	Total	003A				Y	ALS	1704861-53	SM 200.8
4/16/2017	8:08	1704861-54	Total	003B				N	ALS	1704861-54	SM 200.8
4/16/2017	8:55	1704861-55	Total	004A				N	ALS	1704861-55	SM 200.8
4/16/2017	8:55	1704861-56	Total	004B				N	ALS	1704861-56	SM 200.8
4/16/2017	8:48	1704861-57	Hex	005A			<2	U N	ALS	1704861-57	SM 3500
4/16/2017	8:48	1704861-58	Hex	005B			<2	U N	ALS	1704861-58	SM 3500
4/16/2017	8:01	1704861-59	Hex	006A			<2	U N	ALS	1704861-59	SM 3500
4/16/2017	8:01	1704861-60	Hex	006B			<2	U N	ALS	1704861-60	SM 3500
4/16/2017	7:58	1704861-61	Hex	007A			<2	U N	ALS	1704861-61	SM 3500
4/16/2017	7:58	170456-62	Hex	007B			<2	U Y	ALS	170456-62	SM 3500
4/16/2017	8:51	1704861-63	Hex	008A			<2	U N	ALS	1704861-63	SM 3500
4/16/2017	8:51	1704861-64	Hex	008B			<2	U N	ALS	1704861-64	SM 3500
4/16/2017	8:58	1704861-65	Hex	009A			<2	U N	ALS	1704861-65	SM 3500
4/16/2017	8:58	1704861-66	Hex	009B			<2	U Y	ALS	1704861-66	SM 3500
4/16/2017	8:48	1704861-57	Total	005A				N	ALS	1704861-57	SM 200.8
4/16/2017	8:48	1704861-58	Total	005B				N	ALS	1704861-58	SM 200.8
4/16/2017	8:01	1704861-59	Total	006A				N	ALS	1704861-59	SM 200.8
4/16/2017	8:01	1704861-60	Total	006B				N	ALS	1704861-60	SM 200.8
4/16/2017	7:58	1704861-61	Total	007A				N	ALS	1704861-61	SM 200.8
4/16/2017	7:58	170456-62	Total	007B				Y	ALS	170456-62	SM 200.8

4/16/2017	8:51	1704861-63	Total	008A				N	ALS	1704861-63	SM 200.8
4/16/2017	8:51	1704861-64	Total	008B				N	ALS	1704861-64	SM 200.8
4/16/2017	8:58	1704861-65	Total	009A				Y	ALS	1704861-65	SM 200.8
4/16/2017	8:58	1704861-66	Total	009B				N	ALS	1704861-66	SM 200.8
4/16/2017	9:01	1704861-67	Hex	010A		<2		U N	ALS	1704861-67	SM 3500
4/16/2017	9:01	1704861-68	Hex	010B		<2		U N	ALS	1704861-68	SM 3500
4/16/2017	9:15	1704861-69	Hex	11A		<2		U N	ALS	1704861-69	SM 3500
4/16/2017	9:15	1704861-70	Hex	11B		<2		U N	ALS	1704861-70	SM 3500
4/16/2017	9:25	1704861-71	Hex	12A		<2		U N	ALS	1704861-71	SM 3500
4/16/2017	9:25	1704861-72	Hex	12B		<2		U N	ALS	1704861-72	SM 3500
4/16/2017	9:01	1704861-67	Total	010A				N	ALS	1704861-67	SM 200.8
4/16/2017	9:01	1704861-68	Total	010B				N	ALS	1704861-68	SM 200.8
4/16/2017	9:15	1704861-69	Total	11A				N	ALS	1704861-69	SM 200.8
4/16/2017	9:15	1704861-70	Total	11B				N	ALS	1704861-70	SM 200.8
4/16/2017	9:25	1704861-71	Total	12A				N	ALS	1704861-71	SM 200.8
4/16/2017	9:25	1704861-72	Total	12B				N	ALS	1704861-72	SM 200.8
4/16/2017	8:48	1704861-73	Hex	005B DUP		<2		U Y	ALS	1704861-73	SM 3500
4/16/2017	9:59	1704861-74	Hex	B2B DUP		<2		U Y	ALS	1704861-74	SM 3500
4/16/2017	10:48	1704861-75	Hex	D2A DUP		<2		U Y	ALS	1704861-75	SM 3500
4/16/2017	7:55	1704861-76	Hex	INTAKE A DUP		<2		U Y	ALS	1704861-76	SM 3500
4/16/2017	8:48	1704861-73	Total	005B DUP				Y	ALS	1704861-73	SM 200.8
4/16/2017	9:59	1704861-74	Total	B2B DUP				Y	ALS	1704861-74	SM 200.8
4/16/2017	10:48	1704861-75	Total	D2A DUP				Y	ALS	1704861-75	SM 200.8
4/16/2017	7:55	1704861-76	Total	INTAKE A DUP				Y	ALS	1704861-76	SM 200.8

4/17/2017		1704908-1	Hex	A	West	Surface	<2		U N	ALS	1704908-1	SM 3500
4/17/2017		1704908-2	Hex	A	West	Mid Depth	<2		U N	ALS	1704908-2	SM 3500
4/17/2017		1704908-3	Hex	A	Center	Surface	<2		U N	ALS	1704908-3	SM 3500
4/17/2017		1704908-4	Hex	A	Center	Mid Depth	<2		U N	ALS	1704908-4	SM 3500
4/17/2017		1704908-5	Hex	A	East	Surface	<2		U Y	ALS	1704908-5	SM 3500
4/17/2017		1704908-6	Hex	A	East	Mid Depth	<2		U N	ALS	1704908-6	SM 3500
4/17/2017		1704908-1	Total	A	West	Surface			N	ALS	1704908-1	SM 200.8
4/17/2017		1704908-2	Total	A	West	Mid Depth			N	ALS	1704908-2	SM 200.8
4/17/2017		1704908-3	Total	A	Center	Surface			N	ALS	1704908-3	SM 200.8
4/17/2017		1704908-4	Total	A	Center	Mid Depth			N	ALS	1704908-4	SM 200.8
4/17/2017		1704908-5	Total	A	East	Surface			Y	ALS	1704908-5	SM 200.8
4/17/2017		1704908-6	Total	A	East	Mid Depth			N	ALS	1704908-6	SM 3500
4/17/2017		1704908-7	Hex	B	West	Surface	<2		U N	ALS	1704908-7	SM 3500
4/17/2017		1704908-8	Hex	B	West	Mid Depth	<2		U N	ALS	1704908-8	SM 3500
4/17/2017		1704908-9	Hex	B	Center	Surface	<2		U N	ALS	1704908-9	SM 3500
4/17/2017		1704908-10	Hex	B	Center	Surface	<2		U N	ALS	1704908-10	SM 3500
4/17/2017		1704908-11	Hex	B	East	Mid Depth	<2		U N	ALS	1704908-11	SM 3500
4/17/2017		1704908-12	Hex	B	East	Mid Depth	<2		U N	ALS	1704908-12	SM 3500
4/17/2017		1704908-7	Total	B	West	Surface			N	ALS	1704908-7	SM 200.8
4/17/2017		1704908-8	Total	B	West	Mid Depth			N	ALS	1704908-8	SM 200.8
4/17/2017		1704908-9	Total	B	Center	Surface			N	ALS	1704908-9	SM 200.8
4/17/2017		1704908-10	Total	B	Center	Mid Depth			N	ALS	1704908-10	SM 200.8
4/17/2017		1704908-11	Total	B	East	Surface			N	ALS	1704908-11	SM 200.8
4/17/2017		1704908-12	Total	B	East	Mid Depth			N	ALS	1704908-12	SM 200.8
4/17/2017		1704908-13	Hex	C	West	Surface	<2		U N	ALS	1704908-13	SM 3500
4/17/2017		1704908-14	Hex	C	West	Mid Depth	<2		U N	ALS	1704908-14	SM 3500
4/17/2017		1704908-15	Hex	C	Center	Surface	<2		U N	ALS	1704908-15	SM 3500
4/17/2017		1704908-16	Hex	C	Center	Mid Depth	<2		U N	ALS	1704908-16	SM 3500
4/17/2017		1704908-17	Hex	C	East	Surface	<2		U N	ALS	1704908-17	SM 3500
4/17/2017		1704908-18	Hex	C	East	Mid Depth	<2		U N	ALS	1704908-18	SM 3500
4/17/2017		1704908-13	Total	C	West	Surface			N	ALS	1704908-13	SM 200.8
4/17/2017		1704908-14	Total	C	West	Mid Depth			N	ALS	1704908-14	SM 200.8
4/17/2017		1704908-15	Total	C	Center	Surface			N	ALS	1704908-15	SM 200.8
4/17/2017		1704908-16	Total	C	Center	Mid Depth			N	ALS	1704908-16	SM 200.8

