FINAL

SECOND PERIODIC REVIEW REPORT

HUNTER ARMY AIRFIELD
GEORGIA

Prepared for:

United States Army Environmental Command
Fort Sam Houston, Texas

United States Army Garrison-Fort Stewart - Hunter Army Airfield
Savannah, Georgia

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SECOND PERIODIC REVIEW REPORT

HUNTER ARMY AIRFIELD
GEORGIA

Approved By:

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for Thomas C. Fry
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SECOND PERIODIC REVIEW REPORT

HUNTER ARMY AIRFIELD
GEORGIA

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Executive Summary

Hunter Army Airfield (HAAF) is located in southwestern Savannah, Chatham County, Georgia. HAAF began operating in 1929 as the Savannah Municipal Airport. The United States Air Force acquired the property in the early 1940s and renamed the property Savannah Air Base. During World War II, it served as an operational training unit, after which the airfield was given back to the city of Savannah for civilian aviation use. In the late 1960s, HAAF was turned over to the Army to train pilots. The headquarters of U.S. Army Aviation School Element was then moved from nearby Fort Stewart to HAAF and the two bases were combined to serve as the U.S. Army Flight Training Center. Currently, HAAF serves as a rapid deployment station and home for infantry division's aviation units, in addition to several tenant units and commands.

This is the Second Periodic Review for HAAF. This review includes the Installation Restoration Program site, Pump House #1 (1154A.1015, HAAF 13). HAAF manages underground storage tanks under the Georgia Environmental Protection Division UST Management Program. HAAF is not on the National Priorities List. This Periodic Review was conducted in accordance with United States (U.S.) Army (Army) Regulation 200-1 Environmental Quality, Environmental Protection and Enforcement and *Department of Defense (DoD) Manual 4715.20, Defense Environmental Restoration Program Management* (Army, 2007; DoD, 2012). This review includes the site listed in the table below.

Hunter Army Airfield Periodic Review Site Crosswalk

HQAES ID	Site Name	AEDB-R ID
1154A.1015	Former Pump House #1, Release #1 Former Fuel Pit 1A/DAACG Area	HAAF-13
	Former Pump House #1, Release #2 Tank Pit Area	

AEDB-R ID - Army Environmental Database – Restoration Identification
DAACG - Departure/Arrival Air Control Group
HAAF - Hunter Army Airfield
HQAES ID - Headquarters Army Environmental System Identification

Pre-2000 site investigations conducted at HAAF identified the presence of two distinct contaminated groundwater plumes in the vicinity of Former Pump House #1.They are referred to as Former Pump House #1, Release #1 and Former Pump House #1, Release #2 within the decision documents and this Second Periodic Review report.

The purpose of this Periodic Review is to assess the protectiveness and performance of the selected remedies to determine if they are and will continue to be protective of human

health and the environment. The following summarizes the selected remedies and protectiveness statements for the HAAF site evaluated for this Periodic Review.

Former Pump House #1, Release #1

The components of the selected remedy include:

- Phased approach remediation;
    - Phase 1: Remove free product, in conjunction with monitored natural attenuation (MNA) of the groundwater plume until free product recovery activities are terminated.
    - Phase 2: Reevaluate need for active corrective action addressing remaining soil and groundwater contamination.
- Continued monitoring of cone penetrometer testing and monitoring wells for free product;
- Injection of terminal electron acceptor solution or slurry; and
- Calcium peroxide injections.

The remedy at Former Pump House #1, Release #1 currently protects human health and the environment because the removal of free product at Former Pump House #1, Release #1 was achieved to the required measurable thickness of one-eighth inch in the monitoring wells. Groundwater sampling confirmed lead was below the In-stream Water Quality Standards (IWQS) of 30 µg/L following free product removal. Active remediation, including calcium peroxide injections, has reduced the plume mass. However, in order for the remedy to be protective in the long term, the following actions need to be taken to ensure protectiveness:

- Better delineate the extent of the southeast plume boundary to determine if the injection array may need to be extended to the north.
- Evaluate additional corrective actions in the downgradient portion of the plume, near monitoring well P1R1-MW-02.
- Evaluate and determine an estimated timeframe for groundwater to reach Alternate Concentration Limits.

Former Pump House #1, Release #2

The components of the selected remedy include:

- MNA;
- Sodium Persulfate injection (12 wells);

- Evaluate plume status and general site geochemistry;
- Determine optimum persulfate dosing; and
- Determine the dosing requirement and injection volume of calcium peroxide.

The corrective action at Former Pump House #1, Release #2 is protective of human health and the environment.

The removal of free product at Former Pump House #1, Release #2 was achieved to the required measurable thickness of one-eighth inch and there have been no observed impacts to the stormwater drainage canal south of the site since 2007. HAAF is continuing to determine the optimum persulfate dosing requirement and injection volume of calcium peroxide. HAAF continues to evaluate the plume status and general site geochemistry semiannually. The calcium peroxide seems effective at reducing hydrocarbon mass as observed at monitoring well P1-MW-19.

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Periodic Review Summary Form

SITE IDENTIFICATION		
Installation Name: Hunter Army Airfield		
EPA Region: 4	**State:** GA	**City/County:** Chatham County
SITE STATUS		
RCRA Permit or Order: No **Permit Requires PR/FYR:** No		**Other State Authority:** Not applicable
Number of Sites: 2		**Lead Regulatory Agency:** Georgia Environmental Protection Division
REVIEW STATUS		
Major Command: IMCOM		
Installation Environmental Chief: Thomas C. Fry		
Lead Author name: U.S. Army Corps of Engineers (USACE)		
Lead Author affiliation: USACE and USACE contractor Dawson Solutions, LLC		
Review period: ***(when review team conducted its tasks):*** December 5, 2019 – To Be Determined (Signature of Final Periodic Review)		
Date of site inspection: February 4, 2020		
Type of review: Periodic Review-Army Policy		
Review number: 2		
Initial baseline action date: October 11, 2011 **Initial baseline action:** Initial Periodic Review		
Current review due date: September 30, 2020 **Next review due date:** September 30, 2025 ***(First review is typically five years from baseline date. Next review is typically five years from last review due date. Permit required reviews may have different requirements.)***		

Periodic Review Summary Form (continued)

Protectiveness Issues/Recommendations				
Site(s) without Issues/Recommendations Identified in the Periodic Review:				
Pump House #1, Release #2				
OU(s): Pump House #1, Release #1	**Issue Category: Monitoring**			
	Issue: The plume boundary has not been fully captured based on the sampling points identified in the CAP Progress Reports. The southeastern limit does not appear to be based on detected concentrations and is not defined by sampling results.			
	Recommendation: Further delineate the extent of the southeast plume boundary to determine if the injection array may need to be extended to the north.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Implementing Party**	**Oversight Party**	**Milestone Date**
No	Yes	Army	GAEPD State	Sept. 30, 2023
OU(s): Pump House #1, Release #1	**Issue Category: Remedy Performance**			
	Issue: The corrective action objective to remediate groundwater contamination and reduce dissolved benzene concentrations to below the ACL of 285 µg/L may not be achieved downgradient of the injection array, as observed by benzene concentrations in downgradient well P1R1-MW-02.			
	Recommendation: Evaluate additional corrective actions in the downgradient portion of the plume, near monitoring well P1R1-MW-02.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Implementing Party**	**Oversight Party**	**Milestone Date**
No	Yes	Army	GAEPD State	Sept. 30, 2023
OU(s): Pump House #1, Release #1	**Issue Category: Monitoring**			
	Issue: The corrective action objective to reduce the estimated timeframe for groundwater to reach ACLs cannot be evaluated because the estimated timeframe has not been established in the August 2000 CAP Part B, the July 2002 CAP Part B Addendum #1, the July 2006 CAP Part B Addendum #2, the June 2009 Revised CAP Part B, or the October 2009 Revised CAP Part B Addendum #1.			
	Recommendation: Evaluate and determine an estimated timeframe for groundwater to reach ACLs.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Implementing Party**	**Oversight Party**	**Milestone Date**
No	Yes	Army	GAEPD State	Sept. 30, 2023

Protectiveness Statement(s)

Site:	*Protectiveness Determination:*
Former Pump House #1, Release #1	Short-term Protective

Protectiveness Statement:

The remedy at Former Pump House #1, Release #1 currently protects human health and the environment because the removal of free product at Former Pump House #1, Release #1 was achieved to the required measurable thickness of one-eighth inch in the monitoring wells. Groundwater sampling confirmed lead was below the IWQS of 30 µg/L following free product removal. Active remediation, including calcium peroxide injections, has reduced the plume mass. However, in order for the remedy to be protective in the long term, the following actions need to be taken to ensure protectiveness:

- Better delineate the extent of the southeast plume boundary to determine if the injection array may need to be extended to the north.
- Evaluate additional corrective actions in the downgradient portion of the plume, near monitoring well P1R1-MW-02.
- Evaluate and determine an estimated timeframe for groundwater to reach ACLs.

Site:	*Protectiveness Determination:*
Former Pump House #1, Release #2	Protective

Protectiveness Statement:

The corrective action at Former Pump House #1, Release #2 is protective of human health and the environment.

The removal of free product at Former Pump House #1, Release #2 was achieved to the required measurable thickness of one-eighth inch and there have been no observed impacts to the stormwater drainage canal south of the site since 2007. HAAF is continuing to determine the optimum persulfate dosing requirement and injection volume of calcium peroxide. HAAF continues to evaluate the plume status and general site geochemistry semiannually. The calcium peroxide seems effective at reducing hydrocarbon mass as observed at monitoring well P1-MW-19.

