ARCADIS Design & Consultancy for natural and built assets

FMC

FMC Corporation
Middleport, New York

OPERABLE UNIT 6 REACH T1
INTERIM CORRECTIVE MEASURE
PRE-DESIGN REPORT

May 2017

,

OPERABLE UNIT 6 REACH T1 INTERIM CORRECTIVE MEASURE PRE-DESIGN REPORT

FMC Corporation

Middleport, New York

Prepared for:

FMC Corporation

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ACRONYMS AND ABBREVIATIONS

Agencies	NYSDEC and USEPA
ASTM	American Society of Testing Materials
AOC	Administrative Order on Consent
CMS	Corrective Measures Study
ELAP	Environmental Laboratory Approval Program
FEMA	Federal Emergency Management Agency
FMC	FMC Corporation
GPR	ground penetrating radar
ICM	Interim Corrective Measure
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NWP	Nationwide Permit
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	Operable Unit
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SPDES	State Pollutant Discharge Elimination System
SWPPP	stormwater pollution prevention plan
TCLP	Toxicity Characteristic Leaching Procedure
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

1 INTRODUCTION

FMC Corporation (FMC) owns and operates a pesticide formulating and packaging facility ("Facility") located in the Village of Middleport and the Town of Royalton, New York. Investigative, monitoring, and remedial activities have been implemented by FMC to address constituents in soil and other environmental media at the Facility and in off-site areas, under the terms and conditions of the Administrative Order on Consent (AOC), Docket No. II RCRA 90-3008(h)-0209, entered into by FMC, the United States Environmental Protection Agency (USEPA) and the New York State Department of Environmental Conservation (NYSDEC) (USEPA and NYSDEC are referred to herein jointly as "the Agencies"), effective July 2, 1991. The Facility and off-site areas are being addressed in a phased approach in which separate study areas and/or environmental media have been organized into eleven operable units (OUs).

On November 24, 2015, representatives from FMC, the Agencies, and the New York State Department of Health (NYSDOH) met to discuss the Agencies' October 21, 2015 letter inviting FMC to discuss implementation of an interim corrective measure (ICM), under Section VI.6(e) of the above-referenced AOC, for the off-site study area identified as Tributary One and Flood Plain South of Pearson/Stone Roads Study Area (Operable Unit 6 [OU6]). During the November 24th meeting, it was agreed that FMC would submit a proposed approach for an ICM of the upstream portion of OU6 between Francis Street and the Erie Canal – referred to as "Reach T1" (Figure 1). FMC's proposed approach for an ICM was submitted on January 22, 2016 and accepted by the Agencies on February 3, 2016.

The first task of the proposed approach was development and submittal of a Pre-Design Work Plan for review and approval by the Agencies. The identification, evaluation, design and/or selection of corrective measures, technologies, and alternatives must be based on site-specific information. Such information includes the character and structural nature of permanent site features, vertical and horizontal extent of constituents in soil and sediment, stream hydrology and morphology, regulatory requirements associated with disturbance to the stream and associated flood plain, and property-specific use requirements (i.e., businesses, railroad, Erie Canal, utilities, etc.). Accordingly, additional information and data were needed to evaluate possible ICMs for Reach T1. The *Operable Unit 6 (OU6) Reach T1 Interim Corrective Measure (ICM) Pre-Design Work Plan* (Pre-Design Work Plan; May 2016) identified the additional site-specific information and data to be collected. The Pre-Design Work Plan was approved by the Agencies by letter dated June 2, 2016.

The investigation activities described in the Pre-Design Work Plan (Tasks 1 through 5) were conducted from June through December 2016, and are described herein. Based on the investigation results, a proposed ICM Scope of Work is provided for review by the Agencies.

2 TRIBUTARY ONE REACH T1 OVERVIEW

Reach T1 consists of the first approximately 1,600 linear feet of Tributary One and its flood plain downstream of the Facility's historical (pre-1977) discharge outfall to Tributary One at the Francis Street bridge (Figure 2). Within Reach T1, the stream flows through residential, commercial, and public use properties, and beneath the Francis Street and Church Street bridges, an embankment/overpass for active railroad tracks (owned by Genesee Valley Transportation, Inc. and operated as Falls Road Railroad), and the Erie Canal aqueduct. The stream receives the following inputs: 1) stormwater runoff from these properties and other nearby properties and adjoining Village streets through both surface flow and culverts; 2) treated water from the Facility's current State Pollutant Discharge Elimination System (SPDES)-permitted outfall; and 3) overflow from the Erie Canal at the downstream end of Reach T1.

Within Reach T1 the stream ranges from approximately 13 to 23 feet in width and 6 to 12 inches in water depth at base flow. The depth of water varies based on season and weather conditions. The stream banks are highly variable, ranging from less than one foot in height in low lying areas to more than 10 feet in areas with concrete abutments (e.g., railroad overpass). The stream bottom varies from bedrock or concrete with no sediment, to a few inches of sand and gravel over bedrock. The estimated 100-year flood zone, identified by the Federal Emergency Management Agency [FEMA], is shown on Figure 2 for Reach T1.

As described in the *RCRA Facility Investigation (RFI) Report Volume V – Tributary One and Flood Plain South of Pearson/Stone Roads* (RFI Volume V; Final June 2010), soil and sediment in OU6 have been previously evaluated for constituents historically manufactured, formulated, handled, and/or used at the Facility. Arsenic was the constituent most frequently detected in OU6 stream sediment and flood plain soil above background concentrations.

The OU6 study area within Reach T1 includes 26 properties, as shown on Figure 2.

3 PRE-DESIGN INVESTIGATION

In accordance with the Pre-Design Work Plan, the following investigation-related tasks were completed:

- Task 1: Community Participation
- Task 2: Inspection and Survey
- Task 3: Stream Characterization
- Task 4: Soil Sampling and Analysis
- Task 5: Regulatory Review

3.1 Task 1: Community Participation

The following community participation activities were completed after the Agencies' approval of the Pre-Design Work Plan:

- A copy of the approved Pre-Design Work Plan was placed in the Royalton-Hartland Community Library in June 2016.
- By email dated June 15, 2016, FMC submitted draft documents prepared for use in the community outreach efforts for property owners associated with Reach T1. These documents consisted of a general study announcement letter to residents in the area of the planned activities; a letter to affected property owners requesting access permission for the field work; an Access Permission Form; and an Access and Sampling Information Sheet. The Agencies provided comments by email dated June 17, 2016. The documents were revised to address the Agencies' comments.
- On June 20, 2016, FMC mailed announcements to affected property owners, residents, neighbors and local officials regarding the additional studies planned for Reach T1. A copy of the mailed announcement was provided to the Agencies concurrent with the mailing list distribution. News media were also contacted and an announcement was posted on the FMC Plant website.
- Requests for access permission to perform the field work were mailed to property owners via certified mail on June 22, 2016. A copy of the access request letter to property owners (except to the NYS Canal Corporation) was provided to the Agencies along with the mailing list distribution. Access permission for property owned by the NYS Canal Corporation was obtained separately, using its work permit application process. Additional mailings were sent and/or telephone calls were made to follow-up with property owners, as needed. Access permission was obtained from owners of 20 of the 21 properties proposed for sampling or other field investigation. The owner of Property BC11 could not be contacted. The single proposed soil sample location on Property BC11 was moved to an adjacent property, with verbal approval of the NYSDEC.
- Property owners were notified a few days prior to the start of field work on their property, and as specified in the access agreements. FMC addressed property owner and resident questions or concerns regarding the work activities.

Following receipt of the Agencies' approval of this Pre-Design Report, the following community participation activities will be conducted:

- Place approved report in the document repositories;
- Prepare fact sheet to announce availability of the report and describe the study results and proposed ICM Scope of Work for review and approval by the Agencies;
- Provide fact sheet to study area property owners/residents; and
- Distribute fact sheet to the mailing list.

3.2 Task 2: Inspection and Survey

Existing information regarding the location and construction of buildings, retaining walls, storm drains, culverts, buried and overhead utilities, bridges, railroad and Erie Canal structures, and other permanent structures/features were obtained through inquiry of property owners, Digsafely New York, utility owners, and the Village of Middleport. Visual inspections of stream retaining walls and other structures/features were conducted to assess the feasibility of excavation adjacent to these structures/features. In select areas, ground penetrating radar (GPR) was used to identify the size and depth of buried utilities and potential obstructions (e.g., buried concrete foundations). GPR was also used to estimate the approximate depth to bedrock, which varies from approximately 1 to 5 feet deep in the banks and flood plain near the stream. The GPR report is included in Appendix A.

Figure 2 shows the extent of retaining walls (either poured concrete, masonry block, or stone) along the stream and the size and locations of stormwater pipes draining to the stream. Some of the walls support major infrastructure (i.e., public roads, railroad tracks, Erie Canal), while others retain landscaped yards at the stream bank. Representative photographs of Reach T1, including walls or structures adjoining the stream, are provided in Appendix A. Figure 2 also presents the results of an updated, detailed topographic survey of Reach T1, conducted by McIntosh & McIntosh, P.C., a New York State (NYS) licensed surveyor. The survey included stream location and extent, surface elevation to the nearest 0.1 foot, property boundaries, structures, ancillary features, utilities, vegetation, and sampling locations and elevations. This information will be used in the design of the proposed ICM.

3.3 Task 3: Stream Characterization

Stream characterization information was collected as described below to support the conceptual design of stream remediation and restoration.

- In August 2016, a bathymetric survey was performed at eight cross-stream transects (approximate 200-feet intervals) and at grade breaks along the stream thalweg. Along each transect, water depth, pebble count, and sediment thickness (as measured by probing) were recorded, and edge of water, ordinary high water mark, toe of bank, and top of bank were surveyed. Stream bed and bank geomorphic conditions were noted, including exposed bedrock outcrops, significant depositional and scoured features, and riffle and pool complexes (where present). Transect locations (T1.0 through T8.0) and results are summarized on Figure 3 and in Appendix A.
- Stream velocities were measured (using a hydraulic velocity meter) at each transect. In combination with stream width and depth, this information was used to calculate total volumetric flow. During the August 2016 survey, stream flow was low, with water present in only one third of the stream width in

most sections, and water movement negligible in places. The stream dimension, velocity, and total flow rates are provided in Table A.2 of Appendix A. Along with the topographic and bathymetric survey information, the velocities measured during this event can be used to estimate stream flow under varying water depth conditions. This data will be used to aid in the design of stream bypass options during remediation and establishment of stable restoration surfaces following remediation.

- Constructability reconnaissance was performed to identify and evaluate potential locations for construction equipment access to the stream, equipment and materials staging, sediment/soil dewatering and stabilization, and sedimentation and erosion controls.
- Four representative (distributed through Reach T1) sediment and stream bank soil samples were collected for laboratory analysis of the following geotechnical properties:

  - Bulk density (ASTM D2937)
  - Water content (ASTM D2216)
  - Specific gravity (ASTM D854)
  - Grain-size distribution (from Sieve Analysis, ASTM D422)
  - Grain-size distribution for finer fraction (from Hydrometer Analysis, ASTM D1140)

  The results are included in Appendix A. The results will be used to identify options to address special handling of sediment and saturated soil, as needed, during the design and construction phases of the ICM. In general, the stream sediment and stream bank soil samples collected from Reach T1 comprise primarily well-drained, coarser materials (i.e., sand and gravel), as summarized in Tables A.1 and A.3 of Appendix A.

3.4 Task 4: Soil Sampling and Analysis

To supplement existing soil arsenic analytical data from the RFI and further delineate the horizontal and vertical extent of arsenic in the stream banks and flood plain, additional soil samples were collected in July/August 2016. A total of 962 new soil samples were collected at 194 additional locations. At each location, samples were collected from the 0- to 3-inch and 3- to 6-inch depth intervals, and then on six-inch intervals to the proposed depth, which varied from 18 to 36 inches, depending on the location. The sampling locations are shown on Figures 4 through 6, divided into three sub-sections of Reach T1:

- Francis Street to the railroad overpass;
- Railroad overpass to Church Street; and
- Church Street to the Erie Canal overpass.

Proposed soil sampling locations were staked in the field and the horizontal and vertical coordinates of the locations were measured and recorded by the surveyor. As with past soil sampling in OU6, soil samples were collected and analyzed in accordance with the methods and procedures provided in the *Sampling and Analysis Plan to the Tributary One South of Pearson/Stone Roads and Culvert 105 North of the Canal RFI/CMS Work Plan* (October 2003). Nearly all of the samples were collected using hand tools. A track-mounted “Geoprobe” unit was used for eight borings with deeper samples. A physical description of the soil samples is provided in the borehole stratigraphy summary table provided in Appendix B.

The samples were submitted under chain-of-custody to Pace Analytical Services, a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory qualified to perform the required analyses. For quality control purposes, 51 field duplicate samples were collected, and 51 field samples were used as matrix spike / matrix spike duplicate pairs. In addition, the NYSDEC collected 17 split samples.

All of the prior and new arsenic results for primary field, duplicate, and NYSDEC split samples are provided in Appendix C, where a "combined" arsenic result is derived for each sample by averaging any duplicate and split sample results with the primary sample results. The data usability summary reports (DUSRs) for 2016 samples are provided in Appendix D. All of the 2016 data were found to be useable. The validated 2016 data are being submitted to the NYSDEC EQUIS database system. The laboratory data reports are available upon request.

The combined results are also presented in tables on Figures 4 through 6, and are color-coded based on soil arsenic concentration range, consistent with RFI Report Volume V. Each sampling location on the figure is also color-coded based on the maximum concentration at any depth interval at that location. The combined results along eight sampling transects perpendicular to the stream are also provided on cross-section view figures in Appendix E. In general, the higher concentrations are found within the stream, its banks, or flood plain soil closest to the banks, with concentrations generally decreasing with distance from the stream and depth below surface grade.

Based on past remedial activities conducted at the Facility and off-site study areas, soils that would be excavated during an ICM in Reach T1 are expected to be non-hazardous. For confirmatory purposes, three soil samples collected from locations previously sampled during the RFI (T4, 0-6"; T5E3, 0-6"; and T5E4, 12-18") and exhibiting high soil arsenic concentrations were re-sampled in 2016 and analyzed for arsenic by the Toxicity Characteristic Leaching Procedure (TCLP). The resulting estimated concentrations (0.422J, 0.474J and 0.0289J milligrams per liter [mg/L], respectively) were below the regulatory value of 5.0 mg/L and therefore confirm the non-hazardous classification of the soil. Additional waste characterization sampling and analysis may be conducted during the ICM design or construction phases, based on the requirements of the selected disposal facility.

3.5 Task 5: Regulatory Review

Remediation within the stream (i.e., below the ordinary high water mark) requires prior review and approval by the United States Army Corps of Engineers (USACE) and NYSDEC under Section 404 of the Federal Clean Water Act. Approval is anticipated to be through the USACE Nationwide Permit (NWP) program; specifically, *NWP 38 – Cleanup of Toxic and Hazardous Waste*, which allows for streamlined review and approval of remediation projects ordered by a government agency (i.e., NYSDEC/USEPA). The permit is obtained through submittal of a joint permit application and supporting detailed project information prescribed by USACE NWP regulations. NYSDEC is delegated authority to review and approve projects, through issuance of a Clean Water Act Section 401 Water Quality Certification permit.

It is anticipated that the joint permit application will be submitted for NYSDEC/USACE review at the 90 percent remedial design stage (to be prepared after the Agencies' acceptance of the proposed ICM Scope of Work). The permit application will also include review of potential project-related impacts on state- and

federal-listed threatened and endangered species, and state and federal archaeological and cultural resources and historic structures.

Activities within the flood plain will also be subject to NYSDEC requirements for flood plain disturbance and sedimentation and erosion control including, but not limited to, development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will be incorporated into the final remedial design, and will not require separate NYSDEC approval.

A SPDES permit may be required if there are wastewater discharges from dewatering operations, on-site wastewater treatment, or other project-related operations to the stream. However, as currently proposed, the ICM Scope of Work (Section 4), does not involve these activities.

Other anticipated local permits include:

- access agreement and occupancy permit from the NYS Canal Corporation for work on its property;
- access agreement and occupancy permit from Genesee Valley Transportation (d/b/a Falls Road Railroad) for work on railroad property;
- access agreements from other individual property owners;
- access agreements and or building permits from the Village of Middleport for any temporary structures or repair of existing structures, as needed; and
- permit/plan for transportation of excavated soil along public roads in the village.

4 PROPOSED ICM SCOPE OF WORK

FMC proposes an ICM for Reach T1, as follows:

- As shown on Figure 7, excavate/remove soil/sediment within the yellow-shaded area. The basis for this area was developed by considering stream morphology, site features (i.e., existing permanent structures), and areas needed to support construction activities and facilitate restoration of the stream banks.
- Removal depth will be to the top of bedrock, which is situated at or near the stream bed, and generally approximately 1 to 5 feet below ground surface at the top of banks within the proposed ICM area. Excavation depth may be limited in certain areas, as needed to maintain the structural integrity of adjacent structures, or based on additional sampling at depth;
- Safe excavation distances will be maintained from the canal overflow, railroad overpass, and street crossing structures;
- Where retaining walls along the stream are in good condition or need only limited repair, the walls will be maintained in place. Retaining walls in poor condition or constructed of loose stone/block will be removed along with adjoining bank soil and replaced with similar material;
- Excavation/removal within the stream will be accomplished by the use of jersey barriers (or equivalent) covered with a liner sheet material and placed in the middle of the stream to allow the uninterrupted flow of water around the work area, without the use of by-pass pumps;
- Saturated soil/sediment will be temporarily staged within or immediately adjacent to the removal area, allowed to dewater into the removal area, and will be mixed with drier soil, as needed, prior to off-site transport to an approved landfill; and
- Restoration will be to approximate existing conditions regarding topography and surface cover type, including retaining walls, rip rap, and vegetation.

Excavation and restoration will be conducted in sections and will begin in the upstream section (Francis Street to railroad overpass) and proceed downstream (north) to the canal overflow. Subject to weather, field conditions, property access, and permitting, it is anticipated that the work will be completed over two construction seasons.

Details of implementation will be provided in the detailed design, such as erosion and sedimentation control, construction staging and soil loading areas, stormwater runoff management, excavation sequencing, backfilling requirements, and restoration approach and monitoring.

5 SCHEDULE

FMC's detailed design of the ICM will be presented in an ICM Work Plan, which will be submitted to the Agencies for review and approval by August 14, 2017. Notwithstanding, to the extent the Agencies provide any substantive comments resulting in any revisions to the proposed ICM Scope of Work, the Agencies and FMC have agreed that FMC will have 90 days from the date such comments are finally resolved and approved to submit the ICM Work Plan. Concurrent with submittal of the ICM Work Plan, the Joint Permit Application will be submitted to the NYSDEC and USACE. The ICM Work Plan will describe the ICM work areas, community participation activities, contractor procurement, permitting requirements, construction tasks, procedures, design drawings, and construction sequencing and schedule.

After receipt of the Agencies' approval of the ICM Work Plan, FMC will begin the ICM activities. Completion of ICM activities will be in accordance with the schedule provided in the ICM Work Plan, and subject to property access, weather, field conditions, and receipt of the required NYSDEC/USACE permits.

6 REFERENCES

Arcadis. 2010. RCRA Facility Investigation Report Volume V – Tributary One and Flood Plain South of Pearson/Stone Roads. Final June.

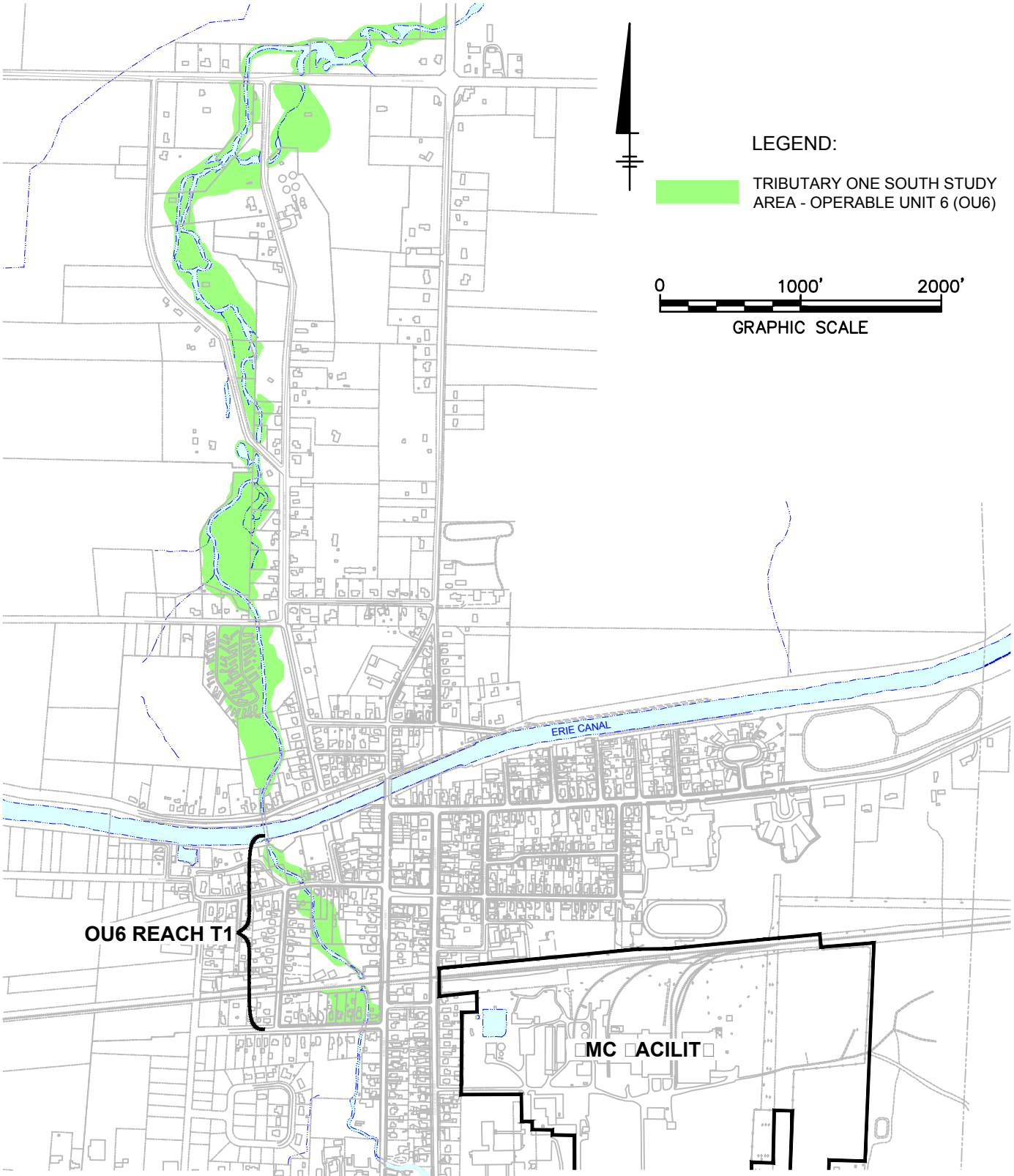
Arcadis. 2011. Corrective Measures Study Work Plan – Tributary One and Flood Plain South of Pearson/Stone Roads. Draft July.

Arcadis. 2016. Operable Unit 6 (OU6) Reach T1 Interim Corrective Measure (ICM) Pre-Design Work Plan. May.

Geomatrix Consultants and Conestoga-Rovers & Associates. 2003. Tributary One South of Pearson/Stone Roads and Culvert 105 North of the Canal RFI/CMS Work Plan. October.

USEPA, NYSDEC and FMC Corporation. 1991. Administrative Order on Consent [Docket No. II RCRA-90-3008(h)-0209] entered into by FMC, NYSDEC and USEPA, effective July 2, 1991.

FIGURES



FMC CORPORATION - MIDDLEPORT, NEW YORK

OU-6 REACH T1 ICM
PRE-DESIGN REPORT

LOCATION MAP

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FIGURE 1

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT
C:\ENVCAD\SYRACUSE\ACTIVE\B0037747.0003.00006\TRIB-1-SOUTH\37747B01.dwg LAYOUT: 1 SAVED: 1/18/2017 5:16 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: C-PA-ADOBEPDF PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 1/18/2017 5:24 PM BY: POSENAUER, LISA
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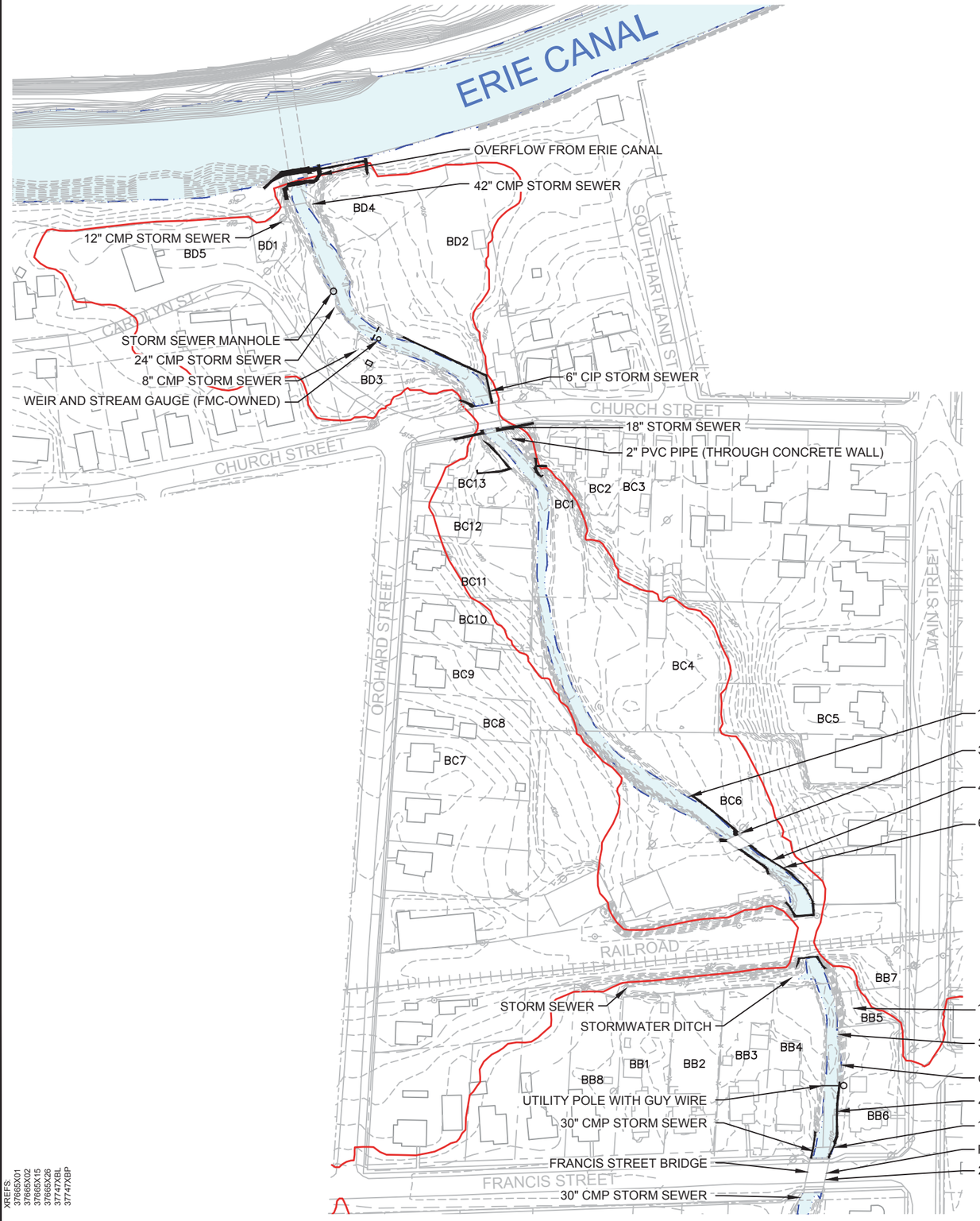

LEGEND:

- APPROXIMATE FEMA 100-YEAR FLOODPLAIN BOUNDARY
- BB6 PROPERTY ID
- RETAINING WALL

NOTES:

1. BASE MAP FROM OCTOBER 2016 SURVEY PROVIDED BY McINTOSH & McINTOSH, INC. SURVEYORS, WITH A HORIZONTAL DATUM OF NAVD83/2011 AND A VERTICAL DATUM OF NAVD88.
2. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010).
3. IDENTIFICATION OF DISCHARGES TO TRIBUTARY ONE BASED ON FIELD SURVEYS PERFORMED IN MARCH 2004, AUGUST 2016, AND VILLAGE OF MIDDLEPORT STORM SEWER DRAWINGS DATED MAY 7, 1975.
4. HDPE = HIGH DENSITY POLYETHYLENE
   CMP = CORRUGATED METAL PIPE
   PVC = POLYVINYL CHLORIDE
   CIP = CAST IRON PIPE

0 160' 320'

GRAPHIC SCALE

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

FEATURES OF OU6 REACH T1

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FIGURE 2

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
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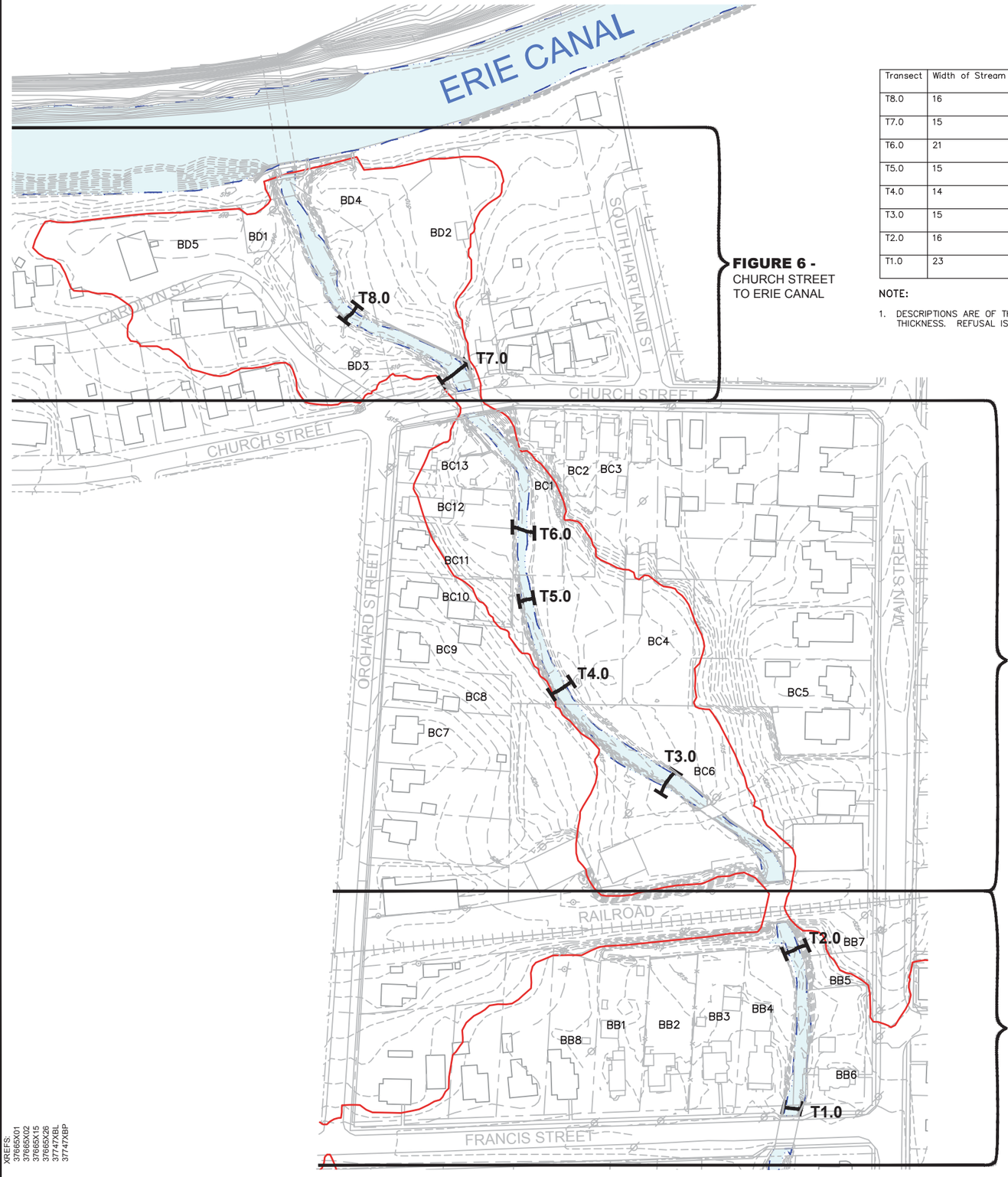

Transect	Width of Stream (ft)	Stream Sediment Thicknesses (inches) and Description (August 2016)		
		25% Width of Stream	50% Width of Stream	75% Width of Stream
T8.0	16	1.00 Clayey Silt and Sand, trace gravel	0.50 Clayey Silt and Sand, little gravel	1.00 Clayey Silt and Sand, little gravel
T7.0	15	0.00 Gravel over concrete stream bed	0.00 None – concrete stream bed	0.00 Gravel over concrete stream bed
T6.0	21	0.50 Sandy Gravel	1.00 Sandy Gravel	0.50 Sandy Gravel
T5.0	15	0.50 Fine Gravel, some cobbles, trace sand	0.50 Coarse Gravel, some cobbles, trace sand	1.00 Fine Gravel, some cobbles, trace sand
T4.0	14	0.00 Gravel, trace sand & cobbles over bedrock	0.50 Gravel, trace sand & cobbles	1.00 Fine Gravel, trace sand & cobbles
T3.0	15	0.00 Trace sand and gravel over bedrock	0.00 Trace sand over bedrock	0.00 Trace sand over bedrock
T2.0	16	0.00 Trace sand and gravel over bedrock	0.00 Trace sand and gravel over bedrock	0.50 Trace sand and gravel over bedrock
T1.0	23	0.50 Sandy Gravel, trace cobbles	1.00 Sandy Gravel, trace cobbles	1.00 Sandy Gravel, trace cobbles

NOTE:

1. DESCRIPTIONS ARE OF THE SEDIMENT ENCOUNTERED. REFUSAL OF HAND AUGERING EQUIPMENT WAS USED TO MEASURE THE SEDIMENT THICKNESS. REFUSAL IS ASSUMED TO BE ON BEDROCK UNLESS OTHERWISE NOTED.

FIGURE 6 -
CHURCH STREET
TO ERIE CANAL

FIGURE 5 -
RAILROAD TO
CHURCH STREET

FIGURE 4 -
FRANCIS STREET
TO RAILROAD

LEGEND:

- APPROXIMATE FEMA 100–YEAR FLOODPLAIN BOUNDARY
- BB6 PROPERTY ID
- T1.0 2016 SAMPLING TRANSECTS

NOTES:

1. BASE MAP FROM OCTOBER 2016 SURVEY PROVIDED BY McINTOSH & McINTOSH, INC. SURVEYORS, WITH A HORIZONTAL DATUM OF NAVD83/2011 AND A VERTICAL DATUM OF NAVD88.
2. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010).

0 160' 320'
GRAPHIC SCALE

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OU-6 REACH T1 ICM
PRE-DESIGN REPORT

REACH T1 STREAM CHARACTERIZATION

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FIGURE
3

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACT\B0037747.0003.00006\TRIB-1-SOUTH\37747G02-07.dwg LAYOUT: 3 SAVED: 1/18/2017 5:19 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 5:27 PM BY: POSENAUER, LISA
XREFS:
37665X01
37665X02
37665X15
37665X26
37747XBL
37747XBP

Arsenic Concentration (mg/kg)							
Sample ID	Matrix	0–3"	3–6"	6–12"	12–18"	18–24"	24–30"
T1E1	Soil	33.2	34.8	33.0	15.0	19.6	
T1.6E1	Soil	18.5	19.3	20.7	15.2	12.9	
T1.6W1	Soil	83.8	80.2	42.3	13.9	10.5	8.5
T1.6W2	Soil	21.1	24.8	19.4	4.7	5.2	
T1E2	Soil	50.2	64.5	43.8	9.8	8.0	
T1E3	Soil	26.2	87.3	33.2	8.8	5.5	
T1E4	Soil	50.3	51.5	5.4	2.1	1.5	
T1E5	Soil	24.5	26.1	34.3	5.4	5.9	7.6 (24–28)
T1W1	Soil	14.6	58.1	186	7.2	6.7	
T1W2	Soil	34.0	31.3	10.6	7.3	5.5	
T1W3	Soil	25.1	26.0	11.4	8.7	3.7	
T1W4	Soil	22.3	23.4	18.6			
T2E1	Soil	983.5	479	467			
T2E2	Soil	8.8	7.8	8.4	8.8	7.7	
T2E3	Soil	12.4	10.0	6.1	10.4	11.2	
T2S	Sediment	157					
T2W1	Soil	281	917	79.1	15.3	27.9	
T2W2	Soil	64.3	53.9	54.3	14.8	4.6	
T2W3	Soil	57.2	37.6	32.6	3.6	3.5	
T2W4	Soil	20.9	25.3	25.6	5.9	4.6	
T2W5	Soil	27.5	27.1	18.7	7.5	1.1	
T2W6	Soil	9.7	7.1	25.7	69.8		
T2W7	Soil	7.4					
T2W8	Soil	4.6					
T2W9	Soil	11.5					
T2W10	Soil	18.3	17.8	8.9	5.7	2.8	
T2W11	Soil	19.9	25.7	34.3	28.1	2.0	
T2W12	Soil	16.7	19.8	31.8	24.6	7.3	
T2W13	Soil	21.6	14.1	6.1	5.5	6.8	
T2W14	Soil	55.5	43.1	10.1	3.9	3.3	
T2W15	Soil	14.3	15.5	27.4	19.6	6.1	
T2.1E1	Soil	37.8	46.0	45.9	26.3	34.4	
T2.1W1	Soil	329	112	26.7	54.9	39.8	9.5
T2.1W2	Soil	78.4	34.6	13.2	10.4		
T2.1W3	Soil	7.3	7.5	6.5	5.8		
T2.1W4	Soil	79.6	27.2	3.9	2.7		

Arsenic Concentration (mg/kg)							
Sample ID	Matrix	0–3"	3–6"	6–12"	12–18"	18–24"	24–30"
BB1–1	Soil	18.9	24.8	15.0	4.7	9.4	
BB1–2	Soil	16.9	16.6	24.8	18.0	8.7	
BB1–3	Soil	9.6	7.6	6.0	2.9	2.4	
BB1–4	Soil	20.0	21.7	14.0			
BB1–5	Soil	15.6	17.8	9.8			
BB1–6	Soil	19.9	19.8	7.3			
BB1–7	Soil	9.8	11.7	13.2			
BB1–8	Soil	11.2	11.2	12.9	14.1		
BB1–9	Soil	11.3	12.2	10.1	4.8		
BB1–10	Soil	13.3	14.2	20.7	22.3		
BB1–11	Soil	14.7	20.6	17.9	9.8		
BB1–12	Soil	13.8	16.5	14.9	16.4	10.4	
BB1–13	Soil	13.4	12.9	12.7	12.1	8.2	
BB2–1	Soil	20.2	33.2	18.0	5.7	4.3	
BB2–2	Soil	6.2	8.0	5.2	7.1	22.4	
BB2–3	Soil	4.9	5.6	10.1	7.7	8.8	
BB2–4	Soil	18.1	54.2	52.7	54.2		
BB2–5	Soil	7.6	3.7	14.1	30.4		
BB2–6	Soil	4.6	4.7	5.1	6.5	4.5	
BB2–7	Soil	6.9	8.1	7.3	7.3	8.9	
BB3–1	Soil	4.9	9.8	12.8	8.3		
BB3–2	Soil	21.9	21.3	17.6	7.0		
BB3–3	Soil	3.3	11.8	3.6	17.6		
BB3–4	Soil	16.2	20.2	17.2	9.2	5.0	
BB4–1	Soil	2.5	0.8	2.5	2.4	2.6	
BB4–2	Soil	32.7	30.6	25.8	12.0		
BB4–3	Soil	18.0	8.1	13.8	6.2		
BB4–4	Soil	7.5	14.2	8.5	4.3		
BB4–5	Soil	16.7	15.0	9.3	7.6	7.5	
BB4–6	Soil	18.8	21.2	18.3	5.0	5.2	
BB4–7	Soil	29.1	27.4	16.3	9.1	7.0	
BB4–8	Soil	4.9	5.6	4.7	3.3	4.3	
BB4–9	Soil	31.5	36.6	18.8	14.7	9.7	

Arsenic Concentration (mg/kg)							
Sample ID	Matrix	0–3"	3–6"	6–12"	12–18"	18–24"	24–30"
BB6–1	Soil	25.1	31.1	37.7			
BB6–2	Soil	23.9	26.0	27.4			
BB6–3	Soil	33.2	41.7	38.3	14.4	7.9	
BB6–4	Soil	23.0	22.9	35.5			
BB6–5	Soil	28.9	33.3	23.8			
BB6–6	Soil	21.7	23.4	12.1			
BB6–7	Soil	18.0	19.6	18.3	13.6	8.3	
BB6–8	Soil	28.5	28.6	9.6	7.7		
BB6–9	Soil	23.4	18.3	8.1	3.8		
BB6–10	Soil	14.5	24.0	21.4	14.1	6.1	
BB6–11	Soil	12.0	28.0	28.6	18.5		
BB6–12	Soil	13.5	10.9	19.1	15.6		
BB6–13	Soil	23.5	24.5	22.9	21.0		
BB6–14	Soil	28.3	34.7	36.9	39.2		
BB6–15	Soil	19.7	32.0	26.6	22.8	10.8	
BB8–1	Soil	17.9	19.8	14.7	5.9	10.6	
BB8–2	Soil	8.3	15.8	11.4	5.3	6.4	
BB8–3	Soil	13.8	18.9	9.4	4.6	4.8	
BB8–4	Soil	13.8	10.9	7.2	2.9	2.3	
TSLSB1	Soil	28.1	31.8	24.6	8.5		
TSLSB2	Soil	4.3	4.4	11.3	6.7		
TSLSB3	Soil	20.6	17.2	9.0	3.5		
TSMSB1	Soil	25.1	35.8	15.9	4.1		
TSMSB2	Soil	31.3	26.6	7.6	4.2		
TSMSB3	Soil	17.8	18.4	15.4	4.3		
TSNSB1	Soil	28.8	27.3	13.9	7.3 (12–14)		
TSNSB2	Soil	5.0	8.7	8.6	2.8		
TSOSB1	Soil	10.6	12.5	8.8	8.0	8.4	
TSPSB1	Soil	12.3	16.6	9.0	12.5		
DOHSS15	Soil	74.0					
DOHSS16	Soil	18.0					
DOHSS17	Soil	73.0					
S8	Soil	59.1					
WSS18	Soil	28.5					
SD3	Sediment	134					
T3	Sediment	235					

NOTES:

1. SAMPLE DEPTHS ARE PRESENTED IN INCHES.
2. ARSENIC CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (MG/KG), EQUIVALENT TO PARTS–PER–MILLION (PPM).
3. DATA IS SHOWN WITHOUT QUALIFIERS AND AS AVERAGE OF ANY DUPLICATE/SPLIT SAMPLES.

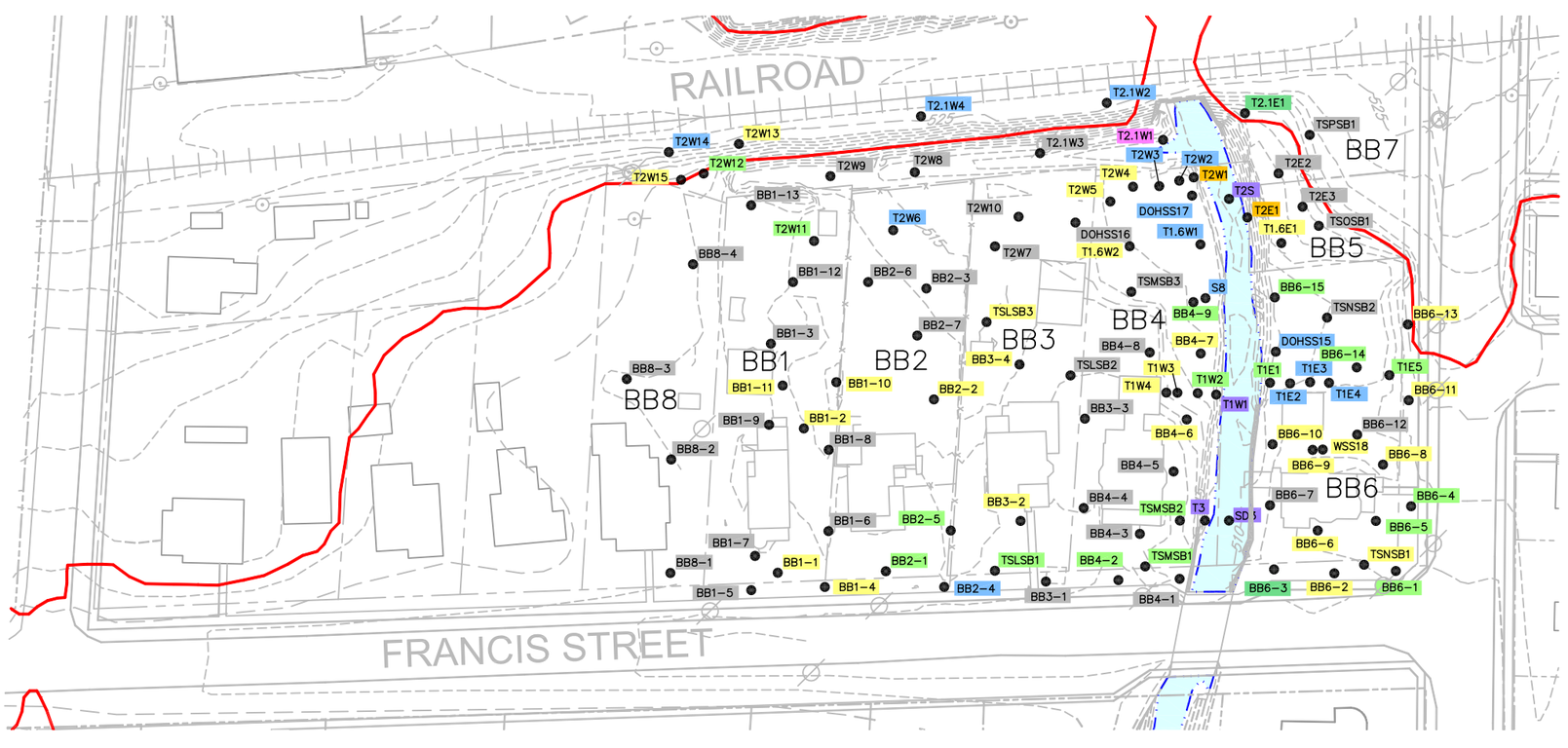
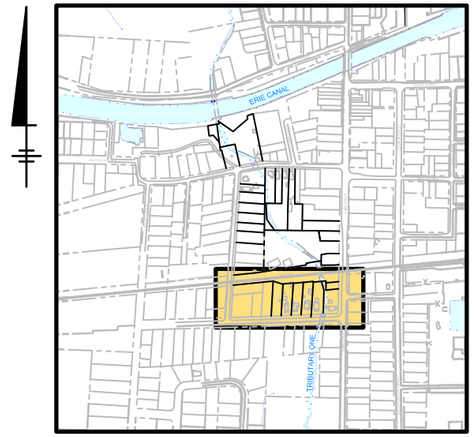


FIGURE INDEX:



LEGEND:

- T1E1 ● SAMPLING LOCATION
- APPROXIMATE FEMA 100–YEAR FLOODPLAIN BOUNDARY
- BB6 PROPERTY ID
- RETAINING WALL

ARSENIC SAMPLE CONCENTRATIONS:

- > 500 mg/kg
- 250 – 500 mg/kg
- 100 – 250 mg/kg
- 50 – 100 mg/kg
- 40 – 50 mg/kg
- 30 – 40 mg/kg
- 20 – 30 mg/kg
- < 20 mg/kg

NOTES:

1. BASE MAP FROM OCTOBER 2016 SURVEY PROVIDED BY McINTOSH & McINTOSH, INC. SURVEYORS, WITH A HORIZONTAL DATUM OF NAVD83/2011 AND A VERTICAL DATUM OF NAVD88.
2. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010).
3. COLOR LABEL AT EACH SAMPLING LOCATION ON FIGURE REPRESENTS THE MAXIMUM CONCENTRATION AT ANY SAMPLE DEPTH INTERVAL SHOWN IN TABLE.