4/17/2017	1704908-17	Total	C	East	Surface			N	ALS	1704908-17	SM 200.8
4/17/2017	1704908-18	Total	C	East	Mid Depth			N	ALS	1704908-18	SM 200.8
4/17/2017	1704908-19	Hex	D	West	Surface			U N	ALS	1704908-19	SM 3500
4/17/2017	1704908-20	Hex	D	West	Mid Depth	<2		U N	ALS	1704908-20	SM 3500
4/17/2017	1704908-21	Hex	D	Center	Surface	<2		U N	ALS	1704908-21	SM 3500
4/17/2017	1704908-22	Hex	D	Center	Mid Depth	<2		U N	ALS	1704908-22	SM 3500
4/17/2017	1704908-23	Hex	D	East	Surface	<2		U N	ALS	1704908-23	SM 3500
4/17/2017	1704908-24	Hex	D	East	Mid Depth	<2		U N	ALS	1704908-24	SM 3500
4/17/2017	1704908-19	Total	D	West	Surface			N	ALS	1704908-19	SM 200.8
4/17/2017	1704908-20	Total	D	West	Mid Depth			N	ALS	1704908-20	SM 200.8
4/17/2017	1704908-21	Total	D	Center	Surface			N	ALS	1704908-21	SM 200.8
4/17/2017	1704908-22	Total	D	Center	Mid Depth			N	ALS	1704908-22	SM 200.8
4/17/2017	1704908-23	Total	D	East	Surface			N	ALS	1704908-23	SM 200.8
4/17/2017	1704908-24	Total	D	East	Mid Depth			N	ALS	1704908-24	SM 200.8
4/17/2017	1704908-25	Hex	E	West	Surface	<2		U N	ALS	1704908-25	SM 3500
4/17/2017	1704908-26	Hex	E	West	Mid Depth	<2		U N	ALS	1704908-26	SM 3500
4/17/2017	1704908-27	Hex	E	Center	Surface	<2		U N	ALS	1704908-27	SM 3500
4/17/2017	1704908-28	Hex	E	Center	Mid Depth	<2		U N	ALS	1704908-28	SM 3500
4/17/2017	1704908-29	Hex	E	East	Surface	<2		U N	ALS	1704908-29	SM 3500
4/17/2017	1704908-30	Hex	E	East	Mid Depth	<2		U N	ALS	1704908-30	SM 3500
4/17/2017	1704908-25	Total	E	West	Surface			N	ALS	1704908-25	SM 200.8
4/17/2017	1704908-26	Total	E	West	Mid Depth			N	ALS	1704908-26	SM 200.8
4/17/2017	1704908-27	Total	E	Center	Surface			N	ALS	1704908-27	SM 200.8
4/17/2017	1704908-28	Total	E	Center	Mid Depth			N	ALS	1704908-28	SM 200.8
4/17/2017	1704908-29	Total	E	East	Surface			N	ALS	1704908-29	SM 200.8
4/17/2017	1704908-30	Total	E	East	Mid Depth			N	ALS	1704908-30	SM 200.8
4/17/2017	1704908-31	Hex	F	West	Surface	<2		U N	ALS	1704908-31	SM 3500
4/17/2017	1704908-32	Hex	F	West	Mid Depth	<2		U N	ALS	1704908-32	SM 3500
4/17/2017	1704908-33	Hex	F	Center	Surface	<2		U N	ALS	1704908-33	SM 3500
4/17/2017	1704908-34	Hex	F	Center	Mid Depth	<2		U N	ALS	1704908-34	SM 3500
4/17/2017	1704908-35	Hex	F	East	Surface	<2		U N	ALS	1704908-35	SM 3500
4/17/2017	1704908-36	Hex	F	East	Mid Depth	<2		U N	ALS	1704908-36	SM 3500
4/17/2017	1704908-31	Total	F	West	Surface			N	ALS	1704908-31	SM 200.8
4/17/2017	1704908-32	Total	F	West	Mid Depth			N	ALS	1704908-32	SM 200.8
4/17/2017	1704908-33	Total	F	Center	Surface			N	ALS	1704908-33	SM 200.8
4/17/2017	1704908-34	Total	F	Center	Mid Depth			N	ALS	1704908-34	SM 200.8
4/17/2017	1704908-35	Total	F	East	Surface			N	ALS	1704908-35	SM 200.8
4/17/2017	1704908-36	Total	F	East	Mid Depth			N	ALS	1704908-36	SM 200.8
4/17/2017	1704908-37	Hex	G	West	Surface	<2		U N	ALS	1704908-37	SM 3500
4/17/2017	1704908-38	Hex	G	West	Mid Depth	<2		U N	ALS	1704908-38	SM 3500
4/17/2017	1704908-39	Hex	G	Center	Surface	<2		U N	ALS	1704908-39	SM 3500
4/17/2017	1704908-40	Hex	G	Center	Mid Depth	<2		U N	ALS	1704908-40	SM 3500
4/17/2017	1704908-41	Hex	G	East	Surface	<2		U N	ALS	1704908-41	SM 3500
4/17/2017	1704908-42	Hex	G	East	Mid Depth	<2		U N	ALS	1704908-42	SM 3500
4/17/2017	1704908-37	Total	G	West	Surface			N	ALS	1704908-37	SM 200.8
4/17/2017	1704908-38	Total	G	West	Mid Depth			N	ALS	1704908-38	SM 200.8
4/17/2017	1704908-39	Total	G	Center	Surface			N	ALS	1704908-39	SM 200.8
4/17/2017	1704908-40	Total	G	Center	Mid Depth			N	ALS	1704908-40	SM 200.8
4/17/2017	1704908-41	Total	G	East	Surface			N	ALS	1704908-41	SM 200.8
4/17/2017	1704908-42	Total	G	East	Mid Depth			N	ALS	1704908-42	SM 200.8
4/17/2017	1704908-43	Hex	H	West	Surface	<2		U N	ALS	1704908-43	SM 3500
4/17/2017	1704908-44	Hex	H	West	Mid Depth	<2		U N	ALS	1704908-44	SM 3500
4/17/2017	1704908-45	Hex	H	Center	Surface	<2		U N	ALS	1704908-45	SM 3500
4/17/2017	1704908-46	Hex	H	Center	Mid Depth	<2		U N	ALS	1704908-46	SM 3500
4/17/2017	1704908-47	Hex	H	East	Surface	<2		U N	ALS	1704908-47	SM 3500
4/17/2017	1704908-48	Hex	H	East	Mid Depth	<2		U N	ALS	1704908-48	SM 3500
4/17/2017	1704908-43	Total	H	West	Surface			N	ALS	1704908-43	SM 200.8
4/17/2017	1704908-44	Total	H	West	Mid Depth			N	ALS	1704908-44	SM 200.8
4/17/2017	1704908-45	Total	H	Center	Surface			N	ALS	1704908-45	SM 200.8
4/17/2017	1704908-46	Total	H	Center	Mid Depth			N	ALS	1704908-46	SM 200.8



4/17/2017		1704908-47	Total	H	East	Surface		N	ALS	1704908-47	SM 200.8
4/17/2017		1704908-48	Total	H	East	Mid Depth		N	ALS	1704908-48	SM 200.8
4/17/2017		1704908-49	Hex	Intake A			<2	U N	ALS	1704908-49	SM 3500
4/17/2017		1704908-50	Hex	Intake B			<2	U N	ALS	1704908-50	SM 3500
4/17/2017		1704908-51	Hex	002A			<2	U N	ALS	1704908-51	SM 3500
4/17/2017		1704908-52	Hex	002B			<2	U Y	ALS	1704908-52	SM 3500
4/17/2017		1704908-53	Hex	003A			<2	U Y	ALS	1704908-53	SM 3500
4/17/2017		1704908-54	Hex	003B			<2	U N	ALS	1704908-54	SM 3500
4/17/2017		1704908-55	Hex	004A			<2	U N	ALS	1704908-55	SM 3500
4/17/2017		1704908-56	Hex	004B			<2	U N	ALS	1704908-56	SM 3500
4/17/2017		1704908-49	Total	Intake A				N	ALS	1704908-49	SM 200.8
4/17/2017		1704908-50	Total	Intake B				N	ALS	1704908-50	SM 200.8
4/17/2017		1704908-51	Total	002A				N	ALS	1704908-51	SM 200.8
4/17/2017		1704908-52	Total	002B				Y	ALS	1704908-52	SM 200.8
4/17/2017		1704908-53	Total	003A				Y	ALS	1704908-53	SM 200.8
4/17/2017		1704908-54	Total	003B				N	ALS	1704908-54	SM 200.8
4/17/2017		1704908-55	Total	004A				N	ALS	1704908-55	SM 200.8
4/17/2017		1704908-56	Total	004B				N	ALS	1704908-56	SM 200.8
4/17/2017		1704908-57	Hex	005A			<2	U N	ALS	1704908-57	SM 3500
4/17/2017		1704908-58	Hex	005B			<2	U N	ALS	1704908-58	SM 3500
4/17/2017		1704908-59	Hex	006A			<2	U N	ALS	1704908-59	SM 3500
4/17/2017		1704908-60	Hex	006B			<2	U N	ALS	1704908-60	SM 3500
4/17/2017		1704908-61	Hex	007A			<2	U N	ALS	1704908-61	SM 3500
4/17/2017		170456-62	Hex	007B			<2	U Y	ALS	170456-62	SM 3500
4/17/2017		1704908-63	Hex	008A			<2	U N	ALS	1704908-63	SM 3500
4/17/2017		1704908-64	Hex	008B			<2	U N	ALS	1704908-64	SM 3500
4/17/2017		1704908-65	Hex	009A			<2	U N	ALS	1704908-65	SM 3500
4/17/2017		1704908-66	Hex	009B			<2	U Y	ALS	1704908-66	SM 3500
4/17/2017		1704908-57	Total	005A				N	ALS	1704908-57	SM 200.8
4/17/2017		1704908-58	Total	005B				N	ALS	1704908-58	SM 200.8
4/17/2017		1704908-59	Total	006A				N	ALS	1704908-59	SM 200.8
4/17/2017		1704908-60	Total	006B				N	ALS	1704908-60	SM 200.8
4/17/2017		1704908-61	Total	007A				N	ALS	1704908-61	SM 200.8
4/17/2017		170456-62	Total	007B				Y	ALS	170456-62	SM 200.8
4/17/2017		1704908-63	Total	008A				N	ALS	1704908-63	SM 200.8
4/17/2017		1704908-64	Total	008B				N	ALS	1704908-64	SM 200.8
4/17/2017		1704908-65	Total	009A				Y	ALS	1704908-65	SM 200.8
4/17/2017		1704908-66	Total	009B				N	ALS	1704908-66	SM 200.8
4/17/2017		1704908-67	Hex	010A			<2	U N	ALS	1704908-67	SM 3500
4/17/2017		1704908-68	Hex	010B			<2	U N	ALS	1704908-68	SM 3500
4/17/2017		1704908-69	Hex	11A			<2	U N	ALS	1704908-69	SM 3500
4/17/2017		1704908-70	Hex	11B			<2	U N	ALS	1704908-70	SM 3500
4/17/2017		1704908-71	Hex	12A			<2	U N	ALS	1704908-71	SM 3500
4/17/2017		1704908-72	Hex	12B			<2	U N	ALS	1704908-72	SM 3500
4/17/2017		1704908-67	Total	010A				N	ALS	1704908-67	SM 200.8
4/17/2017		1704908-68	Total	010B				N	ALS	1704908-68	SM 200.8
4/17/2017		1704908-69	Total	11A				N	ALS	1704908-69	SM 200.8
4/17/2017		1704908-70	Total	11B				N	ALS	1704908-70	SM 200.8
4/17/2017		1704908-71	Total	12A				N	ALS	1704908-71	SM 200.8
4/17/2017		1704908-72	Total	12B				N	ALS	1704908-72	SM 200.8
4/18/2017	11:02	1704989-01A	Hex	A1A				N	ALS		SM 3500
4/18/2017	11:02	1704989-02A	Hex	A1B				N	ALS		SM 3500
4/18/2017	10:59	1704989-03A	Hex	A2A				N	ALS		SM 3500
4/18/2017	10:59	1704989-04A	Hex	A2B				N	ALS		SM 3500
4/18/2017	10:56	1704989-05A	Hex	A3A				N	ALS		SM 3500
4/18/2017	10:56	1704989-06A	Hex	A3B				N	ALS		SM 3500
4/18/2017	11:14	1704989-07A	Hex	B1A				N	ALS		SM 3500
4/18/2017	11:14	1704989-08A	Hex	B1B				N	ALS		SM 3500
4/18/2017	11:12	1704989-09A	Hex	B2A				N	ALS		SM 3500