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ACRONYMS AND ABBREVIATIONS

µg/L	Micrograms per Liter
ACL	Alternate Concentration Limits
ATL	Alternate Threshold Level
AEDB-R	Army Environmental Database - Restoration
AOC	Area of Concern
Army	U.S. Department of the Army
BMP	Best Management Practices
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CAP	Corrective Action Plan
COC	Contaminant of Concern
DAACG	Departure/Arrival Air Control Group
DAWSON	Dawson Solutions, LLC
DD	Decision Document
DoD	Department of Defense
GAEPD	Georgia Environment Protection Division
GIS	Geographical Information System
HAAF	Hunter Army Airfield
HQAES	Headquarters Army Environmental System
ID	Identification
IWQS	In-Stream Water Quality Standards
LUC	Land Use Controls
mg/kg	Milligrams per Kilogram
MNA	Monitored Natural Attenuation
NFA	No Further Action
O&M	Operations and Maintenance
ORC	Oxygen-Releasing Compound
PAH	Polycyclic Aromatic Hydrocarbons
RCRA	Resource Conservation and Recovery Act
SI	Site Investigation
TPH	Total Petroleum Hydrocarbons
UU/UE	Unlimited Use and Unrestricted Exposure
USACE	U.S. Army Corps of Engineers
USAEC	United States Army Environmental Command
USTMP	Underground Storage Tank Management Program

1.0 INTRODUCTION

This is the Second Periodic Review for Hunter Army Airfield (HAAF) located in Chatham County, Georgia. This review includes the Installation Restoration Program site listed in **Table 1**. HAAF manages underground storage tanks (USTs) under the Georgia Environmental Protection Division (GAEPD) UST Management Program (USTMP). HAAF is not on the National Priorities List.

Table 1 – Hunter Army Airfield Periodic Review Site Crosswalk

HQAES ID	Site Name*	AEDB-R ID
1154A.1015	Former Pump House #1, Release #1 Former Fuel Pit 1A/DAACG Area	HAAF-13
	Former Pump House #1, Release #2 Tank Pit Area	

* Pre-2000 site investigations (SI) conducted at HAAF identified the presence of two distinct plumes in the vicinity of Former Pump House #1 (1154A.1015, HAAF 13). They are referred to as Former Pump House #1, Release #1 and Former Pump House #1, Release #2 within the decision documents (DD) and this Second Periodic Review report.
AEDB-R ID - Army Environmental Database – Restoration Identification
DAACG - Departure/Arrival Air Control Group
HAAF - Hunter Army Airfield
HQAES ID - Headquarters Army Environmental System Identification

A table of UST sites at HAAF are presented in **Appendix A**. This table is organized by UST site number and encompasses those sites in the design phase, active remediation phase, and those sites that have been closed in place.

1.1 PURPOSE

The purpose of the Periodic Review is to determine whether a site remains protective of human health and the environment. Periodic Reviews also identify issues found during the review, if any, and provide recommendations to address them. This Second Periodic Review has been prepared because hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure. This report is for internal U.S. Department of the Army (Army) use only and has not been prepared for community or regulatory review.

1.2 AUTHORITY

The U.S. Army Corps of Engineers (USACE), Savannah District, with assistance from Dawson Solutions, LLC (DAWSON), conducted this Second Periodic Review on behalf of the U.S. Army Environmental Command (USAEC) and HAAF in accordance with Army Regulation 200-1 Environmental Quality, Environmental Protection and

Enforcement and *Department of Defense (DoD) Manual 4715.20, Defense Environmental Restoration Program Management* (Army, 2007; DoD, 2012).

The Army, as the lead agency for HAAF, is responsible for this Second Periodic Review, covering the Former Pump House #1. GAEPD is the lead regulatory agency and addresses environmental concerns at HAAF under the Resource Conservation and Recovery Act (RCRA) 42 U.S. Code (USC) §6901 et seq. GAEPD oversees the Georgia USTMP, under which Former Pump House #1 is regulated.

2.0 BACKGROUND

HAAF began operating in 1929 as the Savannah Municipal Airport. The United States Air Force acquired the property in the early 1940s and renamed the property Savannah Air Base. During World War II, it served as an operational training unit, after which the airfield was given back to the city of Savannah for civilian aviation use. In the late 1960s, HAAF was turned over to the Army to train pilots. The headquarters of U.S. Army Aviation School Element was then moved from nearby Fort Stewart to HAAF and the two bases were combined to serve as the U.S. Army Flight Training Center. Currently, HAAF serves as a rapid deployment station and home for infantry division's aviation units, in addition to several tenant units and commands.

2.1 PHYSICAL CHARACTERISTICS

HAAF is located in southwestern Savannah, Chatham County, Georgia (**Figure 1**). The installation consists of 5,400 acres and is bound on the north by lightly populated residential areas, the east and south by residential and light commercial areas, and the west by the Little Ogeechee River.

2.2 GEOLOGY

HAAF and most of Chatham County, is underlain by the Pleistocene Pamlico Terrace. The Pleistocene Satilla Formation (formerly known as the Pamlico Formation) consists of deposits of the Pamlico Terrace complex and other terrace complexes in the region. The Satilla Formation is a lithologically heterogenous unit that consists of variably bedded to non-bedded sand and variably bedded silty to sandy clay (Army, 2000).

2.3 HYDROGEOLOGY

HAAF groundwater is comprised of two water-bearing zones, the surficial aquifer and the Principal Artesian (Floridan) aquifer separated by a thick confining unit. The Floridan Aquifer is the lowermost hydrologic unit. This aquifer is approximately 800 feet in total thickness. It is composed primarily of Tertiary-age limestone, including the Bug Island Formation, the Ocala Group, and the Suwannee Limestone. The confining layer for the Floridan Aquifer is the phosphatic clay of the Hawthorn Group (Army, 2006).

The surficial aquifer overlies the Hawthorn confining units. The surficial aquifer consists of widely varying amounts of sand and clay, ranging from 55 to 150 feet in thickness. Its primary use is domestic lawn and agricultural irrigation. The water table ranges from approximately 2 to 10 feet below ground surface. Groundwater in the surficial aquifer system is under unconfined, or water table, conditions. Locally, however, thin clay beds create confined or semiconfined conditions (Army, 2006).

2.3.1 SURFACE WATER

Surface water bodies at HAAF include Hallstrom Lake, Lamar Canal, Buckhalter Canal, Springfield Canal, Pond 29 located northwest of Buildings 336 and 232, and an unnamed pond located along the southeastern boundary of the installation. Several unnamed drainage canals and ditches exist throughout HAAF. Most of these canals drain southwest into the Little Ogeechee River, which is part of the Lower Ogeechee watershed. The remaining drainage canals located on the eastern side of HAAF flow east and eventually drain into the Vernon River, which is located southeast of HAAF. Surface water bodies at HAAF and adjacent areas are not used as public water supply. The ponds and lakes, as well as Lamar Canal, are perennial, most of the drainage canals and ditches are intermittent, and most of the drainage canals are at least partially enclosed in culverts (Army, 2000 and 2002).

2.4 LAND AND RESOURCE USE

The site included in this Second Periodic Review is located on an industrial portion of HAAF with no planned future residential use.

Public and non-public water supply wells provide potable water to the installation. The deeper Floridan aquifer is used as potable water supply at HAAF. There are nine water supply wells within the boundaries of the installation. HAAF UST groundwater investigation sites are part of the surficial aquifer system. There is no hydraulic interconnection between HAAF UST sites (and associated plumes) and water supply withdrawal points (Army, 2002).

3.0 PERIODIC REVIEW PROCESS

3.1 ADMINISTRATIVE COMPONENTS

The Army initiated the Second Periodic Review Report for HAAF on December 5, 2019, with a kick-off call that included USACE Savannah District, USAEC, HAAF, and DAWSON personnel to discuss the sites and any items of interest pertaining to the protectiveness of the remedies currently in place. A review schedule was established that included:

- Document Review,
- Data Review,
- Site Inspection,
- Interviews, and
- Periodic Review Report development and review.

3.2 DOCUMENT REVIEW

The Second Periodic Review includes a review of relevant site documents including, but not limited to, decision/remedy selection documents, design and implementation reports, investigations, annual reports and related monitoring data, and regulatory documents. Reviewed documents are listed as references in Section 7.0 of this report.

3.3 SITE INSPECTION

The site inspection was performed on February 4, 2020. In attendance were HAAF representative Algeana Stevenson and the DAWSON Second Periodic Review team.

Site inspections are conducted to provide information about the site's status and visually confirm and document the conditions of the remedy, the site, and the surrounding area. The site inspection checklists are presented in **Appendix B** The site inspection photograph logs are presented in **Appendix C**.

3.4 INTERVIEWS

During the Second Periodic Review, the site inspection team conducted interviews to document any perceived issues or successes with the implemented remedies to date at HAAF. Scott Bostian, a Senior Engineer at Arcadis (Operations & Maintenance (O&M) Contractor), was unavailable during the site inspection for an in-person interview and was interviewed via telephone on March 9, 2020. Algeana Stevenson, HAAF Remediation Section Leader/Chemical Engineer, Department of Public Works Environmental Prevention & Compliance Branch, requested to complete an interview questionnaire form, which she provided responses to via email on April 7, 2020.

A summary of relevant issues from interviews will be provided in the applicable Releases sections of this report. The interview summaries are presented in **Appendix D**.

The interviewees agreed there are no known issues with this site and that the implemented remedy is working as designed according to the Corrective Action Plans (CAP).

4.0 FORMER PUMP HOUSE #1, RELEASE #1

4.1 SITE CHRONOLOGY

Site chronology for Former Pump House #1, Release #1 is presented below in **Table 2**.