0 80' 160'

GRAPHIC SCALE

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

SAMPLE LOCATIONS AND RESULTS - FRANCIS STREET TO RAILROAD

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\ACTIVE\B003774\0003\0003\000061\TRIB-1-SOUTH\37747G02-07.dwg LAYOUT: 4 SAVED: 5/26/2017 2:17 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 5/26/2017 2:17 PM BY: SARTORI, KATHERINE
XREFS:
37665X01
37665X02
37665X15
37665X26
37747XBL
37747XBP

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACT\B0037747.0003.00006\TRIB-1-SOUTH\37747G02-07.dwg LAYOUT: 5A SAVED: 3/7/2017 2:19 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/7/2017 2:38 PM BY: POSENAUER, LISA
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37665X15
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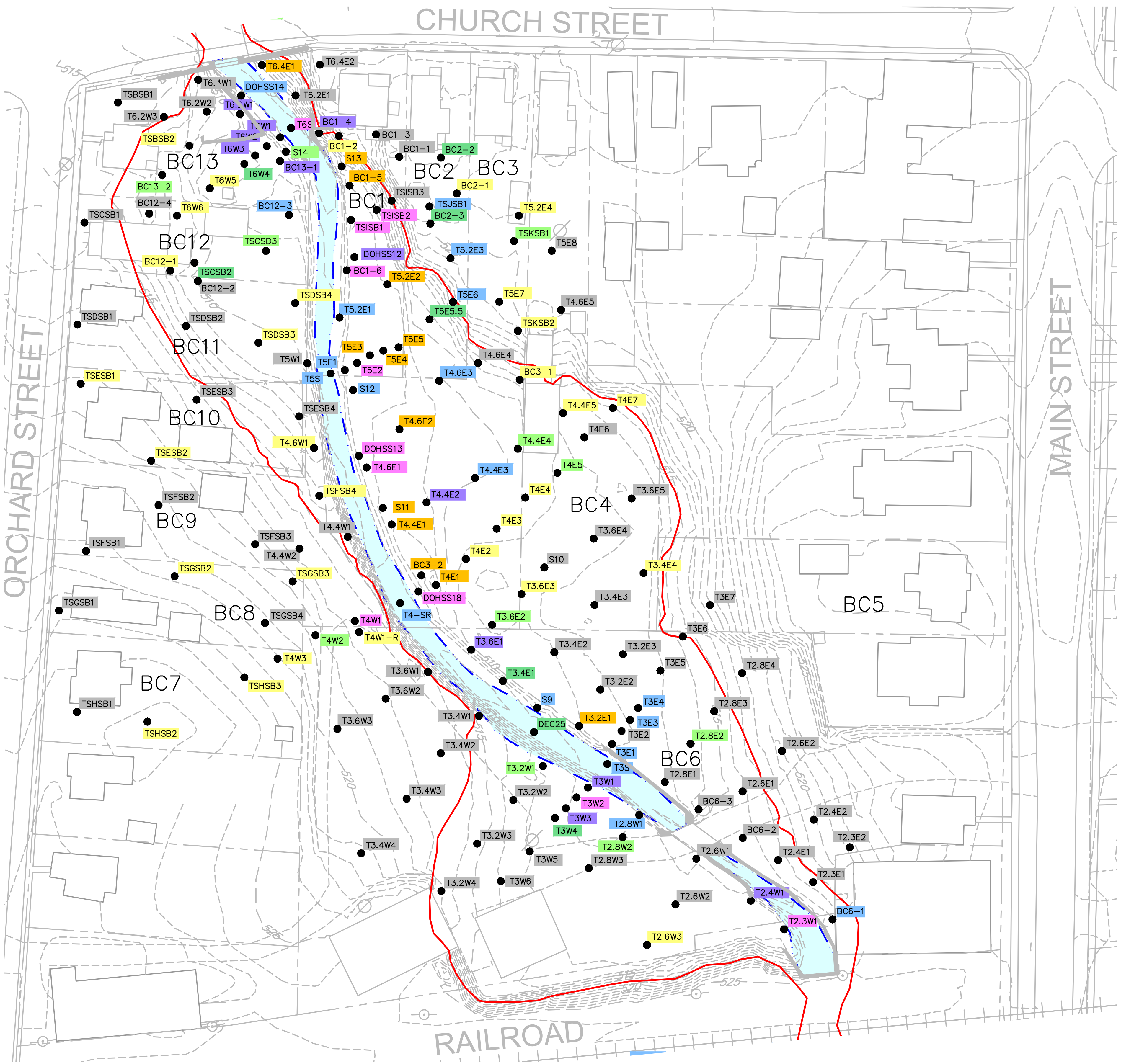
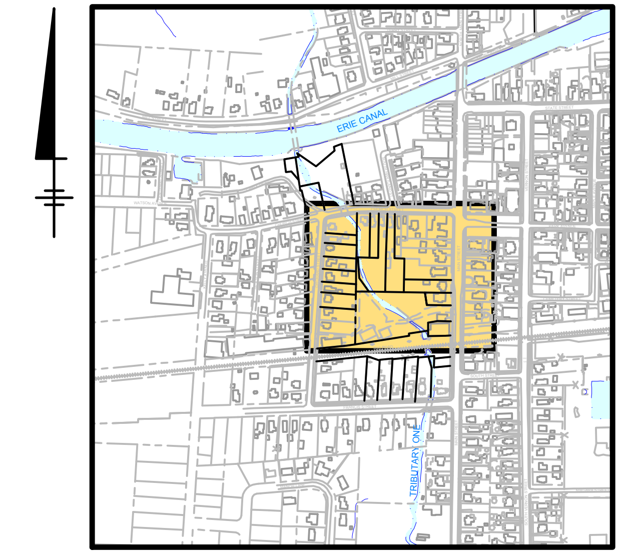


FIGURE INDEX:



LEGEND:

T3E1 ● SAMPLING LOCATION

APPROXIMATE FEMA 100–YEAR FLOODPLAIN BOUNDARY

BC6 PROPERTY ID

RETAINING WALL

ARSENIC SAMPLE CONCENTRATIONS:

> 500 mg/kg

250 – 500 mg/kg

100 – 250 mg/kg

50 – 100 mg/kg

40 – 50 mg/kg

30 – 40 mg/kg

20 – 30 mg/kg

< 20 mg/kg

NOTES:

1. BASE MAP FROM OCTOBER 2016 SURVEY PROVIDED BY McINTOSH & McINTOSH, INC. SURVEYORS, WITH A HORIZONTAL DATUM OF NAVD83/2011 AND A VERTICAL DATUM OF NAVD88.
2. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010).
3. COLOR LABEL AT EACH SAMPLING LOCATION ON FIGURE REPRESENTS THE MAXIMUM CONCENTRATION AT ANY SAMPLE DEPTH INTERVAL SHOWN IN TABLE.

0 80' 160'

GRAPHIC SCALE

FMC CORPORATION - MIDDLEPORT, NEW YORK

OU-6 REACH T1 ICM
PRE-DESIGN REPORT

SAMPLING LOCATIONS -
RAILROAD TO CHURCH STREET

ARCADIS Design & Consultancy for natural and built assets

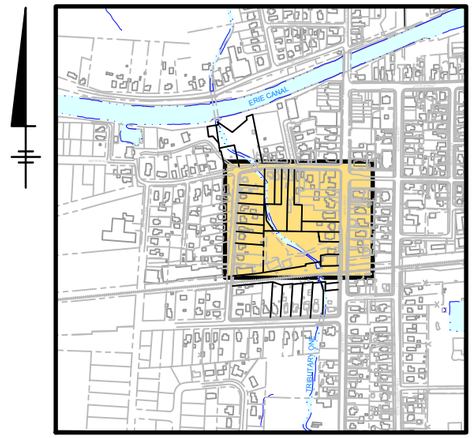
FIGURE

5A

Sample ID	Matrix	Arsenic Concentration (mg/kg) 0–3"	3–6"	6–12"	12–18"	18–24"	24–30"	30–36"	36–42"	42–48"	48–54"	54–60"
T2.3E1	Soil	11.3	6.5	5.9	6.8	5.4						
T2.3E2	Soil	7.5	10.2	8.8	6.9							
T2.3W1	Soil	233	260	299	230	105	251					
T2.4E1	Soil	4.8	4.7	4.8	5.8	19.7						
T2.4E2	Soil	3.4	2.8	2.8	2.8							
T2.4W1	Soil	121	120	68.2	45.9	7.9	28.2					
T2.6E1	Soil	18.4	3.6	3.3	3.9							
T2.6E2	Soil	2.9	2.8	3.0	2.9							
T2.6W1	Soil	10.9	18.8	18.0	15.4	12.1	11.2					
T2.6W2	Soil	15.6	7.3	5.9	3.0	2.1						
T2.6W3	Soil	16.0	21.2	5.6	4.1	3.7						
T2.8E1	Soil	15.4	2.9	8.3	4.3	4.5						
T2.8E2	Soil	20.7	12.0	36.0	5.4	3.4						
T2.8E3	Soil	7.6	6.7	1.9	1.5	1.7						
T2.8E4	Soil	5.8	4.1	2.2	0.9	1.4						
T2.8W1	Soil	7.3	13.5	74.3	54.2	47.4	18.7					
T2.8W2	Soil	5.2	6.8	37.7	26.2	18.8	30.7					
T2.8W3	Soil	6.1	5.4	5.7	10.8	8.7	8.1					
T3E1	Soil	40.7	31.3	53.1								
T3E2	Soil	5.0	4.3	7.7	9.6	2.1						
T3E3	Soil	53.5	5.6	4.9	6.6	4.4						
T3E4	Soil	12.9	50.1	37.2	37.3	6.9						
T3E5	Soil	17.0	15.7	7.1	6.9	9.9	5.4					
T3E6	Soil	9.8	12.3	12.0	4.5	3.1	2.7					
T3E7	Soil	7.5	9.9	16.1	15.6	14.7	9.7					
T3S	Sediment	75.1										
T3W1	Soil	63.1	62.6	23.5	234							
T3W2	Soil	21.4	80.1	293	478	92.0						
T3W3	Soil	11.6	8.2	54.2	87.7	102						
T3W4	Soil	5.6	5.0	15.7	46.2	47.9						
T3W5	Soil	3.6	10.9	17.1	7.9	3.3	2.8					
T3W6	Soil	3.8	3.6	1.6	2.8	2.1	2.5					
T3.2E1	Soil	262	618	522	746	3070						
T3.2E2	Soil	14.7	12.9	7.4	5.5	4.7						
T3.2E3	Soil	17.7	15.4	5.0	4.7	3.6						
T3.2W1	Soil	36.2	39.8	23.8	12.8	15.8	19.9					
T3.2W2	Soil	4.5	5.8	6.9	7.7	7.6	10.0					
T3.2W3	Soil	5.0	6.8	14.1	12.5	16.0						
T3.2W4	Soil	4.3	7.7	5.9	3.3	1.4						
T3.4E1	Soil	46.5	15.2	6.1	6.7							
T3.4E2	Soil	14.1	8.3	11.8	3.7	1.7						
T3.4E3	Soil	1.9	1.3	6.0	19.5	4.1						
T3.4E4	Soil	8.1	5.6	22.0	14.7							
T3.4W1	Soil	6.0	7.0	11.5	16.2	11.1						
T3.4W2	Soil	4.7	8.1	14.0	10.5	8.1						
T3.4W3	Soil	1.5	5.3	4.1	8.4							
T3.4W4	Soil	3.7	4.8	2.8	3.0							
T3.6E1	Soil	207	243	81.2	15.0	64.5	31.2	21.1				
T3.6E2	Soil	27.2	39.8	14.9	5.4	3.2	5.9	3.6				
T3.6E3	Soil	23.3	16.4	5.8	1.4	1.4						
T3.6E4	Soil	19.0	14.1	16.3	10.8							
T3.6E5	Soil	14.5	16.1	12.7	6.5							
T3.6W1	Soil	10.6	8.2	6.3	12.1	18.5	16.4					
T3.6W2	Soil	4.3	5.5	3.4	4.8							
T3.6W3	Soil		2.1	1.9	2.1							
T4E1	Soil	461	582	418	169	120 (18–21)					288	
T4E2	Soil	23.0	14.3	1.9	1.1	1.7	2.5					
T4E3	Soil	27.6	13.6	17.4	5.0	4.7	2.2					
T4E4	Soil	27.5	18.0	4.3	1.4	1.6 (18–20)						
T4E5	Soil	35.4	15.6	10.9	5.8	2.5	1.1 (24–26)					
T4E6	Soil	11.6	6.7	11.4	7.5							
T4E7	Soil	12.0	21.8	15.9	9.6	6.9	4.3					
T4–SR	Sediment	89.8										
T4W1	Soil	28.5	381	4.4	2.5	2.3	1.7					
T4W1–R	Soil	19.7	20.1	6.3	1.9	1.4	1.6					
T4W2	Soil	18.1	20.2	32.3	27.1	10.9	3.2					
T4W3	Soil	23.7	21.1	7.2	7.4	4.9	6.1					
T4.4E1	Soil	512	716	350	40.1	27.7	60.9	113	77.5	26.7		
T4.4E2	Soil	123	99.4	42.2	10.8	8.3	2.6	2.3	1.2	1.1	1.4	1.4
T4.4E3	Soil	46.8	52.5	19.5	9.6	2.9	1.7	2.9	2.8	0.5		
T4.4E4	Soil	32.9	28.5	11.1	5.9	5.8						
T4.4E5	Soil	23.6	12.4	22.8	19.5							
T4.4W1	Soil	10.8	14.7	13.3	9.1	5.8						
T4.4W2	Soil	16.3	14.9	1.4	2.1							
T4.6E1	Soil	238	207	147	76.8	279	206					
T4.6E2	Soil	318	397	685	458	25.2	10.2					
T4.6E3	Soil	78.5	74.5	54.9	44.1	33.6						
T4.6E4	Soil	12.3	12.2	13.9	12.7	9.5						
T4.6E5	Soil	8.4	14.2	12.2	4.6							
T4.6W1	Soil	20.1	16.8	9.8	1.8	1.1						
T5E1	Soil	63.4	84.2									
T5E2	Soil	57.1	81.2	311								
T5E3	Soil	384	914	349	116							
T5E4	Soil	387	665	838	1050							
T5E5	Soil	293	571	345	22.5	22.8	3.8					

Sample ID	Matrix	Arsenic Concentration (mg/kg) 0–3"	3–6"	6–12"	12–18"	18–24"	24–30"	30–36"	36–42"	42–48"	48–54"	54–60"
T5E5.5	Soil	37.4	37.9	42.3	32.7	11.7	16.0					
T5E6	Soil	45.5	57.7	41.8	4.8							
T5E7	Soil	20.2	24.2	10.1	3.3	3.4	3.7					
T5E8	Soil	4.8	3.8	7.8	5.2							
T5S	Sediment	83.3										
T6S	Sediment	251										
T5W1	Soil	16.1	9.5	14.3	15.8	8.2						
T5.2E1	Soil	67.0	54.5	86.0	16.1	9.7						
T5.2E2	Soil	319	520	516								
T5.2E3	Soil	27.8	31.4	51.7	29.0	45.3						
T5.2E4	Soil	21.3	22.8	12.4	17.2							
T6W1	Soil	76.6	119	238	88.2	144						
T6W2	Soil	149	174	199	23.3	19.7						
T6W3	Soil	89.3	116	149								
T6W4	Soil	25.5	39.4	41.6	5.6	5.4						
T6W5	Soil	23.6	11.9	21.3	4.3	8.4	6.4					
T6W6	Soil	12.9	15.5	21.5	4.4	2.9	3.1 (24–26)					
T6.2E1	Soil	10.0	11.0	7.8	8.3	6.9						
T6.2W1	Soil	124	89.4	182	125	70.0	55.8					
T6.2W2	Soil	16.4	15.3	12.1	4.1	3.4	3.2					
T6.2W3	Soil	12.2	15.6	10.7	6.6	4.3						
T6.4E1	Soil	291	507.5	527	70.1	6.3						
T6.4E2	Soil	10.0	12.5	8.8	7.2	4.3						
T6.4W1	Soil	18.3	17.9	12.1	4.0	4.6						
BC1–1	Soil	12.9	16.5	20.0	8.5	3.7	3.6	3.0				
BC1–2	Soil	7.2	7.0	11.2	9.9	21.7						
BC1–3	Soil	17.4	10.8	9.3	11.1	18.2						
BC1–4	Soil	8.7	20.3	23.3	57.6	125						
BC1–5	Soil	89.9	62.9	311	599	733	432	351				
BC1–6	Soil	57.7	107	136	307	283	52.2	206				
BC2–1	Soil	21.5	22.9	17.1	12.1	5.4						
BC2–2	Soil	24.8	28.1	30.4	48.1	45.1						
BC2–3	Soil	43.6	31.1	21.2	9.5	4.1	4.6	11.8				
BC3–1	Soil	22.1	21.1	17.0	9.2	5.5						
BC3–2	Soil	1040	793	878.5	756	439	321	107	24.5	25.7	63.0	
BC6–1	Soil	9.1	44.5	62.1	59.5	23.9						
BC6–2	Soil	4.7	17.1	8.9	7.9	9.1						
BC6–3	Soil	3.8	3.6	4.6	3.0	3.3						
BC12–1	Soil	16.2	26.3	22.0	11.7	8.9	7.3					
BC12–2	Soil	15.1	18.0	18.7	10.5	6.8	5.3					
BC12–3	Soil	47.2	76.8	39.2	30.1	18.2	9.5					
BC12–4	Soil	4.7	3.8	3.2	16.0							
BC13–1	Soil	71.4	65.6	130	100	117	60.1					
BC13–2	Soil	15.1	13.0	32.6	17.7							
TSBSB1	Soil	10.0	15.0	11.4	3.9							
TSBSB2	Soil	11.7	13.2	24.7	13.9							
TSCSB1	Soil	8.8	8.9	11.2	6.4							
TSCSB2	Soil	24.7	48.4	48.4	31.2	20.7	11.1	9.1				
TSCSB3	Soil	35.6	32.5	19.9	7.4							
TSDSB1	Soil	4.6	12.3	12.6	4.5							
TSDSB2	Soil	5.2	5.3	4.1	1.9							
TSDSB3	Soil	16.6	21.3	15.0	5.2							
TSDSB4	Soil	21.2	22.8	14.2	6.5							
TSESB1	Soil	15.5	20.7	7.5	2.7							
TSESB2	Soil	17.5	21.9	9.7	3.9							
TSESB3	Soil	11.9	12.7	11.2	4.5							
TSESB4	Soil	10.4	10.2	7.7	3.8							
TSFSB1	Soil	13.1	13.6	6.3	4.0							
TSFSB2	Soil	16.1	17.4	8.8	6.4							
TSFSB3	Soil	16.2	17.1	11.6	2.9							
TSFSB4	Soil	21.2	16.8	4.1								
TSGSB1	Soil	16.6	17.6	9.1	7.1							
TSGSB2	Soil	26.3	26.0	16.6	7.1							
TSGSB3	Soil	20.4	19.5	6.2	3.2							
TSGSB4	Soil	2.4	2.2	2.5	2.8							
TSHSB1	Soil	10.1	13.8	8.7	6.3							
TSHSB2	Soil	10.5	22.8	20.2	3.4							
TSHSB3	Soil	21.1	22.7	16.1	3.7							
TSISB1	Soil	61.8	157	249	280							
TSISB2	Soil	141	282	160	62.5	152	47.9					
TSISB3	Soil	15.2	16.7	14.8								
TSJSB1	Soil	53.8	51.6	11.4	4.3							
TSKSB1	Soil	29.8	32.4	19.5	8.8							
TSKSB2	Soil	16.3	25.1	9.9	3.4							
DEC–25	Sediment	45.6 (0–6)										
DOHSS12	Soil	180										
DOHSS13	Soil	380										
DOHSS14	Soil	66.0										
DOHSS18	Soil	260										
S9	Soil	88.0										
S10	Soil	ND										
S11	Soil	562										
S12	Soil	51.1										
S13 (1990)	Soil	675										
S13 (1993)	Soil	579			592							
S14	Soil	35.3										

FIGURE INDEX:



ARSENIC SAMPLE CONCENTRATIONS:

- > 500 mg/kg
- 250 – 500 mg/kg
- 100 – 250 mg/kg
- 50 – 100 mg/kg
- 40 – 50 mg/kg
- 30 – 40 mg/kg
- 20 – 30 mg/kg
- < 20 mg/kg

NOTES:

1. SAMPLE DEPTHS ARE PRESENTED IN INCHES.
2. ND = NOT DETECTED.
3. ARSENIC CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (MG/KG), EQUIVALENT TO PARTS–PER–MILLION (PPM).
4. DATA IS SHOWN WITHOUT QUALIFIERS AND AS AVERAGE OF ANY DUPLICATE/SPLIT SAMPLES.

0 80' 160'

GRAPHIC SCALE

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

SAMPLING RESULTS - RAILROAD TO CHURCH STREET

ARCADIS Design & Consultancy for natural and built assets

FIGURE **5B**

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACTIB003747.0003.00006\TRIB-1-SOUTH\37747G02-07.dwg LAYOUT: 5B SAVED: 3/7/2017 2:19 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 3/7/2017 2:46 PM BY: POSENAUER, LISA
XREFS:
37665X01
37665X02
37665X15
37665X26
37747XBL
37747XBP

Arsenic Concentration (mg/kg)							
Sample ID	Matrix	0–3"	3–6"	6–12"	12–18"	18–24"	24–30"
T6.6E1	Soil	38.6	39.4	34.1	24.9	46.7	78.7
T6.6E2	Soil	35.8	41.9	49.3	41.2	36.1	
T6.6W1	Soil	18.3	20.9	32.0	50.3	14.5	
T6.8E1	Soil	296	369	372	192	85.4	176
T6.8E2	Soil	240	423	1050	144.5	22.0	99.5
T6.8E3	Soil	11.4	11.6	4.9	3.4	0.0	
T6.8W1	Soil	27.5	24.1	17.3	21.3	36.3	46.9
T6.8W2	Soil	49.6	49.2	46.8	26.2	21.3	0.0
T7E1	Soil	76.7	95.4	56.3	110	175	
T7E2	Soil	194	289	49.8	124	5.1	
T7E3	Soil	149	156	125	106	35.6	
T7E4	Soil	132	158	54.5	9.0	1.7	
T7E5	Soil	19.8	16.8	7.1	6.8	4.8	5.2
T7E6	Soil	20.5	17.0	9.9	4.6	4.2	1.3
T7E7	Soil	2.2	23.1	5.2	7.5	5.1	2.5
T7E8	Soil	28.4	25.1	5.3	3.0	2.6	3.6
T7E9	Soil	13.5	11.0	6.3	4.1		
T7S	Sediment	83.4					
T7W1	Soil	30.5	34.6	17.1	80.3	30.1	
T7W2	Soil	35.6	14.1	25.8	118	63.7	
T7W3	Soil	45.6	40.5	33.3	9.3	48.1	
T7W4	Soil	22.2	32.9	32.7	10.8		
T7W4–R	Soil	16.1	17.3	20.2	24.1	19.0	18.1 (24–29)
T7W5	Soil	110	13.5	14.1	15.2	7.0	
T7.2E1	Soil	123	131	153	145	88.5	
T7.2E2	Soil	38.8	42.6	37.7	16.9	15.4	6.2
T7.2E3	Soil	24.8	21.9	16.0	11.0		
T7.2E4	Soil	14.5	14.4	6.1	4.3		
T7.2E5	Soil	15.2	13.0	4.9	4.9		

Arsenic Concentration (mg/kg)							
Sample ID	Matrix	0–3"	3–6"	6–12"	12–18"	18–24"	24–30"
T7.2W1	Soil	46.7	29.6	30.1	51.7	156	645
T7.2W2	Soil	20.4	22.9	26.4	27.9	35.0	50.5
T7.2W3	Soil	35.3	53.5	45.9	54.5	72.0	133
T7.4E1	Soil	35.8	17.9	43.9	77.6	207	
T7.4E2	Soil	115	94.3	74.7	23.1	21.9	
T7.4W1	Soil	77.2	82.3	266	297	169	118
T7.4W2	Soil	4.2	4.8	6.8	26.6	8.3	
T7.4W3	Soil	11.0	8.9	21.2	216	123	
T7.6E1	Soil	492	1240	1240	730	744	
T7.6E2	Soil	66.0	31.5	10.1	2.5	2.2	
T7.6E3	Soil	14.0	15.6	16.6	6.1	0.0	
T7.6E4	Soil	7.9	6.3	2.9	3.8	0.0	
T7.6W1	Soil	12.6	10.6	9.0	9.4	11.9	20.2
T7.6W2	Soil	8.6	5.9	6.6	6.5	16.4	
T8E1	Soil	105	134	7.4	4.0	4.2	
T8E2	Soil		15.7	5.1	5.1		
T8E3	Soil	229	95.2	11.1	4.1	4.0	
T8E4	Soil	58.8	6.1	4.7	3.1		
T8E5	Soil	8.7	5.1	5.2	3.5	2.1	4.6
T8E6	Soil	9.8	7.2	4.5	3.0	4.7	6.2
T8E7	Soil	11.2	12.0	11.4	3.2	2.8	3.2
T8E8	Soil	13.0	13.7	9.9	5.1	4.2	2.3
T8S	Sediment	95.8					
T8W1	Soil	15.7	12.1	11.0	5.8	490	
T8W1–R	Soil	16.1	16.9	17.5	15.9	18.0	22.5
T8W2	Soil	10.9	15.8	12.6	10.3	7.9	
T8W2–R	Soil	10.8	11.7	9.5	17.5	18.9	8.7
T8W3	Soil	22.8	25.6	21.3	10.5		
T8W4	Soil	26.1	27.3	22.1	ND	8.2	
T8W5	Soil	17.3	21.0	96.3	23.1	9.4	

Arsenic Concentration (mg/kg)							
Sample ID	Matrix	0–3"	3–6"	6–12"	12–18"	18–24"	24–30"
T8.2E1	Soil	24.5	27.6	26.4	19.0	8.1	
T8.2E2	Soil	29.0	38.0	19.5	12.3		
T8.2E3	Soil	38.7	31.6	3.9	2.4		
T8.2W1	Soil	19.2	7.5	10.4	9.3	6.1	10.6
T8.2W2	Soil	7.7	9.3	15.6	16.6	5.5	
T8.4E1	Soil	15.8	20.9	11.8	5.6	5.7	
T8.4E2	Soil	21.9	17.9	13.3	8.2		
T8.4E3	Soil	16.0	16.1	10.3	6.9		
T8.4W1	Soil	5.9	4.6	5.1	7.0	8.1	6.2
T8.4W2	Soil	2.5	3.1	3.8	1.5	0.5	
T8.6E1	Soil	36.8	163	52.2	24.2	22.1	
T8.6E2	Soil	13.9	10.5	7.0	3.1		
T8.6W1	Soil	54.0	16.7	17.9	8.6	3.8	
BD2–2	Soil	22.8	35.1	29.5	9.8	5.9	
BD2–3	Soil	17.1	12.0	7.6	5.4	2.9	
BD2–4	Soil	20.7	23.0	9.0	11.1		
BD2–5	Soil	16.9	14.1	15.5	12.1	19.4	15.9
BD2–6	Soil	9.0	8.6	9.2	10.8	12.1	19.6
TSASB1	Soil	10.3	13.8	8.9	3.0		
TSASB2	Soil	28.3	19.0	9.5	4.2		
TSASB3	Soil	71.3	66.8	60.5	20.1		
TSASB4	Soil	14.0	14.8	15.5	3.4		
TSASB5	Soil	17.5	21.1	10.1	3.9		
DOHSS11	Soil	300					
S15	Soil	9.4					
SD4	Sediment	333					
T4	Sediment	636		170	14.1		5.1

NOTES:

1. SAMPLE DEPTHS ARE PRESENTED IN INCHES.
2. ND = NOT DETECTED.
3. ARSENIC CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (MG/KG), EQUIVALENT TO PARTS-PER-MILLION (PPM).
4. DATA IS SHOWN WITHOUT QUALIFIERS AND AS AVERAGE OF ANY DUPLCATE/SPLIT SAMPLES.

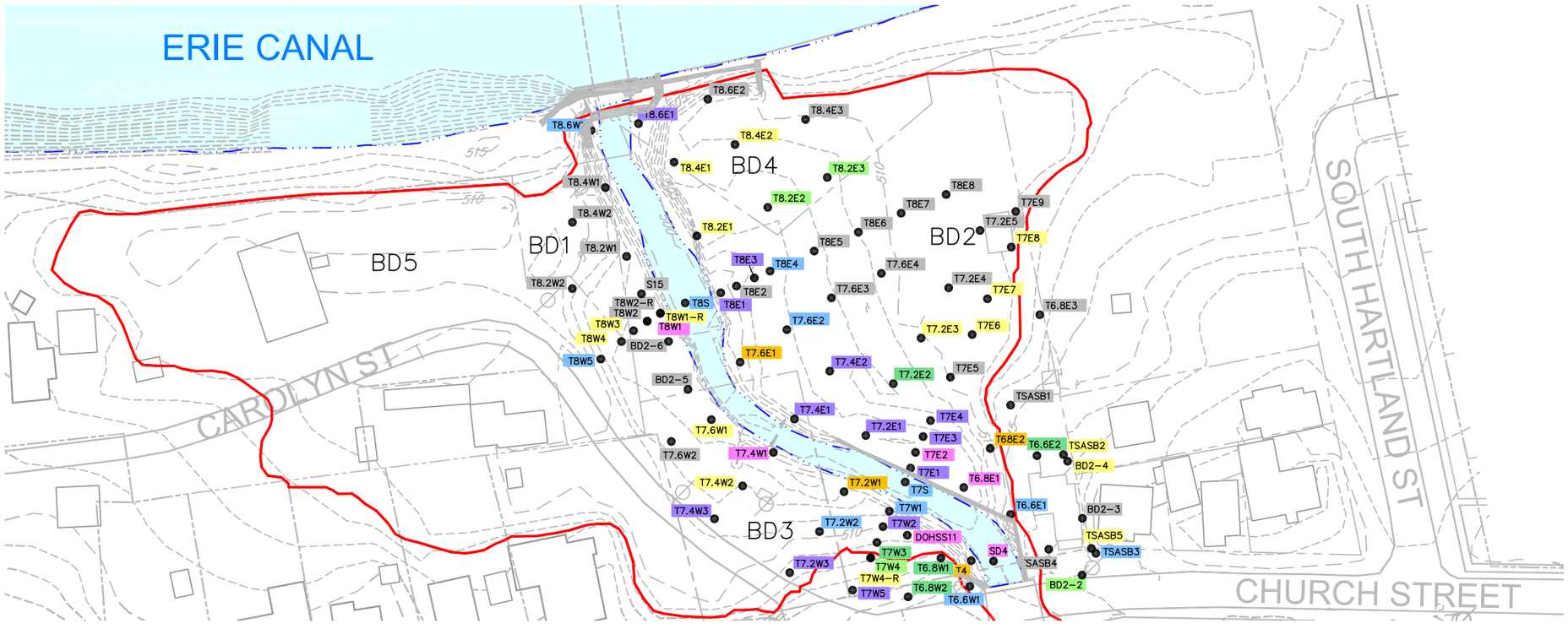
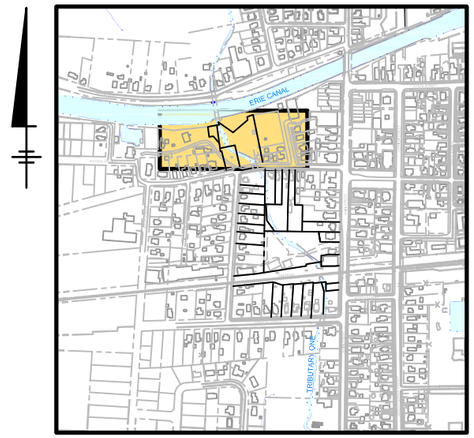


FIGURE INDEX:



LEGEND:

- T8E3 ● SAMPLING LOCATION
- APPROXIMATE FEMA 100-YEAR FLOODPLAIN BOUNDARY
- BD2 PROPERTY ID
- RETAINING WALL

ARSENIC SAMPLE CONCENTRATIONS:

- > 500 mg/kg
- 250 – 500 mg/kg
- 100 – 250 mg/kg
- 50 – 100 mg/kg
- 40 – 50 mg/kg
- 30 – 40 mg/kg
- 20 – 30 mg/kg
- < 20 mg/kg

NOTES:

1. BASE MAP FROM OCTOBER 2016 SURVEY PROVIDED BY McINTOSH & McINTOSH, INC. SURVEYORS, WITH A HORIZONTAL DATUM OF NAVD83/2011 AND A VERTICAL DATUM OF NAVD88.
2. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010).
3. COLOR LABEL AT EACH SAMPLING LOCATION ON FIGURE REPRESENTS THE MAXIMUM CONCENTRATION AT ANY SAMPLE DEPTH INTERVAL SHOWN IN TABLE.

0 80' 160'

GRAPHIC SCALE

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

SAMPLING LOCATIONS AND RESULTS - CHURCH STREET TO ERIE CANAL

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\ACTIB\0037747\0003\0003\000006\TRIB-1-SOUTH\37747G02-07.dwg LAYOUT: 6 SAVED: 5/26/2017 2:18 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: --- PLOTTED: 5/26/2017 2:18 PM BY: SARTORI, KATHERINE
XREFS:
37665X01
37665X02
37665X15
37665X26
37747XBL
37747XBP

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACT\B0037747.0003.00006\TRIB-1-SOUTH\37747G02-07.dwg LAYOUT: 7 SAVED: 1/18/2017 5:19 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 5:41 PM BY: POSENAUER, LISA

XREFS:
37665X01
37665X02
37665X15
37665X26
37747XBL
37747XBP

ERIE CANAL
SOUTH HARTLAND ST
CHURCH STREET
CHURCH STREET
ORCHARD STREET
MAIN STREET
RAILROAD
FRANCIS STREET

BD1
BD2
BD3
BD4
BC1
BC2
BC3
BC4
BC5
BC6
BC7
BC8
BC9
BC10
BC11
BC12
BC13
BB1
BB2
BB3
BB4
BB5
BB6
BB7
BB8

LEGEND:

- T8E3● SAMPLING LOCATION
- APPROXIMATE FEMA 100-YEAR FLOODPLAIN BOUNDARY
- BB6 PROPERTY ID
- RETAINING WALL
- PROPOSED AREA OF SOIL/SEDIMENT REMOVAL

NOTES:

1. BASE MAP FROM OCTOBER 2016 SURVEY PROVIDED BY McINTOSH & McINTOSH, INC. SURVEYORS, WITH A HORIZONTAL DATUM OF NAVD83/2011 AND A VERTICAL DATUM OF NAVD88.
2. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010).

0 100' 200'
GRAPHIC SCALE

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

PROPOSED AREA OF SOIL/SEDIMENT REMOVAL

ARCADIS Design & Consultancy for natural and built assets

FIGURE
7

APPENDIX A

Stream Characterization Information

- Table A.1 – Geotechnical Laboratory Results
- Table A.2 – Reach T1 Stream Flow Characteristics
- Table A.3 – Reach T1 Stream Bed Characterization
- Photographs – 07.28.2016
- Geophysical Report
- Geotechnical Laboratory Report

APPENDIX A
TABLE A.1 - GEOTECHNICAL LABORATORY RESULTS

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Sample ID	Moisture Content	Specific Gravity	Bulk Density (moist/dry)	Sieve Analysis					
				Coarse Gravel	Fine Gravel	Coarse Sand	Medium Sand	Fine Sand	Fines (silts and clay)
T1	15.2	2.67	100.9/79.2	50.4	20.9	7	12	5.5	4.2
T3	69.9	2.45	104/75.7	23	9.7	7.6	14.9	15.4	29.4
T6	15	2.72	132.1/114.6	24.4	34.6	18	18.7	2.4	1.9
T8	159.6	2.24	95.7/69.1	0.4	5.9	7.5	22.8	24.6	38.8

Notes:
1. Moisture content is given as a percent of dry weight
2. Specific Gravity is unitless
3. Bulk density is given in pounds per cubic foot (PCF)
4. Sieve Analysis is given in percentage of the total

APPENDIX A
TABLE A.2 - REACH T1 STREAM FLOW CHARACTERISTICS

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION – MIDDLEPORT, NEW YORK

Transect	Width of Stream (feet)	Stream Profile	25% Width	50% Width	75% Width	Total Flow (cfs)	Total Flow (MGD)
T1.0	23	Water Depth Velocity	* 0	0.11 0	* 0	0.00	0.00
T2.0	16	Water Depth Velocity	* 0	0.26 0	* 0	0.00	0.00
T3.0	15	Water Depth Velocity	* 0	0.68 0.3	* 0	1.02	0.66
T4.0	14	Water Depth Velocity	* 0	0.37 0.15	* 0	0.26	0.17
T5.0	15	Water Depth Velocity	* 0	0.17 0.02	* 0	0.02	0.01
T6.0	21	Water Depth Velocity	* 0	0.4 0	* 0	0.00	0.00
T7.0	15	Water Depth Velocity	* 0	.06 0.1	* 0	0.03	0.02
T8.0	16	Water Depth Velocity	* 0	.28 0.15	* 0	0.22	0.14

Notes:
1. Based on measurements and observations collected by Arcadis during August 2016.
2. Width of stream based on surveyed distance between toe of bank or wall on each side of stream.
3. Water depth in feet.
4. Velocity in feet per second.
5. 25% width, 50% width, and 75% width represent proportional width across the stream at the sampling transect.
6. * = low to no water present

Acronyms and Abbreviations:
% = percent
ft = feet
cfs = cubic feet per second
MGD = million gallons per day

APPENDIX A
TABLE A.3 - REACH T1 STREAM BED CHARACTERIZATION

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION – MIDDLEPORT, NEW YORK

Transect T1.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (inches)	0.50	0.50	1.00	1.00	0.50
Pebble Count					
Small Boulder	0	0	0	0	0
Large Cobble	0	0	0	0	0
Medium Cobble	0	0	1	0	0
Small Cobble	4	8	6	10	3
Very Coarse Gravel	9	21	15	13	35
Coarse Gravel	26	39	19	22	29
Medium Gravel	34	22	21	26	45
Fine Gravel	55	45	40	45	55
Coarse Sand and Smaller	8 oz.	6 oz.	4 oz.	4 oz.	6 oz.

Transect T2.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.00	0.00	0.00	0.25	0.00
Pebble Count					
Small Boulder	1	0	1	2	2
Large Cobble	1	0	2	2	3
Medium Cobble	0	0	0	4	1
Small Cobble	0	8	1	0	0
Very Coarse Gravel	6	11	5	3	0
Coarse Gravel	10	26	12	1	4
Medium Gravel	17	32	20	38	12
Fine Gravel	100	150	125	200	50
Coarse Sand and Smaller	10 oz.	8 oz.	6 oz.	16 oz.	2 oz.

Transect T3.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.13	0.13	0.00	0.00	0.00
Pebble Count					
Small Boulder	0	0	0	0	0
Large Cobble	0	0	0	0	0
Medium Cobble	0	0	0	0	0
Small Cobble	0	0	0	0	0
Very Coarse Gravel	0	0	0	0	0
Coarse Gravel	6	3	0	0	0
Medium Gravel	3	1	0	0	0
Fine Gravel	2	0	0	0	0
Coarse Sand and Smaller	8 oz.	6 oz.	2 oz.	2 oz.	8 oz.

Note:
Stream bed is almost entirely exposed bedrock

APPENDIX A
TABLE A.3 - REACH T1 STREAM BED CHARACTERIZATION

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION – MIDDLEPORT, NEW YORK

Transect T4.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.00	0.00	0.50	1.00	1.50
Pebble Count					
Small Boulder	0	0	0	0	0
Large Cobble	2	1	1	0	0
Medium Cobble	0	1	3	0	0
Small Cobble	0	4	12	9	2
Very Coarse Gravel	5	30	27	16	6
Coarse Gravel	7	23	31	18	3
Medium Gravel	0	52	23	35	10
Fine Gravel	25	40	55	75	100
Coarse Sand and Smaller	1 oz.	4 oz.	6 oz.	8 oz.	10 oz.

Transect T5.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.00	0.25	0.25	0.75	1.00
Pebble Count					
Small Boulder	0	0	0	0	0
Large Cobble	3	1	1	1	1
Medium Cobble	1	0	3	5	2
Small Cobble	5	1	10	3	0
Very Coarse Gravel	16	0	11	15	5
Coarse Gravel	6	5	29	12	18
Medium Gravel	20	4	14	8	18
Fine Gravel	30	50	10	45	26
Coarse Sand and Smaller	4 oz.	2 oz.	2 oz.	5 oz.	8 oz.

Transect T6.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.00	0.25	1.00	0.50	0.50
Pebble Count					
Small Boulder	0	0	0	0	0
Large Cobble	1	1	0	0	0
Medium Cobble	6	3	0	0	2
Small Cobble	8	6	6	5	1
Very Coarse Gravel	4	10	14	18	0
Coarse Gravel	12	26	31	27	0
Medium Gravel	10	32	25	21	5
Fine Gravel	15	25	55	60	27
Coarse Sand and Smaller	1 oz.	4 oz.	6 oz.	6 oz.	12 oz.

APPENDIX A
TABLE A.3 - REACH T1 STREAM BED CHARACTERIZATION

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION – MIDDLEPORT, NEW YORK

Transect T7.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.00	0.13	0.00	0.13	0.13
Pebble Count					
Small Boulder	1	0	0	0	1
Large Cobble	0	0	0	0	1
Medium Cobble	2	0	0	0	2
Small Cobble	0	0	1	0	0
Very Coarse Gravel	0	0	4	0	3
Coarse Gravel	10	2	4	4	6
Medium Gravel	6	3	0	3	10
Fine Gravel	65	10	0	14	15
Coarse Sand and Smaller	2 oz.	1 oz.	1 oz.	1 oz.	3 oz.

Transect T8.0					
Transect Points	**Western Bank**	**25%**	**Center (50%)**	**75%**	**Eastern Bank**
Sediment Thickness (in)	0.50	1.00	0.50	1.00	0.75
Pebble Count					
Small Boulder	1	1	1	0	0
Large Cobble	1	1	2	2	1
Medium Cobble	1	0	0	1	1
Small Cobble	0	0	0	12	8
Very Coarse Gravel	10	2	2	11	15
Coarse Gravel	15	4	5	26	9
Medium Gravel	4	5	10	35	4
Fine Gravel	18	25	60	45	50
Coarse Sand and Smaller	4 oz.	8 oz.	8 oz.	2 oz.	4 oz.

Photo #1: looking upstream towards Francis Street Bridge

Photo #2: looking upstream towards railroad overpass

Photo #3: looking upstream at Property BC6

Photo #4: looking downstream at Property BC6

Photo #5: north part of BC Block

Photo #6: north part of BC Block

Photo #7: at Church Street Bridge

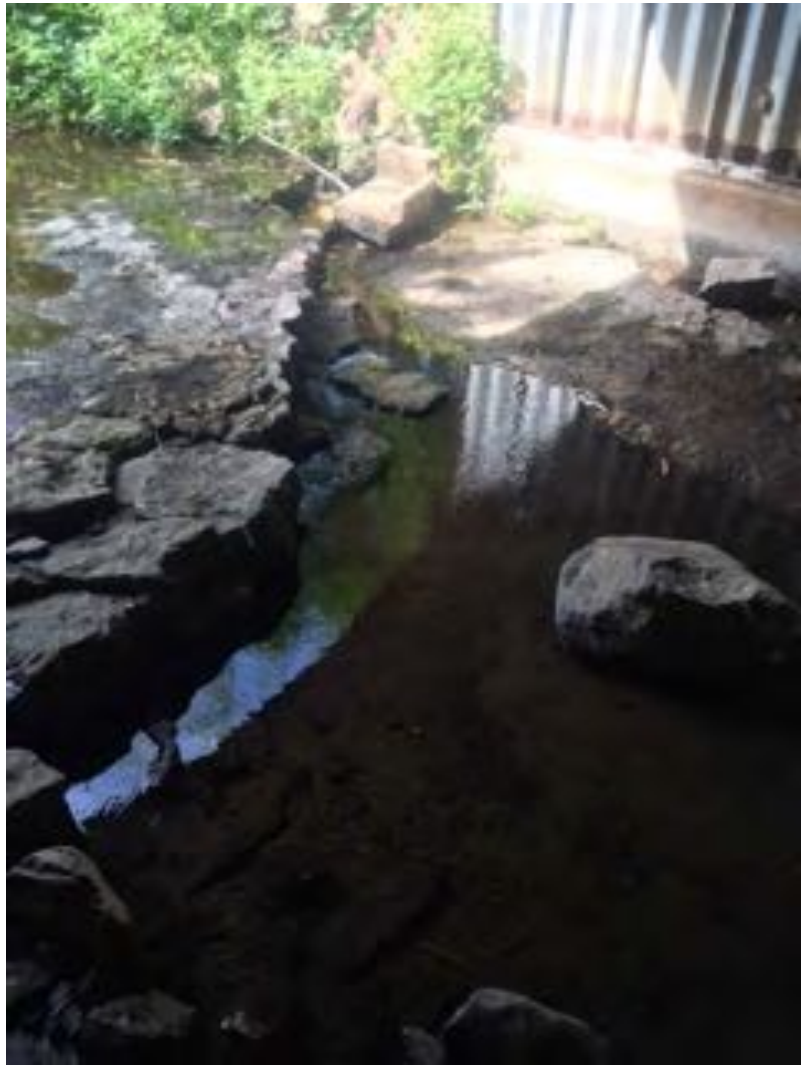


Photo #8: at Property BD2

Photo #9: at FMC gauging station

Photo #10: stream flow (foreground) meets canal discharge

NYLD Infrastructure Field Report

NEW YORK LEAK DETECTION, INC.

Date: 8/3/16 and 8/4/16 Technician: Marcus Eriksson

Customer: Arcadis US Inc.

Site Address: FMC Corporation, 100 Niagara Street, Middleport, NY 14105-1317

Contact Person: Shawn Skelly Phone: 585-350-8146

Scope of Work: Utility location services for up to 24 soil borings and scan along several retaining walls that run along the creek in the property backyards.