4/18/2017	11:12	1704989-10A	Hex	B2B	N	ALS	SM 3500
4/18/2017	11:10	1704989-11A	Hex	B3A	N	ALS	SM 3500
4/18/2017	11:10	1704989-12A	Hex	B3B	N	ALS	SM 3500
4/18/2017	11:54	1704989-13A	Hex	C1A	N	ALS	SM 3500
4/18/2017	11:54	1704989-14A	Hex	C1B	N	ALS	SM 3500
4/18/2017	11:56	1704989-15A	Hex	C2A	N	ALS	SM 3500
4/18/2017	11:56	1704989-16A	Hex	C2B	N	ALS	SM 3500
4/18/2017	11:58	1704989-17A	Hex	C3A	N	ALS	SM 3500
4/18/2017	11:58	1704989-18A	Hex	C3B	N	ALS	SM 3500
4/18/2017	11:48	1704989-19A	Hex	D1A	N	ALS	SM 3500
4/18/2017	11:48	1704989-20A	Hex	D1B	N	ALS	SM 3500
4/18/2017	11:58	1704989-21A	Hex	D2A	N	ALS	SM 3500
4/18/2017	11:58	1704989-22A	Hex	D2B	N	ALS	SM 3500
4/18/2017	11:52	1704989-23A	Hex	D3A	N	ALS	SM 3500
4/18/2017	11:52	1704989-24A	Hex	D3B	N	ALS	SM 3500
4/18/2017	11:46	1704989-25A	Hex	E1A	N	ALS	SM 3500
4/18/2017	11:46	1704989-26A	Hex	E1B	N	ALS	SM 3500
4/18/2017	11:44	1704989-27A	Hex	E2A	N	ALS	SM 3500
4/18/2017	11:44	1704989-28A	Hex	E2B	N	ALS	SM 3500
4/18/2017	11:42	1704989-29A	Hex	E3A	N	ALS	SM 3500
4/18/2017	11:42	1704989-30A	Hex	E3B	N	ALS	SM 3500
4/18/2017	11:36	1704989-31A	Hex	F1A	N	ALS	SM 3500
4/18/2017	11:36	1704989-32A	Hex	F1B	N	ALS	SM 3500
4/18/2017	11:38	1704989-33A	Hex	F2A	N	ALS	SM 3500
4/18/2017	11:38	1704989-34A	Hex	F2B	N	ALS	SM 3500
4/18/2017	11:40	1704989-35A	Hex	F3A	N	ALS	SM 3500
4/18/2017	11:40	1704989-36A	Hex	F3B	N	ALS	SM 3500
4/18/2017	11:34	1704989-37A	Hex	G1A	N	ALS	SM 3500
4/18/2017	11:34	1704989-38A	Hex	G1B	N	ALS	SM 3500
4/18/2017	11:32	1704989-39A	Hex	G2A	N	ALS	SM 3500
4/18/2017	11:32	1704989-40A	Hex	G2B	N	ALS	SM 3500
4/18/2017	11:30	1704989-41A	Hex	G3A	N	ALS	SM 3500
4/18/2017	11:30	1704989-42A	Hex	G3B	N	ALS	SM 3500
4/18/2017	11:24	1704989-43A	Hex	H1A	N	ALS	SM 3500
4/18/2017	11:24	1704989-44A	Hex	H1B	N	ALS	SM 3500
4/18/2017	11:26	1704989-45A	Hex	H2A	N	ALS	SM 3500
4/18/2017	11:26	1704989-46A	Hex	H2B	N	ALS	SM 3500
4/18/2017	11:28	1704989-47A	Hex	H3A	N	ALS	SM 3500
4/18/2017	11:28	1704989-48A	Hex	H3B	N	ALS	SM 3500
4/18/2017	10:09	1704989-49A	Hex	INTAKE A	N	ALS	SM 3500
4/18/2017	10:09	1704989-50A	Hex	INTAKE B	N	ALS	SM 3500
4/18/2017	10:36	1704989-51A	Hex	002 A	N	ALS	SM 3500
4/18/2017	10:36	1704989-52A	Hex	002 B	N	ALS	SM 3500
4/18/2017	10:39	1704989-53A	Hex	003 A	N	ALS	SM 3500
4/18/2017	10:39	1704989-54A	Hex	003 B	N	ALS	SM 3500
4/18/2017	9:46	1704989-55A	Hex	004 A	N	ALS	SM 3500
4/18/2017	9:46	1704989-56A	Hex	004 B	N	ALS	SM 3500
4/18/2017	9:49	1704989-57A	Hex	005 A	N	ALS	SM 3500
4/18/2017	9:49	1704989-58A	Hex	005 B	N	ALS	SM 3500
4/18/2017	10:33	1704989-59A	Hex	006 A	N	ALS	SM 3500
4/18/2017	10:33	1704989-60A	Hex	006 B	N	ALS	SM 3500
4/18/2017	10:30	1704989-61A	Hex	007 A	N	ALS	SM 3500
4/18/2017	15:30	1704989-62A	Hex	007 B	N	ALS	SM 3500
4/18/2017	9:54	1704989-63A	Hex	008 A	N	ALS	SM 3500
4/18/2017	9:54	1704989-64A	Hex	008 B	N	ALS	SM 3500
4/18/2017	9:57	1704989-65A	Hex	009 A	N	ALS	SM 3500
4/18/2017	9:57	1704989-66A	Hex	009 B	N	ALS	SM 3500
4/18/2017	10:00	1704989-67A	Hex	010 A	N	ALS	SM 3500
4/18/2017	10:00	1704989-68A	Hex	010 B	N	ALS	SM 3500
4/18/2017	10:03	1704989-69A	Hex	011 A	N	ALS	SM 3500

4/18/2017	10:03	1704989-70A	Hex	011 B	N	ALS	SM 3500
4/18/2017	10:06	1704989-71A	Hex	012 A	N	ALS	SM 3500
4/18/2017	10:06	1704989-72A	Hex	012 B	N	ALS	SM 3500
4/18/2017	11:12	1704989-79A	Hex	B2A DUP	Y	ALS	SM 3500
4/18/2017	10:56	1704989-80A	Hex	C2A DUP	Y	ALS	SM 3500
4/18/2017	10:09	1704989-81A	Hex	INTAKE A DUP	Y	ALS	SM 3500
4/18/2017	10:39	1704989-82A	Hex	003A DUP	Y	ALS	SM 3500