Table 2 – Former Pump House #1, Release #1 Chronology

Event	Date (Year)
Former Pump House #1 Operational	1953 – 1970
Final Corrective Action Plan Part A - Phase I Site Investigation	1997
Tank Removals Completed	1995 – 1998
Supplemental Surface Water Sampling for Corrective Action Plan Part B	1999
Corrective Action Plan Part B Former Pump House #1	August 22, 2000
Corrective Action Plan Part B, Addendum #1	July 16, 2002
Free Product Removal Conducted	2002 – 2006
Annual Corrective Action Plan Progress Reports Completed	2002 – Present
Corrective Action Plan Part B, Addendum #2	July 11, 2006
Revised Final Corrective Action Plan Part B	June 9, 2009
Revised Corrective Action Plan Part B Addendum #1	October 1, 2009
Calcium Peroxide Injections	2010 – 2012
First Periodic Review	November 1, 2011

4.2 PHYSICAL CHARACTERISTICS

Former Pump House #1 is located along the east-west taxiway of HAAF within an access-controlled fence to the active airfield. Approximately 300 feet south of the Former Pump House #1 is a man-made stormwater drainage canal that flows west towards Lamar Canal. The surface water then flows to the southwest until it reaches Springfield Canal, eventually joining the Little Ogeechee River more than 3 miles downstream of the site (Army, 2002).

This site has two areas of concern (AOC), Release #1 and Release #2. Release #1 is approximately 900 feet west of Former Pump House #1. It is located near the Departure/Arrival Air Control Group (DAACG) facility and in the vicinity of former Fuel Pits 1A and 1B **(Figure 2)**.

4.3 HISTORY OF CONTAMINATION

Former Pump House #1 was an aviation fuel island that operated from 1953 until the 1970s, consisting of ten 25,000-gallon USTs and one 50,000-gallon underground

defueling tank. Petroleum products from military flight line operations were disposed of in nearby fuel pits. Information identifying the fuel pits as lined or unlined could not be located.

4.4 INITIAL RESPONSE

In 1995, eight of the 25,000-gallon USTs were removed. Cast iron piping internal to the Former Pump House #1 facility was removed prior to the tank removal activities. The 50,000-gallon defueling tank and two of the 25,000-gallon tanks remained in place, partially under the Pump House structure. In 1998, the Pump House structure was removed along with the two remaining 25,000-gallon USTs, and the 50,000-gallon defueling tank was closed in place. The piping from the boundary of the Pump House facility to the nearby bulk fuel farm was also drained, pigged, and grouted in place. Approximately 913 cubic yards of contaminated soil was removed during the 1995 UST closure activities and tested in accordance with disposal facility requirements and transported to Kedesh, Inc. The soil was returned to the tank pits during the 1998 closure activities (Army 2000).

4.5 BASIS FOR TAKING ACTION

During UST closure activities, benzene, toluene, ethylbenzene, and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAH), and total petroleum hydrocarbons (TPH) were detected in soil samples. BTEX was detected downgradient of the Former Pump House #1 in surface water, and TPH and PAH were detected in sediment samples, indicating contaminated groundwater was discharging into the “man-made drainage ditch,” also referred to as the stormwater drainage canal. Groundwater seeping into the excavation also contained BTEX and PAH constituents (Army, 2000).

Risk-based screening results showed concentrations of BTEX, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene in groundwater exceeded their respective screening levels. Benzene exceeded its groundwater alternate concentration limit (ACL) of 285 µg/L. Concentrations of BTEX, benzo(a)pyrene, benzo(b)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene in soil exceeded their respective screening levels. Benzene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene exceeded their alternate threshold limits (ATL) of 9.3 mg/kg, 1.4 mg/kg, 2.1 mg/kg, and 0.66 mg/kg, respectively (Army, 2000).

4.6 CORRECTIVE ACTION

4.6.1 CORRECTIVE ACTION OBJECTIVE

The August 2000 CAP Part B, the July 2002 CAP Part B Addendum #1, the July 2006 CAP Part B Addendum #2, the June 2009 Revised CAP Part B, and the October 2009 Revised CAP Part B Addendum #1 serve as the decision documents for Former Pump House #1, Release #1.

The following corrective action objections were established:

- *Remove free product that exceeds one-eighth inch (GAEPD and HAAF established measurement);*
- *Provide risk-based corrective action;*
    - *Remediate groundwater contamination (i.e., reduce dissolved benzene concentration to below ACL of 285 µg/L and reduce dissolved lead concentration below In-Stream Water Quality Standard [IWQS] of 30 µg/L);*
    - *Remediate soil contamination;*
- *Reduce the estimated timeframe for groundwater to reach ACLs.*[1]

Table 3 – Former Pump House #1, Release #1 Cleanup Goals

Contaminant of Concern	Cleanup Goals (µg/L)	Basis
Benzene	285	ACL
Toluene	800,000	ACL
Ethylbenzene	114,800	ACL
Xylenes	N/A	No ACL established
Lead	30	IWQS

µg/L - micrograms per liter
ACL- Alternate concentration limits
N/A - Not applicable
IWQS - In-Stream Water Quality Standard

4.6.2 Corrective Action Selection

The components of the selected remedy include:

- Phased approach remediation:
    - Phase 1: Remove free product "without impacting active military flight operations" in conjunction with monitored natural attenuation (MNA) of the groundwater plume until free product recovery activities are terminated.
    - Phase 2: Reevaluate need for active corrective action addressing remaining soil and groundwater contamination.

[1] An estimated timeframe for groundwater to reach ACLs is not provided in the August 2000 CAP Part B, the July 2002 CAP Part B Addendum #1, the July 2006 CAP Part B Addendum #2, the June 2009 Revised CAP Part B, or the October 2009 Revised CAP Part B Addendum #1.

- Continued monitoring of cone penetrometer testing and monitoring wells for free product;
- Injection of terminal electron acceptor solution or slurry; and
- Calcium peroxide injections.

4.6.3 Corrective Action Implementation

The corrective action in the original CAP was implemented in a phased approach. In February 2000, free product was observed in wells D-MW1, D-MW2, D-MW8, D-MW11, D-MW13, and D-MW17 at a thickness ranging from sheen to 0.88 feet. In February 2001, 11 monitoring wells (D-MW33 through D-MW43) were installed to supplement CAP-Part B investigation activities at the site. In March and July 2001, field bailout tests were conducted in wells D-MW2, D-MW34, and D-MW35. The thickest and most recoverable portion of the free product plume was in the vicinity of wells D-MW2, D-MW34 and D-MW35. Monitoring well locations are shown on **Figure 3**.

Between February 2000 and March 2005, absorbent socks were used in numerous wells associated with Release #1. Bi-monthly vacuum extraction activities began in June 2005 on wells throughout the Release #1 area. Semi-annual groundwater monitoring of the extraction wells was conducted. In 2006, the free product removal method was changed to quarterly vacuum extraction at four wells. In 2007, enhanced fluid recovery techniques were implemented on a quarterly basis in four wells across the site. Free product was not present in monitoring wells measured in December 2007 and December 2008 (Arcadis, 2009a).

After free product was reduced to less than one-eighth inch in the monitoring wells, groundwater sampling of hot spots confirmed lead was below the IWQS of 30 µg/L. Therefore, remediation of soil for petroleum hydrocarbon-related contaminants is not necessary.

For Phase 2, quarterly calcium peroxide injections occurred from April through October 2010 and in March 2012. Water was also injected to increase distribution of the oxygenated water. The March 2012 calcium peroxide injections were through direct push technology points in the northwestern portions of the plume to enhance presumed biodegradation in the most impacted areas (Arcadis, 2012c).

4.6.4 Operations and Maintenance

Operations and maintenance at Former Pump House #1, Release #1 include semi-annual groundwater monitoring which is discussed in Section 4.8, Data Review. HAAF continues to evaluate monitoring wells for free product during the semiannual groundwater sampling events.

4.7 PROGRESS SINCE THE FIRST PERIODIC REVIEW

The First Periodic Review report for HAAF did not provide a protectiveness statement for Pump House #1, Release #1.

The recommendation not affecting protectiveness from the first periodic review for Pump House #1, Release #1 was to "ensure all installation USTs are in the Best Management Practices geographical information system database so that possible issues can be identified during site screening."

4.8 DATA REVIEW

Semi-annual groundwater monitoring data from 2010 to 2018 were evaluated for this review. The data presented in **Appendix E** (Table 2b), indicate that BTEX concentrations were detected in groundwater wells in the area of Pump House #1, Release #1 over the past nine years. Benzene has been found to exceed its groundwater ACL at seven wells since 2010. **Table 4** presents the benzene exceedances for Former Pump House #1, Release #1 from 2010 through 2018.

During the October 2018 monitoring event, benzene concentrations above the ACL were detected in the Release #1 area groundwater monitoring wells. Well P1R1-MW-02 exceeded the benzene ACL of 285 µg/L with a detection of 480 µg/L. However, an anomalously low benzene concentration (i.e., below the ACL) was reported at P1R1-MW-02 during the June 2018 monitoring event; this outlier observation is approximately two orders of magnitude below historical observations. The fluctuation in benzene concentrations from three sampling events between October 2017 and October 2018 (i.e., 420 µg/L to 1.1 µg/L to 480 µg/L) was attributed to changes in groundwater elevation (Pika-Arcadis JV, 2019a). However, the correlation between benzene concentrations (especially anomalous observations) with groundwater elevation fluctuations is arguably poor.