Type of Service:

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

☐ *Infrastructure Assessment* ☐ *Utility Mapping/AutoCAD*

Type of Equipment Used

☐ *Profiler EMP 400* ☒ *RD8000* ☐ *Leica GPS*

☐ *LC2500 Leak Correlator* ☒ *Noggin 250 mHz* ☒ Traceable Sonde

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ *Video Inspection Camera*

☐ *Sonde* ☐ Conquest 1000 mHz ☐ *Helium # Bottles*

☐ *Leica Robotic Total Station*

Marking Used

☒ *Paint* ☒ *Flags* ☐ *Chalk*

☐ *Updated existing maps onsite* ☐ *Other:* _____

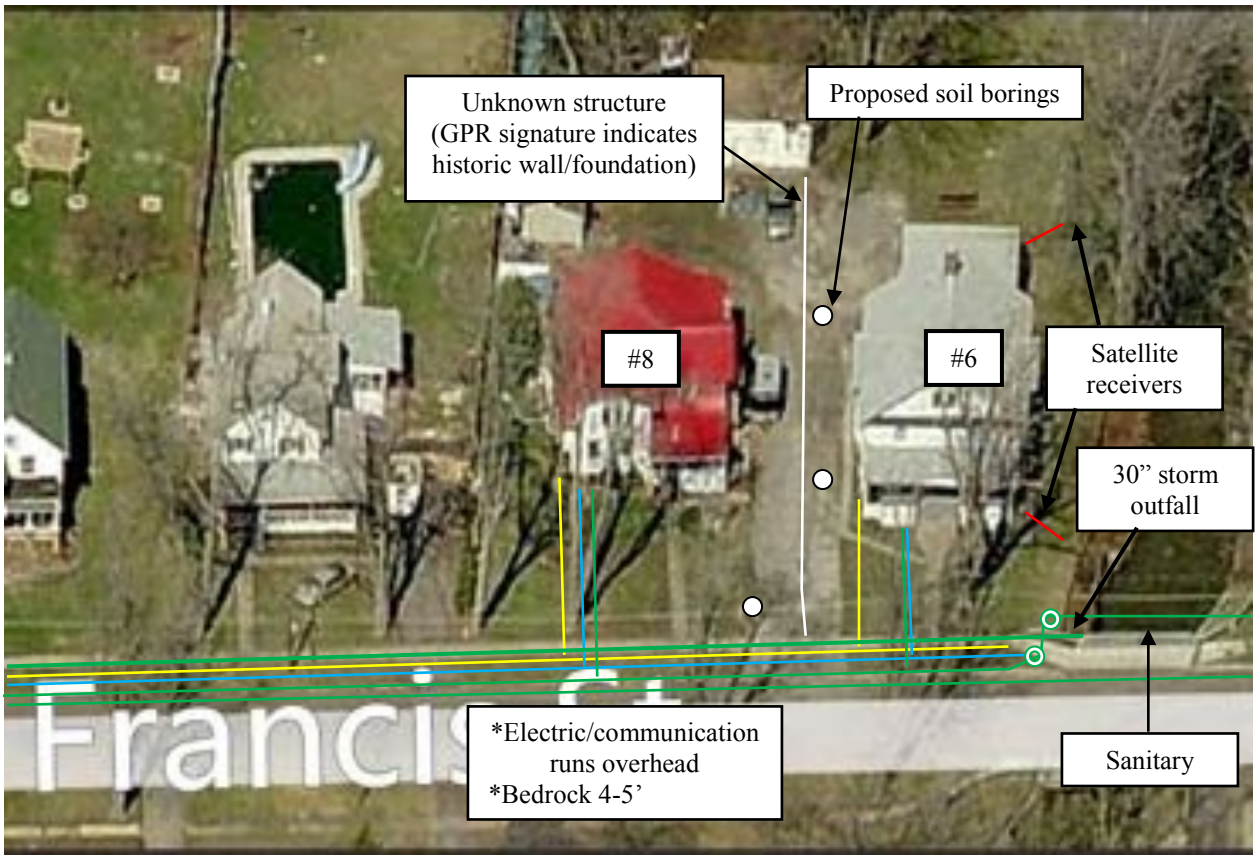
Instructions from Onsite Contact: Locate utilities in the areas surrounding proposed soil borings. Scan along retaining walls in an attempt to locate any pipes/structures emptying into creek.

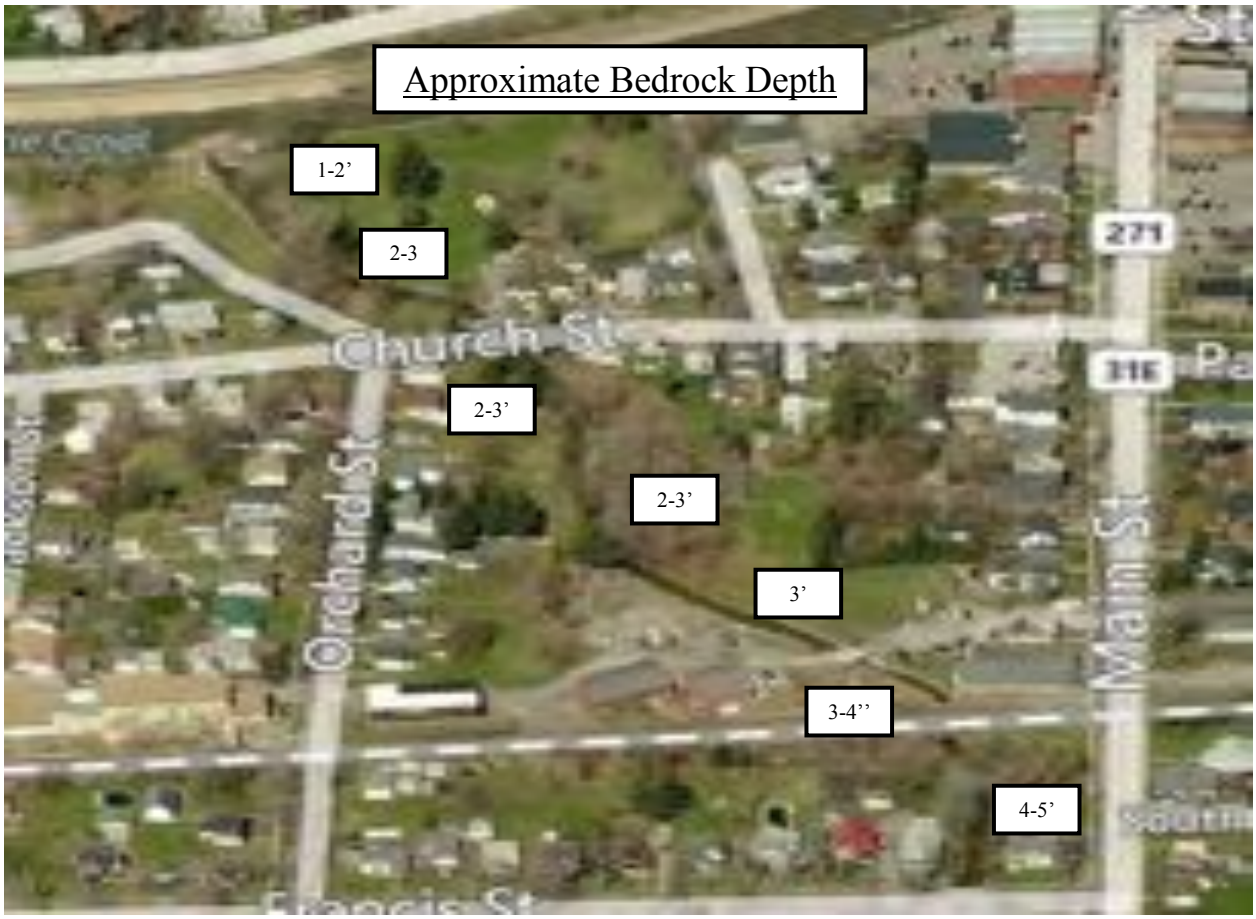
Notes/Testing Results: Utilized RD-8000 pipe and cable locator, traceable sonde and passive power/radio scan to locate all known utilities and scan for any unknown utilities. GPR imagery was used along retaining walls and proposed soil borings to locate any unknown utilities/structures. Not all outfalls/pipes are labeled on maps. There were no anomalies or pipes located that were not on map provided.

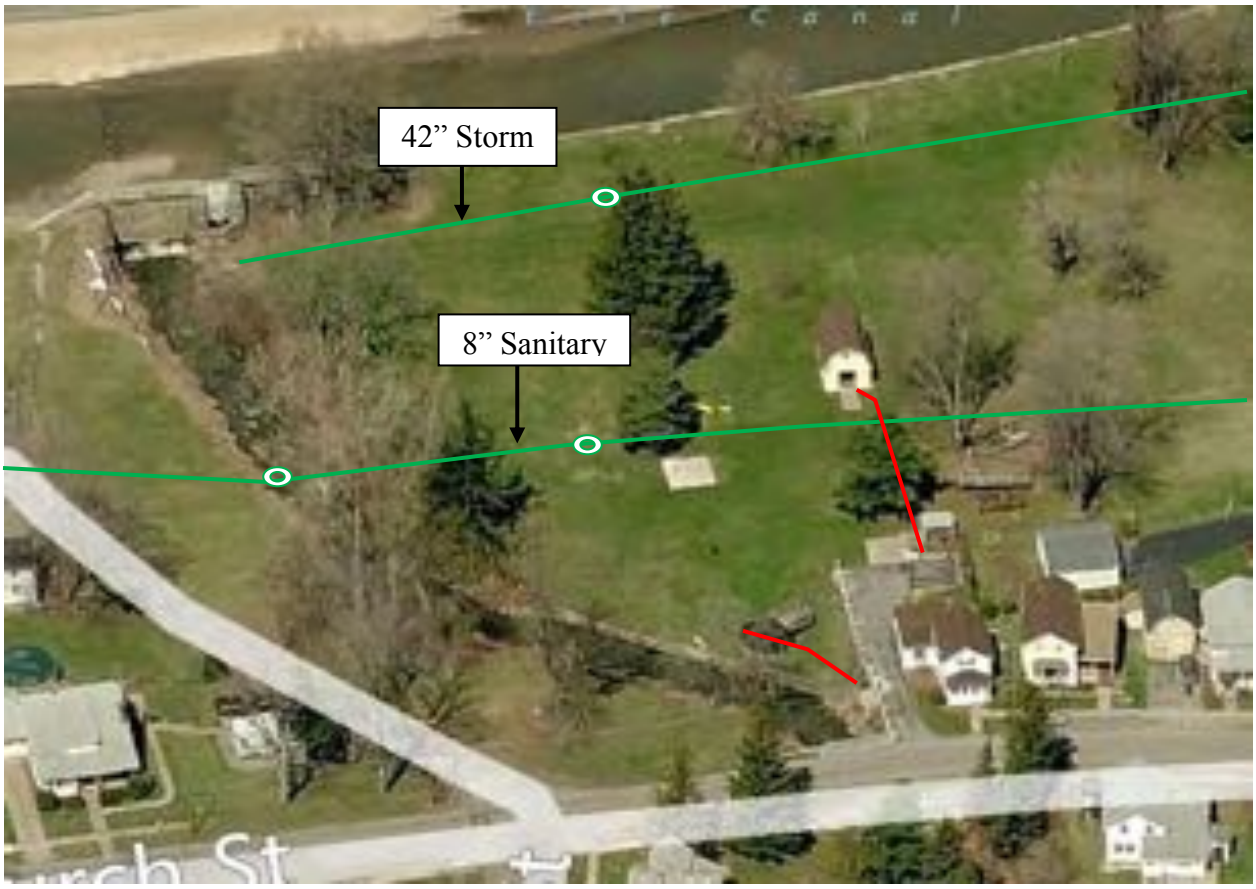
Information Transfer

☒ *Information relayed on site to: Shawn Skelly*


Approximate area scanned with GPR imagery, RD-8000 pipe and cable locator and passive power/radio (Area scanned shaded in yellow)
Church St
Orchard St
Main St
Proposed soil borings


Unknown structure (GPR signature indicates historic wall/foundation)
Proposed soil borings
#8
#6
Satellite receivers
30” storm outfall
*Electric/communication runs overhead
*Bedrock 4-5’
Sanitary


Approximate Bedrock Depth
1-2’
2-3
2-3’
2-3’
3’
3-4’’
4-5’
Church St
Orchard St
Main St
271
316


42” Storm
8” Sanitary

NYLD Infrastructure

NEW YORK LEAK DETECTION, INC.

Field Report

Key

Blue	Water
Red	Power
Orange	Communications
Yellow	Gas/Flammable Fuel
White	Unknown
Green	Storm/Sanitary

PW Laboratories, Inc.
6544 Fremont Road - East Syracuse, New York 13057
Office 315.437.1420 ~ Fax 315.503-3058~ pwlabsinc@hotmail.com

August 29, 2016

Mr. David Wright
Arcadis U.S., Inc.
6723 Towpath Road
P.O. Box 66
Syracuse, New York 13214-0066

Re: L-16054
Laboratory Testing
FMC- OU6 T1 Reach
Project #B0037747.0003

Dear Mr. Wright [David.Wright@arcadis.com]:

Enclosed are the results of laboratory testing performed at your request on four (4) bulk soil samples and four (4) Shelby tube samples delivered to PW Laboratories, Inc. on 8/12/2016 for the above referenced project. Results include:

1.	Natural Moisture Content ASTM D2216 Laboratory I.D. #32901 – 32904	4 Each
2.	Sieve Analysis ASTM D422 & D1140 Laboratory I.D. #32901 – 32904	4 Each
3.	Hydrometer Analysis ASTM D422 Laboratory I.D. #32902 & 32904	2 Each
4.	Specific Gravity ASTM D854 Laboratory I.D. #32901 – 32904	4 Each
5.	Bulk (Natural) Density ASTM D7263 Laboratory I.D. #32897 – 32900	4 Each

All requested tests have been completed on the previously received sample(s) for the above project. All sample remains are scheduled to be disposed of on **9/29/2016**. Please notify PW Laboratories, Inc. by letter or telephone prior to **9/29/2016** if you would prefer to pick up the sample(s) or that the sample(s) be retained by PW Laboratories, Inc. for an additional period of time.

Thank you for this opportunity to work with you.

PW LABORATORIES, INC.

Patrick J. Edmiston
Laboratory Manager
PJE/BLL
Cc: Ray.Smith@arcadis.com
Lance.Ketcham@arcadis.com

PW Laboratories, Inc.
6544 Fremont Road - East Syracuse, New York 13057
Office 315.437.1420 ~ Fax 315.503-3058~ pwlabsinc@hotmail.com

August 29, 2016

L-16054
Laboratory Testing
FMC- OU6 T1 Reach
Project #B0037747.0003

Natural Moisture Content ASTM D2216

Lab. I.D.#	Sample I.D.	Moisture Content as a Percent of Dry Weight
32901	T1-081016-COMP	15.2
32902	T3-081016-COMP	69.9
32903	T6-081016-COMP	15.0
32904	T8-081016-COMP	159.6

PW Laboratories, Inc.
6544 Fremont Road - East Syracuse, New York 13057
Office 315.437.1420 ~ Fax 315.503-3058~ pwlabsinc@hotmail.com

Sieve Analysis of Soil / Aggregate

Project Title: Laboratory Testing
FMC- OU6 T1 Reach
Project #B0037747.0003

Project #: L-16054
Test Method: ASTM D422 & D1140

Report #: 1
Report Date: August 29, 2016

		Sieve Size - Percent Passing Sieve															
Lab I.D. #	**Sample I.D.**	**4"**	**3"**	**2"**	**1 1/2"**	**1"**	**3/4"**	**1/2"**	**3/8"**	**1/4"**	**#4**	**#10**	**#30**	**#40**	**#60**	**#100**	**#200**
32901	T1-081016-COMP	--	100	91.2	81.1	57.3	49.6	42.5	37.9	31.7	28.7	21.7	12.4	9.7	6.7	5.3	4.2
32902	T3-081016-COMP	--	--	100	88.4	82.3	77.0	75.5	73.6	69.9	67.3	59.7	48.9	44.8	38.6	33.7	29.4
32903	T6-081016-COMP	100	91.9	84.3	84.3	81.6	75.6	68.5	63.8	53.7	41.0	23.0	6.2	4.3	2.9	2.3	1.9
32904	T8-081016-COMP	--	--	--	--	100	99.6	98.6	97.9	95.7	93.7	86.2	69.1	63.4	55.7	48.7	38.5

Sample mass, as received, meets minimum mass requirements of test method: **Yes** X **No** ____

Prewashed

Performed By: M.S. **Checked By:** Patrick Edmiston

Entire Sample **X**

Remarks:

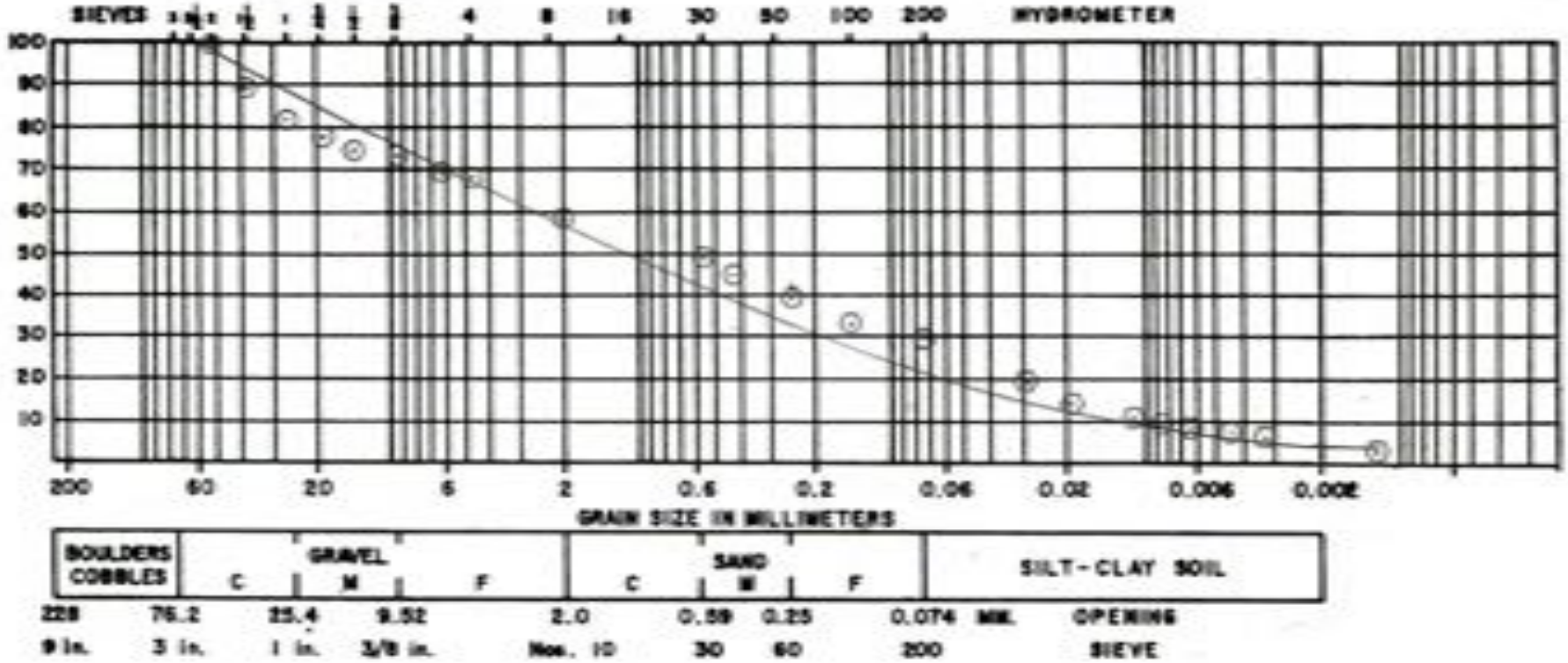
Mass Retained on #200 Only

Not Prewashed:

PW Laboratories, Inc.
6544 Fremont Road – East Syracuse, New York 13057
Office 315.437.3420 – Fax 315.585-3858 – pwlabsinc@hotmail.com

Project #: L-16054
Report #: 3
Date: August 29, 2016

Grain Size Analysis

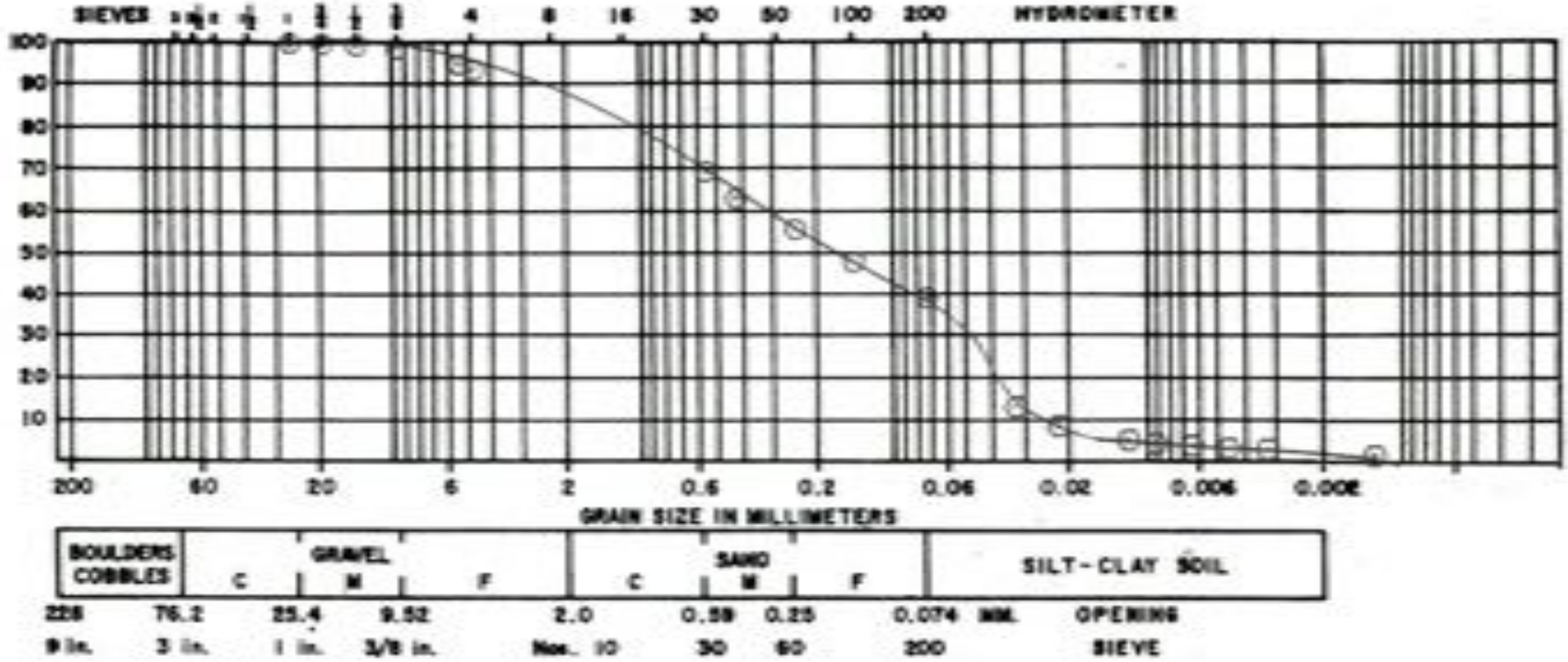


L-16054	Lab I.D. #: 32902
Laboratory Testing	Sample I.D.: T3-081016-COMP
FMC - OU6 T3 Reach	
Arcadis Project #B0037747.0003	
Sieve Analysis ASTM D422 & D1140	
Hydrometer Analysis ASTM D422	

PW Laboratories, Inc.
6544 Tremont Road - East Syracuse, New York 13057
Office 315.437.1420 ~ Fax 315.503-3058 ~ pwlabsinc@hotmail.com

Project #: L-16854
Report #: 2
Date: August 29, 2016

Grain Size Analysis



L-16854	Lab I.D. #: 32904
Laboratory Testing	Sample I.D.: T8-080816-COMP
FMC - OU6 T1 Reach	
Arcadis Project #B0037747.0003	
Sieve Analysis ASTM D422 & D1140	
Hydrometer Analysis ASTM D422	

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August 29, 2016

L-16054
Laboratory Testing
FMC- OU6 T1 Reach
Project #B0037747.0003

Specific Gravity of Soils ASTM D854

Lab. I.D.#	Sample I.D.	Specific Gravity of Solids (G)
32901	T1-081016-COMP	2.67
32902	T3-081016-COMP	2.45
32903	T6-081016-COMP	2.72
32904	T8-081016-COMP	2.24

PW Laboratories, Inc.
6544 Fremont Road - East Syracuse, New York 13057
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August 29, 2016

L-16054
Laboratory Testing
FMC- OU6 T1 Reach
Project #B0037747.0003

Bulk (Natural) Density - Direct Measurement ASTM D7263

Lab. I.D.#	Sample I.D.	Bulk (Natural) Soil Density (PCF)	
		Moist	Dry
32897	T1-081016-SHT	100.9	79.2
32898	T3-081016-SHT	104.0	75.7
32899	T6-081016-SHT	132.1	114.6
32900	T8-081016-SHT	95.7	69.1

APPENDIX B

Borehole Stratigraphic Summary

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
BB4-8	1169140.98	1176595.41	516.63	7/19/2016	2.0	1.7	0.0'-0.4'	Dark brown silt, some fine sand, trace fine gravel, trace organics, dry.
							0.4'-1.7'	Brown silt, some fine sand, trace fine gravel, dry.
BB4-6	1169104.67	1176615.45	515.37	7/19/2016	2.0	1.8	0.0'-0.6'	Dark brown silt, some fine sand, trace organics, trace fine gravel, dry.
							0.6'-1.8'	Brown silt, some fine sand, trace organics, trace fine gravel, dry.
BB4-5	1169076.47	1176608.33	517.62	7/19/2016	2.0	2.0	0.0'-1.1'	Dark brown/brown silt, some fine sand, trace organics, trace fine gravel, dry.
							1.1'-2.0'	Brown silt, some fine sand, trace fine gravel, trace cinders, dry.
BB4-1	1169018.29	1176611.61	517.58	7/19/2016	2.0	1.7	0.0'-0.8'	Brown silt, little fine sand, trace fine gravel, trace organics, dry,
							0.8'-1.7'	Dark gray silt, fine gravel, sand, dry.
BB4-7	1169140.38	1176623.02	513.12	7/19/2016	2.0	2.0	0.0'-1.0'	Dark brown silt, some fine sand, trace organics, dry.
							1.0'-2.0'	Brown silt, some fine sand, trace organics, trace cinders, trace fine gravel, dry.
BB4-9	1169168.22	1176619.05	512.67	7/19/2016	2.0	1.8	0.0'-1.6'	Brown silt, some fine sand, trace organics, trace ash, dry.
							1.6'-1.8'	Brown silt, fine gravel, trace cinders, trace fine sand, dry.
BB4-2	1169017.61	1176578.42	517.91	7/20/2016	1.5	1.5	0.0'-1.0'	Brown silt, fine sand, trace coarse sand, trace organics, dry.
							1.0'-1.5'	Brown silt and fine sand, trace fine gravel, trace organics, dense, dry.
BB4-3	1169042.65	1176590.06	518.32	7/20/2016	1.5	1.5	0.0'-1.0'	Brown silt, fine sand, trace organics, trace coarse sand, dry.
							1.0'-1.5'	Brown-red/brown, dense silt, some fine sand, trace fine gravel, dry.
BB3-4	1169134.42	1176524.88	515.95	7/20/2016	2.0	1.7	0.0'-0.7'	Dark brown silt, trace organics, trace fine gravel, dry.
							0.7'-1.0'	Gray silt, little cinders, trace coal fragments, trace rock fragments, dry.
							1.0'-1.7'	Brown silt, fine sand, trace fine gravel, dry.
BB3-2	1169049.66	1176525.45	518.41	7/20/2016	1.5	1.5	0.0'-0.8'	Brown silt, some fine sand, trace organics.
							0.8'-1.5'	Brown silt, some fine sand, trace coarse sand, trace organics.
BB2-4	1169013.91	1176484.11	518.24	7/20/2016	1.5	1.5	0.0'-0.5'	Brown silt, some fine sand, trace organics, dry.
							0.5'-1.2'	Dark brown dense silt, some fine sand, trace organics, dry.
							1.2'-1.5'	Dark brown silt, tree roots, some fine sand, dry.
BB2-5	1169044.45	1176487.64	517.65	7/20/2016	1.5	1.5	0.0'-0.5'	Dark brown silt, fine gravel, fine sand, little asphalt, trace organics, dry.
							0.5'-1.1'	Brown silt, fine sand, some fine gravel, dry.
							1.1'-1.5'	Brown silt, fine sand, trace fine gravel, dry.
BB2-6	1169179.12	1176442.91	516.24	7/20/2016	2.0	1.8	0.0'-0.8'	Brown silt, some fine sand, little organics, dry.
							0.8'-1.8'	Brown silt, some fine sand, trace organics, dry.
BB2-7	1169150.10	1176469.47	516.23	7/20/2016	2.0	2.0	0.0'-0.9'	Brown silt, some fine sand, trace organics, trace fine gravel, dry.
							0.9'-2.0'	Brown silt, some fine sand, trace grading to little fine gravel, dry.
BB1-5	1169012.15	1176379.56	518.53	7/20/2016	1.0	1.0	0.0'-0.6'	Dark brown silt, some fine sand, trace gravel, trace organics, dry.
							0.6'-1.0'	Brown silt, little fine sand, little fine gravel, dry.
BB1-4	1169013.85	1176419.42	518.50	7/20/2016	1.0	1.0	0.0'-0.7'	Brown silt and fine sand, trace coarse sand, trace organics, moist.
							0.7'-1.0'	Brown silt, little fine sand, trace fine gravel, trace cinders, dry.
BB1-7	1169030.70	1176381.60	518.76	7/20/2016	1.0	1.0	0.0'-1.0'	Dark brown silt and fine sand, trace fine gravel/coarse sand, trace organics, moist.
BB1-6	1169044.13	1176421.38	517.71	7/20/2016	1.0	1.0	0.0'-0.8'	Brown silt, some fine sand, trace fine gravel, trace organics, dry.
							0.8'-1.0'	Red brown silt, some fine sand, trace fine gravel, dense, dry.
BB1-8	1169088.17	1176421.54	516.85	7/20/2016	1.5	1.5	0.0'-1.5'	Brown silt, some fine sand, trace fine gravel, trace organics, dry.
BB1-11	1169123.03	1176396.59	517.20	7/20/2016	1.5	1.4	0.0'-1.0'	Brown silt and fine sand, trace coarse sand, trace organics, moist.
							1.0'-1.4'	Brown silt, little fine sand, trace fine gravel, dry.
BB1-9	1169101.81	1176389.21	518.16	7/20/2016	1.5	1.5	0.0'-0.9'	Brown silt and fine sand, trace organics, trace fine gravel, dry.
							0.9'-1.5'	Brown silt, some fine sand, trace fine gravel, dry.
BB1-10	1169124.88	1176425.65	515.70	7/21/2016	1.5	1.3	0.0'-0.5'	Brown silt and fine sand, trace fine angular gravel, trace organics, loose, dry.
							0.5'-0.7'	gray-brown cinders and slag, little fine sand, loose, dry.
							0.7'-1.3'	Brown silt and fine sand, little rounded gravel, loose, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
BB1-12	1169179.12	1176402.15	517.06	7/21/2016	2.0	1.5	0.0'-0.3'	Light brown fine sand, trace silt, trace organics.
							0.3'-0.6'	Light brown fine sand and silt, loose trace medium gravel.
							0.6'-1.4'	Light brown silt, loose fine sand, dry.
							1.4'-1.5'	Dark brown cinders, some medium gravel, loose, dry.
BB1-13	1169220.69	1176379.50	517.61	7/21/2016	2.0	1.4	0.0'-0.5'	Dark brown fine sand, little silt, trace fine gravel, trace organics, trace fine angular gravel, dense, dry.
							0.5'-0.9'	Brown fine sand and silt, some angular fine gravel, loose, dry.
							0.9'-1.4'	Brown well sorted fine sand, loose, dry.
T1.6W2	1169198.48	1176584.56	513.05	7/21/2016	2.0	2.0	0.0'-1.0'	Dark brown silt, little fine sand, trace cinders/ash/coal, trace organics, trace fine angular gravel, dense, dry.
							1.0'-2.0'	Brown silt and clay, low plasticity, dilatancy, moist, dense.
T2.1W3	1169248.96	1176535.98	511.99	7/21/2016	1.5	1.0	0.0'-0.2'	Dark brown silt and organics, loose, dry.
							0.2'-0.8'	Dark brown silt, some fine sand, some organics, poorly sorted, loose, dry.
							0.8'-1.0'	Brown silt, some clary, no dilatancy, loose, moist.
T2W13	1169253.98	1176372.88	523.67	7/21/2016	2.0	1.4	0.0'-0.5'	Black silt, some organics, trace angular gravel, coal cinders, fine sand, loose, dry.
							0.5'-1.0'	Dark brown fine sands and silts, trace organics, well sorted, dry.
							1.0'-1.4'	Dark brown fine sands and silts, dense, dry.
T2.1W4	1169268.98	1176471.52	525.25	7/21/2016	1.5	1.5	0.0'-0.5'	Dark brown silt, some fine sand, little angular concrete, trace organics, loose, dry.
							0.5'-1.5'	Brown fine sand and silt, little angular gravel, dense, dry.
T2.E2	1169237.97	1176665.18	518.32	7/21/2016	2.0	1.6	0.0'-0.4'	Dark brown fine sand, some silt, trace angular gravel, trace organics, dense, dry.
							0.4'-1.3'	Brown fine sand, little silt, little fine angular gravel, trace glass, dense, dry.
							1.3'-1.6'	Gray coarse angular gravel.
T2.1E1	1169270.62	1176647.01	519.76	7/21/2016	2.0	1.7	0.0'-0.2'	Light brown organics, little silt, trace fine sand, loose, dry.
							0.2'-1.0'	Brown fine sand and silt, little fine sub angular gravel, trace organics, loose, dry.
							1.0'-1.7'	Brown fine sand, little silt, little coarse angular gravel, trace cinders, loose, brick.
T2.1W1	1169256.17	1176602.64	510.95	7/21/2016	2.5	1.9	0.0'-0.6'	Brown fine sand, some silt, little fine-coarse angular gravel, trace organics, loose, dry.
							0.6'-1.3'	Dark brown fine sand and silt, some fine-coarse angular dense, dry.
							1.3'-1.5'	Black coal, dry.
							1.5'-1.9'	Brown-gray clay, some silt, little angular fine gravel, low plasticity, dense, moist.
T2W14	1169249.54	1176334.92	524.01	7/21/2016	2.0	1.5	0.0'-0.4'	Dark brown fine sand, some silt, well sorted, little organics, loose, dry.
							0.4'-1.5'	Light brown fine sand, some silt, little concrete, little angular gravel, trace asphalt, loose, dry.
T2W15	1169234.52	1176341.56	519.05	7/21/2016	2.0	1.9	0.0'-0.9'	Dark brown fine sand, little silt, trace organics, trace slag, trace angular fine gravel, loose, dry.
							0.9'-1.4'	Brown fine sand, some silt, well sorted, dense, dry.
							1.4'-1.9'	Brown silt, little fine sand, well sorted, dense, dry.
T1.6W1	1169199.52	1176622.87	512.72	7/21/2016	2.5	2.4	0.0'-0.1'	Dark organics, grass and roots.
							0.1'-1.9'	Brown silt, some fine sand, little sub rounded fine gravel, dense dry.
							1.9'-2.4'	Light brown medium-coarse angular gravel, little fine sand, dense, dry.
T2.1W2	1169276.21	1176572.16	525.23	7/21/2016	1.5	1.5	0.0'-1.0'	Dark brown fine-medium sand, some silt, little slag, dense, dry.
							1.0'-1.5'	Dark brown fine-coarse sand, trace silt, trace angular gravel, trace cinders, dense, dry.
BB6-1	1169022.55	1176728.73	518.18	7/22/2016	1.0	1.0	0.0'-0.5'	Light brown fine sand, well sorted, trace organics, loose, dry.
							0.5'-0.6'	Organics, wood and roots.
							0.6'-1.0'	Light brown fine sand, well sorted, little fine-coarse angular gravel, trace organics, loose, dry.
BB6-2	1169021.24	1176695.43	517.81	7/22/2016	1.0	1.0	0.0'-0.8'	Light brown fine sand, well sorted, little organics, trace silt, loose, dry.
							0.8'-1.0'	Light brown fine sand, some fine-coarse sub angular gravel, trace cinders, trace organics, trace silt, loose, dry.
BB6-3	1169023.40	1176662.74	517.60	7/22/2016	2.0	1.8	0.0'-0.2'	Brown fine sand, some organics, loose, dry.
							0.2'-1.0'	Light brown fine sand, well sorted, trace silt, loose, dry.
							1.0'-1.1'	Black ash.
							1.1'-1.8'	Light brown fine sand, well sorted, trace silt, trace fine angular gravel, loose, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
BB6-4	1169057.62	1176737.03	518.50	7/22/2016	1.0	1.0	0.0'-0.8'	Brown fine sand, well sorted, little organics, trace fine sub angular gravel, trace silt, loose, dry.
							0.8'-1.0'	Organics, some fine-coarse angular gravel, little fine sand, trace silt, loose, dry.
BB6-5	1169049.69	1176717.95	518.35	7/22/2016	1.0	1.0	0.0'-0.1'	Organics (grass).
							0.1'-0.5'	Dark brown fine sand, some silt, trace organics, loose, dry.
							0.5'-1.0'	Light brown fine sand, little silt, well sorted, loose, dry.
BB6-6	1169044.48	1176686.38	518.14	7/22/2016	1.0	1.0	0.0'-0.4'	Light brown fine sand, little silt, trace organics, loose, dry.
							0.4'-0.9'	Brown fine sand, trace silt, well sorted, loose, dry.
							0.9'-1.0'	Brown-red fine sand, little angular fine gravel, trace silt, loose, dry.
BB6-8	1169080.18	1176721.77	517.89	7/25/2016	1.5	1.3	0.0'-0.1'	Organics (grass and roots).
							0.1'-0.4'	Dark brown silt, trace fine sub angular gravel, trace fine sand, loose, moist.
							0.4'-1.3'	Light brown fine sand, little fine angular gravel, trace cinders, trace organics, loose, dry.
BB6-9	1169088.16	1176683.68	517.83	7/25/2016	1.5	1.3	0.0'-0.3'	Dark brown silt, little fine sand, little organics, loose, moist.
							0.3'-1.3'	Light brown fine sand, well sorted, trace angular fine gravel, loose, dry.
BB6-7	1169058.16	1176660.54	517.15	7/25/2016	2.0	1.0	0.0'-0.7'	Dark brown silt, trace fine sand, trace organics, trace angular fine gravel, loose, moist.
							0.7'-1.0'	Brown fine sand and silt, little sub angular fine-coarse gravel, loose, dry.
BB6-10	1169091.18	1176661.97	516.20	7/25/2016	2.0	1.9	0.0'-0.2'	Dark brown silt, trace fine angular sand, loose, moist.
							0.2'-0.4'	Wood organics.
							0.4'-0.6'	Dark brown silt, trace fine angular sand, trace organics, loose, moist.
							0.6'-1.0'	Brown fine sand and silt, trace angular fine gravel, loose, moist.
							1.0'-1.7'	Brown fine sand and silt, trace angular fine gravel, trace cinders, trace ash, trace coarse angular gravel, loose, moist.
							1.7'-1.9'	Red-brown fine sand, trace silt, trace fine sub angular gravel, loose, dry.
BB6-12	1169096.43	1176707.84	522.50	7/25/2016	1.5	1.2	0.0'-1.0'	Dark brown silt, little fine sand, trace fine sub angular gravel, dense, moist.
							1.0'-1.2'	Brown fine sand, some silt, little fine angular gravel, dense, dry.
BB6-13	1169156.15	1176735.29	520.25	7/25/2016	1.5	1.0	0.0'-0.6'	Dark brown silt, trace organics, trace fine sand, dense, moist.
							0.6'-1.0'	Light brown fine sand, some fine-coarse sub angular gravel, trace organics, dense, dry.
BB6-14	1169132.87	1176707.55	516.18	7/25/2016	1.5	1.0	0.0'-0.1'	Trace organics - grass.
							0.1'-0.6'	Dark brown silt, little fine sand, trace angular coal, loose, moist.
							0.6'-1.0'	Brown fine sand, little silt, trace organics, loose, dry.
BB6-15	1169170.76	1176663.14	515.17	7/25/2016	2.0	1.5	0.0'-0.5'	Dark brown silt, little fine sand, trace organics, trace fine angular gravel, dense, moist.
							0.5'-0.6'	Light brown fine sand and sub angular gravel.
							0.6'-1.2'	Light brown fine sand, trace fine angular gravel, well sorted, loose, dry.
							1.2'-1.3'	Waste wood layer.
							1.3'-1.5'	Light brown fine sand, trace fine angular gravel, well sorted, loose, dry.
T1.6E1	1169200.26	1176666.71	517.76	7/25/2016	2.0	1.3	0.0'-0.6'	Dark brown silt, little organics, trace fine sand, dense, moist.
							0.6'-1.0'	Fine to coarse angular gravel and cobble layer.
							1.0'-1.3'	Brown fine to coarse sand, little fine to coarse sub rounded gravel, loose, dry.
T2E3	1169219.92	1176678.23	518.75	7/25/2016	2.0	1.3	0.0'-0.4'	Dark brown silt, little fine sand, trace brick and cinders, trace organics, loose, moist.
							0.4'-0.9'	Brown fine sand and silt, little fine sub angular gravel, loose, dry.
							0.9'-1.3'	Light brown fine sand, some fine gravel, trace brick cinders, trace sub angular gravel, trace silt, loose, dry.
BB6-11	1169115.03	1176735.75	519.26	7/25/2016	1.5	1.1	0.0'-0.1'	Organics - grass, topsoil.
							0.1'-0.5'	Dark brown fine sand, some silt, trace angular fine gravel, dense, dry.
							0.5'-1.1'	Light brown fine sand, little fine sub angular gravel, trace organics, loose, dry.
T3.4W4	1169419.53	1176283.87	521.44	7/26/2016	1.5	1.2	0.0'-0.2'	Brown fine sand, fine angular gravel, some silt, dense, dry.
							0.2'-0.4'	Gray fine to coarse angular gravel, trace silt, trace fine sand, loose, dry.
							0.4'-1.2'	Red-brown silt and fine sand, little fine to coarse angular gravel, dense, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
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Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T3.4W3	1169458.03	1176315.94	518.48	7/26/2016	1.5	1.2	0.0'-0.1'	Dark brown silt, trace fine sand, trace organics, loose, dry.
							0.1'-0.6'	Gray fine to coarse angular gravel, little silt, trace fine sand, dense, dry.
							0.6'-1.2'	Reddish brown fine sand, trace fine angular gravel, trace silt, dense, dry.
T3.4W2	1169490.12	1176340.05	516.98	7/26/2016	2.0	1.7	0.0'-0.2'	Dark brown silt, some fine sand, some organics, dense, dry.
							0.2'-0.4'	Gray fine to coarse angular gravel, some silt, some fine sand, dense, dry.
							0.4'-0.8'	Dark brown silt, trace fine sand, dense, dry.
							0.8'-1.7'	Light brown fine sand, some fine angular gravel, trace coal cinders, well sorted, dense dry.
T3.2W4	1169392.93	1176340.47	516.85	7/26/2016	2.0	1.6	0.0'-0.3'	Dark brown silt and fine to coarse sub angular gravel, trace fine sand, trace organics, dense, dry.
							0.3'-1.3'	Dark brown silt and fine sand, trace ash and coal cinders, trace angular fine gravel, dense, moist.
							1.3'-1.6'	Brown fine sand, little silt, well sorted, moist, dense.
T3.2W3	1169426.43	1176365.71	515.21	7/26/2016	2.0	1.7	0.0'-0.4'	Brown-gray fine sand and angular fine gravel, trace silt, dense, dry.
							0.4'-0.8'	Brown fine sand, well sorted, trace angular fine gravel, dense, dry.
							0.8'-1.0'	Gray fine to coarse angular gravel lens, trace fine sand, dense, dry.
							1.0'-1.6'	Brown black fine sand, little coarse sub angular gravel, well sorted, dense, dry.
							1.6'-1.7'	Light brown fine sand, trace ash, well sorted, dense, dry.
T3.2W2	1169457.15	1176391.25	513.43	7/26/2016	2.5	2.2	0.0'-0.3'	Brown fine sand and silt, some angular fine gravel, loose, dry.
							0.3'-0.6'	Fine gray angular gravel, little fine sand and silt, loose, dry.
							0.6'-1.8'	Brown fine sand, trace brick cinders, trace angular fine gravel, well sorted, loose, dry.
							1.8'-2.2'	Black ash and fine sand, some fine to coarse angular gravel, loose, dry.
T3.4W1	1169516.60	1176367.03	514.91	7/26/2016	2.0	1.5	0.0'-0.5'	Wood and root organics, trace sand, trace silt, loose, dry.
							0.5'-1.5	Gray, black, and brown fine sand, trace cinders, trace fine to coarse angular gravel, loose, dry.
T3.6W2	1169528.66	1176301.16	518.16	7/26/2016	2.0	1.7	0.0'-0.1'	Brown fine sand and silt, some organics, loose, dry.
							0.1'-0.4'	Gray fine sand and angular gravel, loose, dry.
							0.4'-1.7'	Light brown fine sand, well sorted, trace silt, trace fine to coarse angular gravel, dry.
T3.6W3	1169507.33	1176267.13	519.71	7/26/2016	1.5	1.5	0.0'-0.4'	Light brown fine sand, some fine to coarse angular gravel, trace silt, trace organics, dense, dry.
							0.4'-1.5'	Brown red-brown fine sand, well sorted, trace fine angular gravel, dense, dry.
T3.2W1	1169481.13	1176412.08	512.26	7/26/2016	2.5	2.1	0.0'-0.5	Dark brown silt, little fine sand, trace organic, loose, dry.
							0.5'-0.9	Dark brown silt and fine sand, some coal cinders, trace angular gravel, loose, dry.
							0.9'-2.0'	Light brown fine sand, well sorted, loose, dry.
							2.0'-2.1'	Black fine angular gravel and coal cinders, loose, dry.
T2.8W3	1169409.08	1176444.46	512.29	7/26/2016	2.5	2.1	0.0'-0.6'	Dark brown silt and fine sand, some fine to coarse angular gravel, little ash cinders, dense, dry.
							0.6'-1.6'	Fine to coarse angular gravel, some cobbles, little silt, trace fine sand, loose, dry.
							1.6'-2.1'	Black fine sand, little fine angular gravel, trace silt, dense, dry.
T2.8W2	1169430.92	1176468.38	511.98	7/26/2016	2.5	2.3	0.0'-0.4'	Brown fine sand, little silt, trace organics, trace angular fine gravel, dense, moist.
							0.4'-2.3'	Black fine sand, some ash and brick cinders, little fine angular gravel, dense, dry.
T2.8W1	1169446.53	1176480.10	511.03	7/26/2016	2.5	2.3	0.0'-0.5'	Brown fine sand and silt, trace fine sub rounded gravel, trace organics, loose, dry.
							0.5'-2.1'	Black fine to coarse sand and fine angular gravel, some ash and coal cinders, loose, dry.
							2.1'-2.3'	Light brown fine sand and fine to coarse sub rounded gravel, trace concrete, loose, dry.
T2.6W3	1169355.00	1176485.63	512.72	7/26/2016	2.0	1.8	0.0'-1.1'	Dark brown/black silt and fine sand, trace fine sub rounded gravel, trace organics, dry.
							1.1'-1.8'	Brown fine sand, some silt, trace fine sub rounded gravel, trace coal, little clay, dry.
T2.6W2	1169383.46	1176505.63	512.19	7/26/2016	2.0	1.9	0.0'-0.5'	Dark brown silt and fine sand, trace coal, trace organics, trace fine sub rounded gravel, dry.
							0.5'-1.2'	Dark brown/black fine sand, little silt, trace fine sub rounded gravel, trace coal, dry.
							1.2'-1.9'	Dark brown silt grading to fine sand, trace fine gravel, dry.
T2.6W1	1169415.66	1176520.40	513.51	7/26/2016	2.5	1.8	0.0'-0.5'	Dark brown silt, some fine sand, trace organics, dry.
							0.5'-1.6'	Brown silt, little fine sand, trace fine sub rounded gravel, trace organics, trace brick fragments, dry.
							1.6'-1.8'	Black fine sand, little coal, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