## **Appendix E: April 11, 2017, Chromium Incident Data Summaries and Figures**

**EPA Data Summary (provided by EPA On-Scene Coordinators)**

EPA Data Summary

Sample #	Location	Lab Matr	Analysis	Result	Units	Lab Qualifi	MDL	Event	Date
USS-SW-001-041117	Outfall 004	Water	Hexavalent Chromium	990	ug/L			1 Surface Water Sampling 4/ 4/11/2017	
USS-SW-A001-A-041117	A1	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-A002-A-041117	A2	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-A003-A-041117	A3	Water	Hexavalent Chromium	1.4	ug/L			1.25 Surface Water Sampling 4/ 4/11/2017	
USS-SW-B001-A-041117	B1	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-B002-A-041117	B2	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-B003-A-041117	B3	Water	Hexavalent Chromium	1.25	ug/L	U		1.25 Surface Water Sampling 4/ 4/11/2017	
USS-SW-C001-A-041117	C1	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-C002-A-041117	C2	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-C003-A-041117	C3	Water	Hexavalent Chromium	949	ug/L			2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-D001-A-041117	D1	Water	Hexavalent Chromium	3.1	ug/L	J		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-D002-A-041117	D2	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-D003-A-041117	D3	Water	Hexavalent Chromium	39.7	ug/L			1.25 Surface Water Sampling 4/ 4/11/2017	
USS-SW-E001-A-041117	E1	Water	Hexavalent Chromium	18	ug/L			2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-E002-A-041117	E2	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-E003-A-041117	E3	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-F001-A-041117	F1	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-F002-A-041117	F2	Water	Hexavalent Chromium	2	ug/L	U		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-F003-A-041117	F3	Water	Hexavalent Chromium	38.7	ug/L			1.25 Surface Water Sampling 4/ 4/11/2017	
USS-SW-G001-A-041117	G1	Water	Hexavalent Chromium	3.1	ug/L	J		2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-G002-A-041117	G2	Water	Hexavalent Chromium	17	ug/L			2 Surface Water Sampling 4/ 4/11/2017	
USS-SW-G003-A-041117	G3	Water	Hexavalent Chromium	23.4	ug/L			1.25 Surface Water Sampling 4/ 4/11/2017	
USS-DW-Wetwell-041217	Odgen Dunes Wetwell	Water	Total Chromium	0.94	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-DW-Wetwell-041217	Odgen Dunes Wetwell	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-002-A-041217	SW-2	Water	Hexavalent Chromium	2.6	ug/L	J		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-002-A-041217	SW-2	Water	Total Chromium	4.7	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-002-B-041217	SW-2	Water	Hexavalent Chromium	2.6	ug/L	J		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-002-B-041217	SW-2	Water	Total Chromium	4.9	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-003-A-041217	SW-3	Water	Hexavalent Chromium	2.5	ug/L	J		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-003-A-041217	SW-3	Water	Total Chromium	4.9	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-003-B-041217	SW-3	Water	Hexavalent Chromium	2.9	ug/L	J		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-003-B-041217	SW-3	Water	Total Chromium	5.5	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-004-A-041217	SW-4	Water	Hexavalent Chromium	1	ug/L	U		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-004-A-041217	SW-4	Water	Total Chromium	4.4	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-004-B-041217	SW-4	Water	Hexavalent Chromium	2.1	ug/L	J		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-004-B-041217	SW-4	Water	Total Chromium	4.6	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A001-A-041217	A1	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A001-A-041217	A1	Water	Total Chromium	1.8	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A001-B-041217	A1	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A001-B-041217	A1	Water	Total Chromium	1.8	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A002-A-041217	A2	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A002-A-041217	A2	Water	Total Chromium	1.9	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A002-B-041217	A2	Water	Hexavalent Chromium	2.4	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A002-B-041217	A2	Water	Total Chromium	1.9	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A003-A-041217	A3	Water	Hexavalent Chromium	2.4	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A003-A-041217	A3	Water	Total Chromium	1.9	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A003-B-041217	A3	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-A003-B-041217	A3	Water	Total Chromium	1.7	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B001-A-041217	B1	Water	Hexavalent Chromium	2.2	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B001-A-041217	B1	Water	Total Chromium	1.8	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B001-B-041217	B1	Water	Hexavalent Chromium	2.1	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B001-B-041217	B1	Water	Total Chromium	2	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B002-A-041217	B2	Water	Hexavalent Chromium	2.2	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B002-A-041217	B2	Water	Total Chromium	2.1	ug/L			0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B002-B-041217	B2	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B002-B-041217	B2	Water	Total Chromium	1.8	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B003-A-041217	B3	Water	Hexavalent Chromium	4.5	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B003-A-041217	B3	Water	Total Chromium	1.8	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B003-B-041217	B3	Water	Hexavalent Chromium	3.1	ug/L	JH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-B003-B-041217	B3	Water	Total Chromium	1.9	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-C001-A-041217	C1	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-C001-A-041217	C1	Water	Total Chromium	1.7	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-C001-B-041217	C1	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	
USS-SW-C001-B-041217	C1	Water	Total Chromium	1.7	ug/L	J		0.6 Surface Water Sampling 4/ 4/12/2017	
USS-SW-C002-A-041217	C2	Water	Hexavalent Chromium	1	ug/L	UH		1 Surface Water Sampling 4/ 4/12/2017	

































USS-SW-F001-A-041717	F1	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-F001-B-041717	F1	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-F002-A-041717	F2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-F002-B-041717	F2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-F003-A-041717	F3	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-F003-B-041717	F3	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-G001-A-041717	G1	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-G001-B-041717	G1	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-G002-A-041717	G2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-G002-B-041717	G2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-G003-A-041717	G3	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-G003-B-041717	G3	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H001-A-041717	H1	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H001-B-041717	H1	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H002-A-041717	H2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H002-B-041717-D	H2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H002-A-041717	H2	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H003-A-041717	H3	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-H003-B-041717	H3	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
	Drinking Water					
	Source (Not actual					
USS-SW-intake-A-041717	location)	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
	Drinking Water					
	Source (Not actual					
USS-SW-intake-A-041717-D	location)	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
	Drinking Water					
	Source (Not actual					
USS-SW-intake-B-041717	location)	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-KB02-041717	Kemil Beach 02	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-OD02-041717	Ogden Dunes 02	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-PB02-041717	Porter Beach 02	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
	Portage Lakefront					
USS-SW-PL02-041717	02	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-WB02-041717	West Beach 02	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017
USS-SW-WB02-041717-D	West Beach 02	Water	Hexavalent Chromium	0.3 ug/L	U	0.3 Surface Water Sampling 4/ 4/17/2017



## **Appendix E: April 11, 2017, Chromium Incident Data Summaries and Figures**

**EPA Sampling Location Figures (provided by EPA On-Scene Coordinators)**

DM

File Path: G:\GIS\0206-START (Indiana)\US Steel ER\mxd\Figure3\_Sample Locations.mxd



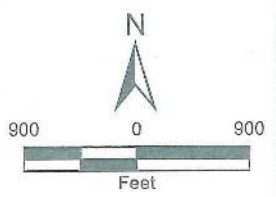
bing

Site Location



### Legend

- Site Boundary
- Sample Locations



US Steel Hexavalent Chromium ER Portage, IN

**Figure 3**  
**Sampling Locations**



Prepared For: USEPA

Prepared By: Tetra Tech

Source: USGS 7.5 Minute Topographic Quadrangle Map, Englewood, 2015

Date Saved: 4/12/2017

EPA Contract No.: EP-S5-13-01

TDD No.: S05-0001-1508-207

Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet. Projection: Transverse Mercator. Datum: North American 1983. Units: Feet US



250 and 500 Yard Locations



	<p>April 11, 2017 Incident Investigation U. S. Steel Corporation Midwest Portage, Indiana</p>	<p>FIGURE A</p>
		<p>PROJECT:</p>
<p>DRAFTED BY:</p>	<p>DATE: 04/14/2017 10:00</p>	



**Appendix F: Monthly Monitoring Reports(MMRs) for November –  
December 2016**



Indiana Discharge Monitoring Report Form 30530  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

FACILITY NAME AND ADDRESS:  
 U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1287

PLEASE COMPLETE AND SUBMIT ONE COPY EACH MONTH.  
 THIS REPORT MUST BE POSTMARKED NO LATER THAN THE  
 28TH OF THE FOLLOWING MONTH.  
 Mail To: Indiana Dept. of Environmental Management  
 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