Table 4 – Former Pump House #1, Release #1 Groundwater Exceedances (2010–2018)

Sample Location	Sample Date	Benzene (ACL 285 µg/L)
D-MW-02	3/31/2011	310
D-MW-34	6/29/2010	490
	9/7/2010	570
	12/16/2010	290
	3/31/2011	310
	10/16/2012	420
	4/16/2013	350
D-MW-35	9/7/2010	410
D-MW-37	9/7/2010	430
	3/31/2011	340

Sample Location	Sample Date	Benzene (ACL 285 µg/L)
	4/25/2012	530
	10/23/2013	600
	4/1/2014	470
	10/29/2014	400
	5/6/2015	450
	4/14/2016	290
P1R1-MW-01	4/24/2012	370
P1R1-MW-02	3/29/2010	330
	9/7/2010	560
	12/16/2010	670
	3/31/2011	690
	9/20/2011	640
	4/24/2012	510
	10/16/2012	440
	4/16/2013	310
	4/1/2014	290
	12/9/2015	390
	4/14/2016	470
	10/20/2016	390
	6/13/2017	430
	10/27/2017	420
	10/19/2018	480
P1R1-IW-10	4/25/2012	760

µg/L - micrograms per liter
ACL- Alternate concentration limits

An assessment of the overall groundwater data trends indicates a potentiometric surface gradient with northwestern flow. Much of the site is covered by an impermeable surface. **Figure 4** indicates variations in the averaged potentiometric surface elevations of wells D-MW-02 and D-MW-35; notably, the water level dropped sharply at the onset of injection and then steadily increased three to four feet from 2011 to 2018. Increased groundwater elevations may mobilize hydrocarbons sorbed to soil in the smear zone.

Benzene concentrations in exceedance of the ACL of 285 µg/L, shown in **Figure 5,** in 2001 include monitoring wells D-MW-2, D-MW-34, D-MW-35, and D-MW-37. **Figure 6** presents a measurably smaller plume in 2008, where benzene concentrations exceeding the ACL are reported only at wells D-MW-01 and D-MW-34. Following the calcium peroxide injections (2010 and 2012), benzene concentrations exceeding the ACL have been reduced, as shown in **Figure 3**, where the only exceedance was reported at well P1R1-MW-02 and no exceedances were reported downgradient of the injection array at wells D-MW-01 or D-MW-34.

The injection array was successful in reducing the plume migration since 2009. Concentrations continue to exceed the benzene ACL and, based on the 2018 CAP Progress Report, may have hydraulically moved the plume around the injection array to the northeast. Exceedances are still reported in downgradient well P1R1-MW-02 and fluctuate with groundwater elevations as observed in **Figure 4**. As shown in **Figure 3**, the data presented in the most recent CAP Progress Report indicate that the benzene plume has diverted around the injection array (Arcadis, 2019). However, the presentation of the benzene plume is problematic in that its southeastern limit does not appear to be based on detected concentrations and is not bound by sampling results. It is unclear if the plume boundary is being interpolated based on historical groundwater sampling results.

4.9 SITE INSPECTION

The Site Inspection team observed the area comprising Former Pump House #1, Release #1. Monitoring wells were adequately labeled and well maintained. The area within HAAF was observed to be restricted by fencing, which was adequately locked and well maintained. No vandalism or trespassing has occurred on site, and there have been no changes in land use on or off site. The roads were observed to be in good condition with no damage.

The Site Inspection Checklist is presented in **Appendix B**. The Site Inspection Photograph Log is presented in **Appendix C**.

4.10 TECHNICAL ASSESSMENT

4.10.1 QUESTION A – IS THE REMEDY FUNCTIONING AS INTENDED BY THE DECISION DOCUMENTS?

Yes, based on the data review, the remedy is functioning as intended. The removal of free product was achieved in December 2007 to the GAEPD required measurable thickness of one-eighth inch in monitoring wells. Groundwater sampling confirmed lead was below the IWQS of 30 µg/L following free product removal. Phase 2 of the corrective action, active remediation, included calcium peroxide injections from April through October 2010 and in March 2012. Based on CAP Progress Reports, it appears the injection array was successful in reducing mass but may have diverted the plume to the northeast around the injection array, though data for the southeast plume boundary is lacking. Benzene concentrations in downgradient well P1R1-MW-02 have consistently exceeded benzene ACLs and appear to fluctuate with groundwater elevations with no further reduction in benzene concentrations. The data and trend analyses generally support the advancement of the remedy toward completion by demonstrating an overall mass reduction. However, the injection array may need to be extended to the north and continued monitoring of four wells surrounding P1R1-MW-02 (i.e., D-MW-34, P1R1-MW-01, D-MW-33, and D-MW-11) will be necessary. Monitoring wells D-MW-33 and D-MW-01 were removed from the approved corrective action sampling list based on the recommendation in the semi-annual 20th CAP Progress Report that was approved by GA EPD letter dated July 27, 2018.

4.10.2 QUESTION B – ARE THE EXPOSURE ASSUMPTIONS, TOXICITY DATA, CLEANUP LEVELS AND REMEDIAL ACTION OBJECTIVES USED AT THE TIME OF THE REMEDIAL ACTION SELECTION STILL VALID?

The cleanup levels used at the time of the remedy selection are still valid. Free product exceeding one-eighth inch has been removed and has not been exceeded in wells since 2007. Following free product reduction to less than one-eighth inch in the monitoring wells, groundwater sampling of hot spots confirmed lead was below the IWQS of 30 µg/L and lead is no longer sampled as part of the monitoring program. In addition, remediation of soil contamination is no longer required. Achievement of the corrective action objective to reduce the estimated timeframe for groundwater to reach ACLs cannot be evaluated as no estimated timeframes have been presented in the CAPs.

There have been no changes to the risk-based ACLs developed as part of the CAP. The site inspection confirmed no changes in land use at Former Pump House #1, Release #1. The removal of free product has been achieved, no new contaminant sources have been identified, and site conditions have not changed in a way that may present a potential vapor intrusion risk. There continue to be no potential receptors to raise the possibility of a complete vapor intrusion pathway.

4.10.3 QUESTION C – HAS ANY OTHER INFORMATION COME TO LIGHT THAT COULD CALL INTO QUESTION THE PROTECTIVENESS OF THE REMEDY?

There is no other information that calls into question the protectiveness of the remedy. No previous or new ecological risks have been identified. There have been no impacts from natural disaster events or weather-related events that have affected the protectiveness of the remedy.

4.10.4 TECHNICAL ASSESSMENT SUMMARY

The removal of free product at Former Pump House #1, Release #1 was achieved to the required measurable thickness of one-eighth inch in the monitoring wells. Groundwater sampling confirmed lead was below the IWQS of 30 µg/L following free product removal. Active remediation, including calcium peroxide injections, appears to be successful in reducing the plume mass. Benzene concentrations in downgradient well P1R1-MW-02 have consistently exceeded benzene ACLs and appear to fluctuate with groundwater elevations with no further reduction in benzene concentrations. Based on the currently defined plume boundary, the injection array may need to be extended to the north and continued monitoring of four wells surrounding P1R1-MW-02 (i.e., D-MW-34, P1R1-MW-01, D-MW-33, and D-MW-11) will be necessary.

4.11 ISSUES

Table 5 presents issues identified while preparing this Second Periodic Review.

Table 5 – Former Pump House #1, Release #1 Issues

Issue Number	Issues	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
1	The plume boundary has not been fully captured based on the sampling points identified in the CAP Progress Reports. The southeastern limit does not appear to be based on detected concentrations and is not defined by sampling results.	N	Y
2	The corrective action objective to remediate groundwater contamination and reduce dissolved benzene concentrations to below the ACL of 285 µg/L may not be achieved downgradient of the injection array, as observed by benzene concentrations in downgradient well P1R1-MW-02.	N	Y
3	The corrective action objective to reduce the estimated timeframe for groundwater to reach ACLs cannot be evaluated because the estimated timeframe has not been established in the August 2000 CAP Part B, the July 2002 CAP Part B Addendum #1, the July 2006 CAP Part B Addendum #2, the June 2009 Revised CAP Part B, or the October 2009 Revised CAP Part B Addendum #1.	N	Y

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4.12 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Recommendation and follow-up actions for Former Pump House #1, Release #2 are presented in **Table 6**.

Table 6 – Former Pump House #1, Release #2 Chronology

Issue Number	Recommendations and Follow Up Action	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
1	Further delineate the extent of the southeast plume boundary to determine if the injection array may need to be extended to the north.	Army	GAEPD	September 2023	N	Y
2	Evaluate additional corrective actions in the downgradient portion of the plume, near monitoring well P1R1-MW-02.	Army	GAEPD	September 2023	N	Y
3	Evaluate and determine an estimated timeframe for groundwater to reach ACLs.	Army	GAEPD	September 2023	N	Y

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4.13 PROTECTIVENESS STATEMENT

The remedy at Former Pump House #1, Release #1 currently protects human health and the environment because the removal of free product at Former Pump House #1, Release #1 was achieved to the required measurable thickness of one-eighth inch in the monitoring wells. Groundwater sampling confirmed lead was below the IWQS of 30 µg/L following free product removal. Active remediation, including calcium peroxide injections, has reduced the plume mass. However, in order for the remedy to be protective in the long term, the following actions need to be taken to ensure protectiveness:

- Further delineate the extent of the southeast plume boundary to determine if the injection array may need to be extended to the north.
- Evaluate additional corrective actions in the downgradient portion of the plume, near monitoring well P1R1-MW-02.
- Evaluate and determine an estimated timeframe for groundwater to reach ACLs.

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5.0 FORMER PUMP HOUSE #1, RELEASE #2

5.1 SITE CHRONOLOGY

Site chronology for Former Pump House #1, Release #2 is presented below in **Table 7**.