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FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T3.6W1	1169547.62	1176331.14	514.37	7/27/2016	2.5	2.1	0.0'-0.2'	Dark brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.2'-1.8'	Brown silt, trace fine gravel, trace fine sand, dry.
							1.8'-2.1'	Dark brown silt, trace fine sand, trace fine gravel, trace coal, dry.
T2.4W1	1169386.12	1176558.77	512.41	7/27/2016	2.5	1.9	0.0'-1.0'	Dark brown silt, trace fine sand, trace fine gravel, trace coal, trace organics, dry.
							1.0'-1.9'	Gray/brown silt, some fine sand, trace fine gravel, dry.
T2.3W1	1169365.88	1176582.32	512.36	7/27/2016	2.5	1.8	0.0'-0.8'	Brown silt, trace fine sand, trace organics, dry.
							0.8'-1.8'	Brown silt, trace fine sand, trace brick, trace fine gravel, dry.
BC6-1	1169372.95	1176616.40	515.69	7/27/2016	2.0	1.6	0.0'-0.8'	Brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.8'-1.6'	Dark brown silt, some fine sand, trace fine gravel, trace ash cinders, dry.
T2.3E1	1169399.17	1176602.73	517.60	7/27/2016	2.0	1.6	0.0'-0.7'	Dark brown silt, little fine sand, trace organics, moist.
							0.7'-1.6'	Dark brown silt, little grading to some fine sand, trace fine gravel, moist.
T2.4E1	1169414.71	1176578.07	516.75	7/27/2016	2.0	1.4	0.0'-0.5'	Brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.5'-1.1'	Brown silt and fine sand, trace fine gravel, trace brick fragments, dry.
							1.1'-1.4'	Dark brown silt, little fine sand, trace fine gravel, dry.
BC6-2	1169430.44	1176553.05	515.68	7/27/2016	2.0	1.8	0.0'-0.4'	Gray/brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.4'-1.3'	Dark brown/black silt and fine sand, trace coal, trace fine gravel, dry.
							1.3'-1.8'	Dark brown silt, little grading to trace fine gravel, little fine sand, trace coal, trace organics, dry.
BC6-3	1169450.61	1176521.89	514.33	7/27/2016	2.0	1.6	0.0'-0.5'	Brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.5'-1.6'	Brown silt, trace fine sand, trace fine gravel, dense, dry.
T2.6E1	1169463.22	1176553.01	515.48	7/27/2016	1.5	1.4	0.0'-0.7'	Gray fine to coarse sand, little silt, little fine gravel, dry.
							0.7'-1.4'	Brown silt, little fine sand, trace fine gravel, dense, dry.
T2.6E2	1169491.76	1176580.72	520.28	7/27/2016	1.5	1.4	0.0'-1.4'	Brown silt, little fine sand, trace fine gravel, trace organics, dry.
T2.8E4	1169546.60	1176552.66	517.29	7/27/2016	2.0	1.7	0.0'-0.5'	Dark brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.5'-1.2'	Brown silt, little fine sand, dry.
							1.2'-1.7'	Red/brown silt and fine sand, trace fine gravel, dry.
T2.8E3	1169519.81	1176532.99	513.92	7/27/2016	2.0	1.7	0.0'-0.4'	Brown silt, little fine sand, trace fine gravel, dry.
							0.4'-1.7'	Tan silt, trace fine sand, dry.
T2.8E2	1169496.88	1176516.27	513.25	7/27/2016	2.0	1.8	0.0'-0.4'	Dark brown silt, little fine sand, trace organics, dry.
							0.4'-0.9'	Dark brown silt and fine sand, trace fine gravel, dry.
							0.9'-1.8'	Brown/tan silt, trace fine sand, trace gravel, dense, dry.
T2.8E1	1169469.81	1176498.08	512.36	7/27/2016	2.0	1.6	0.0'-0.3'	Dark brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.3'-0.9'	Gray/brown silt and fine sand, little fine gravel, dry.
							0.9'-1.6'	Brown silt, trace fine sand, trace fine gravel, tight, moist.
T3.2E2	1169535.10	1176452.56	511.94	7/28/2016	2.0	2.0	0.0'-0.5'	Black silt and fine sand, some organics, trace fine gravel, dry.
							0.5'-2.0'	Light brown silt, fine sand, trace gravel, trace organics, hard, dry.
T3.4E2	1169561.47	1176420.18	511.16	7/28/2016	2.0	1.9	0.0'-0.5'	Dark brown silt and fine sand, trace organics, trace fine gravel, dry.
							0.5'-1.2'	Light brown fine sand and silt, fine to medium gravel, dry.
							1.2'-1.9'	Light gray fine sand and silt, medium gravel, dry.
T3.2E3	1169560.06	1176468.59	512.46	7/28/2016	2.0	2.0	0.0'-0.7'	Black fine sand and silt, some organics, cinders, loose, dry.
							0.7'-1.0'	Light gray fine sand and silt, crushed gravel, loose, dry.
							1.0'-2.0'	Light brown silt and clay, trace fine sand, trace gravel, hard, dry.
T3.4E1	1169541.16	1176383.81	507.87	7/28/2016	2.0	1.3	0.0'-0.7'	Dark brown fine sand and silt, trace fine gravel, some organics, loose, dry.
							0.7'-1.2	Dark brown/brown fine sand and silt, trace clay, angular fine gravel, loose, dry.
							1.2'-1.3'	Red bedrock, dry. Refusal at 1.3' bgs.
T3.2E1	1169509.47	1176437.71	510.83	7/28/2016	2.0	1.0	0.0'-0.4'	Dark brown fine sand and silt, trace fine gravel and organics, loose, dry.
							0.4'-0.7'	Light brown fine sand and silt, trace organics, trace gravel, trace glass/coal/ash cinders, loose, dry.
							0.7'-1.0'	Brown fine sand and silt, trace clay, loose, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

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FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T6.4W1	1169965.56	1176168.91	512.10	7/28/2016	2.0	2.0	0.0'-0.7'	Dark brown fine sand and silt, some organics, loose, dry.
							0.7'-1.0'	Brown fine sand and silt, fine to medium gravel, organics, loose, dry.
							1.0'-1.7'	Red-brown/gray silt, trace medium to fine sand, some gravel, loose, dry.
							1.7'-2.0'	Red-brown silt, fine to medium sand, fragments of bedrock, dry.
T6.2W2	1169943.01	1176174.92	511.46	7/28/2016	2.5	2.3	0.0'-0.7'	Dark brown fine sand and silt, organics, loose dry.
							0.7'-1.3'	Light brown fine sand and silt, trace clay, trace organics, crushed rock fragments. Loose, dry.
							1.3'-2.0'	Light brown silt, some fine sand, dense, dry.
							2.0'-2.3'	Red-brown fine sand and silt, trace fine gravel, dense, dry.
T6.2W3	1169939.28	1176144.63	514.09	7/28/2016	2.0	1.7	0.0'-0.6'	Dark brown fine sand and silt, trace medium sand, some organics, loose, dry.
							0.6'-1.3'	Light brown fine sand and silt, trace clay, loose, dry.
							1.3'-1.7'	Red-brown fine sand and silt, bedrock fragments, loose, dry.
BC13-2	1169898.43	1176143.46	511.94	7/28/2016	1.5	1.2	0.0'-0.5'	Dark brown fine sand and silt, trace organics, loose, dry.
							0.5'-1.0'	Dark brown silt, white and gray cinder and ash, dense, dry.
							1.0'-1.2'	Dark brown fine sand and silt, trace organics, medium dense, moist.
BC13-1	1169908.12	1176226.56	507.88	7/28/2016	2.5	1.9	0.0'-1.4'	Dark brown fine sand and silt, organics, trace fine gravel, trace cinders, loose, dry.
							1.4'-1.9'	Dark brown fine sand and silt, trace medium gravel, organics, trace cinders, loose, dry.
T6.2W1	1169941.28	1176198.35	508.41	7/28/2016	2.5	1.5	0.0'-1.0'	Brown fine sand and silt, trace fine gravel, cinders, some organics, loose, dry.
							1.0'-1.5'	Red and white medium gravel-angular rock fragments, trace silt, loose, dry.
T6.2E1	1169954.34	1176237.61	508.71	7/28/2016	2.0	1.8	0.0'-0.7'	Dark to light brown silt, some fine sand, organics, loose, dry.
							0.7'-1.0'	Light brown to red brown fine sand and silt, cinders, coal, ash, trace organics, loose, dry.
							1.0'-1.8'	Red brown fine sand and silt, trace cinders, trace coarse sand, glass and brick fragments, loose, dry.
T6.4E1	1169975.97	1176213.97	506.23	7/28/2016	2.0	1.8	0.0'-0.6'	Dark brown fine sand and silt, some organics, loose, dry.
							0.6'-1.4'	Red brown to gray fine sand and silt, organics, glass, cinders, concrete, loose, dry.
							1.4'-1.8'	Red brown fine sand and silt, trace fine gravel, loose, dry.
BC12-4	1169871.10	1176134.30	513.69	7/29/2016	1.5	1.1	0.0'-0.3'	Dark brown very fine to fine sand, fine to coarse angular gravel, loose, dry to moist.
							0.3'-0.8'	Gray fine to medium gravel, trace to little fine sand, angular to sub angular, loose, dry.
							0.8'-1.1'	Dark brown to brown fine sand, trace angular to sub angular gravel trace coal and ash, loose, dry to moist.
BC12-2	1169823.43	1176168.64	510.01	7/29/2016	2.5	2.1	0.0'-0.2'	Grass and top soil, dry.
							0.2'-1.1'	Light brown very fine sand, little silt, trace white cinders, trace organics, loose, dry.
							1.1'-1.6'	Reddish brown very fine sand, little silt, trace ash, trace fine angular gravel, dense, moist.
							1.6'-2.1'	Reddish brown very fine sand, trace to little silt, trace fine to medium angular gravel, dense to very dense, dry to moist.
BC12-1	1169830.80	1176149.15	511.55	7/29/2016	2.5	2.3	0.0'-0.7'	Grass and top soil, brown very fine sand, little silt, trace fine sub angular gravel, loose, dry to moist.
							0.7'-1.4'	Reddish brown very fine sand, trace fine angular gravel, trace silt, dense, dry.
							1.4'-1.9'	Dark reddish brown very fine sand and silt, trace to little ash and coal, very dense, moist.
							1.9'-2.3'	Reddish brown silt, trace very fine sand and silt, trace clay, trace coal and ash, dense, moist.
BC12-3	1169870.04	1176232.94	508.73	7/29/2016	2.5	1.8	0.0'-0.5'	Dark brown very fine sand, some silt, trace organics, trace coal, loose, dry.
							0.5'-1.2'	Brown very fine sand, trace silt, trace ash/coal/glass, trace organics, loose, dry.
							1.2'-1.8'	Brown grading to reddish brown very fine sand, trace fine to medium angular gravel, dense to loose, dry.
T5W-1	1169765.35	1176245.82	509.27	7/29/2016	2.0	1.5	0.0'-0.6'	Dark brown very fine sand and silt, some organics, loose, moist.
							0.6'-1.1'	Dark brown very fine sand and silt, trace organics, loose, moist.
							1.1'-1.5'	Red and gray fractured stone and bedrock, dense, dry.
T4.6W1	1169705.66	1176250.66	511.41	7/29/2016	2.0	2.0	0.0'-0.6'	Brown very fine sand and silt, trace organics, white ash, dense, dry.
							0.6'-1.2'	Olive brown grading silt and very fine sand, very dense, dry.
							1.2'-2.0'	Brownish red silt, some clay, large gravel, dense, moist.
T4.4W2	1169634.64	1176240.36	517.28	7/29/2016	1.5	1.5	0.0'-0.8'	Brown to reddish brown very fine sand and silt, trace organics, loose, moist to dry.
							0.8'-1.3'	Light reddish brown very fine sand and silt, trace fine angular gravel, dense, dry.
							1.3'-1.5'	Brownish red very fine sand, trace silt, trace fine angular gravel, medium dense, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T4.4W1	1169642.90	1176274.33	514.17	7/29/2016	2.0	1.3	0.0'-0.6'	Dark brown very fine sand, little silt, trace organics, loose, moist.
							0.6'-1.3'	Brown to reddish brown very fine sand, trace silt, trace sub rounded medium to fine gravel, medium dense, dry.
T4.6E1	1169691.88	1176287.81	508.39	7/29/2016	2.5	1.8	0.0'-0.4'	Dark brown very fine sand and silt, trace to little organics, loose, moist.
							0.4'-0.5'	Red fractured sandstone.
							0.5'-1.8'	Brown to yellowish brown fine sand, some silt, trace sub angular gravel, trace coal/ash, loose, dry.
BC1-1	1169911.13	1176310.76	523.02	8/1/2016	3.0	2.7	0.0'-0.3'	Dark brown fine sand and silt, organics, trace medium gravel, moist.
							0.3'-1.0'	Brown to gray fine sand and silt, cinders, coal, moist.
							1.0'-1.2'	Fine sand and silt, brick, cinders.
							1.2'-1.5'	Brown silt, trace medium gravel, dense, moist to dry.
							1.5'-2.7'	Red brown silt, trace fine sand, loose, moist.
BC1-3	1169926.89	1176294.39	518.29	8/1/2016	2.0	2.0	0.0'-0.7'	Dark to light brown fine sand and silt, some organics, trace cinders and coal ash, moist.
							0.7'-1.0'	Light brown silt, fine to medium gravel, trace organics, dry.
							1.0'-1.6'	Light brown silt, gravel, trace slag/cinders/concrete, dry.
							1.6'-1.8'	Dark brown to gray gravel and silt, concrete, dry.
							1.8'-2.0'	Light brown clay, non plastic, moist.
BC1-2	1169925.91	1176268.08	515.31	8/1/2016	2.0	1.6	0.0'-0.5'	Dark brown fine sand and silt, some organics, wood, moist.
							0.5'-1.0'	Dark brown silt and fine sand, shale fragments, trace cinders/ash, dry.
							1.0'-1.6'	Light brown fine sand and silt, trace gravel, fill material, dry.
BC1-4	1169927.93	1176254.16	510.12	8/1/2016	2.0	1.0	0.0'-0.3'	Dark brown to black organics, moist.
							0.3'-1.0'	Dark brown silt and gravel, trace organics, trace brick, dry.
BC2-2	1169910.53	1176340.18	523.48	8/1/2016	2.0	1.7	0.0'-0.5'	Light brown silt, some organics, trace fine sand, dry.
							0.5'-1.7'	Light brown silt, trace fine gravel, trace organics, dry.
BC2-1	1169885.25	1176351.38	521.90	8/1/2016	2.0	1.6	0.0'-0.3'	Black to gray-brown fine sand and silt, some organics, moist.
							0.3'-1.0'	Light gray silt, trace fine sand, some cinders and coal, dry.
							1.0'-1.6'	Light brown silt, some cinders, dense, dry.
BC2-3	1169863.96	1176332.72	521.00	8/1/2016	3.0	2.6	0.0'-0.4'	Dark brown fine to medium sand and silt, some organics, moist.
							0.4'-0.7'	Light gray silt, fine gravel, some ash and cinders, dry.
							0.7'-2.4'	Light brown silt, fine sand and fine gravel, trace organics, dry.
							2.4'-2.6'	Gray to light brown silt, trace fine gravel, cinders, coal, ash, dry.
T5.2E4	1169869.72	1176395.19	520.84	8/1/2016	1.5	1.5	0.0'-0.6'	Dark brown silt, fine sand, trace organics, trace fine gravel, moist.
							0.6'-1.5'	Red brown silt and fine sand, trace fine angular gravel, moist.
T5.2E3	1169839.59	1176346.91	520.15	8/1/2016	2.0	2.0	0.0'-1.0'	Dark brown fine sand and silt, trace organics, dry.
							1.0'-1.7'	Dark brown to red-brown fine sand and silt, trace medium gravel, dry.
							1.7'-2.0'	Red-brown silt, trace fine gravel, dense, dry.
T5.E55	1169796.44	1176332.14	510.82	8/1/2016	2.5	2.5	0.0'-0.5'	Black to light brown fine sand and silt, some organics, loose, dry.
							0.5'-1.5'	Light brown fine sand and silt, some cinders/coal/ash, dry.
							1.5'-2.5'	Light brown to red-brown fine sand and silt, trace fine gravel, loose, dry.
BC1-5	1169890.77	1176275.67	507.92	8/1/2016	3.0	1.7	0.0'-0.5'	Dark brown to black fine to medium and, some silt, some organics, trace brick and cinders.
							0.5'-1.5'	Dark brown fine sand and silt, crushed stone, some cinders and ash, moist.
							1.5'-1.7'	Black clay and silt, some organics, some cinders and ash, moist.
BC1-6	1169831.00	1176273.67	506.86	8/1/2016	3.0	2.7	0.0'-1.4'	Black to dark brown fine sand and silt, crushed stone, some organics, moist.
							1.4'-1.6'	Dark brown to black fine sand and silt, layer of organics, moist to wet.
							1.6'-2.7'	Dark brown to black fine to medium sand, some gravel, wet. Refusal at 2.7'.
T6.4E2	1169976.24	1176254.80	519.72	8/2/2016	2.0	2.0	0.0'-0.5'	Dark brown, fine sand and silt with organics, some medium to fine rounded gravel, moist.
							0.5'-2.0'	Red brown, fine sand and silt, trace fine gravel, dry, organics (roots).

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
BC3-1	1169753.79	1176395.75	512.72	8/2/2016	2.0	1.8	0.0'-0.3'	Dark brown, organics, peat, moist.
							0.3'-0.5'	Fine sand and silt, fine gravel, fill materials (carport) glass, moist.
							0.5'-0.9'	Brown, coarse gravel with fine sane and silt, moist.
							0.9'-1.8'	Light brown, fine sand and silt with trace gravel, dry.
T4.4E4	1169705.09	1176394.38	510.24	8/2/2016	2.0	2.0	0.0'-0.6'	Brown silt, some fine sand, trace organics, trace fine gravel, dry.
							0.6'-2.0'	Light brown silt, little fine sand, little fine gravel, dry.
T4.6E2	1169718.85	1176310.93	508.05	8/1/2016	2.5	2.2	0.0'-0.9'	Brown silt, some fine sand, trace gravel, trace organics.
							0.9'-1.6'	Brown silt, little fine sand, trace fine gravel, trace coal, dry.
							1.6'-2.2'	Light brown silt, little fine sand, little fine gravel, dry, trace brick.
T4.6E3	1169753.11	1176338.92	509.85	8/2/2016	1.8	1.7	0.0'-0.6'	Brown silt, little fine sand, trace fine gravel, trace organics, dry.
							0.6'-1.4'	Brown silt, fine sand, trace brick, trace fine gravel, dry.
							1.4'-1.7'	Red sandstone fragments, dry.
								Refusal at 1.8'.
T4.6E4	1169765.60	1176366.34	512.30	8/2/2016	2.0	1.9	0.0'-0.3'	Dark brown silt, little fine sand, trace fine gravel, trace organics.
							0.3'-1.9'	Brown silt, little fine sand, trace fine gravel, trace coal, dry.
T5.2E1	1169797.66	1176268.61	505.67	8/2/2016	1.8	1.2	0.0'-0.3'	Dark brown silt, some fine sand, trace organics, trace fine gravel.
							0.3'-0.9'	Brown fine sand, some silt, trace fine gravel, moist.
							0.9'-1.2'	Dark red/brown sandstone, damp.
								Refusal at 1.8'.
T5.2E2	1169821.10	1176302.29	507.98	8/2/2016	1.0	1.0	0.0'-1.0'	Brown silt, some fine sand, trace fine gravel, trace organics, grading to little fine gravel, red sandstone.
								Refusal at 1.0'.
T6.6W1	1170010.84	1176156.36	516.42	8/4/2016	2.0	1.2	0.0'-0.4'	Dark brown, silt and fine sand, trace fine gravel, angular, dry.
							0.4'-0.8'	Dark brown silt, trace find sand, trace angular gravel, dry.
							0.8'-1.2'	White and gray, ash, cinders, dry.
T6.8W2	1170004.30	1176117.80	514.92	8/4/2016	2.0	1.8	0.0'-0.7'	Dark brown silt with fine sand, trace fine gravel, angular, organics, dry.
							0.7'-1.2'	Gray and white ash/cinders, black cinders, trace gravel.
							1.2'-1.8'	Red/brown fine sand and silt, trace coarse sand, trace fine gravel, dry.
T6.8W1	1170028.59	1176138.28	512.73	8/4/2016	2.5	1.7	0.0'-0.6'	Dark brown silt and fine gravel, angular, trace fine sand, dry, some organics.
							0.6'-1.0'	Gray brown gravel with silt, angular, trace organics, dry.
							1.0'-1.5'	Red brown fine sand and silt, trace fine gravel, dry.
							1.5'-1.7'	Gray and white slag/cinders, dense, dry, and angular.
T7-W5	1170008.47	1176083.11	514.35	8/4/2016	2.0	1.7	0.0'-1.0'	Light brown to red brown fine sand and silt, some organics, trace angular gravel, dry.
							1.0'-1.2'	Dark brown sand, white and black ash/cinders, dry.
							1.2'-1.3'	Fine to medium grave, trace coarse sand.
							1.3'-1.7'	White and gray, ash, cinders, dry.
T7.2W3	1170019.42	1176043.83	511.38	8/4/2016	2.5	1.7	0.0'-0.8'	Dark brown fine sand and silt, some angular gravel, moist to dry, organics.
							0.8'-1.7'	White ash and cinders, glass, brick, coal, dark brown fine to medium angular gravel.
T7.2W2	1170045.11	1176062.40	509.66	8/4/2016	2.5	1.5	0.0'-0.3'	Black and dark brown fine sand and silt, some angular gravel, moist to dry, organics, trace fine gravel, dry.
							0.3'-0.9'	Dark brown angular gravel and silt, trace organics, trace coal, dry.
							0.9'-1.3'	Dark brown fine sand and silt, fine to medium angular gravel, dry.
							1.3'-1.5'	Gray and white ash/cinders, dry.
T7.2W1	1170070.03	1176077.79	506.71	8/4/2016	2.5	1.7	0.0'-0.7'	Dark brown fine sand and silt, trace coarse sand, organics, dry.
							0.7'-1.4'	Brown to red brown fine to medium gravel, white and gray ash, cinders, coal.
							1.4'-1.7'	Dark brown fine sand and gravel, some silt with organics.
T2.6W1	1169415.66	1176520.40	513.51	8/4/2016	2.5	1.6	0.0'-0.7'	Gray brown fine sand and silt, trace fine angular gravel, organics, dry.
							0.7'-1.4'	Gray ash and cinders, coal and glass fragments, silt, trace fine gravel, dry.
							1.4'-1.6'	Coal, granular, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T5E3	1169771.01	1176289.98	507.48	8/4/2016	0.5	0.5	0.0'-0.5'	Dark brown fine sand and silt, organics - wood, roots, loose leaf litter, dry.
T7.4W3	1170053.07	1175996.81	508.65	8/5/2016	2.0	1.7	0.0'-0.6'	Brown-gray fine gravel with some fine sand and silt, angular grave, dry.
							0.6'-1.0'	Gray to brown fine gravel and sand, angular, dry.
							1.0'-1.3'	Coal, ash, coarse gravel, fine sand and silt, dry.
							1.3'-1.6'	Red-brown fine sand and silt, dry.
							1.6'-1.7'	White and gray ash and cinders, some glass, loose, dry.
T7.4W2	1170073.64	1176014.37	508.26	8/5/2016	2.0	1.5	0.0'-0.8'	Gray brown fine sand and silt, fine to coarse angular gravel, some organics, dry.
							0.8'-1.5'	Red brown fine sand and silt, some cinders and ash, loose to dense, dry.
T7.4W1	1170094.57	1176033.66	504.31	8/5/2016	2.5	2.2	0.0'-1.0'	Organics, waste material: cloth, wood, glass, slag, coarse gravel, some silt.
							1.0'-1.6'	Brown to red brown fine sand and silt.
							1.6'-2.2'	Silt and clay lens, ceramic pieces, some organic, some rounded gravel.
T7.6W1	1170115.08	1175994.86	506.67	8/5/2016	2.5	2.2	0.0'-1.0'	Light brown silt and gravel, some fine sand, some coarse to fine gravel, organics, dry.
							1.0'-2.2'	Red brown fine sand and silt, trace fine gravel, medium dense, dry.
T7.6W2	1170101.41	1175969.86	507.75	8/5/2016	2.0	1.3	0.0'-0.7'	Dark brown to red brown fine sand and gravel, some organics, dense, dry.
							0.7'-1.1'	Red brown fine sand and silt, trace fine gravel, dense, dry.
							1.1'-1.3'	Gray, white, and black cinders/ash, glass, brick, slag, loose, dry.
BD2-5	1170134.01	1175980.22	506.48	8/5/2016	2.5	1.3	0.0'-0.6'	Dark brown fine sand, fine to medium gravel, some organics, dry.
							0.6'-1.1'	Gray brown silt, coarse angular gravel, dry.
							1.1'-1.3'	Coarse gravel, some cinders, trace fine sand, dry.
BD2-6	1170163.97	1175968.13	505.94	8/5/2016	2.5	1.4	0.0'-0.8'	Red brown fine sand and silt, trace coarse sand, organics, dry.
							0.8'-1.4'	Fine to medium gravel, some concrete, some silt/sand, loose, dry.
T8W5	1170152.89	1175925.80	508.49	8/5/2016	2.0	1.6	0.0'-0.5'	Gray brown silt and fine sand, organics, loose, dry.
							0.5'-1.0'	Dark brown fine sand, medium rounded gravel, trace glass, loose, dry.
							1.0'-1.6'	Red brown fine sand and silt, some rounded gravel, loose, dry. White lens of crystalline material.
T8W2	1170176.59	1175954.76	506.74	8/5/2016	3.0	1.7	0.0'-0.7'	Fine sand and silt, some fine to medium gravel, organics, loose, dry.
							0.7'-1.0'	Gray brown medium to coarse gravel, some fine sand, trace cinders and ash, loose, dry.
							1.0'-1.5'	Red brown fine to medium sand, and silt, white and gray cinders, dense, dry.
							1.5'-1.7'	Gray and red brown fine sand, concrete, brick, dense, dry.
T8W1	1170181.58	1175962.98	505.95	8/5/2016	3.0	1.6	0.0'-0.7'	Dark brown fine sand and silt, some medium gravel, organics, dry.
							0.7'-0.9'	Dark brown to red brown fine sand and silt, wood, loose, dry.
							0.9'-1.1'	Gray concrete, dry.
							1.1'-1.6'	Red brown fine sand and silt, some medium gravel, some organics, medium dense, dry.
T8.2W1	1170217.07	1175941.88	507.57	8/5/2016	2.5	2.2	0.0'-0.5'	Gray brown silt and fine to medium gravel, organics.
							0.5'-1.4'	Red brown fine sand and silt, fine to medium gravel, dry.
							1.4'-2.2'	Yellow brown gravel with silt, loose to dense, dry.
T8.4W1	1170260.11	1175928.64	503.19	8/5/2016	2.5	1.7	0.0'-0.5'	Dark brown to light brown fine sand and silt, some coarse sand, some organics, loose, dry.
							0.5'-1.0'	Red brown fine sand and silt, some coarse sub angular gravel, loose, dry.
							1.0'-1.7'	Red brown silt and fine angular gravel, trace organics, dense, dry.
BC3-2	1169615.71	1176326.26	509.60	8/8/2016	5.0	4.4	0.0'-1.0'	Black medium sand and cinders/ash, some glass, trace organics, loose, dry.
							1.0'-2.3'	Yellow brown coarse gravel and medium sand, loose, dry.
							2.3'-4.4'	Dark red brown weathered bedrock, dense, pulverized bedrock, moist.
T4.4E3	1169684.43	1176364.27	510.47	8/8/2016	5.0	3.6	0.0'-1.1'	Gray brown fine sand, some silt, organics, trace fine gravel, dry.
							1.1'-1.6'	Gray brown to yellow brown fine sand and silt, organics, dry.
							1.6'-1.9'	Yellow brown fine sand and silt, dry.
							1.9'-3.6'	Crushed gravel interbedded with yellow brown fine sand and silt, organics, weathered bedrock.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T4.4E2	1169667.23	1176330.00	508.51	8/8/2016	5.0	4.8	0.0'-1.4'	Gray brown fine to medium sand and silt, some fine gravel, dense to loose, dry.
							1.4'-2.0'	Red brown fine to coarse gravel, fine to medium sand, pulverized stone, dense, dry.
							2.0'-2.1'	Yellow gray fine sand and silt, loose, dry.
							2.1'-2.2'	Fine sand, some organics.
							2.2'-2.6'	Fine sand and silt, rock fragments.
							2.6'-3.1'	Red brown bedrock fragments.
							3.1'-4.8'	Red brown pulverized bedrock, wet.
T4.4E1	1169651.69	1176305.46	508.94	8/8/2016	5.0	4.0	0.0'-1.0'	Gray black medium to coarse sand, some silt, organics, trace coarse gravel, glass/cinders/ash, loose, dry.
							1.0'-1.8'	Red brown fine sand, some silt, trace coarse gravel, organics, dry.
							1.8'-2.5'	Dark brown crushed stone, fine sand,
							2.5'-3.8'	Fine to medium sand, fine to medium gravel, rounded to sub rounded gravel, loose.
							3.8'-3.9'	Yellow brown fine sand and silt.
							3.9'-4.0'	Yellow brown to gray fine sand and silt.
							4.0'	Pulverized red brown sandstone.
T2.3E2	1169423.82	1176628.60	521.04	8/8/2016	1.5	1.5	0.0'-0.4'	Coarse gravel, some fine sand, loose, dry.
							0.4'-1.1'	Black-red brown silt and clay, some coarse gravel, trace coal/ash/cinders, moist, petroleum odor.
							1.1'-1.4'	Red brown fine to medium gravel with silt, cinders/ash, petroleum odor.
							1.4'-1.5'	Red brown fine sand, loose, moist, petroleum odor.
T2.4E2	1169443.25	1176603.22	519.94	8/8/2016	1.5	1.5	0.0'-0.6'	Gray coarse gravel, trace fine sand, loose, dry.
							0.6'-1.0'	Red brown fine sand and silt, trace organics, medium gravel, dense, dry.
							1.0'-1.2'	Red brown medium fine sand, loose, dry.
							1.2'-1.5'	Dark red brown medium sand and silt, loose, moist.
BB3-3	1169105.09	1176560.30	517.21	8/8/2016	1.5	1.5	0.0'-1.3'	Gray crushed stone, fine to coarse gravel, loose to dense, dry.
							1.3'-1.5'	Dark brown clay and silt, trace coal cinders, dense, moist.
BB4-4	1169056.68	1176559.64	517.91	8/8/2016	1.5	1.5	0.0'-0.8'	Gray crushed stone, medium to fine angular gravel, trace silt, dry.
							0.8'-1.5'	Black to red brown clay and silt, some cinders/ash, dense, dry.
BB3-1	1169016.78	1176539.17	517.97	8/8/2016	1.5	1.5	0.0'-0.8'	Gray crushed stone, fine to medium angular gravel, trace silt, dry to moist.
							0.8'-1.4'	Black to red brown clay and sit, some cinders/ash, dense, moist.
							1.4'-1.5'	Red brown silt and clay, dense, moist.
T7.6E2	1170171.29	1176042.05	506.92	8/8/2016	2.0	1.7	0.0'-0.3'	Gray to black fine sand and silt, trace medium rounded gravel, organics.
							0.3'-1.0'	Red brown silt, some fine sand, loose, lens of ash, dry.
							1.0'-1.3'	Red brown coarse gravel, some fine sand and silt, dry.
							1.3'-1.7'	Red brown fine sand, loose, moist.
T7.4E2	1170145.40	1176068.83	507.75	8/8/2016	2.0	1.8	0.0'-0.5'	Gray brown fine sand and silt, some fine gravel, organics, loose to dense.
							0.5'-1.7'	Red brown silt, some fine sand, some brick, trace fine gravel, loose, dry.
							1.7'-1.8'	Cinders, ash, charcoal, glass, loose, dry.
T7.2E2	1170137.50	1176108.54	508.11	8/8/2016	2.5	2.2	0.0'-1.3'	Red brown fine sand and silt, some fine sub angular gravel, organics, dry.
							1.3'-2.2'	Brown to brown black fine to medium sand, some silt, some coal/ash, organics, trace glass, dry.
T7.2E3	1170166.06	1176125.88	509.61	8/8/2016	1.5	1.2	0.0'-0.3'	Gray brown fine sand and silt, organics, dense, dry.
							0.3'-1.2'	Red brown silt, some fine sand, some organics, trace medium sub rounded gravel, loose, dry.
T7.2E5	1170233.28	1176162.76	511.52	8/8/2016	1.5	1.5	0.0'-0.3'	Gray brown fine sand and silt, organics, dense, dry.
							0.3'-1.5'	Red brown fine sand and silt, trace fine gravel, trace organics, dry.
T7.2E4	1170197.46	1176143.14	510.97	8/8/2016	1.5	1.5	0.0'-0.3'	Gray brown fine sand and silt, organics, dense, dry.
							0.3'-0.9'	Gray brown fine sand and silt, fine angular gravel, loose, dry.
							0.9'-1.5'	Red brown fine sand and silt, fine angular gravel, dense, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T6.6E2	1170092.55	1176198.27	515.47	8/8/2016	2.0	1.8	0.0'-0.3'	Gray brown fine sand and silt, organics, dense, dry.
							0.3'-1.3'	Gray brown to red brown fine sand and silt, fine rounded gravel, loose, dry.
							1.3'-1.8'	Red brown fine to medium sand, some silt, trace fine to medium rounded gravel, trace organics, dense, moist.
T7E9	1170245.20	1176185.07	511.91	8/8/2016	1.5	1.5	0.0'-0.3'	Light brown fine sand and silt, organics, dry.
							0.3'-1.5'	Red brown fine sand and silt, trace medium angular gravel, dry.
T6.8E3	1170180.63	1176200.10	513.26	8/8/2016	1.5	1.4	0.0'-0.4'	Gray brown silt, fine sand, dry.
							0.4'-1.5'	Red brown silt and fine sand, trace fine gravel, dry.
BD2-4	1170089.08	1176217.47	516.74	8/8/2016	1.5	1.5	0.0'-0.5'	Gray brown fine sand and silt, some organics, trace gravel, moist.
							0.5'-1.5'	Red brown fine sand and silt, clay, moist.
BD2-3	1170053.40	1176226.71	518.86	8/8/2016	2.0	1.9	0.0'-0.8'	Gray brown fine sand and silt, trace organics.
							0.8'-0.9'	Coals, ash, cinders.
							0.9'-1.9'	Red brown fine sand, some silt, trace medium well rounded gravel, moist.
BD2-2	1170017.86	1176226.52	519.18	8/8/2016	2.0	1.7	0.0'-1.0'	Back to brown fine sand and silt, trace fine gravel, organics, moist.
							1.0'-1.7'	Crushed stone, medium angular gravel, moist.
T3.6E2	1169580.90	1176376.25	511.63	8/9/2016	5.0	2.9	0.0'-1.0'	Brown fine sand and silt, trace coarse sand, trace organics, dry.
							1.0'- 2.0'	Fine sand and silt, some fine angular gravel, dense, dry.
							2.0'-2.9'	Red brown crushed stone, yellow to red brown fine sand and silt, dense, dry. Refusal.
T3.6E3	1169602.48	1176397.01	511.34	8/9/2016	5.0	1.9	0.0'-0.7'	Gray brown fine sand, some silt, organics, trace fine gravel, dry.
							0.7'-1.0'	Gray brown fine to medium sub rounded gravel, fine sand, trace silt, dry.
							1.0'-1.4'	Red brown medium to coarse gravel, yellow brown medium sand, fine sand, dense, dry.
							1.4'-1.9'	Gray white silt, dense, dry. Refusal.
T3.6E1	1169563.29	1176361.47	509.31	8/9/2016	5.0	2.8	0.0'-0.8'	Brown fine sand and silt, trace fine angular gravel, organics, loose.
							0.8'-1.4'	Red brown to yellow fine to medium sand and silt, coarse gravel.
							1.4'-2.8'	Red brown coarse gravel, fine to medium sand and silt, red rock. Refusal.
T8.2E1	1170229.90	1175985.82	506.59	8/9/2016	2.0	1.7	0.0'-1.0'	Gray brown silt, fine sand, loose, dry.
							1.0'-1.7'	Medium to coarse gravel, some fine sand, wood layer, dense, moist to dry.
T7.6E1	1170151.00	1176012.84	504.63	8/9/2016	2.0	1.5	0.0'-0.5'	Organics, coal, cinders, black brown, loose, dry.
							0.5'-1.2'	Brown fine sand and silt, organics, ceramic pieces, loose, dry.
							1.2'-1.5'	Black brown silt, fine sand, some clay, organics, loose, dry.
T7.4E1	1170115.43	1176046.80	505.19	8/9/2016	2.0	1.7	0.0'-1.0'	Gray to red brown fine sand and silt, trace clay, organics, fine angular gravel, medium dense, dry.
							1.0'-1.7'	Gray to white cinders and ash, fine to coarse angular gravel, loose, dry.
T7.2E1	1170105.15	1176091.38	506.31	8/9/2016	2.5	1.2	0.0'-0.3'	Gray brown fine sand and silt, organics, loose.
							0.3'-1.0'	Red brown fine sand and silt, fine angular gravel, loose.
							1.0'-1.2'	Red brown to gray brown fine sand, cinders/ash, fine angular gravel, loose.
T6.8E2	1170097.07	1176169.11	509.93	8/9/2016	2.5	1.9	0.0'-0.3'	Gray brown fine sand and silt, organics, medium dense, dry.
							0.3'-0.8'	Gray brown fine sand and silt, trace organics, loose, dry.
							0.8'-1.7'	Black brown silt, and clay, some fine sand, dense, dry.
							1.7'-1.9'	Fine sand, some cinders/ash, loose, gray/yellow/white fibrous paint chip material, dry.
T6.6E1	1170055.84	1176181.86	510.23	8/9/2016	2.5	1.4	0.0'-0.5'	Gray brown fine sand and silt, trace medium angular gravel, organics, loose, dry.
							0.5'-1.4'	gray brown fine sand and silt, some medium angular gravel, some organics, trace coal/ash, dense.
T6.8E1	1170072.68	1176152.56	505.90	8/9/2016	2.5	2.3	0.0'-0.3'	Gray brown fine sand and silt, trace fine gravel, organics, medium dense, dry.
							0.3'-1.3'	Brown fine sand and silt, trace fine gravel, some organics, loose, dry.
							1.3'-1.8'	Red brown fine sand and silt, coal and ash cinders.
							1.8'-1.9'	Yellow white silt, medium dense, dry.
							1.9'-2.3'	Red black silt and fine sand, organics, dense, moist.
T7.6E3	1170072.68	1176152.56	505.90	8/9/2016	1.5	1.3	0.0'-0.3'	Light brown fine sand and silt, organics, loose, dry.
							0.3'-1.3'	Fine sand and silt, trace fine angular gravel, loose, dry.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T7.6E4	1170206.49	1176101.09	509.32	8/9/2016	1.5	1.5	0.0'-0.3'	Light brown fine sand and silt, organics, loose, dry.
							0.3'-1.5'	Red brown fine sand and silt, trace fine to medium gravel, loose, dry.
T8.2E1	1170229.90	1175985.82	506.59	8/30/2016	1.7	1.3	0.0'-0.7'	Dark brown to brown very fine sand and silt, trace fine angular gravel, trace organics, dense, moist.
							0.7'-1.2'	Reddish brown very fine sand, little silt, trace fine to coarse angular gravel, medium dense, dry to moist.
							1.2'-1.3'	Dark brown organics and sand, moist. Refusal.
T8.4E1	1170276.03	1175971.57	508.45	8/30/2016	2.0	1.7	0.0'-0.8'	Brown very fine sand and silt, trace fine to medium sub angular gravel, trace organics, medium dense, moist.
							0.8'-1.7'	Reddish brown very fine sand and silt, trace fine to coarse sub angular gravel, dense, dry.
T8.6W1	1170295.89	1175919.72	499.65	8/30/2016	2.1	2.1	0.0'-0.3'	Dark brown silt, little very fine sand, organics, dense, moist.
							0.3'-1.2'	Light olive gray silt and clay, trace organics, very dense, moist.
							1.2'-2.1'	Grayish red brown silt, little clay, trace very fine sand, trace fine to coarse angular gravel, very dense, moist. Refusal.
T8.6E1	1170300.08	1175949.30	499.94	8/30/2016	2.0	1.8	0.0'-1.0'	Dark brown dark gray organics with trace silt, wet.
							1.0'-1.7'	Olive grayish brown very fine to fine sand and silt, trace fine angular to sub angular gravel, trace organics, loose, wet.
							1.7'-1.8'	Olive grayish brown very fine to fine sand and silt, trace fine angular to sub angular gravel, trace reddish brown clay, trace organics, loose, wet.
T8.6E2	1170315.40	1175992.63	509.08	8/30/2016	1.5	1.4	0.0'-0.3'	Dark brown wood and organics debris.
							0.3'-1.0'	Brown very fine sand and silt, trace fine angular gravel, medium dense to loose, dry.
							1.0'-1.4'	Reddish brown very fine sand, trace silt, trace fine medium angular gravel, loose, dry.
T8.4E2	1170287.04	1176009.61	508.44	8/30/2016	1.5	1.5	0.0'-1.5'	Brown grading to reddish brown very fine sand and silt, trace fine to medium angular gravel, trace coal, trace organics, dense grading to medium dense, moist to dry.
T8.2E2	1170247.77	1176030.11	507.16	8/30/2016	1.5	1.4	0.0'-0.3'	Brown very fine sand and silt, trace organics, dense, dry.
							0.3'-0.8'	Brown very fine sand and silt, trace fine to coarse sub angular gravel, trace coal, trace organics, dense, dry.
							0.8'-1.4'	Reddish and yellowish brown very fine sand, little silt, trace fine to medium angular to sub angular gravel, loose, dry.
T8.2E3	1170266.47	1176067.27	508.07	8/30/2016	1.5	1.4	0.0'-0.6'	Dark brown silt, trace to little very fine sand, trace organics, dense, moist.
							0.6'-1.1'	Yellowish brown very fine sand, trace silt, trace fine to medium angular gravel, medium dense, dry.
							1.1'-1.4'	Reddish brown silt, trace to little clay, trace very fine sand, dense, dry to moist.
T8.4E3	1170302.70	1176053.72	509.67	8/30/2016	1.5	1.4	0.0'-0.7'	Dark brown silt, and very fine sand, trace fine and coarse angular gravel, trace organics, dense, moist.
							0.7'-1.4'	Brown very fine sand and silt, trace fine to coarse angular to sub angular gravel, loose, dry.
T8.4W2	1170238.44	1175908.06	510.27	8/30/2016	2.0	1.7	0.0'-0.9'	Brown grading to light brown very fine sand and silt, trace grading to little medium to coarse angular gravel, trace organics, loose, dry.
							0.9'-1.2'	Light brown very fine sand, some silt, little fine to coarse angular gravel, loose, dry.
							1.2'-1.7'	Rusty red brown very fine sand, little silt, trace fine angular gravel, loose, dry.
T8.2W2	1170196.99	1175908.00	509.32	8/30/2016	2.0	1.7	0.0'-0.6'	Dark brown silt, trace to little very fine sand, trace organics, fine angular gravel, loose, moist.
							0.6'- 0.8'	Dark brown silt, trace to little very fine sand, little fine to coarse angular gravel, dense, moist.
							0.8'-1.4'	Dark reddish brown silt and very fine sand, trace fine angular gravel, dense, moist.
							1.4'-1.7'	Reddish brown very fine to fine sand and silt, trace angular fine gravel, some fractured red sandstone, trace coal, medium dense, dry.
T2E1	1169214.14	1176648.27	509.74	9/6/2016	0.5	0.5	0.0'-0.3'	Brown very fine sand and silt mixed with organics, trace fine to medium sub angular gravel, loose, moist.
							0.3'-0.5'	Olive gray silt, trace very fine sand, loose to medium dense, moist.
T3.4E3	1169594.83	1176448.51	512.68	9/22/2016	2.0	1.8	0.0'-0.6'	Reddish brown very fine to fine sand, loose, moist.
							0.6'-1.0'	Dark brown silt, some very fine sand, organics, trace coal, dense, moist.
							1.0'-1.3'	Brown silt and very fine sand, trace fine angular to sub angular gravel, medium dense, moist.
							1.3'-1.8'	Reddish brown and yellowish brown very fine grained sand, trace silt, loose, dry, fractured red sandstone.

APPENDIX B
TABLE B.1 − BOREHOLE STRATIGRAPHIC SUMMARY

OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

Boring ID	Survey Coordinates			Date	Depth of Boring (ft bgs)	Recovery of Boring (ft)	Sample Description	
	Northing	Easting	Elevation					
T3.4E4	1169617.39	1176483.08	512.55	9/22/2016	1.5	1.2	0.0'-0.8'	Medium dark brown silt, trace very fine sand, trace coal, dense, moist.
							0.8'-1.2'	Olive brown silt, little very fine grained sand, trace medium to coarse gravel, dense to very dense, dry.
T3.6E4	1169641.67	1176447.91	511.99	9/22/2016	1.5	1.2	0.0'-0.7'	Brown silt, some very fine sand, trace fine angular gravel, trace ash, loose grading to dense, moist.
							0.7'-1.1'	Olive brown silt, some very fine sand, dense to very dense, moist to dry.
							1.1'-1.2'	Fractured red sandstone.
T3.6E5	1169670.01	1176474.73	511.97	9/22/2016	1.5	1.5	0.0'-1.0'	Brown silt, little to some very fine grained sand, trace fine angular to sub angular gravel, loose, moist.
							1.0'-1.5'	Yellowish brown to reddish yellow very fine grained sand, trace fine sand, dense, moist to dry.
T4.6E5	1169803.11	1176424.80	520.20	9/22/2016	1.5	1.5	0.0'-0.6'	Dark brown silt, fine to medium angular gravel, trace very fine sand, dense, moist.
							0.6'-0.7'	Ash, coal, loose, moist.
							0.7'-1.0'	Gray fine angular gravel, loose, moist.
							1.0'-1.5'	Brownish red to red silt, trace very fine sand, trace glass and coal, dense to very dense, moist.
T5E8	1169844.82	1176418.29	520.47	9/22/2016	1.5	1.4	0.0'-0.5'	Brown very fine to medium grained sand, some fine to medium sub rounded gravel, trace organics, loose, moist.
							0.5'-0.9'	Dark brown silt, little very fine to fine sand, trace fine sub angular gravel, trace coal, dense, moist.
							0.9'-1.4'	Reddish brown silt, little very fine sand, dense to very dense, moist.
T4.4E5	1169730.19	1176426.32	512.62	9/22/2016	1.5	1.4	0.0'-0.4'	Brown very fine sand and silt, trace ceramics, loose, moist.
							0.4'-0.7'	Gray fine to medium sand and ash, trace fine angular gravel, loose, moist.
							0.7'-1.4'	Brown silt, and very fine sand, trace coal, trace organics, very dense, moist.