I N O O O O 3 3 7  
 PERMIT NUMBER

0 0 2 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Flow, In Conduit	pH	Temperature	Oil & Grease	Chlorine, Total Residual	Flow, Total		
EFFLUENT PARAMETER NUMBER		Q50050	C00400	C00011	*****	C00552	Q50060	C50060	Q82220
SAMPLE TYPE	Permit Condition	Continuous	Grab	Continuous	*****	Grab	Grab	Grab	RCOTOT
	Monitored	Continuous	Grab	Continuous	*****	Grab			RCOTOT
FREQUENCY	Permit Condition	1/Week	1/Week	Daily	*****	1/Week	Daily	Daily	Monthly
	Monitored	Daily	1/Week	Daily	*****	1/Week			Monthly
EFFLUENT LIMITATIONS	Permit Minimum	*****	6.0	*****	*****	*****	*****	*****	*****
	Permit Average	Report	*****	Report	*****	*****	0.04	0.01	*****
	Permit Maximum	Report	9.0	Report	*****	Report	0.26	0.06	Report
UNITS =		MGD	SU	°F		mg/L	Lbs/day	mg/L	MGAL/MO
01	0.156		71.2						
02	0.140		70.8						
03	0.102		70.4						
04	0.123		69.4						
05	0.086	7.2	73.2		< 1.3				
06	0.040		65.8						
07	0.030		58.6						
08	0.035		60.3						
09	0.116		70.2						
10	0.122		71.6						
11	0.152		72.4						
12	0.165	7.4	75.9		< 1.3				
13	0.089		67.5						
14	0.055		59.1						
15	0.086		57.9						
16	0.039		67.4						
17	0.044		75.7						
18	0.105		72.6						
19	0.083	7.4	71.5		< 1.3				
20	0.054		74.6						
21	0.017		80.3						
22	0.079		82.9						
23	0.032		80.3						
24	0.037		81.8						
25	0.052		78.9						
26	0.123		72.2						
27	0.053	7.6	67.6		< 1.3				
28	0.072		67.9						
29	0.063		66.9						
30	0.064		66.8						
31	0.095		61.1						
MONTHLY AVERAGE	0.081		70.4		< 1.3	NA	NA		
HIGHEST VALUE	0.165	7.6	82.9		< 1.3	NA	NA	2.51	
LOWEST VALUE	0.017	7.2	57.9		< 1.3	NA	NA		
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED	0	0	0		0	0	0		

Highlighted Monthly Averages are LOQ based calculations. Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry (SIGNATURE OF CERTIFIED OPERATOR)	1/21/2017 DATE
Mark Henry 219.763.5869 PHONE NUMBER	WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)	1/21/2017 DATE
Joseph E. Hanning, Manager Environmental Control	Page 1 of 22





**Indiana Discharge Monitoring Report Form 30530**  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

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U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1287

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 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

I N 0 0 0 0 3 3 7  
 PERMIT NUMBER

0 0 3 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Flow, In Conduit	pH	Temperature	Oil & Grease	Chlorine, Total Residual	Flow, Total		
EFFLUENT PARAMETER NUMBER		Q50050	C00400	C00011	*****	C00552	Q50060	C50060	Q82220
SAMPLE TYPE	Permit Condition	Continuous	Grab	Continuous	*****	Grab	Grab	Grab	RCOTOT
	Monitored	Continuous	Grab	Continuous	*****	Grab			RCOTOT
FREQUENCY	Permit Condition	1/Week	1/Week	Daily	*****	1/Week	Daily	Daily	Monthly
	Monitored	Daily	1/Week	Daily	*****	1/Week			Monthly
EFFLUENT LIMITATIONS	Permit Minimum	*****	6.0	*****	*****	*****	*****	*****	*****
	Permit Average	Report	*****	Report	*****	*****	1.14	0.01	*****
	Permit Maximum	Report	9.0	Report	*****	Report	6.82	0.06	Report
UNITS =		MGD	SU	F	mg/L	Lbs/day	mg/L	MGAL/MO	
01	14.72		56.2						
02	14.63		57.3						
03	14.82		56.4						
04	14.95		56.9						
05	13.38	7.4	55.9		< 1.3				
06	13.97		51.1						
07	14.99		51.6						
08	14.92		52.1						
09	14.88		52.0						
10	14.98		51.3						
11	14.98		51.6						
12	15.11	7.6	50.6		< 1.3				
13	15.10		47.3						
14	14.95		46.7						
15	15.03		44.5						
16	14.89		44.3						
17	14.37		46.5						
18	13.85		45.3						
19	13.89	7.6	42.3		< 1.3				
20	13.88		42.6						
21	13.82		44.2						
22	13.92		45.1						
23	14.06		44.5						
24	12.32		40.9						
25	12.37		38.6						
26	12.60		40.3						
27	12.67	7.4	43.1		< 1.3				
28	14.17		46.4						
29	14.27		46.7						
30	14.22		45.1						
31	14.30		44.3						
MONTHLY AVERAGE	14.23		47.8		< 1.3	NA	NA		
HIGHEST VALUE	15.11	7.6	57.3		< 1.3	NA	NA	441.00	
LOWEST VALUE	12.32	7.4	38.6		< 1.3	NA	NA		
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED	0	0	0		0	0	0		

Highlighted Monthly Averages are LOQ based calculations. Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry  
 (SIGNATURE OF CERTIFIED OPERATOR)  
 Mark Henry  
 219.763.5869  
 PHONE NUMBER

Joseph E. Hanning  
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)  
 Joseph E. Hanning, Manager Environmental Control

1/21/2017  
 DATE  
 WW020376  
 CERTIFICATION NO.  
 1/21/2017  
 DATE  
 Page 2 of 22





Indiana Discharge Monitoring Report Form 30530  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

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 MS AE-1  
 Portage, IN 46368-1287

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 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

I N 0 0 0 0 3 3 7  
 PERMIT NUMBER

1 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Total Toxic Organics							
EFFLUENT PARAMETER NUMBER		Q78224	C78224						
SAMPLE TYPE	Permit Condition	Comp24	Comp24						
	Monitored								
FREQUENCY	Permit Condition	Monthly	Monthly						
	Monitored								
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****						
	Permit Average	Report	Report						
	Permit Maximum	Report	Report						
UNITS =		Lbs/day	mg/L						
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
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28									
29									
30									
31									
MONTHLY AVERAGE		N/A	N/A						
HIGHEST VALUE		N/A	N/A						
LOWEST VALUE		N/A	N/A						
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0	0	0	0	0	0	0

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry  
 (SIGNATURE OF CERTIFIED OPERATOR)  
 Mark Henry  
 219.763.5869  
 PHONE NUMBER  
 Joseph E. Hanning  
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)  
 Joseph E. Hanning, Manager Environmental Control

1/21/2017  
 DATE  
 WW020376  
 CERTIFICATION NO.  
 1/21/2017  
 DATE  
 Page 12 of 22





# Indiana Discharge Monitoring Report Form 30530 MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS

Revision Pending Approval - September 2003

FACILITY NAME AND ADDRESS:  
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 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

I N O O O O 3 3 7  
 PERMIT NUMBER

2 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Flow, In Conduit	pH	Solids, Total Suspended		Oil & Grease		
EFFLUENT PARAMETER NUMBER		Q50050	*****	C00400	Q00530	C00530	Q00552	C00552
SAMPLE TYPE	Permit Condition	TOTALZ	*****	Grab	Comp24	Comp24	3Grab24H	3Grab24H
	Monitored	TOTALZ	*****	Grab	Comp24	Comp24	3Grab24H	3Grab24H
FREQUENCY	Permit Condition	5/Week	*****	5/Week	5/Week	5/Week	5/Week	5/Week
	Monitored	Daily	*****	5/Week	5/Week	5/Week	5/Week	5/Week
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	Report	*****	*****	*****	*****
	Permit Average	Report	*****	*****	Report	Report	*****	Report
	Permit Maximum	Report	*****	Report	Report	Report	Report	Report
UNITS =		MGD	SU	Lbs/day	mg/L	Lbs/day	mg/L	
01	0.214	8.3	4.64	2.6	2.32	1.3		
02	0.187	8.2	2.95	1.9	2.03	1.3		
03	0.119							
04	0.024							
05	0.076	8.4	3.11	4.9	0.82	1.3		
06	0.176	8.6	2.79	1.9	1.91	1.3		
07	0.172	7.9	4.16	2.9	1.87	1.3		
08	0.176	8.3	3.38	2.3	1.91	1.3		
09	0.185	8.1	3.71	2.4	2.01	1.3		
10	0.11	8.2						
11	0.118	8.3	4.23	4.3	1.28	1.3		
12	0.012	8.4	0.4	4.0	0.13	1.3		
13	0.094		3.69	4.7	1.02	1.3		
14	0.167	8.3	6.41	4.6	1.81	1.3		
15	0.133	8.1	3.77	3.4	1.44	1.3		
16	0.087	8.3	2.25	3.1	0.94	1.3		
17	0.082	8.2	2.67	3.9	0.89	1.3		
18	0.088	8.4	3.45	4.7	0.95	1.3		
19	0.141	8.3	5.18	4.4	1.53	1.3		
20	0.102	8.4	3.75	4.4	1.11	1.3		
21	0.158	8.2	8.44	6.4	1.80	1.4		
22	0.132	8.2	3.97	3.6	1.58	1.4		
23	0.036							
24	0.021							
25	0.037							
26	0.134	8.2						
27	0.084							
28	0.087		6.61	9.1	0.94	1.3		
29	0.228	8.3	6.85	3.6	2.47	1.3		
30	0.234	8.4	6.64	3.4	2.54	1.3		
31	0.149	8.2	4.23	3.4	1.62	1.3		
MONTHLY AVERAGE	0.121		4	3.9	1.52	1.3		
HIGHEST VALUE	0.234	8.6	8	9.1	2.54	1.4		
LOWEST VALUE	0.012	7.9	0	1.9	0.13	1.3		
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED	0	0	0	0	0	0		

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry (SIGNATURE OF CERTIFIED OPERATOR) Mark Henry 219.763.5869 PHONE NUMBER	1/21/2017 DATE WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER) Joseph E. Hanning, Manager Environmental Control	1/21/2017 DATE Page 13 of 22





Indiana Discharge Monitoring Report Form 30530  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision: Pending Approval - September 2003

FACILITY NAME AND ADDRESS:

U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1287

PLEASE COMPLETE AND SUBMIT ONE COPY EACH MONTH.  
 THIS REPORT MUST BE POSTMARKED NO LATER THAN THE  
 28TH OF THE FOLLOWING MONTH.