Table 7 – Former Pump House #1, Release #2 Chronology

Event	Date (Year)
Former Pump House #1 Operational	1953 – 1970
Final Corrective Action Plan Part A - Phase I Site Investigation	1997
Tank Removal Completed	1998
Corrective Action Plan Part B Former Pump House #1	August 29, 2000
Annual Corrective Action Plan Progress Reports Completed	2001 – Present
Free Product Removal Conducted	2002 – 2006
Revised Corrective Action Plan Part B	July 7, 2009
Addendum #1 Revised Corrective Action Plan Part B	October 1, 2009
Sodium persulfate and Calcium Peroxide Injections	2010 – 2018
First Periodic Review	November 1, 2011

5.2 PHYSICAL CHARACTERISTICS

Former Pump House #1 is located along the east-west taxiway of HAAF within an access-controlled fence to the active airfield. Approximately 300 feet south of the Former Pump House #1 is a man-made stormwater drainage canal that flows west towards Lamar Canal. The surface water then flows to the southwest until it reaches Springfield Canal, eventually joining the Little Ogeechee River more than 3 miles downstream of the site (Army, 2002).

Former Pump House #1, Release #2 is approximately 200 feet north of Former Pump House #1 in the vicinity of former Fuel Pits 1C and 1D. Release #2 consists of three remediation areas; Areas A, B, and C. The stormwater drainage canal is south of Remediation Area C **(Figures 7 and 8).**

5.3 HISTORY OF CONTAMINATION

Former Pump House #1 was an aviation fuel island that operated from 1953 until the 1970s, consisting of ten 25,000-gallon USTs and one 50,000-gallon underground defueling tank. Petroleum products from military flight line operations were disposed of in nearby fuel pits. Information identifying the fuel pits as lined or unlined could not be located.

5.4 INITIAL RESPONSE

In 1995, eight of the 25,000-gallon USTs were removed. Cast iron piping internal to the Former Pump House #1 facility was removed prior to the tank removal activities. The 50,000-gallon defueling tank and two of the 25,000-gallon tanks remained in place, partially under the Pump House structure. In 1998, the Pump House structure was removed along with the two remaining 25,000-gallon USTs, and the 50,000-gallon defueling tank was closed in place. The piping from the boundary of the Pump House facility to the nearby bulk fuel farm was also drained, pigged, and grouted in place. Approximately 913 cubic yards of contaminated soil was removed during the 1995 UST closure activities and tested in accordance with disposal facility requirements and transported to Kedesh, Inc. The soil was returned to the tank pits during the 1998 closure activities (Army 2000).

5.5 BASIS FOR TAKING ACTION

During UST closure activities, BTEX, PAH, and TPH were detected in soil samples. BTEX was detected downgradient of the Former Pump House #1 in surface water, and TPH and PAH were detected in sediment samples, indicating contaminated groundwater was discharging into the “man-made drainage ditch,” also referred to as the stormwater drainage canal. Groundwater seeping into the excavation also contained BTEX and PAH constituents (Army, 2000).

Risk-based screening results showed concentrations of BTEX, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene in groundwater exceeded their respective screening levels. Benzene exceeded its groundwater ACL of 285 µg/L. Concentrations of BTEX, benzo(a)pyrene, benzo(b)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene in soil exceeded their respective screening levels. Benzene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene exceeded their ATL of 9.3 mg/kg, 1.4 mg/kg, 2.1 mg/kg, and 0.66 mg/kg, respectively (Army, 2000).

5.6 CORRECTIVE ACTION

5.6.1 CORRECTIVE ACTION OBJECTIVE

The August 2000 CAP Part B, the July 2009 Revised CAP Plan B, and the October 2009 Revised CAP Part B, Addendum #1 serve as the decision documents for Former Pump House #1, Release #2.

The following corrective action objectives were established:

- *Remove free product that exceeds one-eighth inch (GAEPD and HAAF established measurement);*
- *Provide risk-based corrective action;*
    - *Remediate groundwater contamination;*

- *Remediate soil contamination;*

- *Reduce the source mass that could extend the remediation timeframe; and*
- *Rapidly mitigate impacts to stormwater drainage canal.*

Table 8 – Former Pump House #1, Release #2 Cleanup Goals

Contaminant of Concern	Cleanup Goals (µg/L)	Basis
Benzene	285	ACL
Toluene	800,000	ACL
Ethylbenzene	114,800	ACL
Xylenes	N/A	No ACL established
Lead	30	IWQS

µg/L - micrograms per liter
ACL- Alternate concentration limits
N/A - Not applicable
IWQS - In-Stream Water Quality Standard

5.6.2 Corrective Action Selection

The components of the selected remedy include:

- MNA;
- Sodium Persulfate injection (12 wells);
- Evaluate plume status and general site geochemistry;
- Determine optimum persulfate dosing; and
- Determine the dosing requirement and injection volume of calcium peroxide.

5.6.3 Corrective Action Implementation

Semi-annual monitoring and annual reporting began in September 2001. An investigation was conducted in 2003 to further delineate the horizontal and vertical extent of the free product in the subsurface at Release #2 using cone penetrometer testing equipment with laser induced fluorescence detection. From January 2002 through March 2005, absorbent socks were installed, removed, and replaced on a bimonthly basis. Beginning in 2005, vacuum extraction activities were initiated on wells located throughout the Release #1 and Release #2 areas.

In May 2006, six injection wells were installed around the Pump House #1, Release #2 area for the injection of oxygen-releasing compound (ORC). Injections were conducted from July 2006 through April 2007 and documented in the monitoring reports for the period.

Surface water monitoring for BTEX has been ongoing since 2007.

Subsurface soil sampling performed in January 2008 indicated benzene concentrations were below the ATL of 9.3 mg/kg (Army, 2009b).

In 2010, to decrease the remedial timeframe, in-situ chemical oxidation using sodium persulfate was performed to reduce the mass at Remediation Areas A and B, see **Figure 8**. To mitigate impacts to the stormwater drainage canal downgradient of the plume, in-situ application of calcium peroxide upgradient of the canal (at Area C) was performed. Six rounds of sodium persulfate injections were performed from February 2010 through November 2016. Calcium peroxide amendments were replenished by soil mixing in a downgradient barrier in June 2014 and again in December 2018 (Pika-Arcadis JV, 2019b).

5.6.4 Operations and Maintenance

Operations and maintenance at Former Pump House #1, Release #2 includes semi-annual groundwater and surface water monitoring, sodium persulfate injections and calcium peroxide application, which are discussed in Sections 5.6.3, Corrective Measure Implementation and 5.8, Data Review.

5.7 PROGRESS SINCE THE FIRST PERIODIC REVIEW

The First Periodic Review report for HAAF did not provide a protectiveness statement for Pump House #1, Release #2.

The recommendation not affecting protectiveness from the First Periodic Review for Pump House #1, Release #2 was to “ensure all installation USTs are in the Best Management Practices geographical information system database so that possible issues can be identified during site screening.”

5.8 DATA REVIEW

Semi-annual groundwater and surface water monitoring data from 2010 to 2018 were evaluated for this review. The data presented in **Appendix E** (Table 2) indicate that BTEX were detected in groundwater in the area of Pump House #1, Release #2 over the past nine years. Benzene has been found to exceed ACLs at 32 sampling locations that include monitoring and injection wells. The two surface water sampling locations (P1-SWS-12 and P1-SWS-11) have not exceeded the IWQS for benzene, toluene, or ethylbenzene since 2007. **Appendix F** presents the benzene exceedances for Former Pump House #1, Release #2 from 2010 through 2018. **Figures 9** and **10** identify the sampling locations.

During the October 2018 monitoring event, seven wells (D-MW-05R, P1-MW-02, P1R2-IW-05, P1R2-IW-10, P1R2-IW-13, P1-J4 and P1-CPT-19) within Remediation Areas A and B, exceeded the benzene ACL of 285 µg/L. The concentrations of benzene detected in three (P1-J4, P1R2-IW-13 and D-MW-05R) of the seven wells increased from the June

2018 sampling event. These wells had shown a decline in concentrations from April 2013 to October 2017.

An assessment of the overall data trends indicates a potentiometric surface gradient with south-southwestern flow toward the canal. The northern portion of the site is covered by an impermeable surface. **Figures 11, 12,** and **13** indicate variations in the averaged potentiometric surface elevations in Areas A, B, and C, respectfully. Notably, the water level steadily increased four to five feet from 2011 to 2018 (Pika-Arcadis JV, 2019b). These data match the water table increase reported at Release #1. Increased groundwater elevations may mobilize hydrocarbons sorbed to soil in the smear zone.

Geochemical parameter data **(Appendix E, Table 3)** suggest that groundwater in the source areas is anaerobic and highly reducing, indicated by the lower dissolved oxygen, oxidation reduction potential, and sulfate levels in the source area wells (D-MW-05R, PI-CPT-07 and P1-MW-02) relative to the monitor wells outside the impacted area. The aerobic conditions were stimulated in December 2018 by soil-mixing a calcium peroxide amendment.

Benzene concentrations in exceedance of the ACL of 285 µg/L, shown in **Figure 14** (August 2000), include monitoring wells D-MW-5, P1-MW-3, P1-MW-2, P1-MW-1, and P1-MW-19. The apparent plume ended abruptly at the surface water feature. **Figure 15** (October 2009) presents a benzene plume of approximately the same size and shape, where benzene concentrations exceeding the ACL were reported at D-MW-5R, P1-MW-3, P1-MW-2, and P1-MW-19. Following the sodium persulfate injections (2010 to 2016; Remediation Areas A and B) and calcium peroxide barrier zone installation (Remediation Area C), benzene concentrations exceeding the ACL appear to have been only slightly reduced, as shown in **Figures 9 and 10** and **Appendix F,** from the March 2019 CAP Progress Report, where benzene exceedances were reported at D-MW-05R, P1-MW-02, P1R2-IW-05, P1R2-IW-10, P1R2-IW-13, P1-J4, and P1-CPT-19 (Pika-Arcadis JV, 2019b).