Notes:
(ft) - feet.
bgs - below ground surface
NA - Not Available/Not Applicable
Survey data are in North American Datum 1983 coordinates (NAD83/2011); and elevations are in North American Vertical Datum 1988 (NAVD88).

APPENDIX C

Soil Arsenic Analytical Data

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T1E1	BB-6	0-3	10/24/2002	Soil	34.4 J	--	31.9 E	--	**33.2**
		3-6	10/24/2002	Soil	34.8 J	--	--	--	**34.8**
		6-12	10/24/2002	Soil	33 J	--	--	--	**33.0**
		12-18	10/24/2002	Soil	15.0 J	--	--	--	15.0
		18-24	10/24/2002	Soil	19.6 J	--	--	--	19.6
T1E2	BB-6	0-3	10/24/2002	Soil	50.2 J	--	--	--	**50.2**
		3-6	10/24/2002	Soil	64.5 J	--	--	--	**64.5**
		6-12	10/24/2002	Soil	53.9 J	33.7 J	--	--	**43.8**
		12-18	10/24/2002	Soil	9.8 J	--	--	--	9.8
		18-24	10/24/2002	Soil	8.0 J	--	--	--	8.0
T1E3	BB-6	0-3	10/24/2002	Soil	26.2 J	--	--	--	**26.2**
		3-6	10/24/2002	Soil	87.3 J	--	--	--	**87.3**
		6-12	10/24/2002	Soil	33.2 J	--	--	--	**33.2**
		12-18	10/24/2002	Soil	8.8	--	--	--	8.8
		18-24	10/24/2002	Soil	5.5	--	--	--	5.5
T1E4	BB-6	0-3	10/24/2002	Soil	50.3 J	--	--	--	**50.3**
		3-6	10/24/2002	Soil	51.5 J	--	--	--	**51.5**
		6-12	10/24/2002	Soil	5.4	--	--	--	5.4
		12-18	10/24/2002	Soil	2.1 J	--	--	--	2.1
		18-24	10/24/2002	Soil	1.5 J	--	--	--	1.5
T1E5	BB-6	0-3	3/16/2004	Soil	24.5	--	--	--	**24.5**
		3-6	3/16/2004	Soil	--	--	26.1	--	**26.1**
		6-12	3/16/2004	Soil	34.3	--	--	--	**34.3**
		12-18	3/16/2004	Soil	5.2	--	5.5	--	5.4
		18-24	3/16/2004	Soil	5.9	--	--	--	5.9
		24-28	3/16/2004	Soil	7.6	--	--	--	7.6
T1W1	BB-4	0-3	10/24/2002	Soil	15.9	--	13.3 E	--	14.6
		3-6	10/24/2002	Soil	58.1	--	--	--	**58.1**
		6-12	10/24/2002	Soil	186	--	--	--	**186**
T1W2	BB-4	0-3	10/24/2002	Soil	34.0	--	--	--	**34.0**
		3-6	10/24/2002	Soil	31.3	--	--	--	**31.3**
		6-12	10/24/2002	Soil	10.6	--	--	--	10.6
		12-18	10/24/2002	Soil	7.2	--	--	--	7.2
		18-24	10/24/2002	Soil	6.7	--	--	--	6.7
T1W3	BB-4	0-3	10/24/2002	Soil	25.1	--	--	--	**25.1**
		3-6	10/24/2002	Soil	26.0	--	--	--	**26.0**
		6-12	10/24/2002	Soil	11.3	11.4 J	--	--	11.4
		12-18	10/24/2002	Soil	7.3 J	--	--	--	7.3
		18-24	10/24/2002	Soil	5.5 J	--	--	--	5.5
T1W4	BB-4	0-3	10/24/2002	Soil	22.3 J	--	--	--	**22.3**
		3-6	10/24/2002	Soil	23.4 J	--	--	--	**23.4**
		6-12	10/24/2002	Soil	18.6 J	--	--	--	18.6
		12-18	10/24/2002	Soil	8.7 J	--	--	--	8.7
		18-24	10/24/2002	Soil	3.7 J	--	--	--	3.7
T1.6E1	BB-5	0-3	07/25/2016	Soil	18.5	--	--	--	18.5
		3-6	07/25/2016	Soil	19.3	--	--	--	19.3
		6-12	07/25/2016	Soil	20.7	--	--	--	**20.7**
		12-18	07/25/2016	Soil	15.2	--	--	--	15.2
		18-24	07/25/2016	Soil	12.9	--	--	--	12.9

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T1.6W1	BB-4	0-3	07/21/2016	Soil	83.8 J	--	--	--	**83.8**
		3-6	07/21/2016	Soil	80.2 J	--	--	--	**80.2**
		6-12	07/21/2016	Soil	42.3 J	--	--	--	**42.3**
		12-18	07/21/2016	Soil	13.9 J	--	--	--	13.9
		18-24	07/21/2016	Soil	10.5 J	--	--	--	10.5
		24-30	07/21/2016	Soil	8.5 J	--	--	--	8.5
T1.6W2	BB-4	0-3	07/21/2016	Soil	21.1 J	--	--	--	**21.1**
		3-6	07/21/2016	Soil	24.8 J	--	--	--	**24.8**
		6-12	07/21/2016	Soil	19.4 J	--	--	--	19.4
		12-18	07/21/2016	Soil	5.0 J	4.4 J	--	--	4.7
		18-24	07/21/2016	Soil	5.2 J	--	--	--	5.2
T2E1	BB-6	0-3	10/24/2002	Soil	1,680 J	--	--	--	**1680**
		3-6	10/24/2002	Soil	528 J	--	430 E	--	**479**
		6-12	10/24/2002	Soil	467 J	--	--	--	**467**
T2E1	BB-6	0-6	09/06/2016	Soil	287 J	--	--	--	**287**
T2E2	BB-7	0-3	07/21/2016	Soil	8.8 J	--	--	--	8.8
		3-6	07/21/2016	Soil	7.8 J	--	--	--	7.8
		6-12	07/21/2016	Soil	8.4 J	--	--	--	8.4
		12-18	07/21/2016	Soil	8.8 J	--	--	--	8.8
		18-24	07/21/2016	Soil	7.7 J	--	--	--	7.7
T2E3	BB-5	0-3	07/25/2016	Soil	12.4	--	--	--	12.4
		3-6	07/25/2016	Soil	10.0	--	--	--	10.0
		6-12	07/25/2016	Soil	6.1	--	--	--	6.1
		12-18	07/25/2016	Soil	10.4	--	--	--	10.4
		18-24	07/25/2016	Soil	11.2	--	--	--	11.2
T2S	BB-6	0-3	10/28/2002	Sediment	157 J	--	--	--	**157**
T2W1	BB-4	0-3	10/24/2002	Soil	281 J	--	--	--	**281**
		3-6	10/24/2002	Soil	1240 J	--	594 E	--	**917**
		6-12	10/24/2002	Soil	79.1 J	--	--	--	**79.1**
		12-18	10/24/2002	Soil	15.3 J	--	--	--	15.3
		18-24	10/24/2002	Soil	27.9 J	--	--	--	**27.9**
T2W2	BB-4	0-3	10/24/2002	Soil	64.3 J	--	--	--	**64.3**
		3-6	10/24/2002	Soil	53.9 J	--	--	--	**53.9**
		6-12	10/24/2002	Soil	52.6 J	56.0 J	--	--	**54.3**
		12-18	10/24/2002	Soil	14.8 J	--	--	--	14.8
		18-24	10/24/2002	Soil	4.6 J	--	--	--	4.6
T2W3	BB-4	0-3	10/24/2002	Soil	57.2 J	--	--	--	**57.2**
		3-6	10/24/2002	Soil	37.6 J	--	--	--	**37.6**
		6-12	10/24/2002	Soil	31.0 J	34.1 J	--	--	**32.6**
		12-18	10/24/2002	Soil	3.6 J	--	--	--	3.6
		18-24	10/24/2002	Soil	3.5 J	--	--	--	3.5
T2W4	BB-4	0-3	10/24/2002	Soil	20.9 J	--	--	--	**20.9**
		3-6	10/24/2002	Soil	26.9 J	--	23.6 E	--	**25.3**
		6-12	10/24/2002	Soil	25.6 J	--	--	--	**25.6**
		12-18	10/24/2002	Soil	5.9 J	--	--	--	5.9
		18-24	10/24/2002	Soil	4.6 J	--	--	--	4.6

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T2W5	BB-4	0-3	10/24/2002	Soil	27.5 J	--	--	--	**27.5**
		3-6	10/24/2002	Soil	27.1 J	--	--	--	**27.1**
		6-12	10/24/2002	Soil	18.4 J	19.0 J	--	--	18.7
		12-18	10/24/2002	Soil	7.5 J	--	--	--	7.5
		18-24	10/24/2002	Soil	1.1 J	--	--	--	1.1
T2W6	BB-2	0-3	10/24/2002	Soil	9.7 J	--	--	--	9.7
		3-6	10/24/2002	Soil	7.1 J	--	--	--	7.1
		6-12	10/24/2002	Soil	25.7 J	--	--	--	**25.7**
		12-18	10/24/2002	Soil	69.8 J	--	--	--	**69.8**
T2W7	BB-3	0-3	10/24/2002	Soil	6.4	--	8.3 E	--	7.4
T2W8	BB-7	0-3	10/24/2002	Soil	4.6	--	--	--	4.6
T2W9	BB-7	0-3	10/24/2002	Soil	11.5 J	--	--	--	11.5
T2W10	BB-3	0-3	11/1/2002	Soil	18.3 J	--	--	--	18.3
		3-6	11/1/2002	Soil	17.8 J	--	--	--	17.8
		6-12	11/1/2002	Soil	8.0 J	--	9.8	--	8.9
		12-18	11/1/2002	Soil	5.7 J	--	--	--	5.7
		18-24	11/1/2002	Soil	2.8 J	--	--	--	2.8
T2W11	BB-1	0-3	11/1/2002	Soil	19.9 J	--	--	--	19.9
		3-6	11/1/2002	Soil	25.7 J	--	--	--	**25.7**
		6-12	11/1/2002	Soil	34.3	--	--	--	**34.3**
		12-18	11/1/2002	Soil	28.1	--	--	--	**28.1**
		18-24	11/1/2002	Soil	2.0	--	--	--	2.0
T2W12	BB-7	0-3	12/14/2005	Soil	16.7	--	--	--	16.7
		3-6	12/16/2005	Soil	--	--	19.8	--	19.8
		6-12	12/14/2005	Soil	31.8	--	--	--	**31.8**
		12-18	12/14/2005	Soil	24.6	--	--	--	**24.6**
		18-24	12/14/2005	Soil	7.3	--	--	--	7.3
T2W13	BB-7	0-3	07/21/2016	Soil	21.6 J	--	--	--	**21.6**
		3-6	07/21/2016	Soil	14.1 J	--	--	--	14.1
		6-12	07/21/2016	Soil	6.1 J	--	--	--	6.1
		12-18	07/21/2016	Soil	5.5 J	--	--	--	5.5
		18-24	07/21/2016	Soil	6.8 J	--	--	--	6.8
T2W14	BB-7	0-3	07/21/2016	Soil	55.5 J	--	--	--	**55.5**
		3-6	07/21/2016	Soil	43.1 J	--	--	--	**43.1**
		6-12	07/21/2016	Soil	10.1 J	--	--	--	10.1
		12-18	07/21/2016	Soil	3.9 J	--	--	--	3.9
		18-24	07/21/2016	Soil	3.3 J	--	--	--	3.3
T2W15	BB-7	0-3	07/21/2016	Soil	14.3 J	--	--	--	14.3
		3-6	07/21/2016	Soil	15.5 J	--	--	--	15.5
		6-12	07/21/2016	Soil	24.7 J	--	--	--	**24.7**
		12-18	07/21/2016	Soil	19.6 J	--	--	--	19.6
		18-24	07/21/2016	Soil	6.1 J	--	--	--	6.1
T2.1E1	BB-7	0-3	07/21/2016	Soil	37.8 J	--	--	--	**37.8**
		3-6	07/21/2016	Soil	46.0 J	--	--	--	**46.0**
		6-12	07/21/2016	Soil	45.9 J	--	--	--	**45.9**
		12-18	07/21/2016	Soil	26.3 J	--	--	--	**26.3**
		18-24	07/21/2016	Soil	34.4 J	--	--	--	**34.4**

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T2.1W1	BB-7	0-3	07/21/2016	Soil	329 J	--	--	--	**329**
		3-6	07/21/2016	Soil	112 J	--	--	--	**112**
		6-12	07/21/2016	Soil	26.7 J	--	--	--	**26.7**
		12-18	07/21/2016	Soil	54.9 J	--	--	--	**54.9**
		18-24	07/21/2016	Soil	39.8 J	--	--	--	**39.8**
		24-30	07/21/2016	Soil	9.5 J	--	--	--	9.5
T2.1W2	BB-7	0-3	07/21/2016	Soil	78.4 J	--	--	--	**78.4**
		3-6	07/21/2016	Soil	34.6 J	--	--	--	**34.6**
		6-12	07/21/2016	Soil	13.2 J	--	--	--	13.2
		12-18	07/21/2016	Soil	10.4 J	--	--	--	10.4
T2.1W3	BB-7	0-3	07/21/2016	Soil	7.3 J	--	--	--	7.3
		3-6	07/21/2016	Soil	7.5 J	--	--	--	7.5
		6-12	07/21/2016	Soil	6.5 J	--	--	--	6.5
		12-18	07/21/2016	Soil	5.8 J	--	--	--	5.8
T2.1W4	BB-7	0-3	07/21/2016	Soil	79.6 J	--	--	--	**79.6**
		3-6	07/21/2016	Soil	27.2 J	--	--	--	**27.2**
		6-12	07/21/2016	Soil	3.9 J	--	--	--	3.9
		12-18	07/21/2016	Soil	2.7 J	--	--	--	2.7
T2.3E1	BC-6	0-3	07/27/2016	Soil	11.3	--	--	--	11.3
		3-6	07/27/2016	Soil	6.5	--	--	--	6.5
		6-12	07/27/2016	Soil	5.8	5.9	--	--	5.9
		12-18	07/27/2016	Soil	6.8	--	--	--	6.8
		18-24	07/27/2016	Soil	5.4	--	--	--	5.4
T2.3E2	BC-6	0-3	08/08/2016	Soil	7.5 J	--	--	--	7.5
		3-6	08/08/2016	Soil	10.2 J	--	--	--	10.2
		6-12	08/08/2016	Soil	8.8 J	--	--	--	8.8
		12-18	08/08/2016	Soil	6.9 J	--	--	--	6.9
T2.3W1	BB-7	0-3	07/27/2016	Soil	233	--	--	--	**233**
		3-6	07/27/2016	Soil	260	--	--	--	**260**
		6-12	07/27/2016	Soil	299	--	--	--	**299**
		12-18	07/27/2016	Soil	230	--	--	--	**230**
		18-24	07/27/2016	Soil	105	--	--	--	**105**
		24-30	07/27/2016	Soil	251	--	--	--	**251**
T2.4E1	BC-6	0-3	07/27/2016	Soil	4.8	--	--	--	4.8
		3-6	07/27/2016	Soil	4.7	--	--	--	4.7
		6-12	07/27/2016	Soil	4.8	--	--	--	4.8
		12-18	07/27/2016	Soil	5.8	--	--	--	5.8
		18-24	07/27/2016	Soil	19.7	--	--	--	19.7
T2.4E2	BC-6	0-3	08/08/2016	Soil	3.4 J	--	--	--	3.4
		3-6	08/08/2016	Soil	2.8 J	--	--	--	2.8
		6-12	08/08/2016	Soil	2.4 J	--	3.2	--	2.8
		12-18	08/08/2016	Soil	2.5 J	3.0 J	--	--	2.8
T2.4W1	BC-6	0-3	07/27/2016	Soil	121	--	--	--	**121**
		3-6	07/27/2016	Soil	120	--	--	--	**120**
		6-12	07/27/2016	Soil	68.2	--	--	--	**68.2**
		12-18	07/27/2016	Soil	45.9	--	--	--	**45.9**
		18-24	07/27/2016	Soil	7.9	--	--	--	7.9
		24-30	07/27/2016	Soil	28.2	--	--	--	**28.2**

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T2.6E1	BC-6	0-3	07/27/2016	Soil	18.4 J	--	--	--	18.4
		3-6	07/27/2016	Soil	3.6 J	--	--	--	3.6
		6-12	07/27/2016	Soil	3.3 J	--	--	--	3.3
		12-18	07/27/2016	Soil	3.9	--	--	--	3.9
T2.6E2	BC-6	0-3	07/27/2016	Soil	2.9 J	--	--	--	2.9
		3-6	07/27/2016	Soil	2.8 J	--	--	--	2.8
		6-12	07/27/2016	Soil	3.0 J	--	--	--	3.0
		12-18	07/27/2016	Soil	2.7 J	3.1	--	--	2.9
T2.6W1	BC-6	0-3	08/04/2016	Soil	10.9	--	--	--	10.9
		3-6	08/04/2016	Soil	18.8	--	--	--	18.8
		6-12	07/26/2016	Soil	--	13.5	--	--	13.5
		6-12	08/04/2016	Soil	22.5	--	--	--	**22.5**
		12-18	08/04/2016	Soil	15.4	--	--	--	15.4
		18-24	08/04/2016	Soil	12.1	--	--	--	12.1
		24-30	08/04/2016	Soil	11.2	--	--	--	11.2
T2.6W2	BC-6	0-3	07/26/2016	Soil	15.6	--	--	--	15.6
		3-6	07/26/2016	Soil	7.3	--	--	--	7.3
		6-12	07/26/2016	Soil	5.9	--	--	--	5.9
		12-18	07/26/2016	Soil	3	--	--	--	3.0
		18-24	07/26/2016	Soil	1.3	--	2.9	--	2.1
T2.6W3	BC-6	0-3	07/26/2016	Soil	16.0	--	--	--	16.0
		3-6	07/26/2016	Soil	21.2	--	--	--	**21.2**
		6-12	07/26/2016	Soil	5.6	--	--	--	5.6
		12-18	07/26/2016	Soil	4.1	--	--	--	4.1
		18-24	07/26/2016	Soil	3.7	--	--	--	3.7
T2.8E1	BC-6	0-3	07/27/2016	Soil	15.4	--	--	--	15.4
		3-6	07/27/2016	Soil	2.9	--	--	--	2.9
		6-12	07/27/2016	Soil	8.3	--	--	--	8.3
		12-18	07/27/2016	Soil	4.3	--	--	--	4.3
		18-24	07/27/2016	Soil	4.5	--	--	--	4.5
T2.8E2	BC-6	0-3	07/27/2016	Soil	20.7	--	--	--	**20.7**
		3-6	07/27/2016	Soil	12.0	--	--	--	12.0
		6-12	07/27/2016	Soil	36.6	35.4 J	--	--	**36.0**
		12-18	07/27/2016	Soil	5.4	--	--	--	5.4
		18-24	07/27/2016	Soil	3.4 J	--	--	--	3.4
T2.8E3	BC-6	0-3	07/27/2016	Soil	7.6	--	--	--	7.6
		3-6	07/27/2016	Soil	6.7	--	--	--	6.7
		6-12	07/27/2016	Soil	1.9	--	--	--	1.9
		12-18	07/27/2016	Soil	1.5	--	--	--	1.5
		18-24	07/27/2016	Soil	1.7	--	--	--	1.7
T2.8E4	BC-6	0-3	07/27/2016	Soil	5.8 J	--	--	--	5.8
		3-6	07/27/2016	Soil	4.1 J	--	--	--	4.1
		6-12	07/27/2016	Soil	2.2 J	--	--	--	2.2
		12-18	07/27/2016	Soil	0.93 J	--	--	--	0.9
		18-24	07/27/2016	Soil	1.4 J	--	--	--	1.4

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T2.8W1	BC-6	0-3	07/26/2016	Soil	7.3 J	--	--	--	7.3
		3-6	07/26/2016	Soil	13.5 J	--	--	--	13.5
		6-12	07/26/2016	Soil	62.5	86.0	--	--	**74.3**
		12-18	07/26/2016	Soil	54.2	--	--	--	**54.2**
		18-24	07/26/2016	Soil	47.4	--	--	--	**47.4**
		24-30	07/26/2016	Soil	16.7	--	20.7	--	18.7
T2.8W2	BC-6	0-3	07/26/2016	Soil	5.2 J	--	--	--	5.2
		3-6	07/26/2016	Soil	6.8 J	--	--	--	6.8
		6-12	07/26/2016	Soil	35.4 J	39.9 J	--	--	**37.7**
		12-18	07/26/2016	Soil	26.2 J	--	--	--	**26.2**
		18-24	07/26/2016	Soil	18.8 J	--	--	--	18.8
		24-30	07/26/2016	Soil	30.7 J	--	--	--	**30.7**
T2.8W3	BC-6	0-3	07/26/2016	Soil	6.1 J	--	--	--	6.1
		3-6	07/26/2016	Soil	5.4 J	--	--	--	5.4
		6-12	07/26/2016	Soil	5.7 J	--	--	--	5.7
		12-18	07/26/2016	Soil	10.8 J	--	--	--	10.8
		18-24	07/26/2016	Soil	8.7 J	--	--	--	8.7
		24-30	07/26/2016	Soil	8.1 J	--	--	--	8.1
T3E1	BC-6	0-3	10/24/2002	Soil	40.7	--	--	--	**40.7**
		3-6	10/24/2002	Soil	31.3	--	--	--	**31.3**
		6-12	10/24/2002	Soil	53.1	--	--	--	**53.1**
T3E2	BC-6	0-3	10/24/2002	Soil	5.0	--	--	--	5.0
		3-6	10/24/2002	Soil	4.3	--	--	--	4.3
		6-12	10/24/2002	Soil	7.7	--	--	--	7.7
		12-18	10/24/2002	Soil	9.6	--	--	--	9.6
		18-24	10/24/2002	Soil	2.1	--	--	--	2.1
T3E3	BC-6	0-3	10/24/2002	Soil	53.5	--	--	--	**53.5**
		3-6	10/24/2002	Soil	5.6	--	--	--	5.6
		6-12	10/24/2002	Soil	4.9	4.9	--	--	4.9
		12-18	10/24/2002	Soil	6.6	--	--	--	6.6
		18-24	10/24/2002	Soil	4.4	--	--	--	4.4
T3E4	BC-6	0-3	10/24/2002	Soil	12.9 J	--	--	--	12.9
		3-6	10/24/2002	Soil	50.1 J	--	--	--	**50.1**
		6-12	10/24/2002	Soil	37.2 J	--	--	--	**37.2**
		12-18	10/24/2002	Soil	43.0 J	--	31.6 E	--	**37.3**
		18-24	10/24/2002	Soil	6.9 J	--	--	--	6.9
T3E5	BC-6	0-3	3/15/2004	Soil	17.0	--	--	--	17.0
		3-6	3/15/2004	Soil	--	--	14.8 N	16.6 N	15.7
		6-12	3/15/2004	Soil	6.9	--	7.2 N	--	7.1
		12-18	3/15/2004	Soil	6.9	--	--	--	6.9
		18-24	3/15/2004	Soil	9.9	--	--	--	9.9
		24-30	3/15/2004	Soil	5.4	--	--	--	5.4
T3E6	BC-6	0-3	3/15/2004	Soil	9.8	--	--	--	9.8
		3-6	3/15/2004	Soil	--	--	12.3 N	--	12.3
		6-12	3/15/2004	Soil	12.1	--	--	--	12.0
		12-18	3/15/2004	Soil	4.5	--	--	--	4.5
		18-24	3/15/2004	Soil	3.1	--	--	--	3.1
		24-30	3/15/2004	Soil	2.7	--	--	--	2.7

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T3E7	BC-5	0-3	3/15/2004	Soil	7.5	--	--	--	7.5
		3-6	3/15/2004	Soil	--	--	9.9 N	--	9.9
		6-12	3/15/2004	Soil	16.1	--	--	--	16.1
		12-18	3/15/2004	Soil	15.6	--	--	--	15.6
		18-24	3/15/2004	Soil	14.7	--	--	--	14.7
		24-30	3/15/2004	Soil	9.7	--	--	--	9.7
T3S	BC-6	0-3	10/28/2002	Sediment	53.6 J	--	96.6	--	**75.1**
T3W1	BC-6	0-3	10/24/2002	Soil	63.1	--	--	--	**63.1**
		3-6	10/24/2002	Soil	36.7	--	88.4 E	--	**62.6**
		6-12	10/24/2002	Soil	23.5	--	--	--	**23.5**
		12-18	10/24/2002	Soil	234	--	--	--	**234**
T3W2	BC-6	0-3	10/24/2002	Soil	21.4	--	--	--	**21.4**
		3-6	10/24/2002	Soil	80.1	--	--	--	**80.1**
		6-12	10/24/2002	Soil	291	295	--	--	**293**
		12-18	10/24/2002	Soil	478	--	--	--	**478**
		18-24	10/24/2002	Soil	92.0	--	--	--	**92.0**
T3W3	BC-6	0-3	10/24/2002	Soil	11.6	--	--	--	11.6
		3-6	10/24/2002	Soil	8.2	--	--	--	8.2
		6-12	10/24/2002	Soil	54.2	--	--	--	**54.2**
		12-18	10/24/2002	Soil	87.7	--	--	--	**87.7**
		18-24	10/24/2002	Soil	102	--	--	--	**102**
T3W4	BC-6	0-3	10/24/2002	Soil	5.6	--	--	--	5.6
		3-6	10/24/2002	Soil	5.8	--	4.5 E	4.7 E	5.0
		6-12	10/24/2002	Soil	15.7	--	--	--	15.7
		12-18	10/24/2002	Soil	46.2	--	--	--	**46.2**
		18-24	10/24/2002	Soil	47.9	--	--	--	**47.9**
T3W5	BC-6	0-3	3/15/2004	Soil	3.6	--	--	--	3.6
		3-6	3/15/2004	Soil	--	--	10.9 N	--	10.9
		6-12	3/15/2004	Soil	17.1	--	--	--	17.1
		12-18	3/15/2004	Soil	7.9	--	--	--	7.9
		18-24	3/15/2004	Soil	3.3	--	--	--	3.3
		24-30	3/15/2004	Soil	2.8	--	--	--	2.8
T3W6	BC-6	0-3	3/15/2004	Soil	3.8	--	--	--	3.8
		3-6	3/15/2004	Soil	--	--	3.6	--	3.6
		6-12	3/15/2004	Soil	1.8	--	1.4	--	1.6
		12-18	3/15/2004	Soil	2.8	--	--	--	2.8
		18-24	3/15/2004	Soil	2.1	--	--	--	2.1
		24-30	3/15/2004	Soil	2.5	--	--	--	2.5
T3.2E1	BC-6	0-3	07/28/2016	Soil	262	--	--	--	**262**
		3-6	07/28/2016	Soil	618	--	--	--	**618**
		6-12	07/28/2016	Soil	651	--	392	--	**522**
		12-18	07/28/2016	Soil	746	--	--	--	**746**
		18-24	07/28/2016	Soil	3070	--	--	--	**3070**
T3.2E2	BC-6	0-3	07/28/2016	Soil	14.7	--	--	--	14.7
		3-6	07/28/2016	Soil	12.9	--	--	--	12.9
		6-12	07/28/2016	Soil	7.4	--	--	--	7.4
		12-18	07/28/2016	Soil	5.5	--	--	--	5.5
		18-24	07/28/2016	Soil	4.4	--	4.9	--	4.7

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T3.2E3	BC-6	0-3	07/28/2016	Soil	17.7	--	--	--	17.7
		3-6	07/28/2016	Soil	15.4	--	--	--	15.4
		6-12	07/28/2016	Soil	5.0	--	--	--	5.0
		12-18	07/28/2016	Soil	4.2	5.2	--	--	4.7
		18-24	07/28/2016	Soil	3.6	--	--	--	3.6
T3.2W1	BC-6	0-3	07/26/2016	Soil	36.2 J	--	--	--	**36.2**
		3-6	07/26/2016	Soil	38.4 J	41.1 J	--	--	**39.8**
		6-12	07/26/2016	Soil	23.8 J	--	--	--	**23.8**
		12-18	07/26/2016	Soil	12.8 J	--	--	--	12.8
		18-24	07/26/2016	Soil	15.8 J	--	--	--	15.8
		24-30	07/26/2016	Soil	19.9 J	--	--	--	19.9
T3.2W2	BC-6	0-3	08/02/2016	Soil	4.5 J	--	--	--	4.5
		3-6	08/02/2016	Soil	5.8 J	--	--	--	5.8
		6-12	08/02/2016	Soil	6.4 J	7.3 J	--	--	6.9
		12-18	08/02/2016	Soil	7.7 J	--	--	--	7.7
		18-24	08/02/2016	Soil	7.6 J	--	--	--	7.6
		24-30	08/02/2016	Soil	10 J	--	--	--	10.0
T3.2W3	BC-6	0-3	07/26/2016	Soil	5.0 J	--	--	--	5.0
		3-6	07/26/2016	Soil	6.3 J	7.2 J	--	--	6.8
		6-12	07/26/2016	Soil	14.1 J	--	--	--	14.1
		12-18	07/26/2016	Soil	19.1 J	5.8	--	--	12.5
		18-24	07/26/2016	Soil	16.0 J	--	--	--	16.0
T3.2W4	BC-6	0-3	07/26/2016	Soil	4.3 J	--	--	--	4.3
		3-6	07/26/2016	Soil	7.7 J	--	--	--	7.7
		6-12	07/26/2016	Soil	6.0 J	--	5.8	--	5.9
		12-18	07/26/2016	Soil	3.3 J	--	--	--	3.3
		18-24	07/26/2016	Soil	1.4 J	--	--	--	1.4
T3.4E1	BC-6	0-3	07/28/2016	Soil	46.5	--	--	--	**46.5**
		3-6	07/28/2016	Soil	15.2	--	--	--	15.2
		6-12	07/28/2016	Soil	6.1	--	--	--	6.1
		12-18	07/28/2016	Soil	6.7	--	--	--	6.7
T3.4E2	BC-6	0-3	07/28/2016	Soil	14.1	--	--	--	14.1
		3-6	07/28/2016	Soil	8.3	--	--	--	8.3
		6-12	07/28/2016	Soil	11.8	--	--	--	11.8
		12-18	07/28/2016	Soil	3.7	--	--	--	3.7
		18-24	07/28/2016	Soil	1.7	--	--	--	1.7
T3.4E3	BC-4	0-3	09/22/2016	Soil	1.9	--	--	--	1.9
		3-6	09/22/2016	Soil	1.3	--	--	--	1.3
		6-12	09/22/2016	Soil	6.0	--	--	--	6.0
		12-18	09/22/2016	Soil	19.5	--	--	--	19.5
		18-24	09/22/2016	Soil	4.0	4.1	--	--	4.1
T3.4E4	BC-4	0-3	09/22/2016	Soil	8.1	--	--	--	8.1
		3-6	09/22/2016	Soil	5.6	--	--	--	5.6
		6-12	09/22/2016	Soil	22.0	--	--	--	**22.0**
		12-18	09/22/2016	Soil	14.7	--	--	--	14.7
T3.4W1	BC-6	0-3	07/26/2016	Soil	6.0	--	--	--	6.0
		3-6	07/26/2016	Soil	7.0	--	--	--	7.0
		6-12	07/26/2016	Soil	11.5	--	--	--	11.5
		12-18	07/26/2016	Soil	16.2	--	--	--	16.2
		18-24	07/26/2016	Soil	11.1	--	--	--	11.1

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T3.4W2	BC-6	0-3	07/26/2016	Soil	4.7 J	--	--	--	4.7
		3-6	07/26/2016	Soil	8.1 J	--	--	--	8.1
		6-12	07/26/2016	Soil	14.0 J	--	--	--	14.0
		12-18	07/26/2016	Soil	7.5 J	13.5 J	--	--	10.5
		18-24	07/26/2016	Soil	8.1 J	--	--	--	8.1
T3.4W3	BC-6	0-3	07/26/2016	Soil	1.5 J	--	--	--	1.5
		3-6	07/26/2016	Soil	5.3 J	--	--	--	5.3
		6-12	07/26/2016	Soil	4.1 J	--	--	--	4.1
		12-18	07/26/2016	Soil	8.4 J	--	8.4	--	8.4
T3.4W4	BC-6	0-3	07/26/2016	Soil	3.7 J	--	--	--	3.7
		3-6	07/26/2016	Soil	4.8 J	--	--	--	4.8
		6-12	07/26/2016	Soil	2.8 J	--	--	--	2.8
		12-18	07/26/2016	Soil	3.0 J	--	--	--	3.0
T3.6E1	BC-6	0-3	08/09/2016	Soil	207	--	--	--	**207**
		3-6	08/09/2016	Soil	243	--	--	--	**243**
		6-12	08/09/2016	Soil	81.2	--	--	--	**81.2**
		12-18	08/09/2016	Soil	15.0	--	--	--	15.0
		18-24	08/09/2016	Soil	64.5	--	--	--	**64.5**
		24-30	08/09/2016	Soil	31.2	--	--	--	**31.2**
		30-36	08/09/2016	Soil	23.5	18.6	--	--	**21.1**
T3.6E2	BC-3	0-3	08/09/2016	Soil	27.2	--	--	--	**27.2**
		3-6	08/09/2016	Soil	39.8	--	--	--	**39.8**
		6-12	08/09/2016	Soil	14.9	--	--	--	14.9
		12-18	08/09/2016	Soil	5.4	--	--	--	5.4
		18-24	08/09/2016	Soil	3.2	--	--	--	3.2
		24-30	08/09/2016	Soil	5.9	--	--	--	5.9
		30-36	08/09/2016	Soil	3.6	--	--	--	3.6
T3.6E3	BC-3	0-3	08/09/2016	Soil	23.3	--	--	--	**23.3**
		3-6	08/09/2016	Soil	16.4	--	--	--	16.4
		6-12	08/09/2016	Soil	5.8	--	--	--	5.8
		12-18	08/09/2016	Soil	1.4	--	--	--	1.4
		18-24	08/09/2016	Soil	1.4	--	--	--	1.4
T3.6E4	BC-4	0-3	09/22/2016	Soil	19.0	--	--	--	19.0
		3-6	09/22/2016	Soil	14.1	--	--	--	14.1
		6-12	09/22/2016	Soil	16.3	--	--	--	16.3
		12-18	09/22/2016	Soil	10.8	--	--	--	10.8
T3.6E5	BC-4	0-3	09/22/2016	Soil	14.5	--	--	--	14.5
		3-6	09/22/2016	Soil	16.1	--	--	--	16.1
		6-12	09/22/2016	Soil	12.7	--	--	--	12.7
		12-18	09/22/2016	Soil	6.5	--	--	--	6.5
T3.6W1	BC-6	0-3	07/27/2016	Soil	10.6	--	--	--	10.6
		3-6	07/27/2016	Soil	8.2	--	--	--	8.2
		6-12	07/27/2016	Soil	6.3	--	--	--	6.3
		12-18	07/27/2016	Soil	12.1	--	--	--	12.1
		18-24	07/27/2016	Soil	18.5	--	--	--	18.5
		24-30	07/27/2016	Soil	16.4	--	--	--	16.4

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T3.6W2	BC-6	0-3	07/26/2016	Soil	4.3 J	--	--	--	4.3
		3-6	07/26/2016	Soil	5.5 J	--	--	--	5.5
		6-12	07/26/2016	Soil	3.4 J	--	--	--	3.4
		12-18	07/26/2016	Soil	4.8 J	--	--	--	4.8
		18-24	07/26/2016	Soil	8.0 J	8.5 J	--	--	8.3
T3.6W3	BC-6	0-3	07/26/2016	Soil	3.0	--	--	--	3.0
		3-6	07/26/2016	Soil	1.9	--	2.1 J	--	2.0
		6-12	07/26/2016	Soil	1.9 J	--	--	--	1.9
		12-18	07/26/2016	Soil	2.1 J	--	--	--	2.1
T4E1	BC-3	0-3	3/11/2004	Soil	461	--	--	--	**461**
		3-6	3/11/2004	Soil	--	--	582 *	--	**582**
		6-12	3/11/2004	Soil	418	--	--	--	**418**
		12-18	3/11/2004	Soil	208	129 J	--	--	**169**
		18-21	3/11/2004	Soil	120	--	--	--	**120**
		48-54	3/11/2004	Soil	288 J	--	--	--	**288**
T4E2	BC-3	0-3	3/11/2004	Soil	23.0	--	--	--	**23.0**
		3-6	3/11/2004	Soil	--	--	14.3 *	--	14.3
		6-12	3/11/2004	Soil	1.9	--	--	--	1.9
		12-18	3/11/2004	Soil	1.1	--	--	--	1.1
		18-24	3/11/2004	Soil	1.7	--	--	--	1.7
		24-30	3/11/2004	Soil	2.5 J	--	--	--	2.5
T4E3	BC-3	0-3	3/11/2004	Soil	27.6 J	--	--	--	**27.6**
		3-6	3/11/2004	Soil	--	--	13.6 *	--	13.6
		6-12	3/11/2004	Soil	10.5 J	--	24.3 *	--	17.4
		12-18	3/11/2004	Soil	5.0 J	--	--	--	5.0
		18-24	3/11/2004	Soil	4.7 J	--	--	--	4.7
		24-30	3/11/2004	Soil	2.2 BJ	--	--	--	2.2
T4E4	BC-4	0-3	3/11/2004	Soil	27.5 J	--	--	--	**27.5**
		3-6	3/11/2004	Soil	--	--	18.0 *	--	18.0
		6-12	3/11/2004	Soil	4.3 J	--	--	--	4.3
		12-18	3/11/2004	Soil	1.6 J	--	1.2 B*	--	1.4
		18-20	3/11/2004	Soil	1.6 J	--	--	--	1.6
T4E5	BC-4	0-3	3/11/2004	Soil	35.4 J	--	--	--	**35.4**
		3-6	3/11/2004	Soil	--	--	15.6 *	--	15.6
		6-12	3/11/2004	Soil	10.9 J	--	--	--	10.9
		12-18	3/11/2004	Soil	5.8 J	--	--	--	5.8
		18-24	3/11/2004	Soil	2.5 J	--	--	--	2.5
		24-26	3/11/2004	Soil	1.1 J	--	--	--	1.1
T4E6	BC-4	0-3	3/11/2004	Soil	11.6 J	--	--	--	11.6
		3-6	3/11/2004	Soil	--	--	6.7 *	--	6.7
		6-12	3/11/2004	Soil	11.4 J	--	--	--	11.4
		12-18	3/11/2004	Soil	7.5 J	--	--	--	7.5
T4E7	BC-4	0-3	3/11/2004	Soil	12.0 J	--	--	--	12.0
		3-6	3/11/2004	Soil	--	--	21.8 *	--	**21.8**
		6-12	3/11/2004	Soil	15.9	--	--	--	15.9
		12-18	3/11/2004	Soil	9.6	--	--	--	9.6
		18-24	3/11/2004	Soil	7.2	6.5	--	--	6.9
		24-30	3/11/2004	Soil	4.3	--	--	--	4.3
T4S-R	BC-9	0-3	11/10/2004	Sediment	89.8	--	--	--	**89.8**

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T4W1	BC-9	0-3	3/11/2004	Soil	28.5	--	--	--	**28.5**
		3-6	3/11/2004	Soil	22.5	--	739	--	**381**
		6-12	3/11/2004	Soil	4.4	--	--	--	4.4
		12-18	3/11/2004	Soil	2.5	--	--	--	2.5
		18-24	3/11/2004	Soil	2.3	--	--	--	2.3
		24-30	3/11/2004	Soil	1.7	--	--	--	1.7
T4W1-R	BC-9	0-3	11/10/2004	Soil	19.7 J	--	--	--	19.7
		3-6	11/10/2004	Soil	18.5 J	--	21.6	--	**20.1**
		6-12	11/10/2004	Soil	6.3 J	--	--	--	6.3
		12-18	11/10/2004	Soil	1.9 J	--	--	--	1.9
		18-24	11/10/2004	Soil	1.4 J	--	--	--	1.4
		24-30	11/10/2004	Soil	1.6 J	--	--	--	1.6
T4W2	BC-6	0-3	3/11/2004	Soil	18.1	--	--	--	18.1
		3-6	3/11/2004	Soil	--	--	20.2 *	--	**20.2**
		6-12	3/11/2004	Soil	32.3	--	--	--	**32.3**
		12-18	3/11/2004	Soil	27.1	--	--	--	**27.1**
		18-24	3/11/2004	Soil	10.9	--	--	--	10.9
		24-30	3/11/2004	Soil	3.2	--	--	--	3.2
T4W3	BC-7	0-3	3/11/2004	Soil	23.7	--	--	--	**23.7**
		3-6	3/11/2004	Soil	--	--	21.1 *	--	**21.1**
		6-12	3/11/2004	Soil	7.2	--	--	--	7.2
		12-18	3/11/2004	Soil	7.4	--	--	--	7.4
		18-24	3/11/2004	Soil	5.0	4.7	--	--	4.9
		24-30	3/11/2004	Soil	6.1	--	--	--	6.1
T4.4E1	BC-3	0-3	08/08/2016	Soil	512 J	--	--	--	**512**
		3-6	08/08/2016	Soil	716 J	--	--	--	**716**
		6-12	08/08/2016	Soil	350 J	--	--	--	**350**
		12-18	08/08/2016	Soil	40.1 J	--	--	--	**40.1**
		18-24	08/08/2016	Soil	27.7 J	--	--	--	**27.7**
		24-30	08/08/2016	Soil	60.9 J	--	--	--	**60.9**
		30-36	08/08/2016	Soil	98.0 J	128 J	--	--	**113**
		36-42	08/08/2016	Soil	77.5 J	--	--	--	**77.5**
		42-48	08/08/2016	Soil	26.7 J	--	--	--	**26.7**
T4.4E2	BC-3	0-3	08/08/2016	Soil	123 J	--	--	--	**123**
		3-6	08/08/2016	Soil	99.4 J	--	--	--	**99.4**
		6-12	08/08/2016	Soil	42.2 J	--	--	--	**42.2**
		12-18	08/08/2016	Soil	10.8 J	--	--	--	10.8
		18-24	08/08/2016	Soil	8.3 J	--	--	--	8.3
		24-30	08/08/2016	Soil	2.6 J	--	--	--	2.6
		30-36	08/08/2016	Soil	2.3 J	--	--	--	2.3
		36-42	08/08/2016	Soil	1.2 J	--	--	--	1.2
		42-48	08/08/2016	Soil	1.1 J	--	--	--	1.1
		48-54	08/08/2016	Soil	1.4 J	--	--	--	1.4
		54-60	08/08/2016	Soil	0.76 J	--	2.0 J	--	1.4

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T4.4E3	BC-3	0-3	08/08/2016	Soil	46.8 J	--	--	--	**46.8**
		3-6	08/08/2016	Soil	52.5 J	--	--	--	**52.5**
		6-12	08/08/2016	Soil	19.5 J	--	--	--	19.5
		12-18	08/08/2016	Soil	9.6 J	--	--	--	9.6
		18-24	08/08/2016	Soil	2.9 J	--	--	--	2.9
		24-30	08/08/2016	Soil	1.7 J	--	--	--	1.7
		30-36	08/08/2016	Soil	2.9 J	--	2.8	--	2.9
		36-42	08/08/2016	Soil	2.8 J	--	--	--	2.8
		42-48	08/08/2016	Soil	0.53 UBJ	--	--	--	0.5
T4.4E4	BC-3	0-3	08/02/2016	Soil	32.9	--	--	--	**32.9**
		3-6	08/02/2016	Soil	28.5	--	--	--	**28.5**
		6-12	08/02/2016	Soil	11.1	--	--	--	11.1
		12-18	08/02/2016	Soil	5.9	--	--	--	5.9
		18-24	08/02/2016	Soil	5.8	--	--	--	5.8
T4.4E5	BC-4	0-3	09/22/2016	Soil	23.6 J	--	--	--	**23.6**
		3-6	09/22/2016	Soil	12.4 J	--	--	--	12.4
		6-12	09/22/2016	Soil	22.8 J	--	--	--	**22.8**
		12-18	09/22/2016	Soil	19.5 J	--	--	--	19.5
T4.4W1	BC-3	0-3	07/29/2016	Soil	10.8	--	--	--	10.8
		3-6	07/29/2016	Soil	14.7	--	--	--	14.7
		6-12	07/29/2016	Soil	13.3	--	--	--	13.3
		12-18	07/29/2016	Soil	9.1	--	--	--	9.1
		18-24	07/29/2016	Soil	5.8	--	--	--	5.8
T4.4W2	BC-9	0-3	07/29/2016	Soil	16.3	--	--	--	16.3
		3-6	07/29/2016	Soil	14.9	--	--	--	14.9
		6-12	07/29/2016	Soil	1.4	--	--	--	1.4
		12-18	07/29/2016	Soil	2.1	--	--	--	2.1
T4.6E1	BC-3	0-3	07/29/2016	Soil	238	--	--	--	**238**
		3-6	07/29/2016	Soil	207	--	--	--	**207**
		6-12	07/29/2016	Soil	147	--	--	--	**147**
		12-18	07/29/2016	Soil	76.8	--	--	--	**76.8**
		18-24	07/29/2016	Soil	279	--	--	--	**279**
		24-30	07/29/2016	Soil	206	--	--	--	**206**
T4.6E2	BC-3	0-3	08/02/2016	Soil	318 J	--	--	--	**318**
		3-6	08/02/2016	Soil	397 J	--	--	--	**397**
		6-12	08/02/2016	Soil	685 J	--	--	--	**685**
		12-18	08/02/2016	Soil	458 J	--	--	--	**458**
		18-24	08/02/2016	Soil	25.2 J	--	--	--	**25.2**
		24-30	08/02/2016	Soil	10.2 J	--	--	--	10.2
T4.6E3	BC-3	0-3	08/02/2016	Soil	78.5 J	--	--	--	**78.5**
		3-6	08/02/2016	Soil	74.5 J	--	--	--	**74.5**
		6-12	08/02/2016	Soil	54.9 J	--	--	--	**54.9**
		12-18	08/02/2016	Soil	44.1 J	--	--	--	**44.1**
		18-22	08/02/2016	Soil	33.6 J	--	--	--	**33.6**
T4.6E4	BC-3	0-3	08/02/2016	Soil	12.3 J	--	--	--	12.3
		3-6	08/02/2016	Soil	12.2 J	--	--	--	12.2
		6-12	08/02/2016	Soil	13.9 J	--	--	--	13.9
		12-18	08/02/2016	Soil	12.9 J	12.5 J	--	--	12.7
		18-24	08/02/2016	Soil	9.5 J	--	--	--	9.5