Mail To: Indiana Dept. of Environmental Management  
 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

I N 0 0 0 0 3 3 7  
 PERMIT NUMBER

2 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Cyanide, Total		Fluoride, Total		Nickel, Total Recov.		Silver, Total Recov.				
EFFLUENT PARAMETER NUMBER		Q00720	C00720	Q00951	C00951	Q01074	C01074	Q01079	C01079			
SAMPLE TYPE	Permit Condition	Grab	Grab	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24			
	Monitored	Grab	Grab	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24			
FREQUENCY	Permit Condition	5/Week	5/Week	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly			
	Monitored	5/Week	5/Week	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly			
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****			
	Permit Average	Report	Report	Report	Report	Report	Report	Report	Report			
	Permit Maximum	Report	Report	Report	Report	Report	Report	Report	Report			
UNITS =		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L			
01	<	0.0036	<	0.0020								
02	<	0.0031	<	0.0020								
03												
04												
05	<	0.0013	<	0.0020	0.596	0.94	0.01	0.0081	<	0.00004	<	0.000070
06	<	0.0029	<	0.0020								
07		0.0034		0.0024								
08	<	0.0029	<	0.0020								
09	<	0.0031	<	0.0020								
10												
11	<	0.002	<	0.0020								
12	<	0.0002	<	0.0020								
13												
14	<	0.0028	<	0.0020								
15	<	0.0022	<	0.0020								
16	<	0.0015	<	0.0020								
17	<	0.0014	<	0.0020								
18	<	0.0015	<	0.0020								
19	<	0.0024	<	0.0020								
20	<	0.0017	<	0.0020								
21	<	0.0026	<	0.0020								
22	<	0.0022	<	0.0020								
23												
24												
25												
26												
27												
28												
29	<	0.0038	<	0.0020								
30		0.0107		0.0055								
31	<	0.0025	<	0.0020								
MONTHLY AVERAGE	<	0.003	<	0.0022	0.596	0.94	0.01	0.0081	<	0.00004	<	0.000070
HIGHEST VALUE		0.011		0.0055	0.596	0.94	0.01	0.0081	<	0.00004	<	0.000070
LOWEST VALUE	<	0.000	<	0.0020	0.596	0.94	0.01	0.0081	<	0.00004	<	0.000070
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0		0	0	0	0	0		0		0

--- Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment or knowing violations.

Mark Henry  
 (SIGNATURE OF CERTIFIED OPERATOR)  
 Mark Henry  
 219.763.5889  
 PHONE NUMBER  
 Joseph E. Hanning  
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)  
 Joseph E. Hanning, Manager Environmental Control

1/21/2017  
 DATE  
 WW020376  
 CERTIFICATION NO.  
 1/21/2017  
 DATE





**Indiana Discharge Monitoring Report Form 30530**  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision: Pending Approval - September 2003

FACILITY NAME AND ADDRESS:  
 U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1287

PLEASE COMPLETE AND SUBMIT ONE COPY EACH MONTH.  
 THIS REPORT MUST BE POSTMARKED NO LATER THAN THE  
 28TH OF THE FOLLOWING MONTH.  
 Mail To: Indiana Dept. of Environmental Management  
 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

1 | N | 0 | 0 | 0 | 0 | 3 | 3 | 7      2 | 0 | 4 | A      1 | 2 | 1 | 6  
 PERMIT NUMBER      OUTFALL NO.      MO.      YR.

EFFLUENT CHARACTERISTICS		Zinc, Total Recov.		Cadmium, Total Recov.		Lead, Total Recov.		Chromium, Total Recov.	
EFFLUENT PARAMETER NUMBER		Q01094	C01094	Q01113	C01113	Q01114	C01114	Q01118	C01118
SAMPLE TYPE	Permit Condition	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24
	Monitored	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24
FREQUENCY	Permit Condition	5/Week	5/Week	Monthly	Monthly	Monthly	Monthly	5/Week	5/Week
	Monitored	5/Week	5/Week	Monthly	Monthly	Monthly	Monthly	5/Week	5/Week
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****
	Permit Average	Report	Report	Report	Report	Report	Report	Report	Report
	Permit Maximum	Report	Report	Report	Report	Report	Report	Report	Report
UNITS =		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L
01		0.045	0.025					0.286	0.16
02		0.037	0.024					0.359	0.23
03									
04									
05		0.014	0.022	0.0002	0.00038	< 0.0001	< 0.00010	0.184	0.29
06		0.026	0.018					0.206	0.14
07		0.022	0.015					0.388	0.27
08		0.025	0.017					0.279	0.19
09		0.031	0.02					0.401	0.26
10									
11		0.014	0.014					0.207	0.21
12		0.003	0.034					0.028	0.28
13		0.015	0.019					0.180	0.23
14		0.033	0.024					0.334	0.24
15		0.017	0.015					0.244	0.22
16		0.020	0.028					0.225	0.31
17		0.018	0.027					0.130	0.19
18		0.012	0.017					0.125	0.17
19		0.016	0.014					0.271	0.23
20		0.015	0.018					0.272	0.32
21		0.025	0.019					0.264	0.20
22		0.019	0.017					0.463	0.42
23									
24									
25									
26									
27									
28		0.020	0.028					0.312	0.43
29		0.048	0.025					0.818	0.43
30		0.047	0.024					0.508	0.26
31		0.034	0.027					0.410	0.33
MONTHLY AVERAGE		0.024	0.0213	0.0002	0.00038	< 0.0001	< 0.00010	0.300	0.26
HIGHEST VALUE		0.048	0.034	0.0002	0.00038	< 0.0001	< 0.00010	0.818	0.43
LOWEST VALUE		0.003	0.014	0.0002	0.00038	< 0.0001	< 0.00010	0.028	0.14
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0	0	0	0	0	0	0

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry (SIGNATURE OF CERTIFIED OPERATOR) Mark Henry 219.763.5869 PHONE NUMBER	1/21/2017 DATE
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER) Joseph E. Hanning, Manager Environmental Control	WWQ20376 CERTIFICATION NO.
	1/21/2017 DATE





**Indiana Discharge Monitoring Report Form 30530**  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

FACILITY NAME AND ADDRESS:

U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1267

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Mail To: Indiana Dept. of Environmental Management  
 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

PERMIT NUMBER: 1 N 0 0 0 0 3 3 7

OUTFALL NO.: 2 0 4 A

MO. 1 2 1 6 YR.

EFFLUENT CHARACTERISTICS		Copper, Total Recov.		Chromium, Hexavalent		Tetrachloroethylene		Naphthalene	
EFFLUENT PARAMETER NUMBER		Q01119	C01119	Q01220	C01220	Q34475	C34475	Q34696	C34696
SAMPLE TYPE	Permit Condition	Comp24	Comp24	Grab	Grab	Grab	Grab	Grab	Grab
	Monitored	Comp24	Comp24	Grab	Grab	Grab	Grab	Grab	Grab
FREQUENCY	Permit Condition	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Monthly	Monthly
	Monitored	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Monthly	Monthly
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****
	Permit Average	Report	Report	Report	Report	*****	Report	*****	*****
	Permit Maximum	Report	Report	Report	Report	Report	Report	Report	Report
UNITS =		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L
01									
02									
03									
04									
05		0.01	0.0096 <	0.00003 <	0.000052 <	0.00017 <	0.00027 <	0.0001 <	0.00010
06									
07									
08									
09									
10									
11									
12									
13									
14									
15			<	0.00006 <	-0.000052				
16									
17									
18									
19									
20			<	0.00004 <	0.000052				
21									
22									
23									
24									
25									
26									
27									
28									
29			<	0.00010 <	0.000052				
30									
31									
MONTHLY AVERAGE		0.01	0.0096 <	0.00006 <	0.000052 <	0.0002 <	0.00027 <	0.0001 <	0.00010
HIGHEST VALUE		0.01	0.0096 <	0.00010 <	0.000052 <	0.0002 <	0.00027 <	0.0001 <	0.00010
LOWEST VALUE		0.01	0.0096 <	0.00003 <	0.000052 <	0.0002 <	0.00027 <	0.0001 <	0.00010
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0	0	0	0	0	0	0

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

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Mark Henry (SIGNATURE OF CERTIFIED OPERATOR)	1/21/2017 DATE
Mark Henry 219.763.5869 PHONE NUMBER	WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)	1/21/2017 DATE
Joseph E. Hanning, Manager Environmental Control	Page 16 of 22





**Indiana Discharge Monitoring Report Form 30530**  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

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 U.S. Steel Corporation Midwest Plant  
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 MS AE-1  
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 Indianapolis, Indiana 46206-6015

I N 0 0 0 0 3 3 7  
 PERMIT NUMBER

2 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Total Toxic Organics					
EFFLUENT PARAMETER NUMBER		Q78224	C78224				
SAMPLE TYPE	Permit Condition	Comp24	Comp24				
	Monitored						
FREQUENCY	Permit Condition	Monthly	Monthly				
	Monitored						
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****				
	Permit Average	*****	*****				
	Permit Maximum	Report	Report				
UNITS =		Lbs/day	mg/L				
01							
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
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22							
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25							
26							
27							
28							
29							
30							
31							
MONTHLY AVERAGE		N/A	N/A				
HIGHEST VALUE		N/A	N/A				
LOWEST VALUE		N/A	N/A				
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0				