The data presented in the most recent CAP Progress Report indicate the benzene plume appears to be maintaining its same general shape but migrating slightly toward the east. The core of the plume in Area A has shifted from the west side of P1-MW-40 (December 2008) to the east side of that well (June – December 2018). Below the impermeable surface, the plume does not appear to be following the groundwater gradient, suggesting preferential pathways may dominate the mass transport in Remediation Area A. Additionally, the elongated southward plume is presented in the CAP Progress Report No. 28 as being narrow and ending just beyond the calcium peroxide barrier. However, there are no closely spaced monitoring wells between Remediation Areas B and C, which indicates the plume dimensions are inferred.

Overall, concentrations of benzene above ACL in the groundwater at Former Pump House #1, Release #2 have shown a minimal decline in concentration levels since 2016. Mr. Bostian stated Release #2 is receiving sodium persulfate injections and is not reducing concentrations of site contaminants as quickly as mitigation efforts at Release

#1. He stated contaminant reduction occurs more slowly at Release #2 because the contaminant mass is more significant than initially reported.

5.9 SITE INSPECTION

The Site Inspection team observed the area comprising Former Pump House #1, Release #2. Monitoring wells were adequately labeled and well maintained. The area within HAAF was observed to be restricted by fencing, which was adequately locked and well maintained. No vandalism or trespassing has occurred on site, and there have been no changes in land use on or off site. The roads were observed to be in good condition with no damage.

The Site Inspection Checklist is presented in **Appendix B**. The Site Inspection Photograph Log is presented in **Appendix C**.

5.10 TECHNICAL ASSESSMENT

5.10.1 QUESTION A – IS THE REMEDY FUNCTIONING AS INTENDED BY THE DECISION DOCUMENTS?

Yes, the remedy is functioning as intended by the decision document. The removal of free product was achieved to the GAEPD required measurable thickness of one eight inch in the monitoring wells. Overall, concentrations of benzene above ACL in the groundwater at Former Pump House #1, Release #2 have shown a minimal decline in concentration levels since 2016. The groundwater data and trend analyses do not yet support the advancement of the remedy toward completion. However, HAAF is continuing to determine the optimum persulfate dosing requirement and injection volume of calcium peroxide. HAAF continues to evaluate the plume status and general site geochemistry semi-annually. Calcium peroxide seems effective at reducing hydrocarbon mass as observed at monitoring well P1-MW-19.

5.10.2 QUESTION B – ARE THE EXPOSURE ASSUMPTIONS, TOXICITY DATA, CLEANUP LEVELS AND REMEDIAL ACTION OBJECTIVES USED AT THE TIME OF THE REMEDIAL ACTION SELECTION STILL VALID?

The cleanup levels used at the time of the remedy selection are still valid. Free product exceeding one-eighth inch has been removed and has not been exceeded in wells since 2007. Following free product reduction to less than one-eighth inch in the monitoring wells, groundwater sampling of hot spots confirmed lead was below the IWQS of 30 µg/L and lead is no longer sampled as part of the monitoring program. In addition, remediation of soil contamination is no longer required. The corrective action objective to reduce the source mass has not yet been achieved and the remediation timeframe for groundwater to reach ACLs has not been established in the CAPs

There have been no changes to the risk-based ACLs developed as part of the CAP. The site inspection confirmed no changes in land use at Former Pump House #1, Release #2. The removal of free product has been achieved, no new contaminant sources have been identified, there are no observed impacts to the stormwater drainage canal, and site

conditions have not changed in a way that may present a potential vapor intrusion risk. There continue to be no potential receptors to raise the possibility of a complete vapor intrusion pathway.

5.10.3 QUESTION C – HAS ANY OTHER INFORMATION COME TO LIGHT THAT COULD CALL INTO QUESTION THE PROTECTIVENESS OF THE REMEDY?

There is no other information that calls into question the protectiveness of the remedy. No previous or new ecological risks have been identified. There have been no impacts from natural disaster events or weather-related events that have affected the protectiveness of the remedy.

5.10.4 TECHNICAL ASSESSMENT SUMMARY

The removal of free product at Former Pump House #1, Release #2 was achieved to the required measurable thickness of one-eighth inch and there have been no observed impacts to the stormwater drainage canal south of the site since 2007. HAAF is continuing to determine the optimum persulfate dosing requirement and injection volume of calcium peroxide. HAAF continues to semi-annually evaluate the plume status and general site geochemistry. The calcium peroxide seems effective at reducing hydrocarbon mass as observed at monitoring well P1-MW-19.

5.11 ISSUES

No issues were identified during this Periodic Review that prevent the corrective action from being protective now or in the future.

5.12 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

No recommendations or follow-up actions are required since there are no issues identified during this Periodic Review that affect current or future protectiveness of the corrective actions.

5.13 PROTECTIVENESS STATEMENT

The corrective action at Former Pump House #1, Release #2 is protective of human health and the environment.

The removal of free product at Former Pump House #1, Release #2 was achieved to the required measurable thickness of one-eighth inch and there have been no observed impacts to the stormwater drainage canal south of the site since 2007. HAAF is continuing to determine the optimum persulfate dosing requirement and injection volume of calcium peroxide. HAAF continues to evaluate the plume status and general site geochemistry semiannually. The calcium peroxide seems effective at reducing hydrocarbon mass as observed at monitoring well P1-MW-19.

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6.0 NEXT REVIEW

The next Periodic Review will be due within five years of the due date of this Second Periodic Review.

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7.0 REFERENCES

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Arcadis, 2013e. *Final CAP Progress Report No.11 (December 2012-April 2013) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* September.

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Arcadis, 2015c. *CAP Progress Report No. 13 (April - October 2014) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1Hunter Army Airfield, Georgia.* February.

Arcadis, 2015d. *Final CAP Progress Report No. 16 (April 2014 – July 2014) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* March*.*

Arcadis, 2015e. *Final CAP Progress Report No. 17 (July 2014 – October 2014) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* March.

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Army, 2009c. *Fifteenth Semiannual Monitoring Report with Addendum #1 to Revised Corrective Action Plan – Par B Former Pumphouse #1, Release #2 Facility ID #9-0 Former Building 8060 Hunter Army Airfield, Georgia.* October, prepared by Arcadis.

Army, 2009d. *Revised Correction Action Plan – Part B Addendum #1 Former Pumphouse #1 (Release #1) Former Building 8060 Hunter Army Airfield Savannah GA.* October, prepared by Arcadis.

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Pika-Arcadis JV, 2015a. *Final Corrective Action Plan Progress Report No. 14 (October 2014 - May 2015) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1 Hunter Army Airfield, Georgia.* September.

Pika-Arcadis JV, 2015b. *Final Corrective Action Plan Progress Report No. 19 (March 2015 – May 2015) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* September.

Pika-Arcadis JV, 2015c. *Final Corrective Action Plan Progress Report No. 18 (October 2014 - March 2015) Former Pumphouse #1, Release #2 (HAA-13) Facility ID #9-025085*2 Hunter Army Airfield, Georgia.* September.

Pika-Arcadis JV, 2016a. *Corrective Action Plan Progress Report No. 20 (May – July 2015) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060Hunter Army Airfield, Georgia.* February.

Pika-Arcadis JV, 2016b. *Corrective Action Plan Progress Report No. 15 (May - December 2015) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1 Hunter Army Airfield, Georgia.* April.

Pika-Arcadis JV, 2016c. *Corrective Action Plan Progress Report No. 21 (July – December 2015) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* April.

Pika-Arcadis JV, 2016d. *Corrective Action Plan Progress Report No. 22 (December 2015 – February 2016) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* July.

Pika-Arcadis JV, 2016e. *Final Corrective Action Plan (CAP) Progress Report No. 16 (December 2015 – April 2016) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1 Hunter Army Airfield, Georgia.* August.

Pika-Arcadis JV, 2016f. *Corrective Action Plan Progress Report No. 23 (February 2016 – April 2016) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* August.

Pika-Arcadis JV, 2017a. *Corrective Action Plan (CAP) Progress Report No. 17 (April 2016 – October 2016) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9025085*1 Hunter Army Airfield, Georgia.* April.

Pika-Arcadis JV, 2017b. *Corrective Action Plan Progress Report No. 24 (April 2016 – December 2016) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* April.

Pika-Arcadis JV, 2018a. *Corrective Action Plan (CAP) Progress Report No. 18 (October 2016 - June 2017) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1Hunter Army Airfield, Georgia.* March.

Pika-Arcadis JV, 2018b. *Corrective Action Plan Progress Report No. 25 (October 2016 – June 2017) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* March.

Pika-Arcadis JV, 2018c. *Corrective Action Plan Progress Report No. 26 (October 2017) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* April.

Pika-Arcadis JV, 2018d. *Corrective Action Plan (CAP) Progress Report No. 19 (October 2017) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1 Hunter Army Airfield, Georgia.* April.

Pika-Arcadis JV, 2018e. *Corrective Action Plan (CAP) Progress Report No. 20 (October 2017 – June 2018) Former Pumphouse #1, Release #1 (HAA-13) Facility ID #9-025085*1 Hunter Army Airfield, Georgia.* September.

Pika-Arcadis JV, 2018f. *Corrective Action Plan (CAP) Progress Report No. 27 (October 2017 – June 2018) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* October.