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T4.6E5	BC-4	0-3	09/22/2016	Soil	8.4	--	--	--	8.4
		3-6	09/22/2016	Soil	14.2	--	--	--	14.2
		6-12	09/22/2016	Soil	12.2	--	--	--	12.2
		12-18	09/22/2016	Soil	4.6	--	--	--	4.6
T4.6W1	BC-9	0-3	07/29/2016	Soil	20.1	--	--	--	**20.1**
		3-6	07/29/2016	Soil	16.8	--	--	--	16.8
		6-12	07/29/2016	Soil	9.8	--	--	--	9.8
		12-18	07/29/2016	Soil	1.8	--	--	--	1.8
		18-24	07/29/2016	Soil	0.81	1.3	--	--	1.1
T5E1	BC-1	0-3	10/24/2002	Soil	59.6	--	67.2 E	--	**63.4**
		3-6	10/24/2002	Soil	84.2	--	--	--	**84.2**
T5E2	BC-1	0-3	10/24/2002	Soil	57.9	--	56.2 E	--	**57.1**
		3-6	10/24/2002	Soil	81.2	--	--	--	**81.2**
		6-12	10/24/2002	Soil	311	--	--	--	**311**
T5E3	BC-1	0-3	10/24/2002	Soil	384	--	--	--	**384**
		3-6	10/24/2002	Soil	914	--	--	--	**914**
		6-12	10/24/2002	Soil	349	--	--	--	**349**
		12-18	10/24/2002	Soil	116	--	--	--	**116**
T5E4	BC-1	0-3	10/24/2002	Soil	387	--	--	--	**387**
		3-6	10/24/2002	Soil	665	--	--	--	**665**
		6-12	10/24/2002	Soil	838	--	--	--	**838**
		12-18	10/24/2002	Soil	1050	--	--	--	**1050**
T5E5	BC-1	0-3	3/16/2004	Soil	293	--	--	--	**293**
		3-6	3/16/2004	Soil	--	--	571	--	**571**
		6-12	3/16/2004	Soil	345	--	--	--	**345**
		12-18	3/16/2004	Soil	27.3	--	17.6	--	**22.5**
		18-24	3/16/2004	Soil	22.8	--	--	--	**22.8**
		24-30	3/16/2004	Soil	3.8	--	--	--	3.8
T5E6	BC-2	0-3	11/10/2004	Soil	45.5 J	--	--	--	**45.5**
		3-6	11/10/2004	Soil	--	--	57.7 E*	--	**57.7**
		6-12	11/10/2004	Soil	41.8 J	--	--	--	**41.8**
		12-18	11/10/2004	Soil	4.3 J	5.3	--	--	4.8
T5E7	BC-3	0-3	3/15/2004	Soil	20.2	--	--	--	**20.2**
		3-6	3/15/2004	Soil	--	--	24.2 N	--	**24.2**
		6-12	3/15/2004	Soil	10.1	--	--	--	10.1
		12-18	3/15/2004	Soil	3.1	--	3.5 N	--	3.3
		18-24	3/15/2004	Soil	3.4	--	--	--	3.4
		24-30	3/15/2004	Soil	3.7	--	--	--	3.7
T5E8	BC-4	0-3	09/22/2016	Soil	4.8	--	--	--	4.8
		3-6	09/22/2016	Soil	3.8	--	--	--	3.8
		6-12	09/22/2016	Soil	8.5	7.0	--	--	7.8
		12-18	09/22/2016	Soil	5.2	--	--	--	5.2
T5S	BC-1	0-3	10/28/2002	Sediment	118 J	--	48.6	--	**83.3**
T5W1	BC-1	0-3	07/29/2016	Soil	16.1	--	--	--	16.1
		3-6	07/29/2016	Soil	9.5	--	--	--	9.5
		6-12	07/29/2016	Soil	14.3	--	--	--	14.3
		12-18	07/29/2016	Soil	15.8	--	--	--	15.8
		18-24	07/29/2016	Soil	8.2	--	--	--	8.2

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T5.2E1	BC-1	0-3	08/02/2016	Soil	67.0 J	--	--	--	**67.0**
		3-6	08/02/2016	Soil	54.5 J	--	--	--	**54.5**
		6-12	08/02/2016	Soil	86.0 J	--	--	--	**86.0**
		12-18	08/02/2016	Soil	16.1 J	--	--	--	16.1
		18-20	08/02/2016	Soil	9.7 J	--	--	--	9.7
T5.2E2	BC-1	0-3	08/02/2016	Soil	319 J	--	--	--	**319**
		3-6	08/02/2016	Soil	520 J	--	--	--	**520**
		6-12	08/02/2016	Soil	516 J	--	--	--	**516**
T5.2E3	BC-2	0-3	08/01/2016	Soil	27.8	--	--	--	**27.8**
		3-6	08/01/2016	Soil	31.4	--	--	--	**31.4**
		6-12	08/01/2016	Soil	51.7	--	--	--	**51.7**
		12-18	08/01/2016	Soil	29.0	--	--	--	**29.0**
		18-24	08/01/2016	Soil	49.0	--	41.5	--	**45.3**
T5.2E4	BC-3	0-3	08/01/2016	Soil	21.3 J	--	--	--	**21.3**
		3-6	08/01/2016	Soil	22.8 J	--	--	--	**22.8**
		6-12	08/01/2016	Soil	12.4 J	--	--	--	12.4
		12-18	08/01/2016	Soil	8.4 J	25.9 J	--	--	17.2
T5E5.5	BC-2	0-3	08/01/2016	Soil	37.4	--	--	--	**37.4**
		3-6	08/01/2016	Soil	37.9	--	--	--	**37.9**
		6-12	08/01/2016	Soil	42.3	--	--	--	**42.3**
		12-18	08/01/2016	Soil	32.7	--	--	--	**32.7**
		18-24	08/01/2016	Soil	11.7	--	--	--	11.7
		24-30	08/01/2016	Soil	25.7 J	6.2 J	--	--	16.0
T6S	BC-13	0-3	10/28/2002	Sediment	456 J	--	45.5	--	**251**
T6W1	BC-13	0-3	10/23/2002	Soil	75.7	--	77.4 E	--	**76.6**
		3-6	10/23/2002	Soil	119	--	--	--	**119**
		6-12	10/23/2002	Soil	238	--	--	--	**238**
		12-18	10/23/2002	Soil	88.2	--	--	--	**88.2**
		18-24	10/23/2002	Soil	144 J	--	--	--	**144**
T6W2	BC-13	0-3	10/23/2002	Soil	149 J	--	--	--	**149**
		3-6	10/23/2002	Soil	174 J	--	--	--	**174**
		6-12	10/23/2002	Soil	199 J	--	--	--	**199**
		12-18	10/23/2002	Soil	23.3 J	--	--	--	**23.3**
		18-24	10/23/2002	Soil	19.7 J	--	--	--	19.7
T6W3	BC-13	0-3	10/23/2002	Soil	89.3 J	--	--	--	**89.3**
		3-6	10/23/2002	Soil	116 J	--	--	--	**116**
		6-12	10/23/2002	Soil	140 J	157 J	--	--	**149**
T6W4	BC-13	0-3	10/23/2002	Soil	25.5 J	--	--	--	**25.5**
		3-6	10/23/2002	Soil	40.0 J	--	38.8 E	--	**39.4**
		6-12	10/23/2002	Soil	41.6 J	--	--	--	**41.6**
		12-18	10/23/2002	Soil	5.6 J	--	--	--	5.6
		18-24	10/23/2002	Soil	5.4 J	--	--	--	5.4
T6W5	BC-13	0-3	3/10/2004	Soil	23.6	--	--	--	**23.6**
		3-6	3/10/2004	Soil	--	--	11.9	--	11.9
		6-12	3/10/2004	Soil	9.2	--	33.3	--	**21.3**
		12-18	3/10/2004	Soil	4.3	--	--	--	4.3
		18-24	3/10/2004	Soil	8.4	--	--	--	8.4
		24-30	3/10/2004	Soil	6.4	--	--	--	6.4

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T6W6	BC-12	0-3	3/10/2004	Soil	12.9	--	--	--	12.9
		3-6	3/10/2004	Soil	--	--	15.5	--	15.5
		6-12	3/10/2004	Soil	21.5	--	--	--	**21.5**
		12-18	3/10/2004	Soil	4.2	4.6	--	--	4.4
		18-24	3/10/2004	Soil	2.9	--	--	--	2.9
		24-26	3/10/2004	Soil	3.1	--	--	--	3.1
T6.2E1	BC-13	0-3	07/28/2016	Soil	10.0	--	--	--	10.0
		3-6	07/28/2016	Soil	11.0	--	--	--	11.0
		6-12	07/28/2016	Soil	7.8	--	--	--	7.8
		12-18	07/28/2016	Soil	8.3	--	--	--	8.3
		18-24	07/28/2016	Soil	6.9	--	--	--	6.9
T6.2W1	BC-13	0-3	07/28/2016	Soil	124	--	--	--	**124**
		3-6	07/28/2016	Soil	89.4	--	--	--	**89.4**
		6-12	07/28/2016	Soil	182	--	--	--	**182**
		12-18	07/28/2016	Soil	125	--	--	--	**125**
		18-24	07/28/2016	Soil	70.0	--	--	--	**70.0**
		24-30	07/28/2016	Soil	55.8	--	--	--	**55.8**
T6.2W2	BC-13	0-3	07/28/2016	Soil	16.4	--	--	--	16.4
		3-6	07/28/2016	Soil	15.3	--	--	--	15.3
		6-12	07/28/2016	Soil	12.1	--	--	--	12.1
		12-18	07/28/2016	Soil	4.1	--	--	--	4.1
		18-24	07/28/2016	Soil	3.4	--	--	--	3.4
		24-30	07/28/2016	Soil	3.2	--	--	--	3.2
T6.2W3	BC-13	0-3	07/28/2016	Soil	12.2	--	--	--	12.2
		3-6	07/28/2016	Soil	15.1	16.0	--	--	15.6
		6-12	07/28/2016	Soil	10.7	--	--	--	10.7
		12-18	07/28/2016	Soil	6.6	--	--	--	6.6
		18-24	07/28/2016	Soil	4.3	--	--	--	4.3
T6.4E1	BC-13	0-3	07/28/2016	Soil	356	226	--	--	**291**
		3-6	07/28/2016	Soil	508	--	507	--	**508**
		6-12	07/28/2016	Soil	527	--	--	--	**527**
		12-18	07/28/2016	Soil	70.1	--	--	--	**70.1**
		18-24	07/28/2016	Soil	6.3	--	--	--	6.3
T6.4E2	BC-1	0-3	08/02/2016	Soil	10.0	--	--	--	10.0
		3-6	08/02/2016	Soil	12.5	--	--	--	12.5
		6-12	08/02/2016	Soil	8.8	--	--	--	8.8
		12-18	08/02/2016	Soil	7.2	--	--	--	7.2
		18-24	08/02/2016	Soil	4.3	--	--	--	4.3
T6.4W1	BC-13	0-3	07/28/2016	Soil	18.3	--	--	--	18.3
		3-6	07/28/2016	Soil	17.9	--	--	--	17.9
		6-12	07/28/2016	Soil	11.4	12.8	--	--	12.1
		12-18	07/28/2016	Soil	4.0	--	--	--	4.0
		18-24	07/28/2016	Soil	4.6	--	--	--	4.6
T6.6E1	BD-2	0-3	08/09/2016	Soil	38.6	--	--	--	**38.6**
		3-6	08/09/2016	Soil	39.4	--	--	--	**39.4**
		6-12	08/09/2016	Soil	34.1	--	--	--	**34.1**
		12-18	08/09/2016	Soil	24.9	--	--	--	**24.9**
		18-24	08/09/2016	Soil	46.7	--	--	--	**46.7**
		24-30	08/09/2016	Soil	78.7	--	--	--	**78.7**

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T6.6E2	BD-2	0-3	08/08/2016	Soil	35.8	--	--	--	**35.8**
		3-6	08/08/2016	Soil	41.9	--	--	--	**41.9**
		6-12	08/08/2016	Soil	49.3	--	--	--	**49.3**
		12-18	08/08/2016	Soil	41.2	--	--	--	**41.2**
		18-24	08/08/2016	Soil	36.1	--	--	--	**36.1**
T6.6W1	BD-2	0-3	08/04/2016	Soil	18.3	--	--	--	18.3
		3-6	08/04/2016	Soil	20.9	--	--	--	**20.9**
		6-12	08/04/2016	Soil	32.0	--	--	--	**32.0**
		12-18	08/04/2016	Soil	50.3	--	--	--	**50.3**
		18-24	08/04/2016	Soil	14.5	--	--	--	14.5
T6.8E1	BD-2	0-3	08/09/2016	Soil	296	--	--	--	**296**
		3-6	08/09/2016	Soil	369	--	--	--	**369**
		6-12	08/09/2016	Soil	372	--	--	--	**372**
		12-18	08/09/2016	Soil	192	--	--	--	**192**
		18-24	08/09/2016	Soil	85.4	--	--	--	**85.4**
		24-30	08/09/2016	Soil	176	--	--	--	**176**
T6.8E2	BD-2	0-3	08/09/2016	Soil	240	--	--	--	**240**
		3-6	08/09/2016	Soil	423	--	--	--	**423**
		6-12	08/09/2016	Soil	1050	--	--	--	**1050**
		12-18	08/09/2016	Soil	187 J	102 J	--	--	**145**
		18-24	08/09/2016	Soil	22.0 J	--	--	--	**22.0**
		24-30	08/09/2016	Soil	99.5 J	--	--	--	**99.5**
T6.8E3	BD-2	0-3	08/08/2016	Soil	11.4	--	--	--	11.4
		3-6	08/08/2016	Soil	11.6	--	--	--	11.6
		6-12	08/08/2016	Soil	4.9	--	--	--	4.9
		12-18	08/08/2016	Soil	3.4	--	--	--	3.4
T6.8W1	BD-2	0-3	08/04/2016	Soil	27.5	--	--	--	**27.5**
		3-6	08/04/2016	Soil	24.1	--	--	--	**24.1**
		6-12	08/04/2016	Soil	17.3	--	--	--	17.3
		12-18	08/04/2016	Soil	21.3	--	--	--	**21.3**
		18-24	08/04/2016	Soil	36.3	--	--	--	**36.3**
		24-30	08/04/2016	Soil	46.9	--	--	--	**46.9**
T6.8W2	BD-2	0-3	08/04/2016	Soil	49.6	--	--	--	**49.6**
		3-6	08/04/2016	Soil	49.2	--	--	--	**49.2**
		6-12	08/04/2016	Soil	46.8	--	--	--	**46.8**
		12-18	08/04/2016	Soil	26.2	--	--	--	**26.2**
		18-24	08/04/2016	Soil	19.8	22.7	--	--	**21.3**
T7E1	BD-2	0-3	10/23/2002	Soil	87.3 J	--	66.0	--	**76.7**
		3-6	10/23/2002	Soil	95.4 J	--	--	--	**95.4**
		6-12	10/23/2002	Soil	56.3 J	--	--	--	**56.3**
		12-18	10/23/2002	Soil	100 J	119 J	--	--	**110**
		18-24	10/23/2002	Soil	175 J	--	--	--	**175**
T7E2	BD-2	0-3	10/23/2002	Soil	194 J	--	--	--	**194**
		3-6	10/23/2002	Soil	289 J	--	--	--	**289**
		6-12	10/23/2002	Soil	49.8 J	--	--	--	**49.8**
		12-18	10/23/2002	Soil	124 J	--	--	--	**124**
		18-24	10/23/2002	Soil	5.1 J	--	--	--	5.1

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T7E3	BD-2	0-3	10/23/2002	Soil	149 J	--	--	--	**149**
		3-6	10/23/2002	Soil	156 J	--	--	--	**156**
		6-12	10/23/2002	Soil	125 J	--	--	--	**125**
		12-18	10/23/2002	Soil	106 J	--	--	--	**106**
		18-24	10/23/2002	Soil	35.6 J	--	--	--	**35.6**
T7E4	BD-2	0-3	10/23/2002	Soil	132 J	--	--	--	**132**
		3-6	10/23/2002	Soil	158 J	--	--	--	**158**
		6-12	10/23/2002	Soil	54.5 J	--	--	--	**54.5**
		12-18	10/23/2002	Soil	9.0 J	--	--	--	9.0
		18-24	10/23/2002	Soil	1.7 J	--	--	--	1.7
T7E5	BD-2	0-3	3/10/2004	Soil	19.8 J	--	--	--	19.8
		3-6	3/10/2004	Soil	--	--	16.8	--	16.8
		6-12	3/10/2004	Soil	5.3 J	--	8.8	--	7.1
		12-18	3/10/2004	Soil	6.8 J	--	--	--	6.8
		18-24	3/10/2004	Soil	4.8 J	--	--	--	4.8
		24-30	3/10/2004	Soil	5.2 J	--	--	--	5.2
T7E6	BD-2	0-3	3/10/2004	Soil	20.5 J	--	--	--	**20.5**
		3-6	3/10/2004	Soil	--	--	17.0	--	17.0
		6-12	3/10/2004	Soil	9.9 J	--	--	--	9.9
		12-18	3/10/2004	Soil	4.6 J	--	--	--	4.6
		18-24	3/10/2004	Soil	4.0 J	4.3 J	--	--	4.2
		24-30	3/10/2004	Soil	1.3 J	--	--	--	1.3
T7E7	BD-2	0-3	3/10/2004	Soil	2.2 J	--	--	--	2.2
		3-6	3/10/2004	Soil	--	--	23.1	--	**23.1**
		6-12	3/10/2004	Soil	4.6 J	--	5.8	--	5.2
		12-18	3/10/2004	Soil	7.5 J	--	--	--	7.5
		18-24	3/10/2004	Soil	5.1 J	--	--	--	5.1
		24-30	3/10/2004	Soil	2.5 J	--	--	--	2.5
T7E8	BD-2	0-3	3/10/2004	Soil	26.6 J	--	30.2	--	**28.4**
		3-6	3/10/2004	Soil	--	--	25.1	--	**25.1**
		6-12	3/10/2004	Soil	5.3 J	--	--	--	5.3
		12-18	3/10/2004	Soil	3.0 J	--	--	--	3.0
		18-24	3/10/2004	Soil	2.6	--	--	--	2.6
		24-30	3/10/2004	Soil	3.6	--	--	--	3.6
T7E9	BD-2	0-3	08/08/2016	Soil	13.5	--	--	--	13.5
		3-6	08/08/2016	Soil	11.0	--	--	--	11.0
		6-12	08/08/2016	Soil	6.3	--	--	--	6.3
		12-18	08/08/2016	Soil	4.1	--	--	--	4.1
T7S	BD-2	0-3	10/28/2002	Sediment	87.1 J	--	79.6	--	**83.4**
T7W1	BD-2	0-3	10/23/2002	Soil	30.5	--	--	--	**30.5**
		3-6	10/23/2002	Soil	34.6	--	--	--	**34.6**
		6-12	10/23/2002	Soil	16.1	17.2	17.9	--	17.1
		12-18	10/23/2002	Soil	80.3	--	--	--	**80.3**
		18-24	10/23/2002	Soil	30.1	--	--	--	**30.1**
T7W2	BD-2	0-3	10/23/2002	Soil	35.6	--	--	--	**35.6**
		3-6	10/23/2002	Soil	14.1	--	--	--	14.1
		6-12	10/23/2002	Soil	25.8	--	--	--	**25.8**
		12-18	10/23/2002	Soil	118	--	--	--	**118**
		18-24	10/23/2002	Soil	63.7	--	--	--	**63.7**

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T7W3	BD-2	0-3	10/23/2002	Soil	45.6	--	--	--	**45.6**
		3-6	10/23/2002	Soil	40.5	--	--	--	**40.5**
		6-12	10/23/2002	Soil	33.3	--	--	--	**33.3**
		12-18	10/23/2002	Soil	9.3	--	--	--	9.3
		18-24	10/23/2002	Soil	48.1	--	--	--	**48.1**
T7W4	BD-2	0-3	10/23/2002	Soil	23.7	--	20.7	--	**22.2**
		3-6	10/23/2002	Soil	32.9	--	--	--	**32.9**
		6-12	10/23/2002	Soil	32.7	--	--	--	**32.7**
		12-18	10/23/2002	Soil	10.8	--	--	--	10.8
T7W4-R	BD-2	0-3	3/10/2004	Soil	16.1	--	--	--	16.1
		3-6	3/10/2004	Soil	--	--	17.3	--	17.3
		6-12	3/10/2004	Soil	23.1	--	17.2	--	**20.2**
		12-18	3/10/2004	Soil	24.1	--	--	--	**24.1**
		18-24	3/10/2004	Soil	19.0	--	--	--	19.0
		24-29	3/10/2004	Soil	18.1	--	--	--	18.1
T7W5	BD-2	0-3	08/04/2016	Soil	110	--	--	--	**110**
		3-6	08/04/2016	Soil	13.5	--	--	--	13.5
		6-12	08/04/2016	Soil	14.1	--	--	--	14.1
		12-18	08/04/2016	Soil	15.2	--	--	--	15.2
		18-24	08/04/2016	Soil	7.0	--	--	--	7.0
T7.2E1	BD-2	0-3	08/09/2016	Soil	123	--	--	--	**123**
		3-6	08/09/2016	Soil	131	--	--	--	**131**
		6-12	08/09/2016	Soil	153	--	--	--	**153**
		12-18	08/09/2016	Soil	145	--	--	--	**145**
		18-24	08/09/2016	Soil	88.5	--	--	--	**88.5**
		24-30	08/09/2016	Soil	111	--	--	--	**111**
T7.2E2	BD-2	0-3	08/08/2016	Soil	38.8 J	--	--	--	**38.8**
		3-6	08/08/2016	Soil	42.6 J	--	--	--	**42.6**
		6-12	08/08/2016	Soil	37.7 J	--	--	--	**37.7**
		12-18	08/08/2016	Soil	16.9 J	--	--	--	16.9
		18-24	08/08/2016	Soil	15.4 J	--	--	--	15.4
		24-30	08/08/2016	Soil	6.2 J	--	--	--	6.2
T7.2E3	BD-2	0-3	08/08/2016	Soil	24.8	--	--	--	**24.8**
		3-6	08/08/2016	Soil	21.9	--	--	--	**21.9**
		6-12	08/08/2016	Soil	16.0	--	--	--	16.0
		12-18	08/08/2016	Soil	11.0 J	--	--	--	11.0
T7.2E4	BD-2	0-3	08/08/2016	Soil	14.5	--	--	--	14.5
		3-6	08/08/2016	Soil	14.4	--	--	--	14.4
		6-12	08/08/2016	Soil	6.1	--	--	--	6.1
		12-18	08/08/2016	Soil	4.3	--	--	--	4.3
T7.2E5	BD-2	0-3	08/08/2016	Soil	15.2	--	--	--	15.2
		3-6	08/08/2016	Soil	12.8	13.2	--	--	13.0
		6-12	08/08/2016	Soil	4.5	--	5.2	--	4.9
		12-18	08/08/2016	Soil	4.9	--	--	--	4.9
T7.2W1	BD-2	0-3	08/04/2016	Soil	46.7	--	--	--	**46.7**
		3-6	08/04/2016	Soil	29.6	--	--	--	**29.6**
		6-12	08/04/2016	Soil	35.2	25.0	--	--	**30.1**
		12-18	08/04/2016	Soil	51.7	--	--	--	**51.7**
		18-24	08/04/2016	Soil	156	--	--	--	**156**
		24-30	08/04/2016	Soil	645	--	--	--	**645**

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T7.2W2	BD-3	0-3	08/04/2016	Soil	20.4	--	--	--	**20.4**
		3-6	08/04/2016	Soil	22.9	--	--	--	**22.9**
		6-12	08/04/2016	Soil	26.4	--	--	--	**26.4**
		12-18	08/04/2016	Soil	27.9	--	--	--	**27.9**
		18-24	08/04/2016	Soil	35.0	--	--	--	**35.0**
		24-30	08/04/2016	Soil	50.5	--	--	--	**50.5**
T7.2W3	BD-3	0-3	08/04/2016	Soil	35.3	--	--	--	**35.3**
		3-6	08/04/2016	Soil	53.5	--	--	--	**53.5**
		6-12	08/04/2016	Soil	45.9	--	--	--	**45.9**
		12-18	08/04/2016	Soil	54.5	--	--	--	**54.5**
		18-24	08/04/2016	Soil	72.0	--	--	--	**72.0**
		24-30	08/04/2016	Soil	133	--	--	--	**133**
T7.4E1	BD-3	0-3	08/09/2016	Soil	35.8	--	--	--	**35.8**
		3-6	08/09/2016	Soil	17.9	--	--	--	17.9
		6-12	08/09/2016	Soil	43.9	--	--	--	**43.9**
		12-18	08/09/2016	Soil	77.6	--	--	--	**77.6**
		18-24	08/09/2016	Soil	207	--	--	--	**207**
T7.4E2	BD-2	0-3	08/08/2016	Soil	115 J	--	--	--	**115**
		3-6	08/08/2016	Soil	94.3 J	--	--	--	**94.3**
		6-12	08/08/2016	Soil	76.6 J	72.8 J	--	--	**74.7**
		12-18	08/08/2016	Soil	23.8 J	--	22.4 J	--	**23.1**
		18-24	08/08/2016	Soil	21.9 J	--	--	--	**21.9**
T7.4W1	BD-3	0-3	08/05/2016	Soil	77.2	--	--	--	**77.2**
		3-6	08/05/2016	Soil	82.3	--	--	--	**82.3**
		6-12	08/05/2016	Soil	266	--	--	--	**266**
		12-18	08/05/2016	Soil	297	--	--	--	**297**
		18-24	08/05/2016	Soil	169	--	--	--	**169**
		24-30	08/05/2016	Soil	105	131	--	--	**118**
T7.4W2	BD-3	0-3	08/05/2016	Soil	4.2	--	--	--	4.2
		3-6	08/05/2016	Soil	4.8	--	--	--	4.8
		6-12	08/05/2016	Soil	6.8	--	--	--	6.8
		12-18	08/05/2016	Soil	26.6	--	--	--	**26.6**
		18-24	08/05/2016	Soil	8.3	--	--	--	8.3
T7.4W3	BD-3	0-3	08/05/2016	Soil	11.0	--	--	--	11.0
		3-6	08/05/2016	Soil	8.9	--	--	--	8.9
		6-12	08/05/2016	Soil	21.2	--	--	--	**21.2**
		12-18	08/05/2016	Soil	216	--	--	--	**216**
		18-24	08/05/2016	Soil	123	--	--	--	**123**
T7.6E1	BD-2	0-3	08/09/2016	Soil	492	--	--	--	**492**
		3-6	08/09/2016	Soil	1240	--	--	--	**1240**
		6-12	08/09/2016	Soil	1240	--	--	--	**1240**
		12-18	08/09/2016	Soil	730	--	--	--	**730**
		18-24	08/09/2016	Soil	744	--	--	--	**744**
T7.6E2	BD-2	0-3	08/08/2016	Soil	66.0 J	--	--	--	**66.0**
		3-6	08/08/2016	Soil	31.5 J	--	--	--	**31.5**
		6-12	08/08/2016	Soil	10.1 J	--	--	--	10.1
		12-18	08/08/2016	Soil	2.5 J	--	--	--	2.5
		18-24	08/08/2016	Soil	2.2 J	--	--	--	2.2

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T7.6E3	BD-2	0-3	08/09/2016	Soil	14.0	--	--	--	14.0
		3-6	08/09/2016	Soil	15.6	--	--	--	15.6
		6-12	08/09/2016	Soil	16.6	--	--	--	16.6
		12-18	08/09/2016	Soil	6.1	--	--	--	6.1
T7.6E4	BD-2	0-3	08/09/2016	Soil	7.9	--	--	--	7.9
		3-6	08/09/2016	Soil	6.3	--	--	--	6.3
		6-12	08/09/2016	Soil	2.9	--	--	--	2.9
		12-18	08/09/2016	Soil	3.7	3.8	--	--	3.8
T7.6W1	BD-3	0-3	08/05/2016	Soil	12.6	--	--	--	12.6
		3-6	08/05/2016	Soil	10.6	--	--	--	10.6
		6-12	08/05/2016	Soil	9.0	--	--	--	9.0
		12-18	08/05/2016	Soil	9.4	--	--	--	9.4
		18-24	08/05/2016	Soil	11.9	--	--	--	11.9
		24-30	08/05/2016	Soil	20.2	--	--	--	**20.2**
T7.6W2	BD-3	0-3	08/05/2016	Soil	8.6	--	--	--	8.6
		3-6	08/05/2016	Soil	5.9	--	--	--	5.9
		6-12	08/05/2016	Soil	6.6	--	--	--	6.6
		12-18	08/05/2016	Soil	6.5	--	--	--	6.5
		18-24	08/05/2016	Soil	16.4	--	--	--	16.4
T8E1	BD-2	0-3	10/23/2002	Soil	105 J	--	105 E	--	**105**
		3-6	10/23/2002	Soil	134 J	--	--	--	**134**
		6-12	10/23/2002	Soil	10.8	4.0	--	--	7.4
		12-18	10/23/2002	Soil	4.0	--	--	--	4.0
		18-24	10/23/2002	Soil	4.2	--	--	--	4.2
T8E2	BD-2	3-6	10/23/2002	Soil	15.7	--	--	--	15.7
		6-12	10/23/2002	Soil	5.1	--	--	--	5.1
		12-18	10/23/2002	Soil	5.1	--	--	--	5.1
T8E3	BD-2	0-3	10/23/2002	Soil	229	--	--	--	**229**
		3-6	10/23/2002	Soil	95.2	--	--	--	**95.2**
		6-12	10/23/2002	Soil	11.1	--	--	--	11.1
		12-18	10/23/2002	Soil	4.1	--	--	--	4.1
		18-24	10/23/2002	Soil	4.0	--	--	--	4.0
T8E4	BD-2	0-3	10/23/2002	Soil	58.8	--	--	--	**58.8**
		3-6	10/23/2002	Soil	6.1	--	--	--	6.1
		6-12	10/23/2002	Soil	4.7	--	--	--	4.7
		12-18	10/23/2002	Soil	3.1	--	--	--	3.1
T8E5	BD-2	0-3	3/10/2004	Soil	8.7	--	--	--	8.7
		3-6	3/10/2004	Soil	--	--	5.1	--	5.1
		6-12	3/10/2004	Soil	5.2	--	--	--	5.2
		12-18	3/10/2004	Soil	3.7	--	3.2	--	3.5
		18-24	3/10/2004	Soil	2.1	--	--	--	2.1
		24-30	3/10/2004	Soil	4.3	4.9 J	--	--	4.6
T8E6	BD-2	0-3	3/10/2004	Soil	9.8	--	--	--	9.8
		3-6	3/10/2004	Soil	--	--	7.2	--	7.2
		6-12	3/10/2004	Soil	4.5	--	--	--	4.5
		12-18	3/10/2004	Soil	3.0	--	--	--	3.0
		18-24	3/10/2004	Soil	4.7	--	--	--	4.7
		24-30	3/10/2004	Soil	6.2	--	--	--	6.2

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T8E7	BD-2	0-3	3/10/2004	Soil	11.2	--	--	--	11.2
		3-6	3/10/2004	Soil	--	--	12.0	--	12.0
		6-12	3/10/2004	Soil	11.4	--	--	--	11.4
		12-18	3/10/2004	Soil	3.2	--	--	--	3.2
		18-24	3/10/2004	Soil	2.8	--	--	--	2.8
		24-30	3/10/2004	Soil	3.2	--	--	--	3.2
T8E8	BD-2	0-3	3/10/2004	Soil	13.0	--	--	--	13.0
		3-6	3/10/2004	Soil	--	--	13.7	--	13.7
		6-12	3/10/2004	Soil	10.5	--	11.3	7.9	9.9
		12-18	3/10/2004	Soil	5.1	--	--	--	5.1
		18-24	3/10/2004	Soil	4.2	--	--	--	4.2
		24-30	3/10/2004	Soil	2.3	--	--	--	2.3
T8S	BD-2	0-3	10/28/2002	Sediment	74.6 J	--	117	--	**95.8**
T8W1	BD-2	0-3	10/23/2002	Soil	14.8	--	16.5	--	15.7
		3-6	10/23/2002	Soil	12.1 J	--	--	--	12.1
		6-12	10/23/2002	Soil	11.0 J	--	--	--	11.0
		12-18	10/23/2002	Soil	5.8 J	--	--	--	5.8
		18-24	10/23/2002	Soil	200 J	780 J	--	--	**490**
T8W1-R	BD-2	0-3	08/05/2016	Soil	16.1	--	--	--	16.1
		3-6	08/05/2016	Soil	16.9	--	--	--	16.9
		6-12	08/05/2016	Soil	17.5	--	--	--	17.5
		12-18	08/05/2016	Soil	15.9	--	--	--	15.9
		18-24	08/05/2016	Soil	18.0	--	--	--	18.0
		24-30	08/05/2016	Soil	22.5	--	--	--	**22.5**
T8W2	BD-2	0-3	10/23/2002	Soil	10.6 J	--	11.1	--	10.9
		3-6	10/23/2002	Soil	15.8 J	--	--	--	15.8
		6-12	10/23/2002	Soil	12.6 J	--	--	--	12.6
		12-18	10/23/2002	Soil	10.3 J	--	--	--	10.3
		18-24	10/23/2002	Soil	7.9 J	--	--	--	7.9
T8W2-R	BD-2	0-3	08/05/2016	Soil	10.8	--	--	--	10.8
		3-6	08/05/2016	Soil	11.7	--	--	--	11.7
		6-12	08/05/2016	Soil	9.5	--	--	--	9.5
		12-18	08/05/2016	Soil	17.5	--	--	--	17.5
		18-24	08/05/2016	Soil	18.9	--	--	--	18.9
		24-30	08/05/2016	Soil	8.7	--	--	--	8.7
T8W3	BD-2	0-3	10/23/2002	Soil	22.8 J	--	--	--	**22.8**
		3-6	10/23/2002	Soil	25.6 J	--	--	--	**25.6**
		6-12	10/23/2002	Soil	21.3 J	--	--	--	**21.3**
		12-18	10/23/2002	Soil	10.5 J	--	--	--	10.5
T8W4	BD-5	0-3	10/23/2002	Soil	26.1 J	--	--	--	**26.1**
		3-6	10/23/2002	Soil	27.3 J	--	--	--	**27.3**
		6-12	10/23/2002	Soil	22.1 J	--	--	--	**22.1**
		12-18	10/23/2002	Soil	0.21 U	--	--	--	0.21 U
		18-24	10/23/2002	Soil	8.2 J	--	--	--	8.2
T8W5	BD-5	0-3	08/05/2016	Soil	17.3	--	--	--	17.3
		3-6	08/05/2016	Soil	18.9	23.1	--	--	**21.0**
		6-12	08/05/2016	Soil	96.3	--	--	--	**96.3**
		12-18	08/05/2016	Soil	23.1	--	--	--	**23.1**
		18-24	08/05/2016	Soil	9.4	--	--	--	9.4

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T8.2E1	BD-2	0-3	08/09/2016	Soil	24.5	--	--	--	**24.5**
		3-6	08/09/2016	Soil	27.6	--	--	--	**27.6**
		6-12	08/09/2016	Soil	26.4	--	--	--	**26.4**
		12-18	08/09/2016	Soil	19.0	--	--	--	19.0
		18-24	08/09/2016	Soil	8.1	--	--	--	8.1
T8.2E2	BD-4	0-3	08/30/2016	Soil	29.0	--	--	--	**29.0**
		3-6	08/30/2016	Soil	38.0	--	--	--	**38.0**
		6-12	08/30/2016	Soil	19.5	--	--	--	19.5
		12-18	08/30/2016	Soil	12.3	--	--	--	12.3
T8.2E3	BD-4	0-3	08/30/2016	Soil	38.7	--	--	--	**38.7**
		3-6	08/30/2016	Soil	31.6	--	--	--	**31.6**
		6-12	08/30/2016	Soil	3.9	--	--	--	3.9
		12-18	08/30/2016	Soil	2.4	--	--	--	2.4
T8.2W1	BD-2	0-3	08/05/2016	Soil	19.2	--	--	--	19.2
		3-6	08/05/2016	Soil	7.5	--	--	--	7.5
		6-12	08/05/2016	Soil	10.4	--	--	--	10.4
		12-18	08/05/2016	Soil	9.3	--	--	--	9.3
		18-24	08/05/2016	Soil	6.1	--	--	--	6.1
		24-30	08/05/2016	Soil	10.6	--	--	--	10.6
T8.2W2	BD-5	0-3	08/30/2016	Soil	7.7	--	--	--	7.7
		3-6	08/30/2016	Soil	9.3	--	--	--	9.3
		6-12	08/30/2016	Soil	15.6	--	--	--	15.6
		12-18	08/30/2016	Soil	16.6	--	--	--	16.6
		18-24	08/30/2016	Soil	5.2	5.8	--	--	5.5
T8.4E1	BD-2	0-3	08/30/2016	Soil	15.8	--	--	--	15.8
		3-6	08/30/2016	Soil	20.9	--	--	--	**20.9**
		6-12	08/30/2016	Soil	11.8	--	--	--	11.8
		12-18	08/30/2016	Soil	5.6	--	--	--	5.6
		18-24	08/30/2016	Soil	5.6	5.7	--	--	5.7
T8.4E2	BD-4	0-3	08/30/2016	Soil	21.9	--	--	--	**21.9**
		3-6	08/30/2016	Soil	20.6	15.1	--	--	17.9
		6-12	08/30/2016	Soil	13.3	--	--	--	13.3
		12-18	08/30/2016	Soil	8.2	--	--	--	8.2
T8.4E3	BD-4	0-3	08/30/2016	Soil	16.0	--	--	--	16.0
		3-6	08/30/2016	Soil	16.1	--	--	--	16.1
		6-12	08/30/2016	Soil	10.3	--	--	--	10.3
		12-18	08/30/2016	Soil	6.9	--	--	--	6.9
T8.4W1	BD-1	0-3	08/05/2016	Soil	5.9 J	--	--	--	5.9
		3-6	08/05/2016	Soil	4.6 J	--	--	--	4.6
		6-12	08/05/2016	Soil	3.1 J	7.0 J	--	--	5.1
		12-18	08/05/2016	Soil	7.0 J	--	--	--	7.0
		18-24	08/05/2016	Soil	8.1 J	--	--	--	8.1
		24-30	08/05/2016	Soil	6.2 J	--	--	--	6.2
T8.4W2	BD-1	0-3	08/30/2016	Soil	2.5	--	--	--	2.5
		3-6	08/30/2016	Soil	3.1	--	--	--	3.1
		6-12	08/30/2016	Soil	3.8	--	--	--	3.8
		12-18	08/30/2016	Soil	1.5	--	--	--	1.5
		18-24	08/30/2016	Soil	0.46 J	--	--	--	0.5

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
T8.6E1	BD-4	0-3	08/30/2016	Soil	36.8	--	--	--	**36.8**
		3-6	08/30/2016	Soil	163	--	--	--	**163**
		6-12	08/30/2016	Soil	52.2	--	--	--	**52.2**
		12-18	08/30/2016	Soil	24.2	--	--	--	**24.2**
		18-24	08/30/2016	Soil	22.1	--	--	--	**22.1**
T8.6E2	BD-4	0-3	08/30/2016	Soil	13.9	--	--	--	13.9
		3-6	08/30/2016	Soil	10.5	--	--	--	10.5
		6-12	08/30/2016	Soil	7.0	--	--	--	7.0
		12-18	08/30/2016	Soil	3.1	--	--	--	3.1
T8.6W1	BD-4	0-3	08/30/2016	Soil	54	--	--	--	**54.0**
		3-6	08/30/2016	Soil	16.7	--	--	--	16.7
		6-12	08/30/2016	Soil	17.9	--	--	--	17.9
		12-18	08/30/2016	Soil	8.6	--	--	--	8.6
		18-24	08/30/2016	Soil	3.8	--	--	--	3.8
DEC25	BC-6	0-6	11/1/1986	Sediment	--	--	45.6	--	**45.6**
DOH-SS11	BD-2	0-3	1/1/1989	Soil	300	--	--	--	**300**
DOH-SS12	BC-1	0-3	1/1/1989	Soil	180	**--**	--	--	**180**
DOH-SS13	BC-3	0-3	1/1/1989	Soil	320	440	--	--	**380**
DOH-SS14	BC-13	0-3	1/1/1989	Soil	66.0	--	--	--	**66.0**
DOH-SS15	BB-6	0-3	1/1/1989	Soil	74.0	--	--	--	**74.0**
DOH-SS16	BB-3	0-3	1/1/1989	Soil	18.0	--	--	--	18.0
DOH-SS17	BB-4	0-3	1/1/1989	Soil	73.0	--	--	--	**73.0**
DOH-SS18	BC-3	0-3	1/1/1989	Soil	260	**--**	--	--	**260**
SD3	BB-6	0-6	4/14/1993	Sediment	83.5	--	--	--	**83.5**
SD4	BD-2	0-6	4/13/1993	Sediment	333	--	--	--	**333**
S8	BB-4	0-6	11/15/1990	Soil	59.1	--	--	--	**59.1**
S9	BC-6	0-6	11/15/1990	Soil	88.0	--	--	--	**88.0**
S10	BC-4	0-6	11/15/1990	Soil	3.3 U	--	--	--	3.3 U
S11	BC-3	0-6	11/15/1990	Soil	562	**--**	--	--	**562**
S12	BC-3	0-6	11/15/1990	Soil	51.1	**--**	--	--	**51.1**
S13	BC-1	0-6	11/15/1990	Soil	675	**--**	--	--	**675**
S13	BC-1	0-6	6/23/1993	Soil	597	**--**	--	--	**597**
		12-18	6/23/1993	Soil	592	**--**	--	--	**592**
S14	BC-13	0-6	11/15/1990	Soil	35.3	--	--	--	**35.3**
S15	BD-2	0-6	11/15/1990	Soil	9.4	--	--	--	9.4
T3	BB-4	0-6	9/4/1990	Soil	235	--	--	--	**235**
T4	BD-2	0-6	9/5/1990	Soil	636	--	--	--	**636**
		6-12	11/26/1990	Soil	170	--	--	--	**170**
WSS18	BB-6	0-3	11/20/1996	Soil	27.2	--	29.7	--	**28.5**
TSASB1	BD-2	0-3	3/10/2004	Soil	10.3	--	--	--	10.3
		3-6	3/10/2004	Soil	--	--	13.8	--	13.8
		6-12	3/10/2004	Soil	8.9	--	--	--	8.9
		12-18	3/10/2004	Soil	3.0	--	--	--	3.0
TSASB2	BD-2	0-3	3/10/2004	Soil	28.3	--	--	--	**28.3**
		3-6	3/10/2004	Soil	--	--	19.0	--	19.0
		6-12	3/10/2004	Soil	8.0	--	12.1	8.4	9.5
		12-18	3/10/2004	Soil	4.2	--	--	--	4.2

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
TSASB3	BD-2	0-3	3/10/2004	Soil	71.3	--	--	--	**71.3**
		3-6	3/10/2004	Soil	--	--	66.8	--	**66.8**
		6-12	3/10/2004	Soil	60.5	--	--	--	**60.5**
		12-18	3/10/2004	Soil	11.3	--	28.8	--	**20.1**
TSASB4	BD-2	0-3	11/10/2004	Soil	12.3 J	--	15.7 E*	--	14.0
		3-6	11/10/2004	Soil	--	--	14.8 E*	--	14.8
		6-12	11/10/2004	Soil	16.2 J	14.8 J	--	--	15.5
		12-18	11/10/2004	Soil	3.4 J	--	--	--	3.4
TSASB5	BD-2	0-3	11/10/2004	Soil	17.5 J	--	--	--	17.5
		3-6	11/10/2004	Soil	--	--	21.1 E*	--	**21.1**
		6-12	11/10/2004	Soil	10.1	--	--	--	10.1
		12-18	11/10/2004	Soil	3.9	--	--	--	3.9
TSBSB1	BC-13	0-3	3/10/2004	Soil	10.0	--	--	--	10.0
		3-6	3/10/2004	Soil	--	--	15.0	--	15.0
		6-12	3/10/2004	Soil	11.4	--	--	--	11.4
		12-18	3/10/2004	Soil	3.8	--	3.9	--	3.9
TSBSB2	BC-13	0-3	3/10/2004	Soil	11.7	--	--	--	11.7
		3-6	3/10/2004	Soil	--	--	13.2	--	13.2
		6-12	3/10/2004	Soil	24.7	--	--	--	**24.7**
		12-18	3/10/2004	Soil	13.9	--	--	--	13.9
TSCSB1	BC-12	0-3	3/15/2004	Soil	8.8	--	--	--	8.8
		3-6	3/15/2004	Soil	--	--	8.9	--	8.9
		6-12	3/15/2004	Soil	11.2	--	--	--	11.2
		12-18	3/15/2004	Soil	6.4	--	--	--	6.4
TSCSB2	BC-12	0-3	3/11/2004	Soil	24.7	--	--	--	**24.7**
		3-6	3/11/2004	Soil	--	--	48.4	--	**48.4**
		6-12	3/11/2004	Soil	48.4	--	--	--	**48.4**
		12-18	3/11/2004	Soil	31.2	--	--	--	**31.2**
		18-24	3/11/2004	Soil	20.7 J	--	--	--	**20.7**
		24-30	3/11/2004	Soil	11.1 J	--	--	--	11.1
		30-36	3/11/2004	Soil	9.1 J	--	--	--	9.1
TSCSB3	BC-12	0-3	3/15/2004	Soil	35.6 J	--	--	--	**35.6**
		3-6	3/15/2004	Soil	--	--	32.5	--	**32.5**
		6-12	3/15/2004	Soil	19.9 J	--	--	--	19.9
		12-18	3/15/2004	Soil	7.4 J	--	--	--	7.4
TSDSB1	BC-11	0-3	3/15/2004	Soil	4.6 J	--	--	--	4.6
		3-6	3/15/2004	Soil	--	--	12.3	--	12.3
		6-12	3/15/2004	Soil	12.6 J	--	--	--	12.6
		12-18	3/15/2004	Soil	4.9 J	--	4.0	--	4.5
TSDSB2	BC-11	0-3	3/15/2004	Soil	5.2 J	--	--	--	5.2
		3-6	3/15/2004	Soil	--	--	5.3	--	5.3
		6-12	3/15/2004	Soil	4.1 J	--	--	--	4.1
		12-18	3/15/2004	Soil	1.9 J	--	--	--	1.9
TSDSB3	BC-11	0-3	3/15/2004	Soil	16.6 J	--	--	--	16.6
		3-6	3/15/2004	Soil	--	--	21.3	--	**21.3**
		6-12	3/15/2004	Soil	15.0 J	--	--	--	15.0
		12-18	3/15/2004	Soil	5.2 J	--	--	--	5.2