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

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Mark Henry 219.763.5869 PHONE NUMBER	WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)	1/21/2017 DATE
Joseph E. Hanning, Manager Environmental Control	Page 17 of 22





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 Indianapolis, Indiana 46206-6015

I N 0 0 0 0 3 3 7  
 PERMIT NUMBER

3 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Flow, In Conduit		Solids, Total Suspended		Oil & Grease		Cyanide, Total	
EFFLUENT PARAMETER NUMBER		Q50050	*****	Q00530	C00530	Q00552	C00552	Q00720	C00720
SAMPLE TYPE	Permit Condition	TOTALZ	*****	Comp24	Comp24	3Grab24H	3Grab24H	Grab	Grab
	Monitored	TOTALZ	*****	Comp24	Comp24	3Grab24H	3Grab24H	Grab	Grab
FREQUENCY	Permit Condition	5/Week	*****	5/Week	5/Week	5/Week	5/Week	5/Week	5/Week
	Monitored	Daily	*****	5/Week	5/Week	5/Week	5/Week	5/Week	5/Week
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****
	Permit Average	Report	*****	1147	Report	*****	*****	3.41	Report
	Permit Maximum	Report	*****	2290	Report	765	Report	7.95	Report
UNITS =		MGD		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L
01	9.93			629.2	7.6 <	143 <	1.7 <	0.17 <	0.0020
02	9.34			254.9	3.3 <	101 <	1.3 <	0.16 <	0.0020
03	8.13								
04	7.78								
05	7.50			133.1	2.1 <	95.8 <	1.5 <	0.13 <	0.0020
06	8.32			349.2	5.0 <	97 <	1.4 <	0.14 <	0.0020
07	8.28			200.4	2.9 <	89.8 <	1.3 <	0.14 <	0.0020
08	8.65			165.9	2.3 <	93.8 <	1.3 <	0.14 <	0.0020
09	9.24			162.3	2.1 <	100 <	1.3 <	0.15 <	0.0020
10	8.53								
11	8.97			144.6	1.9 <	97.3 <	1.3 <	0.15 <	0.0020
12	7.38			141.9	2.3 <	80.1 <	1.3 <	0.12 <	0.0020
13	7.34			227.5	3.7 <	152 <	2.5		
14	8.08			145	2.2 <	87.6 <	1.3 <	0.13 <	0.0020
15	7.92			172.8	2.6 <	86 <	1.3 <	0.13 <	0.0020
16	7.99			404.4	6.1 <	88.8 <	1.3 <	0.13 <	0.0020
17	7.88			197.9	3.0 <	85.5 <	1.3 <	0.13 <	0.0020
18	7.35			100.4	1.6 <	79.7 <	1.3 <	0.12 <	0.0020
19	7.14			303.1	5.1 <	77.5 <	1.3 <	0.12 <	0.0020
20	7.70			238.4	3.7 <	83.6 <	1.3 <	0.13 <	0.0020
21	9.00			156.0	2.1	147	2.0 <	0.15 <	0.0020
22	8.25			166.6	2.4	182	2.6 <	0.14 <	0.0020
23	7.33								
24	6.45								
25	6.50								
26	6.93								
27	7.80								
28	8.57			282.6	4.0 <	92.9 <	1.3		
29	9.20			156.6	2.0 <	117 <	1.5 <	0.15 <	0.0020
30	9.15			133.2	1.7 <	99.3 <	1.3 <	0.16 <	0.0021
31	8.54			116.3	1.8 <	92.6 <	1.3 <	0.14 <	0.0020
MONTHLY AVERAGE	8.10			216.6	3.1 <	103 <	1.5 <	0.14 <	0.0020
HIGHEST VALUE	9.93			629.2	7.6	182	2.6 <	0.17 <	0.0021
LOWEST VALUE	6.45			100.4	1.6 <	77 <	1.3 <	0.12 <	0.0020
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED	0			0	0	0	0	0	0

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Mark Henry (SIGNATURE OF CERTIFIED OPERATOR)	1/21/2017 DATE
Mark Henry 219.763.5869 PHONE NUMBER	WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)	1/21/2017 DATE
Joseph E. Hanning, Manager Environmental Control	Page 18 of 22





**Indiana Discharge Monitoring Report Form 30530**  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

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1 N 0 0 0 0 3 3 7  
 PERMIT NUMBER

3 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Fluoride, Total		Nickel, Total Recov.		Silver, Total Recov.		Zinc, Total Recov.	
EFFLUENT PARAMETER NUMBER		Q00951	C00951	Q01074	C01074	Q01079	C01079	Q01094	C01094
SAMPLE TYPE	Permit Condition	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24
	Monitored	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24
FREQUENCY	Permit Condition	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	5/Week	5/Week
	Monitored	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	5/Week	5/Week
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****
	Permit Average	150	Report	Report	Report	Report	Report	10.0	Report
	Permit Maximum	400	Report	Report	Report	Report	Report	30.0	Report
UNITS =		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L
	01							1.34	0.016
	02							0.74	0.010
	03								
	04								
	05	12.98	0.21	0.135	0.0022 <	0.0044 <	0.000070	0.82	0.013
	06							1.18	0.017
	07							1.04	0.015
	08							1.09	0.015
	09							0.86	0.011
	10								
	11							1.12	0.015
	12							0.93	0.015
	13							0.92	0.015
	14							0.96	0.014
	15							0.73	0.011
	16							0.63	0.0094
	17							0.66	0.010
	18							0.68	0.011
	19							1.07	0.018
	20							1.09	0.017
	21							1.06	0.014
	22							0.64	0.0093
	23								
	24								
	25								
	26								
	27								
	28							0.94	0.013
	29							1.32	0.017
	30							1.16	0.015
	31							1.01	0.014
MONTHLY AVERAGE		13	0.21	0.135	0.0022 <	0.004 <	0.000070	0.96	0.014
HIGHEST VALUE		13	0.21	0.135	0.0022 <	0.004 <	0.000070	1.34	0.018
LOWEST VALUE		13	0.21	0.135	0.0022 <	0.004 <	0.000070	0.63	0.0093
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0	0	0	0	0	0	0

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry (SIGNATURE OF CERTIFIED OPERATOR)	1/21/2017 DATE
Mark Henry 219.763.5869 PHONE NUMBER	WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)	1/21/2017 DATE
Joseph E. Hanning, Manager Environmental Control	Page 19 of 22





**Indiana Discharge Monitoring Report Form 30530**  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

FACILITY NAME AND ADDRESS:  
 U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1287

PLEASE COMPLETE AND SUBMIT ONE COPY EACH MONTH.  
 THIS REPORT MUST BE POSTMARKED NO LATER THAN THE  
 26TH OF THE FOLLOWING MONTH.  
 Mail To: Indiana Dept. of Environmental Management  
 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

1 N 0 0 0 0 3 3 7  
 PERMIT NUMBER

3 0 4 A  
 OUTFALL NO.

1 2 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Cadmium, Total Recov.		Lead, Total Recov.		Chromium, Total Recov.		Copper, Total Recov.	
EFFLUENT PARAMETER NUMBER		Q01113	C01113	Q01114	C01114	Q01118	C01118	Q01119	C01119
SAMPLE TYPE	Permit Condition	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24
	Monitored	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24	Comp24
FREQUENCY	Permit Condition	Monthly	Monthly	Monthly	Monthly	5/Week	5/Week	Monthly	Monthly
	Monitored	Monthly	Monthly	Monthly	Monthly	5/Week	5/Week	Monthly	Monthly
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****
	Permit Average	Report	Report	Report	Report	10.0	Report	Report	Report
	Permit Maximum	Report	Report	Report	Report	30.0	Report	Report	Report
UNITS =		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L
01						1.83	0.0221		
02						1.12	0.0144		
03									
04									
05		0.029	0.000469	0.021	0.00034	0.7	0.0112	0.099	0.0016
06						0.65	0.0094		
07						1.2	0.0174		
08						0.98	0.0136		
09						1.84	0.0238		
10									
11						0.61	0.0081		
12						1.69	0.0274		
13						0.97	0.0158		
14						1.06	0.0157		
15						1.09	0.0165		
16						2.53	0.038		
17						0.91	0.0139		
18						0.42	0.0069		
19						1.03	0.0173		
20						0.82	0.0127		
21						0.92	0.0123		
22						1.07	0.0155		
23									
24									
25									
26									
27									
28						0.86	0.0121		
29						1.38	0.018		
30						1.25	0.0164		
31						1.02	0.0143		
MONTHLY AVERAGE		0.029	0.000469	0.021	0.00034	1.13	0.0162	0.099	0.0016
HIGHEST VALUE		0.029	0.000469	0.021	0.00034	2.53	0.038	0.099	0.0016
LOWEST VALUE		0.029	0.000469	0.021	0.00034	0.42	0.0069	0.099	0.0016
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0	0	0	0	0	0	0

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Henry  
 (SIGNATURE OF CERTIFIED OPERATOR)  
 Mark Henry  
 219.763.5869  
 PHONE NUMBER  
 Joseph E. Hanning  
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)  
 Joseph E. Hanning, Manager Environmental Control

1/21/2017  
 DATE  
 WW020376  
 CERTIFICATION NO.  
 1/21/2017  
 DATE  
 Page 20 of 22





Indiana Discharge Monitoring Report Form 30530  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

FACILITY NAME AND ADDRESS:  
 U.S. Steel Corporation Midwest Plant  
 6300 US HWY 12  
 MS AE-1  
 Portage, IN 46368-1287

PLEASE COMPLETE AND SUBMIT ONE COPY EACH MONTH.  
 THIS REPORT MUST BE POSTMARKED NO LATER THAN THE  
 28TH OF THE FOLLOWING MONTH.  
 Mail To: Indiana Dept. of Environmental Management  
 Office of Water Quality / Data Management Section  
 P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

1 | N | 0 | 0 | 0 | 0 | 3 | 3 | 7  
 PERMIT NUMBER

3 | 0 | 4 | A  
 OUTFALL NO.