Pika-Arcadis JV, 2019a. *Correction Action Plan Progress Report #21 (June 2018 – October 2018) Former Pumphouse #1 Release #1 (HAA-13) Facility ID #9-025085*1 Hunter Army Airfield, Georgia.* February.

Pika-Arcadis JV, 2019b. *Corrective Action Plan Progress Report No. 28 (June 2018 – December 2018) HAA-13 Former Pumphouse #1 (Release #2) Facility ID #9-025085*2 Former Building 8060 Hunter Army Airfield, Georgia.* March.

SAIC, 2009. *Thirteenth Semiannual Monitoring Only Report, Former Pumphouse #1, Release #2, Facility ID #9-025085*2, Former Building 8060 Hunter Army Airfield, Georgia.*

FIGURES

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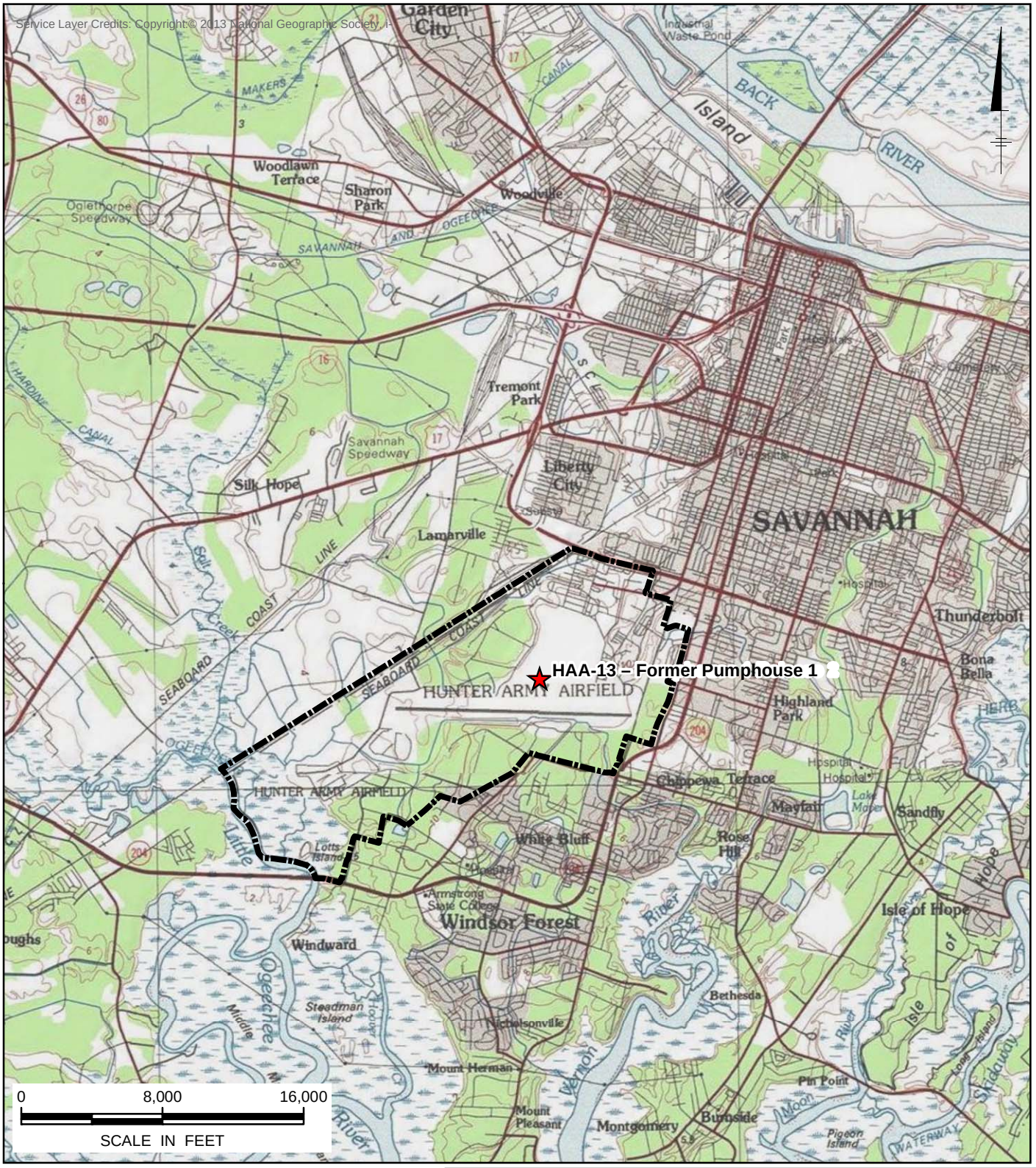
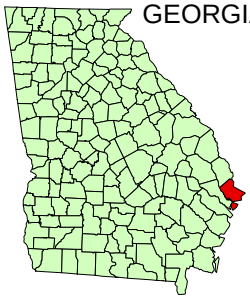


PROJECTION: NAD83 State Plane Georgia East Feet

SOURCE: ESRI Online Services (USA Topo Maps)

REFERENCE: U.S.G.S. 7.5 Minute Series Topographic Quadrangles:
Burroughs, Georgia 1980
Garden City, Georgia 1981
Isle of Hope, Georgia 1981
Savannah, Georgia 1979.



HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT #28 (JUNE 2018 TO DECEMBER 2018)

Site Location Map

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FIGURE
1

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:(T.TAHALE) PM:(S.GIBBONS) PIKATM:(L.BASILIO)
PROJECT: 10153001.0001 PATH: Z:\GIS\PROJECTS_ENV\PIKA\HAAF_PIKA\MAPDOCS\H13\P1R2\CAP PROGRESS 28 201810\F1 P1R2_N28 REG.MXD SAVED: 12/10/2018 BY: MGI01044

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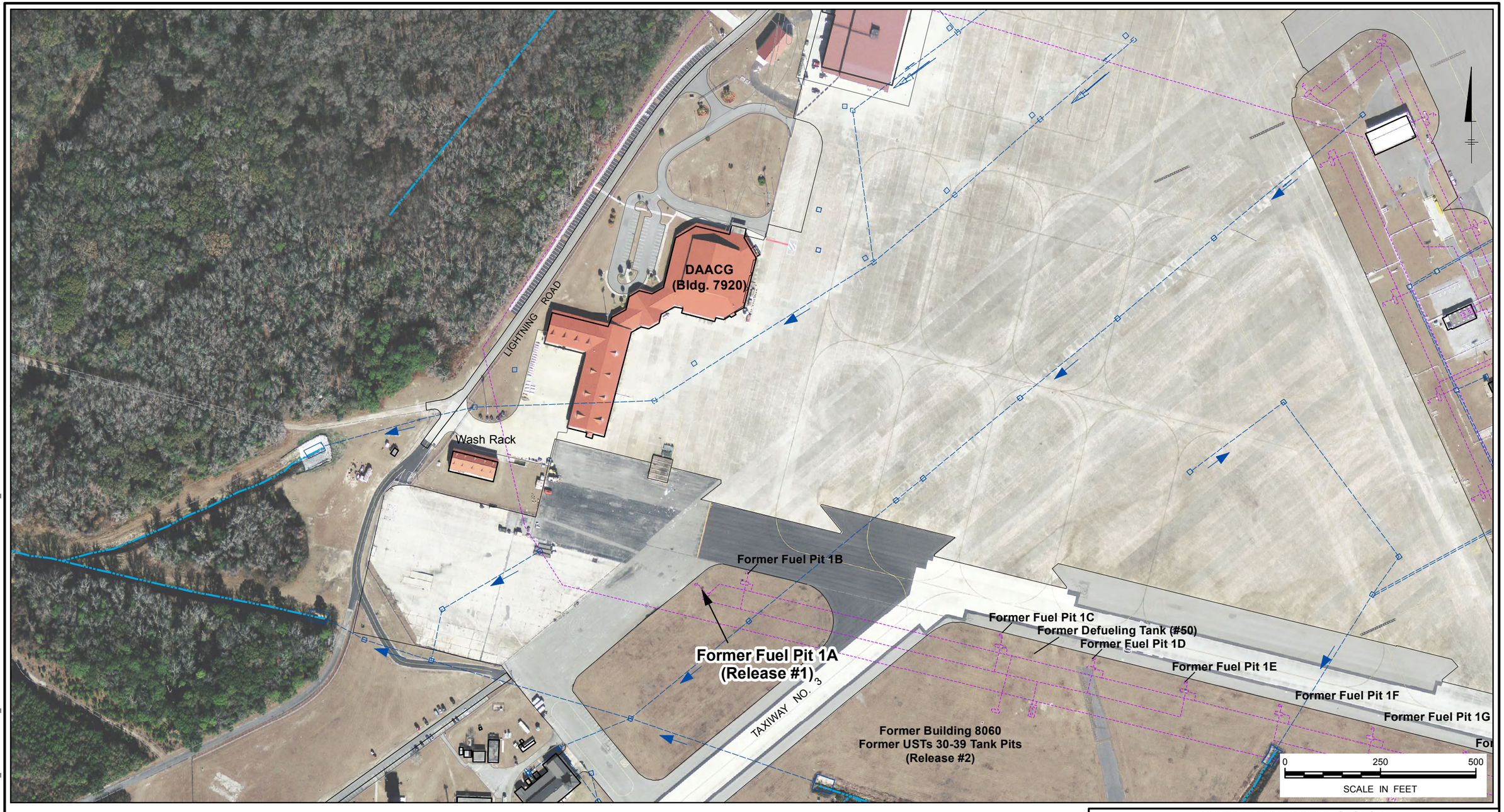

PROJECTION: NAD83 State Plane Georgia East Feet
REFERENCE: SAGIS (2008).
AERIAL SOURCE: U.S. ARMY (2011).