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
TSDSB4	BC-11	0-3	3/15/2004	Soil	21.4 J	--	21.0	--	**21.2**
		3-6	3/15/2004	Soil	--	--	22.8	--	**22.8**
		6-12	3/15/2004	Soil	14.2 J	--	--	--	14.2
		12-18	3/15/2004	Soil	6.5 J	--	--	--	6.5
TSESB1	BC-10	0-3	3/11/2004	Soil	15.5	--	--	--	15.5
		3-6	3/11/2004	Soil	--	--	20.7	--	**20.7**
		6-12	3/11/2004	Soil	7.5	--	--	--	7.5
		12-18	3/11/2004	Soil	2.7	--	--	--	2.7
TSESB2	BC-10	0-3	3/11/2004	Soil	17.5	--	--	--	17.5
		3-6	3/11/2004	Soil	--	--	21.9	--	**21.9**
		6-12	3/11/2004	Soil	9.7	--	--	--	9.7
		12-18	3/11/2004	Soil	3.9	--	--	--	3.9
TSESB3	BC-10	0-3	3/11/2004	Soil	11.9	--	--	--	11.9
		3-6	3/11/2004	Soil	--	--	12.7	--	12.7
		6-12	3/11/2004	Soil	11.2	--	--	--	11.2
		12-18	3/11/2004	Soil	4.5	--	--	--	4.5
TSESB4	BC-10	0-3	3/11/2004	Soil	10.4	--	--	--	10.4
		3-6	3/11/2004	Soil	--	--	10.2	--	10.2
		6-12	3/11/2004	Soil	7.7	--	--	--	7.7
		12-18	3/11/2004	Soil	3.8	--	--	--	3.8
TSFSB1	BC-9	0-3	3/11/2004	Soil	13.1	--	--	--	13.1
		3-6	3/11/2004	Soil	--	--	13.6	--	13.6
		6-12	3/11/2004	Soil	6.3	--	--	--	6.3
		12-18	3/11/2004	Soil	3.6	4.3	--	--	4.0
TSFSB2	BC-9	0-3	3/11/2004	Soil	16.1	--	--	--	16.1
		3-6	3/11/2004	Soil	--	--	17.4	--	17.4
		6-12	3/11/2004	Soil	8.8	--	--	--	8.8
		12-18	3/11/2004	Soil	6.4	--	--	--	6.4
TSFSB3	BC-9	0-3	3/11/2004	Soil	16.2	--	--	--	16.2
		3-6	3/11/2004	Soil	--	--	17.1	--	17.1
		6-12	3/11/2004	Soil	11.6	--	--	--	11.6
		12-18	3/11/2004	Soil	2.9	--	--	--	2.9
TSFSB4	BC-9	0-3	3/11/2004	Soil	21.2	--	--	--	**21.2**
		3-6	3/11/2004	Soil	--	--	16.8	--	16.8
		6-12	3/11/2004	Soil	4.1	--	--	--	4.1
TSGSB1	BC-8	0-3	3/15/2004	Soil	16.6	--	--	--	16.6
		3-6	3/15/2004	Soil	--	--	17.6	--	17.6
		6-12	3/15/2004	Soil	9.4	8.7	--	--	9.1
		12-18	3/15/2004	Soil	7.1	--	--	--	7.1
TSGSB2	BC-8	0-3	3/15/2004	Soil	27.1	--	25.5	--	**26.3**
		3-6	3/15/2004	Soil	--	--	26.0	--	**26.0**
		6-12	3/15/2004	Soil	16.6	--	--	--	16.6
		12-18	3/15/2004	Soil	7.1	--	--	--	7.1
TSGSB3	BC-8	0-3	3/15/2004	Soil	20.4	--	--	--	**20.4**
		3-6	3/15/2004	Soil	--	--	19.5	--	19.5
		6-12	3/15/2004	Soil	6.2	--	--	--	6.2
		12-18	3/15/2004	Soil	3.2	--	--	--	3.2

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
TSGSB4	BC-8	0-3	3/15/2004	Soil	2.4	--	--	--	2.4
		3-6	3/15/2004	Soil	--	--	2.2	--	2.2
		6-12	3/15/2004	Soil	2.5	--	--	--	2.5
		12-18	3/15/2004	Soil	2.8	--	--	--	2.8
TSHSB1	BC-7	0-3	3/11/2004	Soil	10.1	--	--	--	10.1
		3-6	3/11/2004	Soil	--	--	13.8 *	--	13.8
		6-12	3/11/2004	Soil	8.6	--	8.6 *	8.9 *	8.7
		12-18	3/11/2004	Soil	6.3	--	--	--	6.3
TSHSB2	BC-7	0-3	3/11/2004	Soil	10.5	--	--	--	10.5
		3-6	3/11/2004	Soil	--	--	22.8 *	--	**22.8**
		6-12	3/11/2004	Soil	20.2	--	--	--	**20.2**
		12-18	3/11/2004	Soil	3.4	--	--	--	3.4
TSHSB3	BC-7	0-3	3/11/2004	Soil	21.1	--	--	--	**21.1**
		3-6	3/11/2004	Soil	--	--	22.7 *	--	**22.7**
		6-12	3/11/2004	Soil	16.1	--	--	--	16.1
		12-18	3/11/2004	Soil	3.7	--	--	--	3.7
TSISB1	BC-1	0-3	3/15/2004	Soil	61.8	--	--	--	**61.8**
		3-6	3/15/2004	Soil	--	--	157 N	--	**157**
		6-12	3/15/2004	Soil	249	--	--	--	**249**
		12-18	3/15/2004	Soil	280	--	--	--	**280**
TSISB2	BC-1	0-3	3/15/2004	Soil	141	--	--	--	**141**
		3-6	3/15/2004	Soil	--	--	282 N	--	**282**
		6-12	3/15/2004	Soil	173	--	146 N	--	**160**
		12-18	3/15/2004	Soil	62.5	--	--	--	**62.5**
		18-24	3/15/2004	Soil	152 J	--	--	--	**152**
		24-30	3/15/2004	Soil	47.9 J	--	--	--	**47.9**
TSISB3	BC-1	0-3	3/16/2004	Soil	15.2	--	--	--	15.2
		3-6	3/16/2004	Soil	--	--	16.7	--	16.7
		6-12	3/16/2004	Soil	14.8	--	--	--	14.8
TSJSB1	BC-2	0-3	11/10/2004	Soil	53.8 J	--	--	--	**53.8**
		3-6	11/10/2004	Soil	--	--	51.6 E*	--	**51.6**
		6-12	11/10/2004	Soil	11.4 J	--	--	--	11.4
		12-18	11/10/2004	Soil	4.3 J	--	--	--	4.3
TSKSB1	BC-3	0-3	3/15/2004	Soil	24.0	--	35.5 N	--	**29.8**
		3-6	3/15/2004	Soil	--	--	32.4 N	--	**32.4**
		6-12	3/15/2004	Soil	19.5	--	--	--	19.5
		12-18	3/15/2004	Soil	8.8	--	--	--	8.8
TSKSB2	BC-3	0-3	3/15/2004	Soil	16.3	--	--	--	16.3
		3-6	3/15/2004	Soil	--	--	25.1 N	--	**25.1**
		6-12	3/15/2004	Soil	8.1	11.6	--	--	9.9
		12-18	3/15/2004	Soil	3.4	--	--	--	3.4
TSLSB1	BB-3	0-3	3/16/2004	Soil	28.1	--	--	--	**28.1**
		3-6	3/16/2004	Soil	--	--	31.8	--	**31.8**
		6-12	3/16/2004	Soil	24.6	--	--	--	**24.6**
		12-18	3/16/2004	Soil	8.5	--	--	--	8.5
TSLSB2	BB-3	0-3	3/16/2004	Soil	4.3	--	--	--	4.3
		3-6	3/16/2004	Soil	--	--	4.4	--	4.4
		6-12	3/16/2004	Soil	11.3	--	--	--	11.3
		12-18	3/16/2004	Soil	6.7	--	--	--	6.7

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Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
TSLSB3	BB-3	0-3	3/16/2004	Soil	22.0	--	19.1	--	**20.6**
		3-6	3/16/2004	Soil	--	--	17.2	--	17.2
		6-12	3/16/2004	Soil	9.0	--	--	--	9.0
		12-18	3/16/2004	Soil	3.5	--	--	--	3.5
TSMSB1	BB-4	0-3	3/16/2004	Soil	25.1	--	--	--	**25.1**
		3-6	3/16/2004	Soil	--	--	35.8 E	--	**35.8**
		6-12	3/16/2004	Soil	16.1	--	15.8	15.7	15.9
		12-18	3/16/2004	Soil	4.1	--	--	--	4.1
TSMSB2	BB-4	0-3	3/16/2004	Soil	31.3	--	--	--	**31.3**
		3-6	3/16/2004	Soil	--	--	26.6	--	**26.6**
		6-12	3/16/2004	Soil	7.6	--	--	--	7.6
		12-18	3/16/2004	Soil	4.2	--	--	--	4.2
TSMSB3	BB-4	0-3	3/16/2004	Soil	18.1	17.4	--	--	17.8
		3-6	3/16/2004	Soil	--	--	18.4	--	18.4
		6-12	3/16/2004	Soil	15.4	--	--	--	15.4
		12-18	3/16/2004	Soil	4.5	--	4.1	--	4.3
TSNSB1	BB-6	0-3	3/16/2004	Soil	28.8	--	--	--	**28.8**
		3-6	3/16/2004	Soil	--	--	27.3	--	**27.3**
		6-12	3/16/2004	Soil	15.3	--	12.2	14.2	13.9
		12-14	3/16/2004	Soil	7.3	--	--	--	7.3
TSNSB2	BB-6	0-3	3/16/2004	Soil	5.0	--	--	--	5.0
		3-6	3/16/2004	Soil	--	--	8.7	--	8.7
		6-12	3/16/2004	Soil	9.5	7.7	--	--	8.6
		12-18	3/16/2004	Soil	2.8	--	--	--	2.8
TSOSB1	BB-5	0-3	11/10/2004	Soil	10.6 J	--	--	--	10.6
		3-6	11/10/2004	Soil	--	--	12.5	--	12.5
		6-12	11/10/2004	Soil	8.8 J	--	--	--	8.8
		12-18	11/10/2004	Soil	8.0 J	--	--	--	8.0
		18-24	11/10/2004	Soil	8.4	--	--	--	8.4
TSPSB1	BB-7	0-3	4/27/2004	Soil	12.3	--	--	--	12.3
		3-6	4/27/2004	Soil	--	--	16.6 N	--	16.6
		6-12	4/27/2004	Soil	9.0	--	--	--	9.0
		12-18	4/27/2004	Soil	12.5	--	--	--	12.5
BB1-1	BB-1	0-3	12/14/2005	Soil	18.9	--	--	--	18.9
		3-6	12/14/2005	Soil	--	--	24.8	--	**24.8**
		6-12	12/14/2005	Soil	15.0	--	--	--	15.0
		12-18	12/14/2005	Soil	5.8	--	3.9	4.5	4.7
		18-24	12/14/2005	Soil	9.4	--	--	--	9.4
BB1-2	BB-1	0-3	12/14/2005	Soil	16.9	--	--	--	16.9
		3-6	12/14/2005	Soil	--	--	16.6	--	16.6
		6-12	12/14/2005	Soil	24.8	--	--	--	**24.8**
		12-18	12/14/2005	Soil	18.0	--	--	--	18.0
		18-24	12/14/2005	Soil	8.7	--	--	--	8.7
BB1-3	BB-1	0-3	12/14/2005	Soil	9.6	--	--	--	9.6
		3-6	12/14/2005	Soil	--	--	7.6	--	7.6
		6-12	12/14/2005	Soil	6.0	--	--	--	6.0
		12-18	12/14/2005	Soil	2.9	--	--	--	2.9
		18-24	12/14/2005	Soil	2.4	--	--	--	2.4

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BB1-4	BB-1	0-3	07/20/2016	Soil	20.0 J	--	--	--	20.0
		3-6	07/20/2016	Soil	21.7	--	--	--	**21.7**
		6-12	07/20/2016	Soil	14.0	--	--	--	14.0
BB1-5	BB-1	0-3	07/20/2016	Soil	15.6 J	--	--	--	15.6
		3-6	07/20/2016	Soil	17.8 J	--	--	--	17.8
		6-12	07/20/2016	Soil	9.8 J	--	--	--	9.8
BB1-6	BB-1	0-3	07/20/2016	Soil	19.9	--	--	--	19.9
		3-6	07/20/2016	Soil	19.8	--	--	--	19.8
		6-12	07/20/2016	Soil	7.3	--	--	--	7.3
BB1-7	BB-1	0-3	07/20/2016	Soil	9.8	--	--	--	9.8
		3-6	07/20/2016	Soil	11.7	--	--	--	11.7
		6-12	07/20/2016	Soil	13.2	--	--	--	13.2
BB1-8	BB-1	0-3	07/20/2016	Soil	11.2	--	--	--	11.2
		3-6	07/20/2016	Soil	11.2	--	--	--	11.2
		6-12	07/20/2016	Soil	12.9	--	--	--	12.9
		12-18	07/20/2016	Soil	14.1	--	--	--	14.1
BB1-9	BB-1	0-3	07/20/2016	Soil	11.3	--	--	--	11.3
		3-6	07/20/2016	Soil	12.2	--	--	--	12.2
		6-12	07/20/2016	Soil	10.1	--	--	--	10.1
		12-18	07/20/2016	Soil	4.8	--	--	--	4.8
BB1-10	BB-1	0-3	07/21/2016	Soil	13.3 J	--	--	--	13.3
		3-6	07/21/2016	Soil	14.2 J	--	--	--	14.2
		6-12	07/21/2016	Soil	20.7 J	--	--	--	**20.7**
		12-18	07/21/2016	Soil	22.2 J	22.4 J	--	--	**22.3**
BB1-11	BB-1	0-3	07/20/2016	Soil	14.7	--	--	--	14.7
		3-6	07/20/2016	Soil	20.6	--	--	--	**20.6**
		6-12	07/20/2016	Soil	17.9	--	--	--	17.9
		12-18	07/20/2016	Soil	9.8	--	--	--	9.8
BB1-12	BB-1	0-3	07/21/2016	Soil	13.8 J	--	--	--	13.8
		3-6	07/21/2016	Soil	16.5 J	--	--	--	16.5
		6-12	07/21/2016	Soil	14.9 J	--	--	--	14.9
		12-18	07/21/2016	Soil	16.4 J	--	--	--	16.4
		18-24	07/21/2016	Soil	10.4 J	--	--	--	10.4
BB1-13	BB-1	0-3	07/21/2016	Soil	13.4 J	--	--	--	13.4
		3-6	07/21/2016	Soil	12.9 J	--	--	--	12.9
		6-12	07/21/2016	Soil	12.7 J	--	--	--	12.7
		12-18	07/21/2016	Soil	12.1 J	--	--	--	12.1
		18-24	07/21/2016	Soil	8.2 J	--	--	--	8.2
BB2-1	BB-2	0-3	12/14/2005	Soil	20.2	--	--	--	**20.2**
		3-6	12/14/2005	Soil	--	--	33.2	--	**33.2**
		6-12	12/14/2005	Soil	18.0	--	--	--	18.0
		12-18	12/14/2005	Soil	5.7	--	--	--	5.7
		18-24	12/14/2005	Soil	4.3	--	--	--	4.3
BB2-2	BB-2	0-3	12/14/2005	Soil	6.2	--	--	--	6.2
		3-6	12/14/2005	Soil	--	--	8.0	--	8.0
		6-12	12/14/2005	Soil	5.2	--	--	--	5.2
		12-18	12/14/2005	Soil	7.1	--	--	--	7.1
		18-24	12/14/2005	Soil	22.4	--	--	--	**22.4**

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BB2-3	BB-2	0-3	12/14/2005	Soil	4.9	--	--	--	4.9
		3-6	12/14/2005	Soil	--	--	5.6	--	5.6
		6-12	12/14/2005	Soil	10.1	--	--	--	10.1
		12-18	12/14/2005	Soil	7.7	--	--	--	7.7
		18-24	12/14/2005	Soil	8.8	--	--	--	8.8
BB2-4	BB-2	0-3	07/20/2016	Soil	18.1 J	--	--	--	18.1
		3-6	07/20/2016	Soil	54.2 J	--	--	--	**54.2**
		6-12	07/20/2016	Soil	52.7 J	--	--	--	**52.7**
		12-18	07/20/2016	Soil	54.2 J	--	--	--	**54.2**
BB2-5	BB-2	0-3	07/20/2016	Soil	7.6 J	--	--	--	7.6
		3-6	07/20/2016	Soil	3.7 J	--	--	--	3.7
		6-12	07/20/2016	Soil	13.8 J	14.3 J	--	--	14.1
		12-18	07/20/2016	Soil	30.4 J	--	--	--	**30.4**
BB2-6	BB-2	0-3	07/20/2016	Soil	4.6 J	--	--	--	4.6
		3-6	07/20/2016	Soil	4.7 J	--	--	--	4.7
		6-12	07/20/2016	Soil	5.1 J	--	--	--	5.1
		12-18	07/20/2016	Soil	6.5 J	--	--	--	6.5
		18-24	07/20/2016	Soil	4.5 J	--	--	--	4.5
BB2-7	BB-2	0-3	07/20/2016	Soil	6.9 J	--	--	--	6.9
		3-6	07/20/2016	Soil	8.1 J	--	--	--	8.1
		6-12	07/20/2016	Soil	7.3 J	--	--	--	7.3
		12-18	07/20/2016	Soil	7.3 J	--	--	--	7.3
		18-24	07/20/2016	Soil	8.9 J	--	--	--	8.9
BB3-1	BB-3	0-3	08/08/2016	Soil	4.9 J	--	--	--	4.9
		3-6	08/08/2016	Soil	9.8 J	--	--	--	9.8
		6-12	08/08/2016	Soil	12.8 J	--	--	--	12.8
		12-18	08/08/2016	Soil	8.3 J	--	--	--	8.3
BB3-2	BB-3	0-3	07/20/2016	Soil	21.9	--	--	--	**21.9**
		3-6	07/20/2016	Soil	21.3	--	--	--	**21.3**
		6-12	07/20/2016	Soil	17.6	--	--	--	17.6
		12-18	07/20/2016	Soil	7.0 J	--	--	--	7.0
BB3-3	BB-4	0-3	08/08/2016	Soil	3.3 J	--	--	--	3.3
		3-6	08/08/2016	Soil	11.8 J	--	--	--	11.8
		6-12	08/08/2016	Soil	3.6 J	--	--	--	3.6
		12-18	08/08/2016	Soil	17.6 J	--	--	--	17.6
BB3-4	BB-3	0-3	07/20/2016	Soil	16.2	--	--	--	16.2
		3-6	07/20/2016	Soil	20.2	--	--	--	**20.2**
		6-12	07/20/2016	Soil	19.6	14.7	--	--	17.2
		12-18	07/20/2016	Soil	9.2	--	--	--	9.2
		18-24	07/20/2016	Soil	5.0	--	--	--	5.0
BB4-1	BB-4	0-3	07/19/2016	Soil	2.5	--	--	--	2.5
		3-6	07/19/2016	Soil	0.84	--	--	--	0.8
		6-12	07/19/2016	Soil	2.5	--	--	--	2.5
		12-18	07/19/2016	Soil	2.4	--	--	--	2.4
		18-24	07/19/2016	Soil	2.6	--	--	--	2.6
BB4-2	BB-4	0-3	07/20/2016	Soil	32.7	--	--	--	**32.7**
		3-6	07/20/2016	Soil	30.6	--	--	--	**30.6**
		6-12	07/20/2016	Soil	25.8	--	--	--	**25.8**
		12-18	07/20/2016	Soil	12.0	--	--	--	12.0

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					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BB4-3	BB-4	0-3	07/20/2016	Soil	18.0	--	--	--	18.0
		3-6	07/20/2016	Soil	8.1	--	--	--	8.1
		6-12	07/20/2016	Soil	13.8	--	--	--	13.8
		12-18	07/20/2016	Soil	6.2	--	--	--	6.2
BB4-4	BB-4	0-3	08/08/2016	Soil	7.5 J	--	--	--	7.5
		3-6	08/08/2016	Soil	14.2 J	--	--	--	14.2
		6-12	08/08/2016	Soil	8.5 J	--	--	--	8.5
		12-18	08/08/2016	Soil	4.3 J	--	--	--	4.3
BB4-5	BB-4	0-3	07/19/2016	Soil	16.7	--	--	--	16.7
		3-6	07/19/2016	Soil	15.0	--	--	--	15.0
		6-12	07/19/2016	Soil	9.3	--	--	--	9.3
		12-18	07/19/2016	Soil	7.6	--	--	--	7.6
		18-24	07/19/2016	Soil	7.5	--	--	--	7.5
BB4-6	BB-4	0-3	07/19/2016	Soil	18.8	--	--	--	18.8
		3-6	07/19/2016	Soil	21.2	--	--	--	**21.2**
		6-12	07/19/2016	Soil	18.3	--	--	--	18.3
		12-18	07/19/2016	Soil	5.0	--	--	--	5.0
		18-24	07/19/2016	Soil	5.2	--	--	--	5.2
BB4-7	BB-4	0-3	07/19/2016	Soil	29.1	--	--	--	**29.1**
		3-6	07/19/2016	Soil	27.4	--	--	--	**27.4**
		6-12	07/19/2016	Soil	16.3	--	--	--	16.3
		12-18	07/19/2016	Soil	9.1	--	--	--	9.1
		18-24	07/19/2016	Soil	7.0	--	--	--	7.0
BB4-8	BB-4	0-3	07/19/2016	Soil	4.9	--	--	--	4.9
		3-6	07/19/2016	Soil	5.6	--	--	--	5.6
		6-12	07/19/2016	Soil	4.7	--	--	--	4.7
		12-18	07/19/2016	Soil	3.3	--	--	--	3.3
		18-24	07/19/2016	Soil	4.3	--	--	--	4.3
BB4-9	BB-4	0-3	07/19/2016	Soil	31.5 J	--	--	--	**31.5**
		3-6	07/19/2016	Soil	36.6 J	--	--	--	**36.6**
		6-12	07/19/2016	Soil	18.8 J	--	--	--	18.8
		12-18	07/19/2016	Soil	9.2 J	20.2 J	--	--	14.7
		18-24	07/19/2016	Soil	9.7 J	--	--	--	9.7
BB6-1	BB-6	0-3	07/22/2016	Soil	25.1 J	--	--	--	**25.1**
		3-6	07/22/2016	Soil	31.1 J	--	--	--	**31.1**
		6-12	07/22/2016	Soil	37.7 J	--	--	--	**37.7**
BB6-2	BB-6	0-3	07/22/2016	Soil	23.9 J	--	--	--	**23.9**
		3-6	07/22/2016	Soil	26.0 J	--	--	--	**26.0**
		6-12	07/22/2016	Soil	27.4 J	--	--	--	**27.4**
BB6-3	BB-6	0-3	07/22/2016	Soil	33.2 J	--	--	--	**33.2**
		3-6	07/22/2016	Soil	41.7 J	--	--	--	**41.7**
		6-12	07/22/2016	Soil	38.3 J	--	--	--	**38.3**
		12-18	07/22/2016	Soil	14.4 J	--	--	--	14.4
		18-24	07/22/2016	Soil	7.9 J	--	--	--	7.9
BB6-4	BB-6	0-3	07/22/2016	Soil	23.0 J	--	--	--	**23.0**
		3-6	07/22/2016	Soil	22.9 J	--	--	--	**22.9**
		6-12	07/22/2016	Soil	35.5 J	--	--	--	**35.5**
BB6-5	BB-6	0-3	07/22/2016	Soil	28.9 J	--	--	--	**28.9**
		3-6	07/22/2016	Soil	33.3 J	--	--	--	**33.3**
		6-12	07/22/2016	Soil	23.8 J	--	--	--	**23.8**

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BB6-6	BB-6	0-3	07/22/2016	Soil	21.7 J	--	--	--	**21.7**
		3-6	07/22/2016	Soil	23.4 J	--	--	--	**23.4**
		6-12	07/22/2016	Soil	12.1 J	--	--	--	12.1
BB6-7	BB-6	0-3	07/25/2016	Soil	18.0 J	--	--	--	18.0
		3-6	07/25/2016	Soil	19.6 J	--	--	--	19.6
		6-12	07/25/2016	Soil	18.3 J	--	--	--	18.3
		12-18	07/25/2016	Soil	13.6 J	--	--	--	13.6
		18-24	07/25/2016	Soil	8.3 J	--	--	--	8.3
BB6-8	BB-6	0-3	07/25/2016	Soil	28.5 J	--	--	--	**28.5**
		3-6	07/25/2016	Soil	28.6 J	--	--	--	**28.6**
		6-12	07/25/2016	Soil	9.6 J	--	--	--	9.6
		12-18	07/25/2016	Soil	7.7 J	--	--	--	7.7
BB6-9	BB-6	0-3	07/25/2016	Soil	23.4 J	--	--	--	**23.4**
		3-6	07/25/2016	Soil	18.3 J	--	--	--	18.3
		6-12	07/25/2016	Soil	8.1 J	--	--	--	8.1
		12-18	07/25/2016	Soil	3.8 J	--	--	--	3.8
BB6-10	BB-6	0-3	07/25/2016	Soil	14.5 J	--	--	--	14.5
		3-6	07/25/2016	Soil	24.0 J	--	--	--	**24.0**
		6-12	07/25/2016	Soil	21.4 J	--	--	--	**21.4**
		12-18	07/25/2016	Soil	14.1 J	--	--	--	14.1
		18-24	07/25/2016	Soil	6.0 J	6.1 J	--	--	6.1
BB6-11	BB-6	0-3	07/25/2016	Soil	12.0	--	--	--	12.0
		3-6	07/25/2016	Soil	28.0 J	--	--	--	**28.0**
		6-12	07/25/2016	Soil	28.6 J	--	--	--	**28.6**
		12-18	07/25/2016	Soil	18.5 J	--	--	--	18.5
BB6-12	BB-6	0-3	07/25/2016	Soil	13.5 J	--	--	--	13.5
		3-6	07/25/2016	Soil	10.9 J	--	--	--	10.9
		6-12	07/25/2016	Soil	19.1 J	--	--	--	19.1
		12-18	07/25/2016	Soil	15.6 J	--	--	--	15.6
BB6-13	BB-6	0-3	07/25/2016	Soil	22.2	24.7 J	--	--	**23.5**
		3-6	07/25/2016	Soil	24.5	--	--	--	**24.5**
		6-12	07/25/2016	Soil	22.9	--	--	--	**22.9**
		12-18	07/25/2016	Soil	21.0	--	--	--	**21.0**
BB6-14	BB-6	0-3	07/25/2016	Soil	28.3	--	--	--	**28.3**
		3-6	07/25/2016	Soil	34.7	--	--	--	**34.7**
		6-12	07/25/2016	Soil	36.9	--	--	--	**36.9**
		12-18	07/25/2016	Soil	39.2	--	--	--	**39.2**
BB6-15	BB-6	0-3	07/25/2016	Soil	19.7	--	--	--	19.7
		3-6	07/25/2016	Soil	32.0	--	--	--	**32.0**
		6-12	07/25/2016	Soil	26.6	--	--	--	**26.6**
		12-18	07/25/2016	Soil	22.8	--	--	--	**22.8**
		18-24	07/25/2016	Soil	10.8	--	--	--	10.8
BB8-1	BB-8	0-3	12/14/2005	Soil	17.9	--	--	--	17.9
		3-6	12/14/2005	Soil	--	--	19.8	--	19.8
		6-12	12/14/2005	Soil	14.7	--	--	--	14.7
		12-18	12/14/2005	Soil	5.9	--	--	--	5.9
		18-24	12/14/2005	Soil	10.6	--	--	--	10.6

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BB8-2	BB-8	0-3	12/14/2005	Soil	10.7	--	5.9	--	8.3
		3-6	12/14/2005	Soil	--	--	15.8	--	15.8
		6-12	12/14/2005	Soil	11.4	--	--	--	11.4
		12-18	12/14/2005	Soil	5.3	--	--	--	5.3
		18-24	12/14/2005	Soil	6.4	--	--	--	6.4
BB8-3	BB-8	0-3	12/14/2005	Soil	13.8	--	--	--	13.8
		3-6	12/14/2005	Soil	--	--	18.9	--	18.9
		6-12	12/14/2005	Soil	9.9	8.9	--	--	9.4
		12-18	12/14/2005	Soil	4.6	--	--	--	4.6
		18-24	12/14/2005	Soil	4.8	--	4.6	5.2	4.8
BB8-4	BB-8	0-3	12/14/2005	Soil	13.8	--	--	--	13.8
		3-6	12/14/2005	Soil	--	--	10.9	--	10.9
		6-12	12/14/2005	Soil	7.4	--	6.9	--	7.2
		12-18	12/14/2005	Soil	2.9	--	--	--	2.9
		18-24	12/14/2005	Soil	2.3	--	--	--	2.3
BC1-1	BC-1	0-3	08/01/2016	Soil	12.9 J	--	--	--	12.9
		3-6	08/01/2016	Soil	16.5 J	--	--	--	16.5
		6-12	08/01/2016	Soil	20.0 J	--	--	--	20.0
		12-18	08/01/2016	Soil	8.5 J	--	--	--	8.5
		18-24	08/01/2016	Soil	3.7 J	--	--	--	3.7
		24-30	08/01/2016	Soil	3.6 J	--	--	--	3.6
		30-36	08/01/2016	Soil	3.0 J	--	--	--	3.0
BC1-2	BC-1	0-3	08/01/2016	Soil	7.2 J	--	--	--	7.2
		3-6	08/01/2016	Soil	7.0 J	--	--	--	7.0
		6-12	08/01/2016	Soil	11.2 J	--	--	--	11.2
		12-18	08/01/2016	Soil	9.9 J	--	--	--	9.9
		18-24	08/01/2016	Soil	21.7 J	--	--	--	**21.7**
BC1-3	BC-1	0-3	08/01/2016	Soil	17.4 J	--	--	--	17.4
		3-6	08/01/2016	Soil	10.8 J	--	--	--	10.8
		6-12	08/01/2016	Soil	9.6 J	--	8.9	--	9.3
		12-18	08/01/2016	Soil	11.1 J	--	--	--	11.1
		18-24	08/01/2016	Soil	18.2 J	--	--	--	18.2
BC1-4	BC-1	0-3	08/01/2016	Soil	8.7 J	--	--	--	8.7
		3-6	08/01/2016	Soil	20.3 J	--	--	--	**20.3**
		6-12	08/01/2016	Soil	23.3 J	--	--	--	**23.3**
		12-18	08/01/2016	Soil	57.6 J	--	--	--	**57.6**
		18-24	08/01/2016	Soil	125 J	--	--	--	**125**
BC1-5	BC-1	0-3	08/01/2016	Soil	89.9 J	--	--	--	**89.9**
		3-6	08/01/2016	Soil	62.9 J	--	--	--	**62.9**
		6-12	08/01/2016	Soil	311 J	--	--	--	**311**
		12-18	08/01/2016	Soil	599 J	--	--	--	**599**
		18-24	08/01/2016	Soil	733 J	--	--	--	**733**
		24-30	08/01/2016	Soil	432 J	--	--	--	**432**
		30-36	08/01/2016	Soil	351 J	--	--	--	**351**

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BC1-6	BC-1	0-3	08/01/2016	Soil	57.7 J	--	--	--	**57.7**
		3-6	08/01/2016	Soil	107 J	--	--	--	**107**
		6-12	08/01/2016	Soil	136 J	--	--	--	**136**
		12-18	08/01/2016	Soil	307 J	--	--	--	**307**
		18-24	08/01/2016	Soil	283 J	--	--	--	**283**
		24-30	08/01/2016	Soil	52.2 J	--	--	--	**52.0**
		30-32	08/01/2016	Soil	206 J	--	--	--	**206**
BC2-1	BC-2	0-3	08/01/2016	Soil	21.5	--	--	--	**21.5**
		3-6	08/01/2016	Soil	22.9	--	--	--	**22.9**
		6-12	08/01/2016	Soil	17.1	--	--	--	17.1
		12-18	08/01/2016	Soil	12.1	--	--	--	12.1
		18-24	08/01/2016	Soil	5.4	--	--	--	5.4
BC2-2	BC-2	0-3	08/01/2016	Soil	24.8 J	--	--	--	**24.8**
		3-6	08/01/2016	Soil	28.1 J	--	--	--	**28.1**
		6-12	08/01/2016	Soil	30.4 J	--	--	--	**30.4**
		12-18	08/01/2016	Soil	63.2 J	26.4 J	54.6	--	**48.1**
		18-24	08/01/2016	Soil	45.1 J	--	--	--	**45.1**
BC2-3	BC-2	0-3	08/01/2016	Soil	43.6 J	--	--	--	**43.6**
		3-6	08/01/2016	Soil	31.1 J	--	--	--	**31.1**
		6-12	08/01/2016	Soil	21.2 J	--	--	--	**21.2**
		12-18	08/01/2016	Soil	9.5 J	--	--	--	9.5
		18-24	08/01/2016	Soil	4.0 J	4.1	--	--	4.1
		24-30	08/01/2016	Soil	4.6 J	--	--	--	4.6
		30-36	08/01/2016	Soil	11.8 J	--	--	--	11.8
BC3-1	BC-3	0-3	08/02/2016	Soil	22.1	--	--	--	**22.1**
		3-6	08/02/2016	Soil	21.1	--	--	--	**21.1**
		6-12	08/02/2016	Soil	17.8	16.2	--	--	17.0
		12-18	08/02/2016	Soil	9.2	--	--	--	9.2
		18-24	08/02/2016	Soil	5.5	--	--	--	5.5
BC3-2	BC-3	0-3	08/08/2016	Soil	1040 J	--	--	--	**1040**
		3-6	08/08/2016	Soil	793 J	--	--	--	**793**
		6-12	08/08/2016	Soil	770 J	987 J	--	--	**879**
		12-18	08/08/2016	Soil	756 J	--	--	--	**756**
		18-24	08/08/2016	Soil	439 J	--	--	--	**439**
		24-30	08/08/2016	Soil	321 J	--	--	--	**321**
		30-36	08/08/2016	Soil	107 J	--	--	--	**107**
		36-42	08/08/2016	Soil	24.5 J	--	--	--	**24.5**
		42-48	08/08/2016	Soil	25.7 J	--	--	--	**25.7**
		48-54	08/08/2016	Soil	63.0 J	--	--	--	**63.0**
BC6-1	BB-7	0-3	07/27/2016	Soil	9.1	--	--	--	9.1
		3-6	07/27/2016	Soil	44.5	--	--	--	**44.5**
		6-12	07/27/2016	Soil	62.1	--	--	--	**62.1**
		12-18	07/27/2016	Soil	59.5	--	--	--	**59.5**
		18-24	07/27/2016	Soil	23.9	--	--	--	**23.9**
BC6-2	BC-6	0-3	07/27/2016	Soil	4.7	--	--	--	4.7
		3-6	07/27/2016	Soil	17.1	--	--	--	17.1
		6-12	07/27/2016	Soil	8.9	--	--	--	8.9
		12-18	07/27/2016	Soil	7.9	--	--	--	7.9
		18-24	07/27/2016	Soil	9.1 J	--	--	--	9.1

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BC6-3	BC-6	0-3	07/27/2016	Soil	3.8 J	--	--	--	3.8
		3-6	07/27/2016	Soil	3.6 J	--	--	--	3.6
		6-12	07/27/2016	Soil	4.6 J	--	--	--	4.6
		12-18	07/27/2016	Soil	3.0 J	--	--	--	3.0
		18-24	07/27/2016	Soil	3.3 J	--	--	--	3.3
BC12-1	BC-12	0-3	07/29/2016	Soil	16.2	--	--	--	16.2
		3-6	07/29/2016	Soil	26.3	--	--	--	**26.3**
		6-12	07/29/2016	Soil	22.0	--	--	--	**22.0**
		12-18	07/29/2016	Soil	11.7	--	--	--	11.7
		18-24	07/29/2016	Soil	8.9	--	--	--	8.9
		24-30	07/29/2016	Soil	7.3	--	--	--	7.3
BC12-2	BC-11	0-3	07/29/2016	Soil	15.1	--	--	--	15.1
		3-6	07/29/2016	Soil	18.0	--	--	--	18.0
		6-12	07/29/2016	Soil	17.9	19.5	--	--	18.7
		12-18	07/29/2016	Soil	10.5	--	--	--	10.5
		18-24	07/29/2016	Soil	6.8	--	--	--	6.8
		24-30	07/29/2016	Soil	5.3	--	--	--	5.3
BC12-3	BC-12	0-3	07/29/2016	Soil	47.2	--	--	--	**47.2**
		3-6	07/29/2016	Soil	76.8	--	--	--	**76.8**
		6-12	07/29/2016	Soil	39.2	--	--	--	**39.2**
		12-18	07/29/2016	Soil	30.1	--	--	--	**30.1**
		18-24	07/29/2016	Soil	18.2	--	--	--	18.2
		24-30	07/29/2016	Soil	9.5	--	--	--	9.5
BC12-4	BC-12	0-3	07/29/2016	Soil	4.7	--	--	--	4.7
		3-6	07/29/2016	Soil	3.8	--	--	--	3.8
		6-12	07/29/2016	Soil	3.2	--	--	--	3.2
		12-18	07/29/2016	Soil	16.0	--	--	--	16.0
BC13-1	BC-13	0-3	07/28/2016	Soil	71.4	--	--	--	**71.4**
		3-6	07/28/2016	Soil	65.6	--	--	--	**65.6**
		6-12	07/28/2016	Soil	130	--	--	--	**130**
		12-18	07/28/2016	Soil	100	--	--	--	**100**
		18-24	07/28/2016	Soil	117	--	--	--	**117**
		24-30	07/28/2016	Soil	60.1	--	--	--	**60.1**
BC13-2	BC-13	0-3	07/28/2016	Soil	15.1	--	--	--	15.1
		3-6	07/28/2016	Soil	13.0	--	--	--	13.0
		6-12	07/28/2016	Soil	32.6	--	--	--	**32.6**
		12-18	07/28/2016	Soil	19.7	--	15.7	--	17.7
BD2-2	BD-2	0-3	08/08/2016	Soil	22.8	--	--	--	**22.8**
		3-6	08/08/2016	Soil	35.1	--	--	--	**35.1**
		6-12	08/08/2016	Soil	31.8	27.1	--	--	**29.5**
		12-18	08/08/2016	Soil	9.8	--	--	--	9.8
		18-24	08/08/2016	Soil	5.9	--	--	--	5.9
BD2-3	BD-2	0-3	08/08/2016	Soil	17.1	--	--	--	17.1
		3-6	08/08/2016	Soil	12.0	--	--	--	12.0
		6-12	08/08/2016	Soil	7.6	--	--	--	7.6
		12-18	08/08/2016	Soil	5.4	--	--	--	5.4
		18-24	08/08/2016	Soil	2.9	--	--	--	2.9

SOIL AND SEDIMENT ARSENIC ANALYTICAL DATA
OU6 - TRIBUTARY ONE
SOUTH OF CANAL - REACH T1
FMC CORPORATION − MIDDLEPORT, NEW YORK

Location ID	Property ID	Sample Interval (inches)	Date Collected	Matrix	Arsenic Concentration - FMC Samples		Arsenic Concentration - Agency Samples		Combined Concentration (mg/kg)
					Primary (mg/kg)	Duplicate (mg/kg)	Primary (mg/kg)	Duplicate (mg/kg)	
BD2-4	BD-2	0-3	08/08/2016	Soil	20.7	--	--	--	**20.7**
		3-6	08/08/2016	Soil	23.0	--	--	--	**23.0**
		6-12	08/08/2016	Soil	9.0	--	--	--	9.0
		12-18	08/08/2016	Soil	11.1	--	--	--	11.1
BD2-5	BD-2	0-3	08/05/2016	Soil	16.9	--	--	--	16.9
		3-6	08/05/2016	Soil	14.1	--	--	--	14.1
		6-12	08/05/2016	Soil	15.5	--	--	--	15.5
		12-18	08/05/2016	Soil	12.1	--	--	--	12.1
		18-24	08/05/2016	Soil	19.4	--	--	--	19.4
		24-30	08/05/2016	Soil	15.9	--	--	--	15.9
BD2-6	BD-2	0-3	08/05/2016	Soil	10.3	7.6	--	--	9.0
		3-6	08/05/2016	Soil	8.6	--	--	--	8.6
		6-12	08/05/2016	Soil	9.2	--	--	--	9.2
		12-18	08/05/2016	Soil	10.8	--	--	--	10.8
		18-24	08/05/2016	Soil	12.1	--	--	--	12.1
		24-30	08/05/2016	Soil	19.6	--	--	--	19.6
				Totals	1554	78	163	9	1641

General Notes:
1. Soil concentrations are presented in dry-weight milligrams per kilogram (mg/kg).
2. The combined concentration for each sample was calculated as the arithmetic average of all primary, duplicate, and split sample results for that sample.
3. Bold values indicate concentrations that exceed the Agencies' arsenic background delineation criteria of 20 mg/kg.

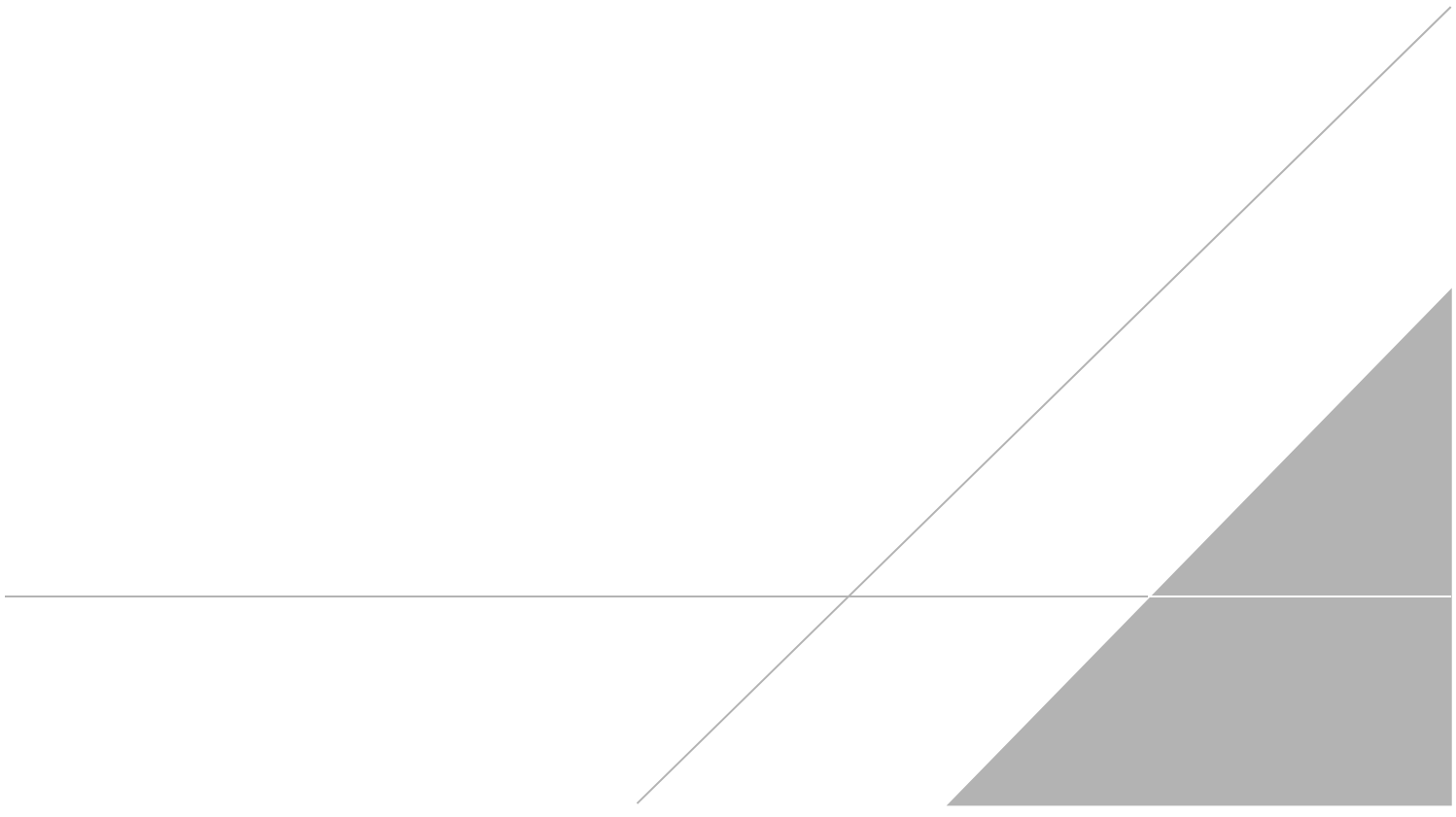
Data Qualifiers:
* = Indicates the analysis is not within the quality control limits.
B = The reported concentration is an estimated value greater than the instrument detection limit but less than the quantitation limit.
E = Sample concentration was outside the linear range of the analytical instrument.
J = The analyte was positively identified; however, the associated numerical value is an estimated concentration.
U = Analyte not detected at the associated detection level.