1 | 2 | 1 | 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Chromium, Hexavalent		Tetrachloroethylene		Naphthalene		Total Toxic Organics						
EFFLUENT PARAMETER NUMBER		Q01220	C01220	Q34475	C34475	Q34696	C34696	Q78224	C78224					
SAMPLE TYPE	Permit Condition	Grab	Grab	Grab	Grab	Grab	Grab	Comp24	Comp24					
	Monitored	Grab	Grab	Grab	Grab	Grab	Grab							
FREQUENCY	Permit Condition	Weekly	Weekly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly					
	Monitored	Weekly	Weekly	Monthly	Monthly	Monthly	Monthly							
EFFLUENT LIMITATIONS	Permit Minimum	*****	*****	*****	*****	*****	*****	*****	*****					
	Permit Average	0.17	Report	*****	Report	*****	*****	*****	*****					
	Permit Maximum	0.51	Report	1.29	Report	0.86	Report	38.43	Report					
UNITS =		Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L	Lbs/day	mg/L					
01														
02														
03														
04														
05	<	0.003	<	0.000052	<	0.017	<	0.00027	<	0.01	<	0.00010		
06														
07														
08														
09														
10														
11														
12														
13														
14														
15	<	0.003	<	0.000052										
16														
17														
18														
19														
20	<	0.003	<	0.000052										
21														
22														
23														
24														
25														
26														
27														
28														
29	<	0.004	<	0.000052										
30														
31														
MONTHLY AVERAGE	<	0.004	<	0.000052	<	0.017	<	0.00027	<	0.01	<	0.00010	N/A	N/A
HIGHEST VALUE	<	0.004	<	0.000052	<	0.017	<	0.00027	<	0.01	<	0.00010	N/A	N/A
LOWEST VALUE	<	0.003	<	0.000052	<	0.017	<	0.00027	<	0.01	<	0.00010	N/A	N/A
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0		0		0		0		0		0		0

Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

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 Mark Henry  
 219.763.5869  
 PHONE NUMBER  
 Joseph E. Hanning  
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)  
 Joseph E. Hanning, Manager Environmental Control

1/21/2017  
 DATE  
 WW020376  
 CERTIFICATION NO.  
 1/21/2017  
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 Page 21 of 22





Indiana Discharge Monitoring Report Form 30530  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

Revision Pending Approval - September 2003

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 MS AE-1  
 Portage, IN 46368-1287

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 Indianapolis, Indiana 46206-6015

I N O O O O 3 3 7  
 PERMIT NUMBER

0 0 2 A  
 OUTFALL NO.

1 1 1 6  
 MO. YR.

EFFLUENT CHARACTERISTICS		Flow, In Conduit	pH	Temperature	Oil & Grease		Chlorine, Total Residual		Flow, Total
EFFLUENT PARAMETER NUMBER		Q50050	C00400	C00011	*****	C00552	Q50060	C50060	Q82220
SAMPLE TYPE	Permit Condition	Continuous	Grab	Continuous	*****	Grab	Grab	Grab	RCOTOT
	Monitored	Continuous	Grab	Continuous	*****	Grab	Grab	Grab	RCOTOT
FREQUENCY	Permit Condition	1/Week	1/Week	Daily	*****	1/Week	Daily	Daily	Monthly
	Monitored	Daily	1/Week	Daily	*****	1/Week	Daily	Daily	Monthly
EFFLUENT LIMITATIONS	Permit Minimum	*****	6.0	*****	*****	*****	*****	*****	*****
	Permit Average	Report	*****	Report	*****	*****	0.04	0.01	*****
	Permit Maximum	Report	9.0	Report	*****	Report	0.26	0.06	Report
UNITS =		MGD	SU	°F		mg/L	Lbs/day	mg/L	MGAL/MO
01	0.117		72.1			< 0.02	< 0.02		
02	0.680		71.0			< 0.11	< 0.02		
03	0.264		72.2			< 0.04	< 0.02		
04	0.187		72.0			< 0.03	< 0.02		
05	0.204		71.7						
06	0.197		72.0						
07	0.184	7.8	72.2		< 1.3				
08	0.041		66.3						
09	0.005		64.3						
10	0.005		63.2						
11	0.007		64.8						
12	0.012		61.5						
13	0.146		70.7						
14	0.176	7.7	71.8		< 1.3				
15	0.194		72.6						
16	0.193		73.1						
17	0.122		71.5						
18	0.344		70.8						
19	0.038		60.4						
20	0.006		57.9						
21	0.009	7.8	65.2		< 1.3				
22	0.068		69.8						
23	0.377		69.0						
24	0.135		69.0						
25	0.147		68.5						
26	0.074		63.7						
27	0.015		60.6						
28	0.286		62.6		< 1.3				
29	0.076		65.9						
30	0.126		70.5						
MONTHLY AVERAGE		0.148		67.9		< 1.3	0.00	0.00	
HIGHEST VALUE		0.680	7.8	73.1		< 1.3	< 0.11	< 0.02	4.44
LOWEST VALUE		0.005	7.7	57.9		< 1.3	< 0.02	< 0.02	
NO. OF TIMES WEEKLY OR DAILY EFFL. LIMITATIONS EXCEEDED		0	0	0		0	0	0	

Highlighted Monthly Averages are LOQ based calculations. Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

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Mark Henry (SIGNATURE OF CERTIFIED OPERATOR)	12/21/2016 DATE
Mark Henry 219.763.5869 PHONE NUMBER	WW020376 CERTIFICATION NO.
Joseph E. Hanning (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER)	12/21/2016 DATE
Joseph E. Hanning, Manager Environmental Control	Page 1 of 22



Indiana Discharge Monitoring Report Form 30530  
**MONTHLY MONITORING REPORT (MMR) FOR INDUSTRIAL DISCHARGE PERMITS**

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 P.O. Box 6015  
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N 0 0 0 0 3 3 7

PERMIT NUMBER

0 0 3 A

OUTFALL NO.

1 1 1 8

MO. YR.

EFFLUENT CHARACTERISTICS		Flow, In Conduit	pH	Temperature	Oil & Grease		Chlorine, Total Residual		Flow, Total
EFFLUENT PARAMETER NUMBER		Q50050	C00400	C00011	*****	C00552	Q50060	C50060	Q82220
SAMPLE TYPE	Permit Condition	Continuous	Grab	Continuous	*****	Grab	Grab	Grab	RCOTOT
	Monitored	Continuous	Grab	Continuous	*****	Grab	Grab	Grab	RCOTOT
FREQUENCY	Permit Condition	1/Week	1/Week	Daily	*****	1/Week	Daily	Daily	Monthly
	Monitored	Daily	1/Week	Daily	*****	1/Week	Daily	Daily	Monthly
EFFLUENT LIMITATIONS	Permit Minimum	*****	6.0	*****	*****	*****	*****	*****	*****
	Permit Average	Report	*****	Report	*****	*****	1.14	0.01	*****
	Permit Maximum	Report	9.0	Report	*****	Report	6.82	0.06	Report
UNITS =		MGD	SU	°F	mg/L	Lbs/day	mg/L	MGAL/MO	
01	13.86			64.1		< 2.31	< 0.02		
02	15.58			64.9		< 2.60	< 0.02		
03	14.64			66.0		< 2.44	< 0.02		
04	14.58			66.8		< 2.43	< 0.02		
05	14.45			67.5					
06	13.59			67.1					
07	12.65	7.6		66.3	< 1.3				
08	12.63			61.6					
09	14.18			65.2					
10	14.50			65.9					
11	14.35			65.6					
12	14.11			65.7					
13	14.57			64.3					
14	12.72	7.9		63.8	< 1.3				
15	13.24			62.9					
16	14.54			61.9					
17	14.59			61.1					
18	14.47			63.4					
19	14.56			63.9					
20	14.73			60.2					
21	13.38	7.5		59.7	< 1.3				
22	14.62			58.4					
23	14.87			59.1					
24	12.95			55.9					
25	12.97			55.2					
26	14.82			56.1					
27	14.87			56.3					
28	13.53			56.6	< 1.3				
29	13.30			57.6					
30	14.65			58.5					
MONTHLY AVERAGE	14.08			62.1	< 1.3	0.00	0.00		
HIGHEST VALUE	15.58	7.9		67.5	< 1.3	< 2.60	< 0.02	422.5	
LOWEST VALUE	12.63	7.5		55.2	< 1.3	< 2.31	< 0.02		
NO. OF TIMES WEEKLY OR DAILY EFFLUENT LIMITATIONS EXCEEDED	0	0	0	0	0	0	0		

Highlighted Monthly Averages are LOQ based calculations. Highlighted daily values are <LOQ & >= LOD, and are not quantifiable.

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 Joseph E. Hanning, Manager Environmental Control

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 Page 2 of 22