Acronyms and Abbreviations:
-- = this type of sample not collected at this location and depth
mg /kg = milligrams per kilogram

APPENDIX D

Data Usability Summary Reports

(electronic copy only)



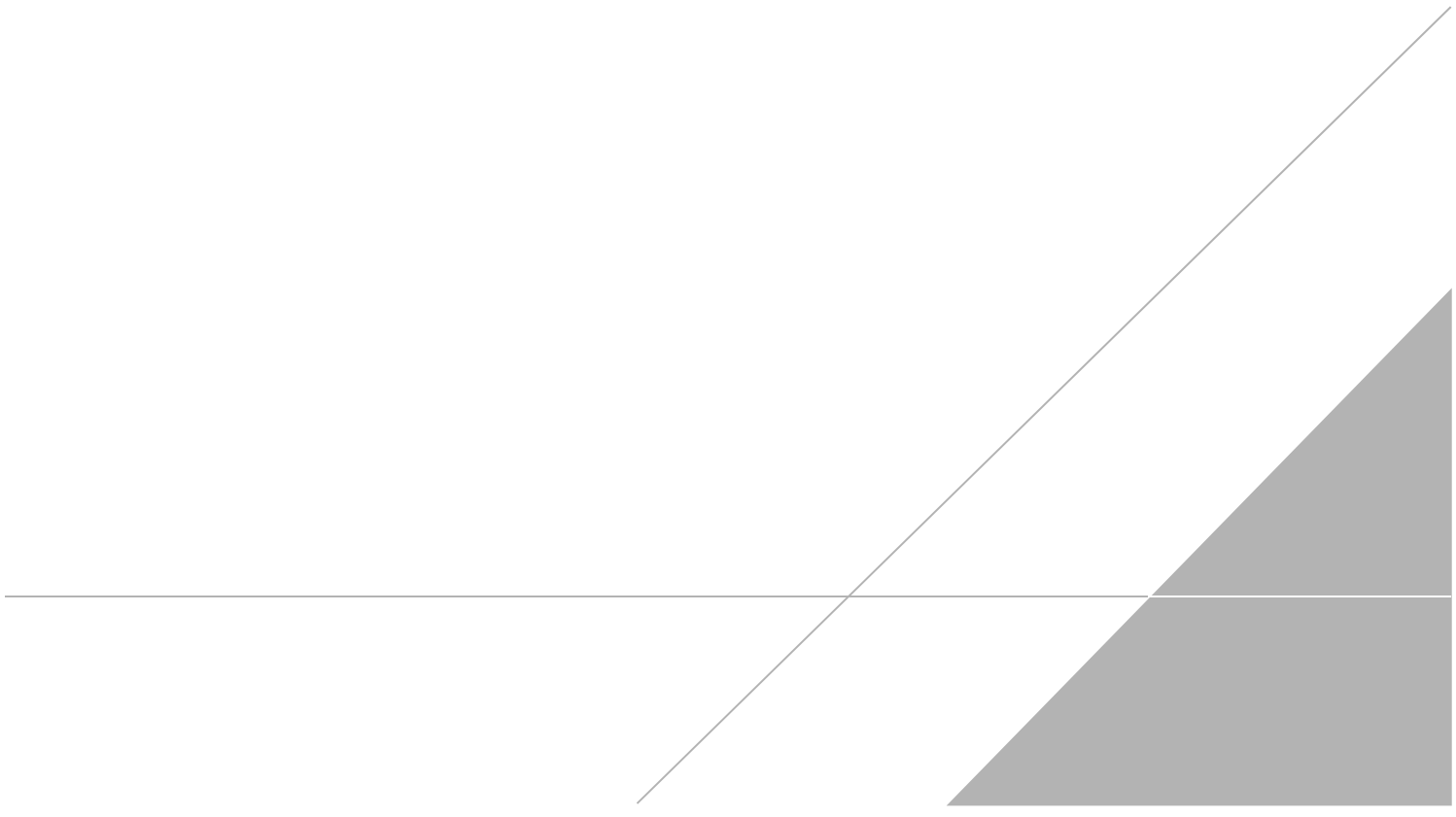
APPENDIX D
TABLE D.1 − DUSR LAB REPORT CROSS-REFERENCE

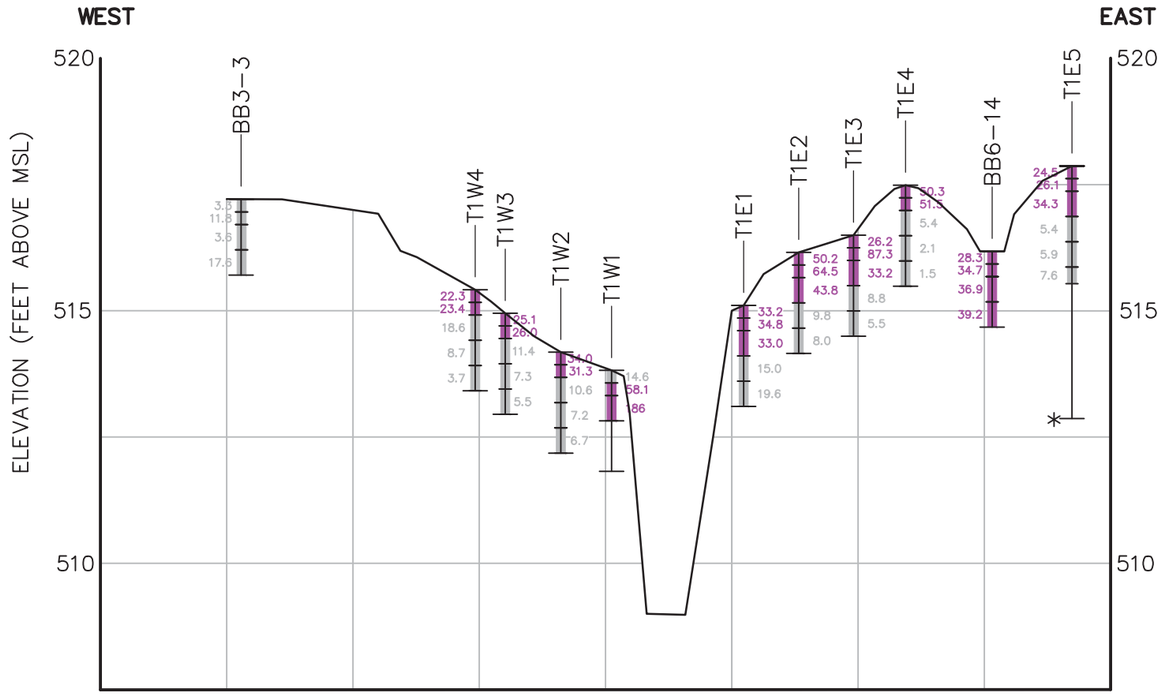
OU-6 REACH T1 ICM PRE-DESIGN REPORT
FMC CORPORATION − MIDDLEPORT, NEW YORK

DUSR #	LABORATORY SDG #	SAMPLE DATE
26336	PACE-NY486	7/19/2016
26342	PACE-NY488	7/19 - 7/20/2016
26294	PACE-NY485	7/20/2016
26337	PACE-NY487	7/20/2016
26344	PACE-NY491	7/21/2016
26347	PACE-NY493	7/21/2016
26346	PACE-NY492	7/21 - 7/22/2016
26343	PACE-NY490	7/22/2016
26348	PACE-NY494	7/25/2016
26395	PACE-NY497	7/25/2016
26393	PACE-NY495	7/25 - 7/26/2016
26394	PACE-NY496	7/25 - 7/26/2016
26396	PACE-NY498	7/26/2016
26397	PACE-NY499	7/26/2016
26296	ARC-S014	7/27/2016
26297	ARC-S015	7/27/2016
26307	ARC-S016	7/27/2016
26308	ARC-S017	7/27 - 7/28/2016
26319	ARC-S018	7/28/2016
26320	ARC-S019	7/28/2016
26428	ARC-S020	7/28/2016
26233	ARC-S012	7/29/2016
26295	ARC-S013	7/29/2016
26429	ARC-S021	8/1/2016
26430	ARC-S022	8/1/2016
26431	ARC-S023	8/1/2016
26432	ARC-S024	8/2/2016
26433	ARC-S025	8/2/2016
26436	ARC-S026	8/2/2016
26437	ARC-S027/27F	8/4/2016
26438	ARC-S028	8/4/2016
26446	ARC-S029	8/5/2016
26447	ARC-S030	8/5/2016
26448	ARC-S031	8/5/2016
26449	ARC-S032	8/5/2016
26450	ARC-S033	8/8/2016
26451	ARC-S034	8/8/2016
26539	ARC-S035	8/8/2016
26540	ARC-S036	8/8/2016
26541	ARC-S037	8/8/2016
26553	ARC-S038	8/8/2016
26622	ARC-S039	8/9/2016
26623	ARC-S040	8/9/2016
26624	ARC-S041	8/9/2016
26625	ARC-S042	8/30/2016
26626	ARC-S043	8/30/2016
26627	ARC-S044	8/30/2016
26708	ARC-S053	9/6/2016
26709	30197227	9/22/2016

APPENDIX E

Cross-Sections





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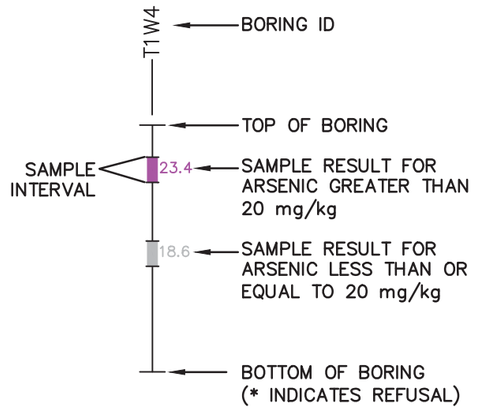
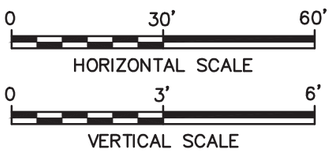
LEGEND:





NOTES:

1. SOIL ARSENIC CONCENTRATIONS SHOWN ARE AVERAGES OF ANY PRIMARY FIELD, DUPLICATE OR SPLIT SAMPLE RESULTS, AND ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg), EQUIVALENT TO PARTS-PER-MILLION (ppm).
2. SURFACE ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
3. THIS TRANSECT IS ENTIRELY LOCATED WITHIN THE 100-YEAR FEMA FLOOD PLAIN.

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T1.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.1

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACT\B0037747.0003.00006\TRIB-1-SOUTH\37747VE1-E8.dwg LAYOUT: E.1 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 5:47 PM BY: POSENAUER, LISA
XREFS:
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37665X02
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37747XBL

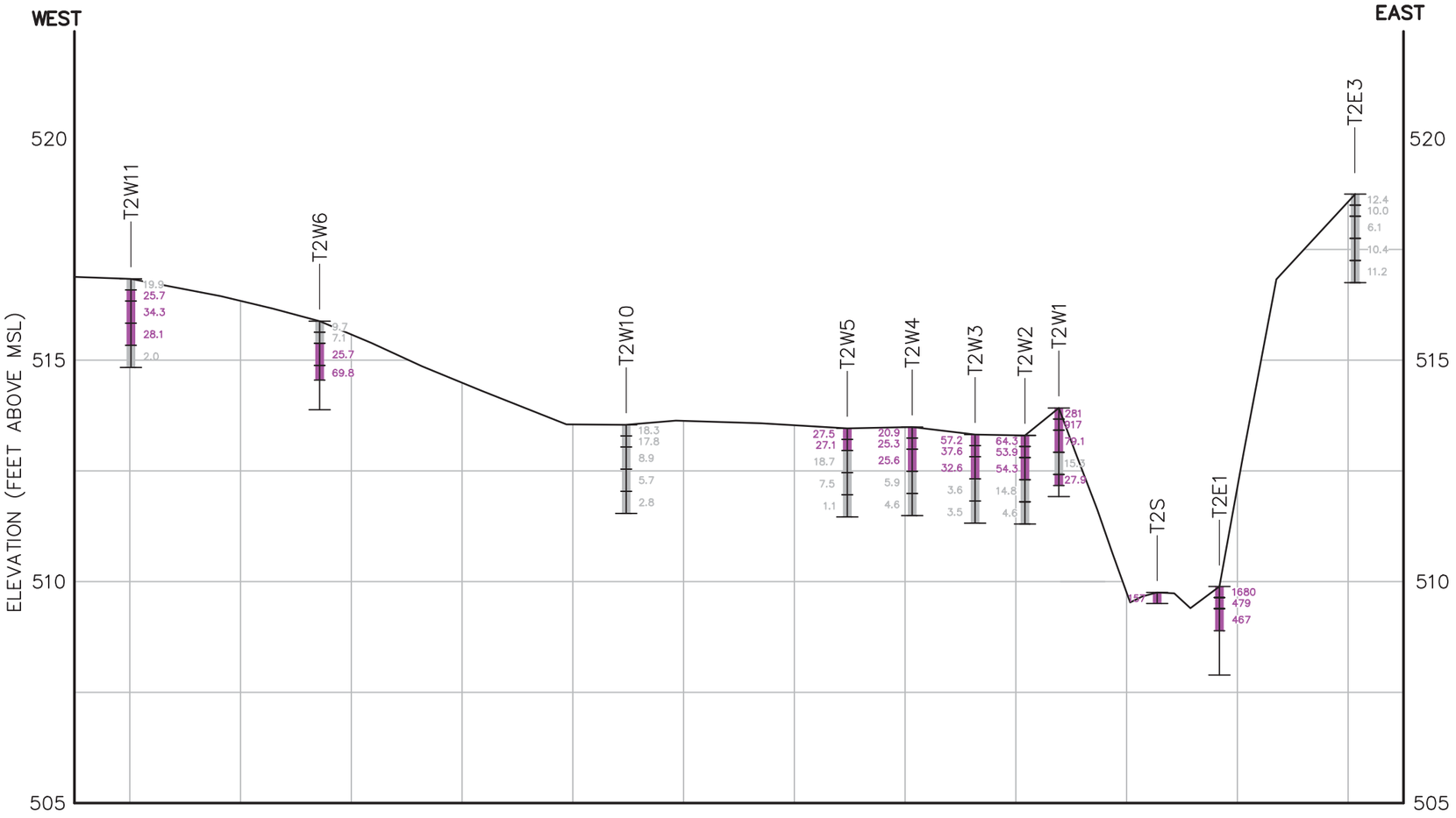
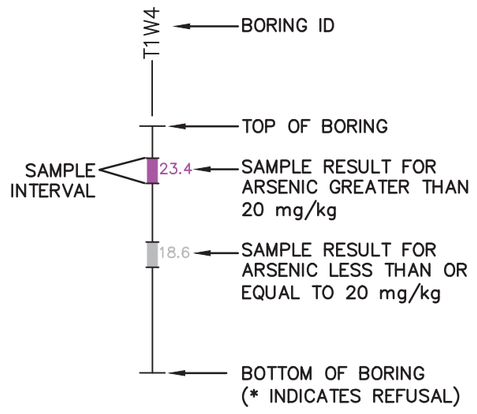
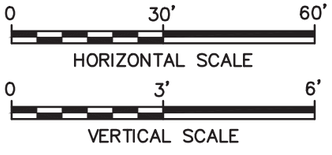


FIGURE INDEX:

LEGEND:





NOTES:

1. SOIL ARSENIC CONCENTRATIONS SHOWN ARE AVERAGES OF ANY PRIMARY FIELD, DUPLICATE OR SPLIT SAMPLE RESULTS, AND ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg), EQUIVALENT TO PARTS–PER–MILLION (ppm).
2. SURFACE ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
3. THIS TRANSECT IS ENTIRELY LOCATED WITHIN THE 100–YEAR FEMA FLOOD PLAIN.

FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T2.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.2

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENV\CAD\SYRACUSE\ACT\B0037747.0003.00006\TRIB-1-SOUTH\37747VE1-E8.dwg LAYOUT: E.2 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 5:50 PM BY: POSENAUER, LISA
XREFS:
37665X01
37665X02
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37665X26
37747XBL

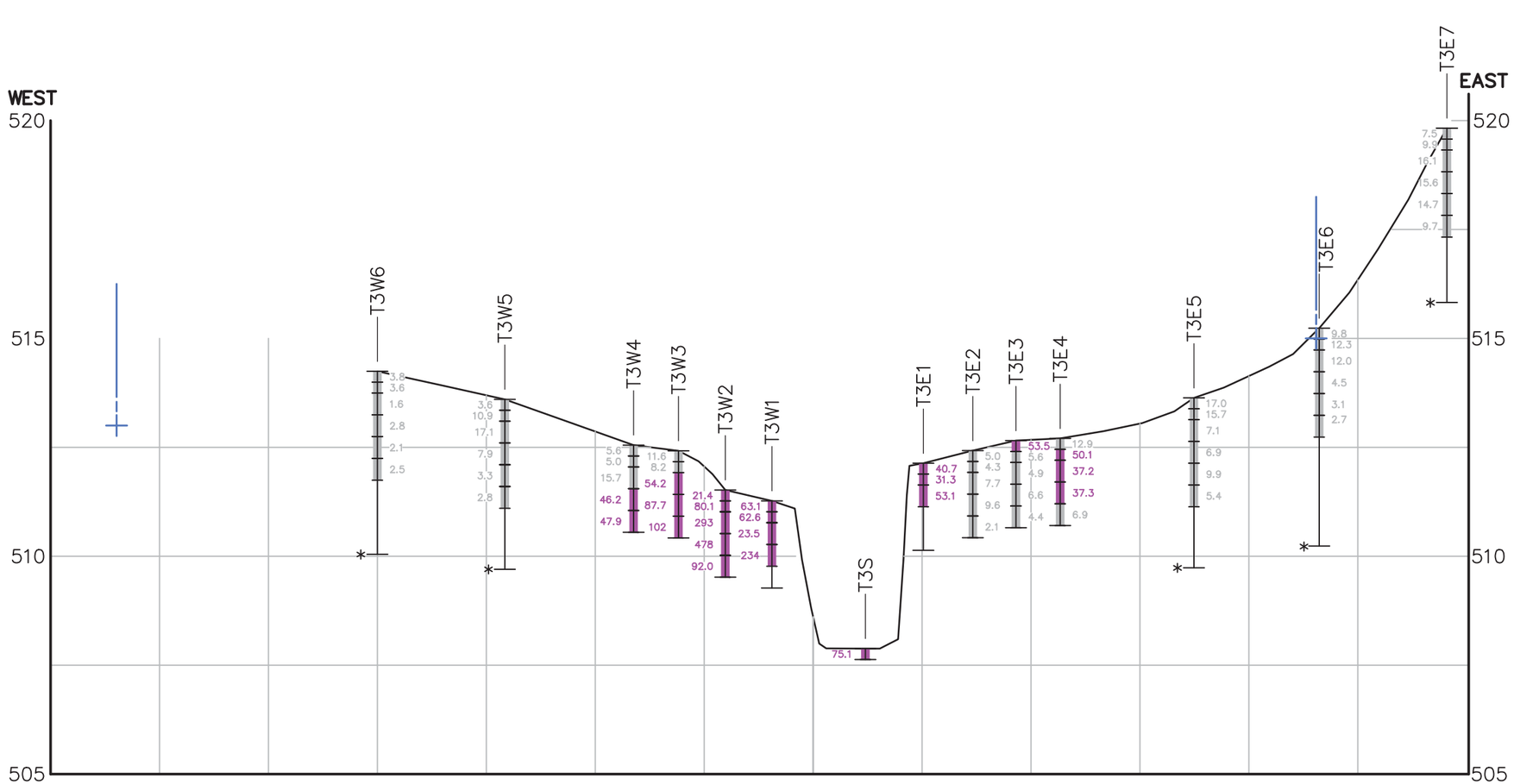
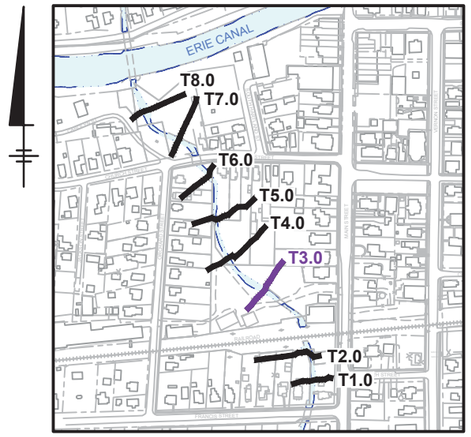


FIGURE INDEX:



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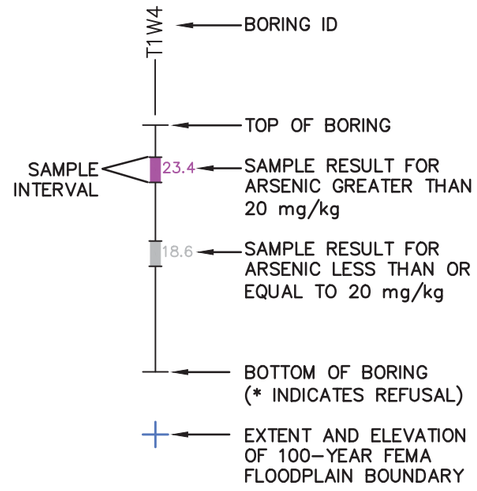

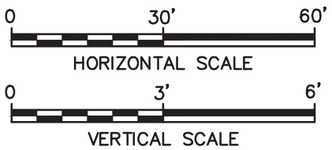

NOTES:

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2. SURFACE ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
3. FLOODPLAIN BOUNDARIES APPROXIMATED USING FEMA FLOOD INSURANCE RATE MAPS 36063C0276E AND 36063C0278E (EFFECTIVE DATE: SEPTEMBER 17, 2010)

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OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T3.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.3

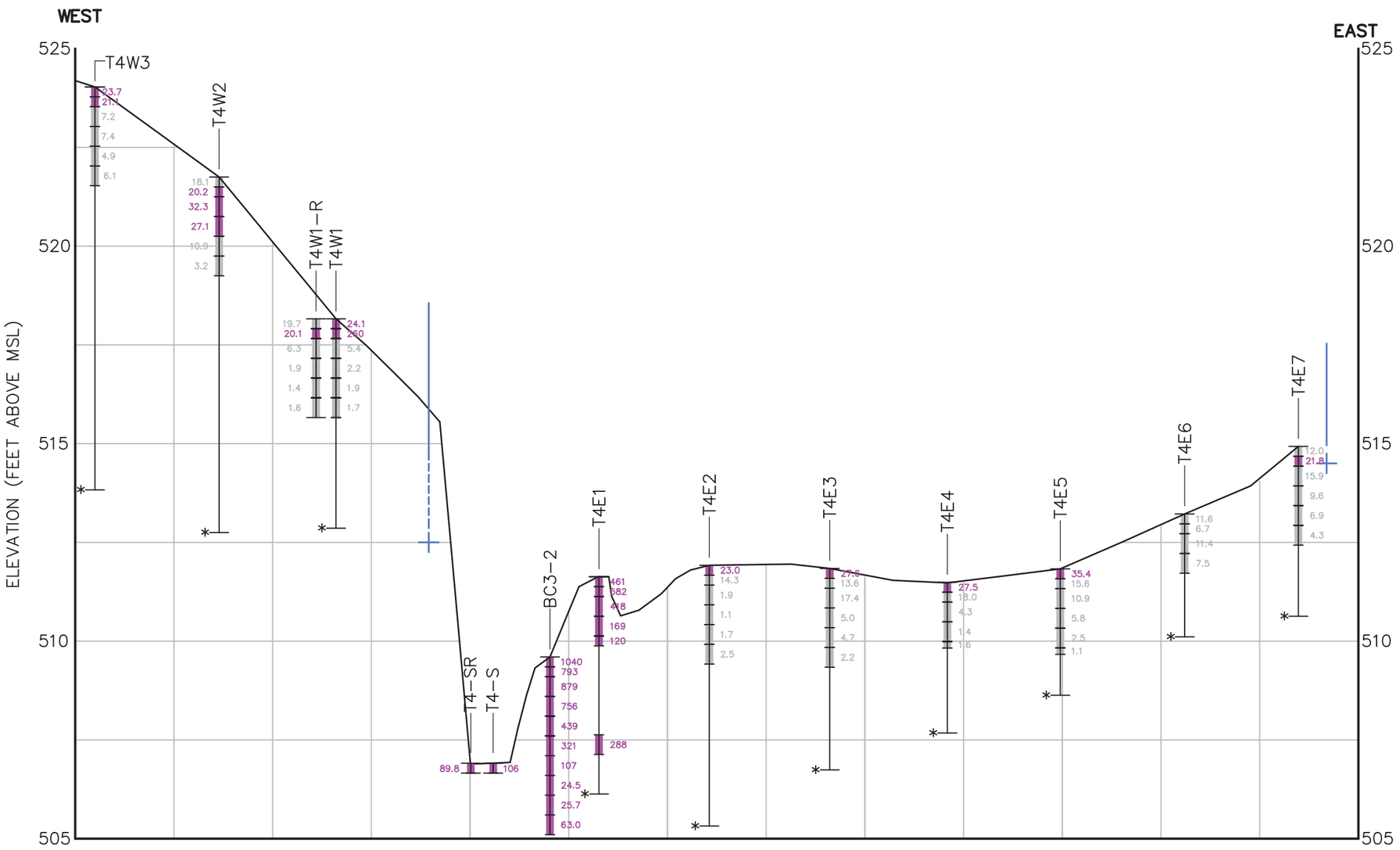
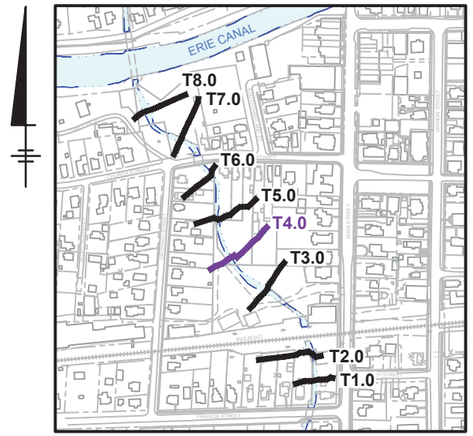


FIGURE INDEX:



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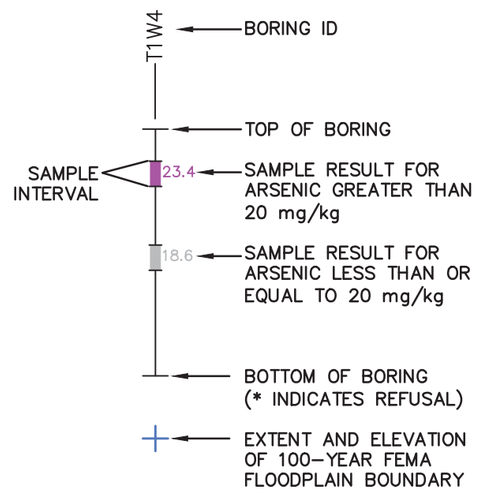

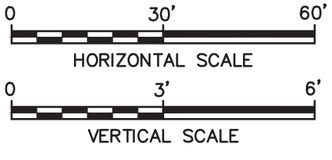

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FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T4.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.4

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENV\CAD\SYRACUSE\ACT\B0037747.0003.00006\TRIB-1-SOUTH\37747VE1-E8.dwg LAYOUT: E.4 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 5:55 PM BY: POSENAUER, LISA
XREFS:
37665X01
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37747XBL

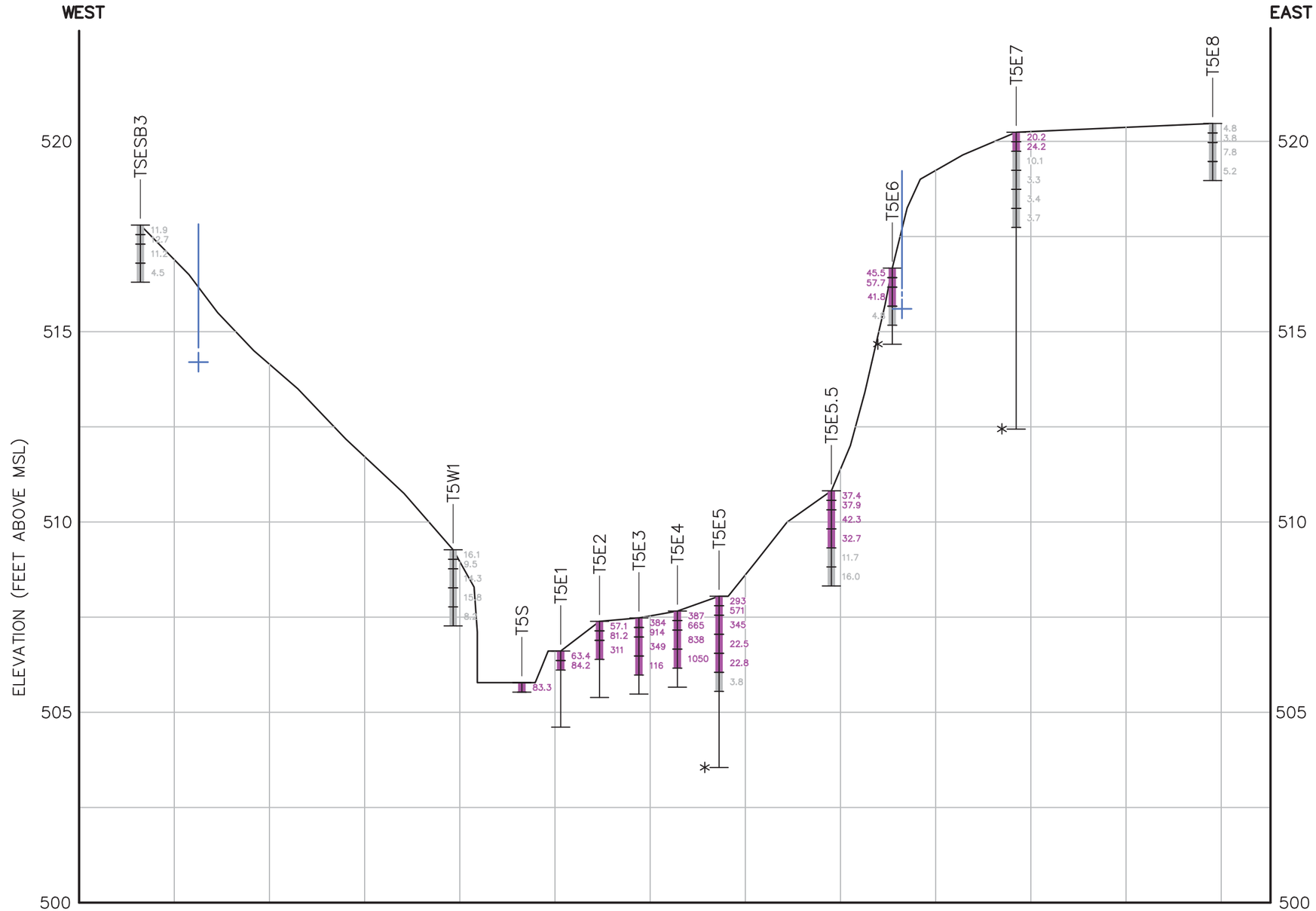
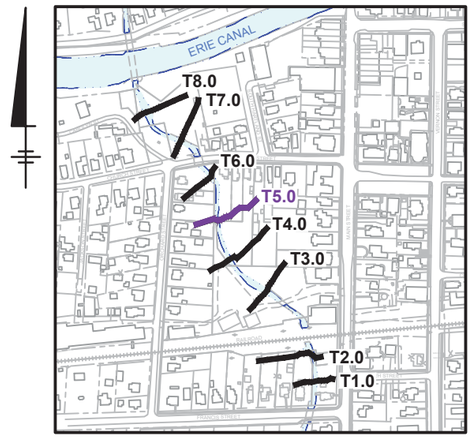


FIGURE INDEX:



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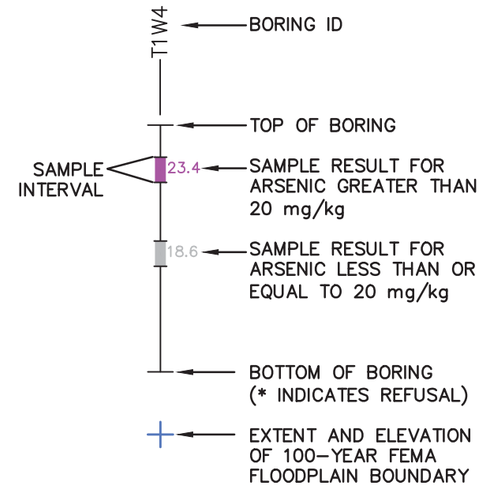

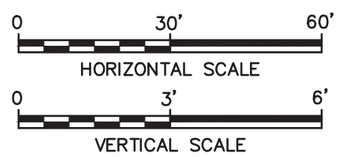

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FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T5.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.5

CITY: SYRACUSE, NY DIV/GROUP: EBC-IMDV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACTIB0037747.0003.00006\TRIB-1-SOUTH\37747VE1-E8.dwg LAYOUT: E.5 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 5:57 PM BY: POSENAUER, LISA
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37665X02
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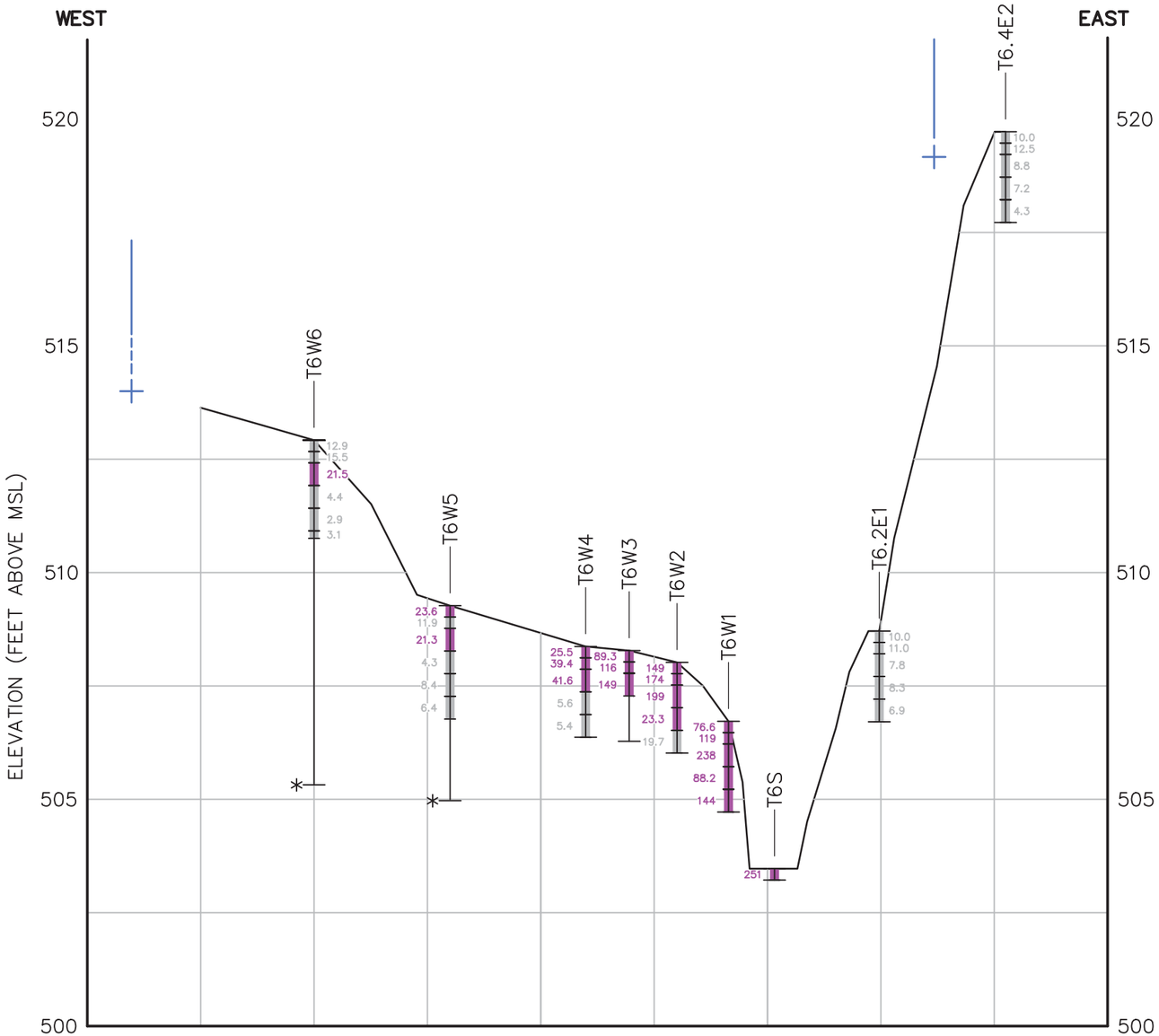
37747XBL



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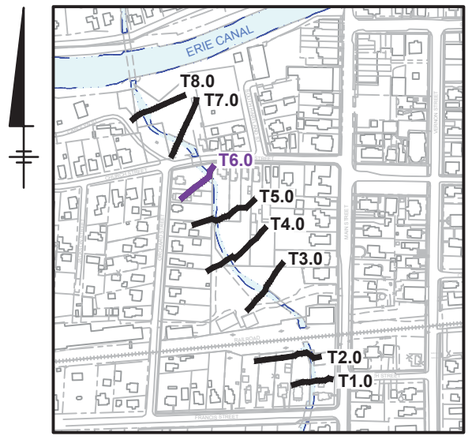

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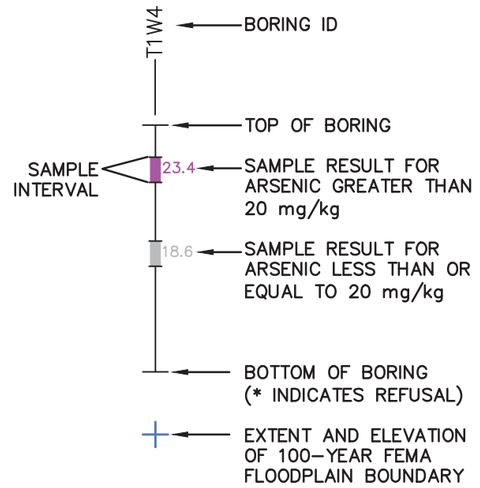

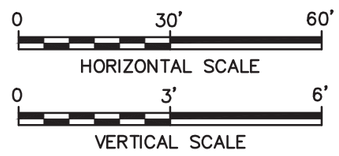

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FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T6.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.6

CITY: SYRACUSE, NY DIV/GROUP: EBC-IMDV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACTIVE\B0037747.0003.00006\TRIB-1-SOUTH\37747VE1-1E8.dwg LAYOUT: E.6 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 6:00 PM BY: POSENAUER, LISA
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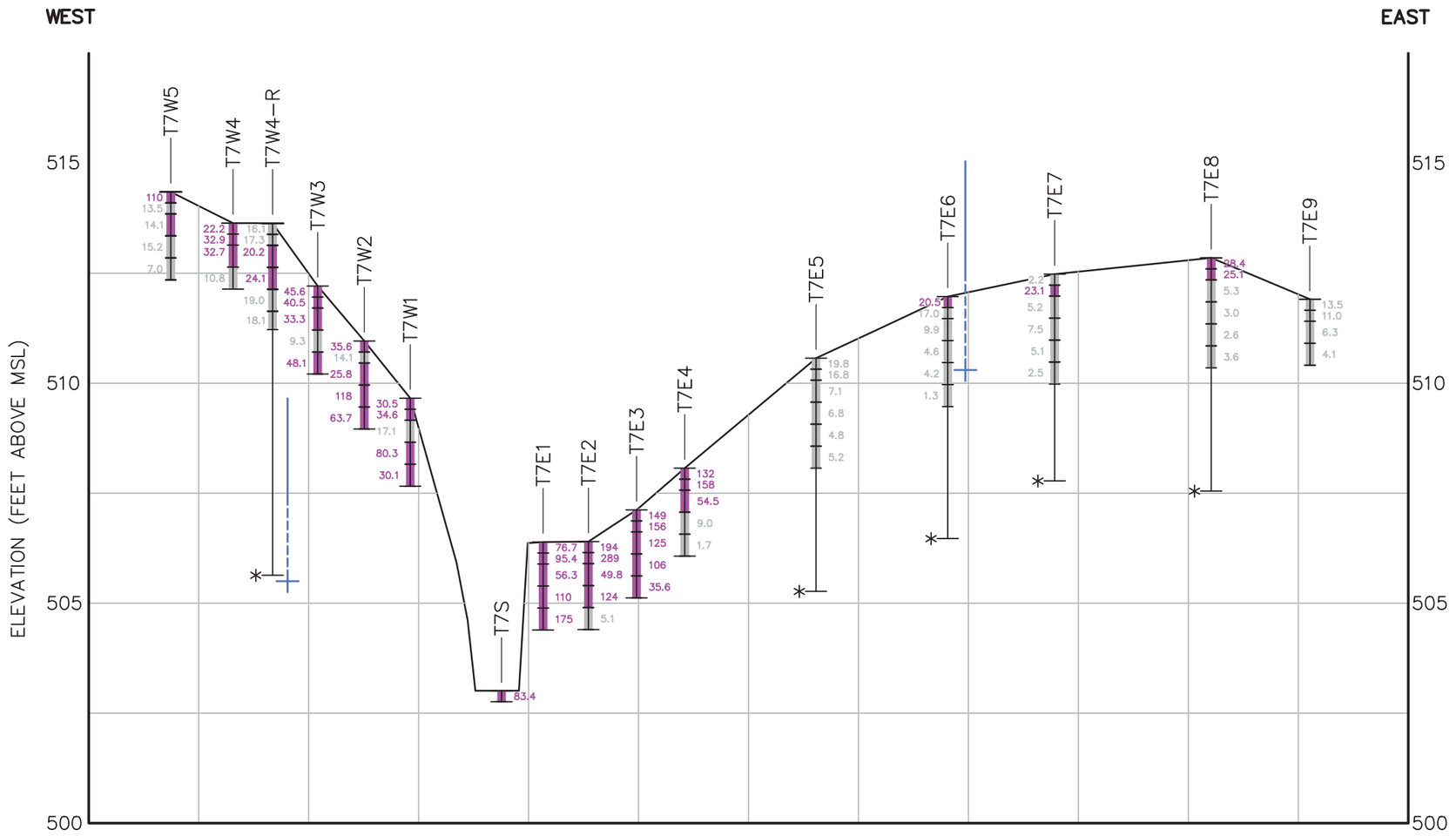
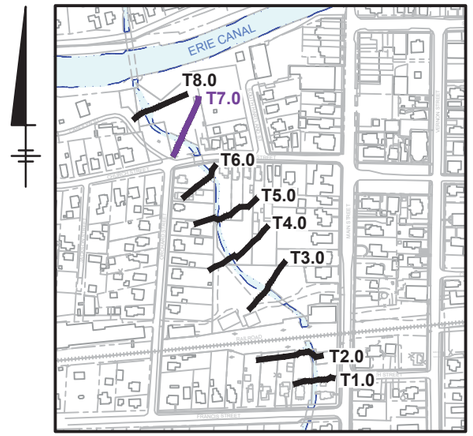


FIGURE INDEX:



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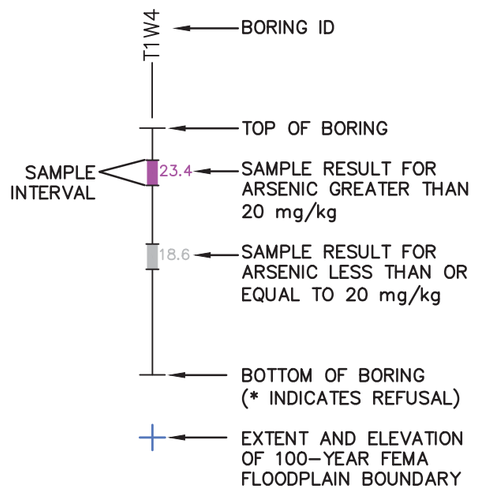

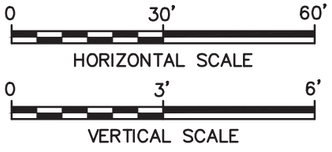

NOTES:

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FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T7.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.7

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACTIB\0037747.0003.00006\TRIB-1-SOUTH\37747VE1-E8.dwg LAYOUT: E.7 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 6:02 PM BY: POSENAUER, LISA
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37665X02
37665X15
37665X26
37747XBL

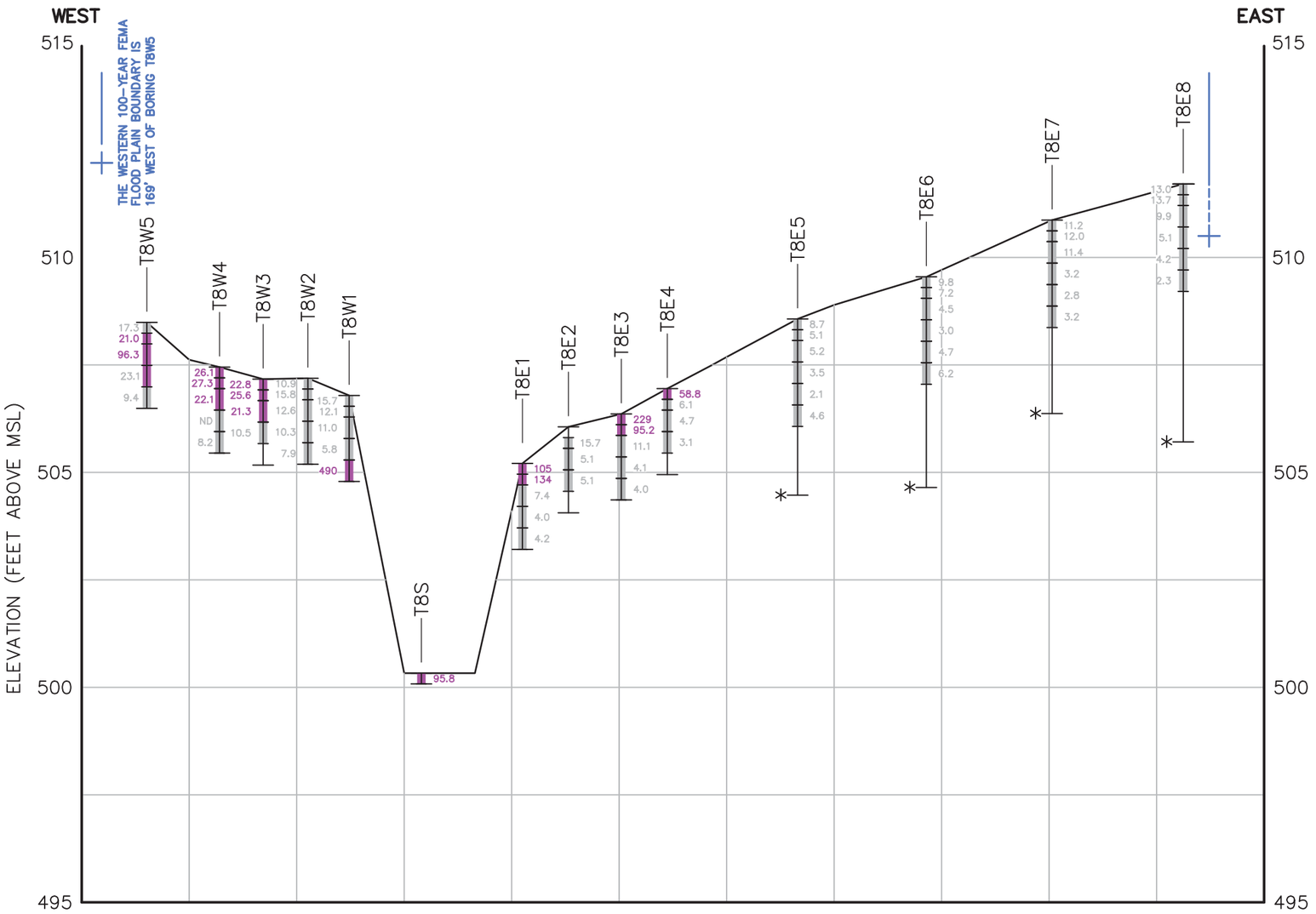
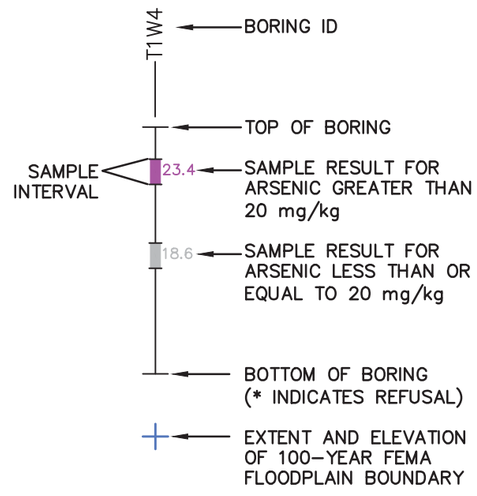
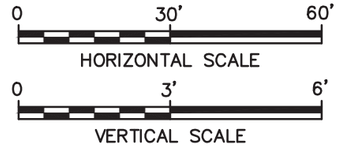


FIGURE INDEX:

LEGEND:





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FMC CORPORATION - MIDDLEPORT, NEW YORK
OU-6 REACH T1 ICM
PRE-DESIGN REPORT

CROSS SECTION AT TRANSECT T8.0 WITH ARSENIC CONCENTRATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
E.8

CITY: SYRACUSE, NY DIV/GROUP: EBC-IMDV DB/LD: L.POSENAUER PM/TM: D.WRIGHT TR: R. SMITH/A.GEORGE
C:\ENVCAD\SYRACUSE\ACTIB\0037747.0003.00006\TRIB-1-SOUTH\37747VE1-E8.dwg LAYOUT: E.8 SAVED: 1/18/2017 5:32 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 1/18/2017 6:05 PM BY: POSENAUER, LISA
XREFS:
37665X01
37665X02
37665X15
37665X26
37747XBL