LEGEND

- Storm Water Drainage Canal
- Former Fuel Transfer Line
- Storm Water Drainage System
- Surface Water Flow Direction

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #1)
FORMER BUILDING 8060, FACILITY ID #9-025085*1
CAP PROGRESS REPORT NO. 21 (JUNE 2018 - OCTOBER 2018)

Site Map of Former Pumphouse #1 Release #1

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FIGURE
2

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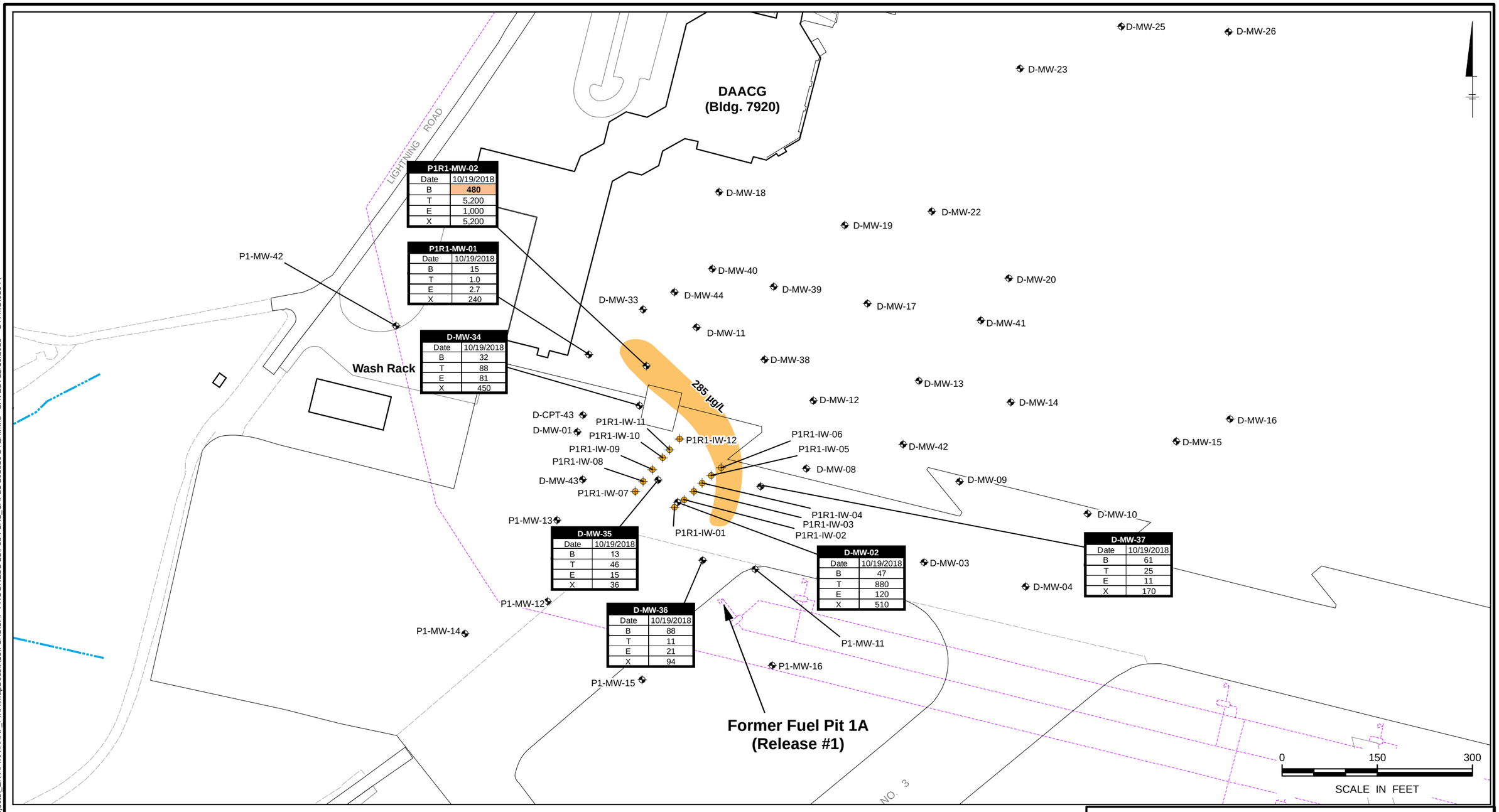

PROJECTION: NAD83 State Plane Georgia East Feet
REFERENCE: SAGIS (2008).

LEGEND

- Former Fuel Transfer Line
- Storm Water Drainage Canal
- Monitor Well (shallow)
- Injection Well (Installed 2010)
- Benzene Concentration Exceeds ACL

	Constituent	ACL
B	Benzene	285
T	Toluene	800,000
E	Ethylbenzene	114,800
X	Xylenes (total)	---

ACL - Alternate Concentration Limit
J - Value is estimated
U - Value not detected above the reporting limit
[ ] - Duplicate Sample Results

NOTES:
1) Samples collected October 18, 2018.
2) All concentrations reported in micrograms per liter (µg/L).
3) Only one value exceeded the Alternate Concentration Limit (ACL)

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #1)
FORMER BUILDING 8060, FACILITY ID #9-025085*1
CAP PROGRESS REPORT NO. 21 (JUNE 2018 - OCTOBER 2018)

BTEX Concentrations in Groundwater Monitor Wells (October 2018)

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FIGURE
3

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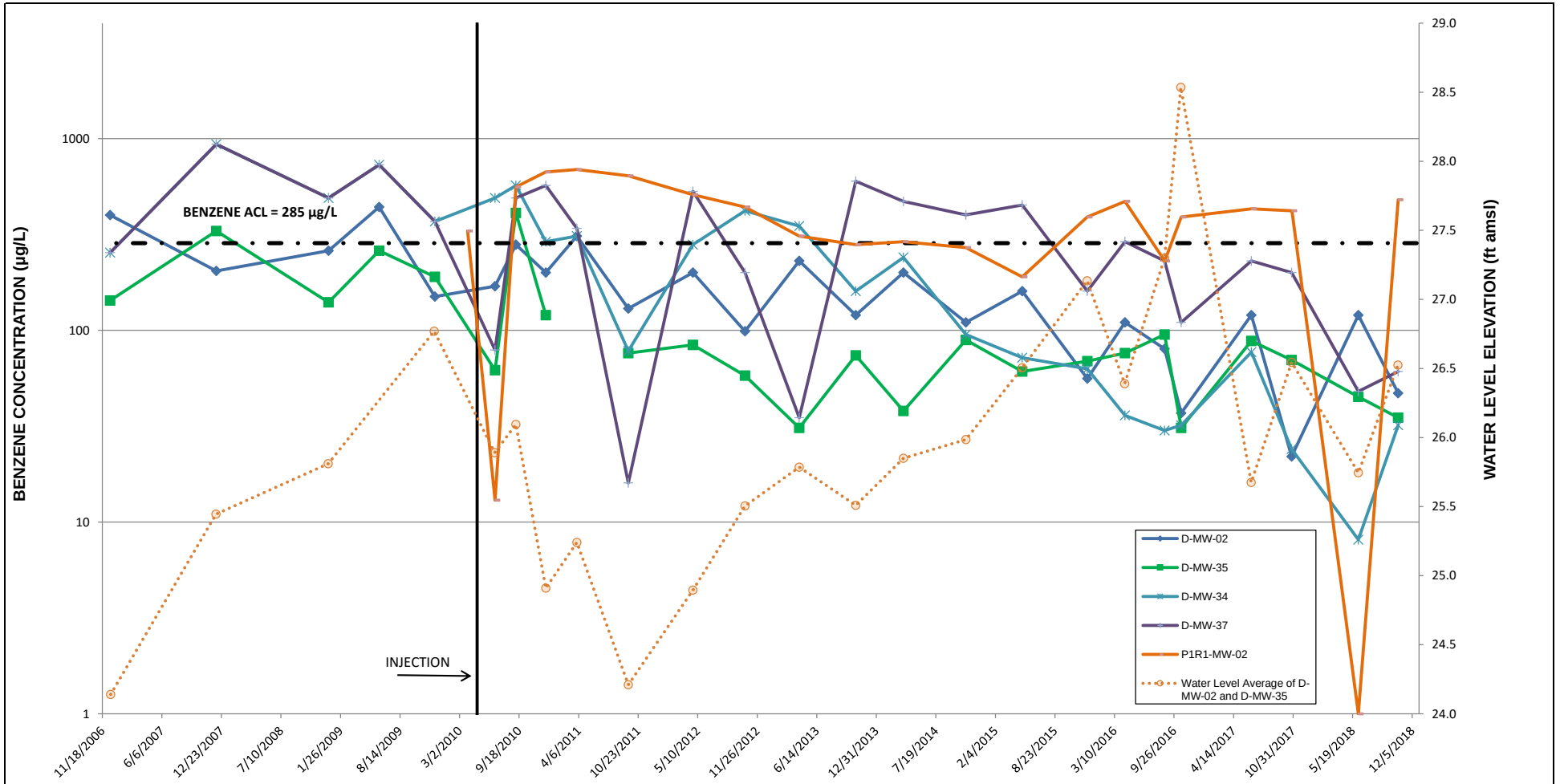

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HUNTER ARMY AIRFIELD
FORMER PUMPHOUSE #1 (RELEASE #1)
FORMER BUILDING 8060, FACILITY ID #9-025085*1
CAP PROGRESS REPORT NO. 21
(JUNE 2018 - OCTOBER 2018)

Benzene Concentrations Versus Time in Select Wells

FIGURE

4

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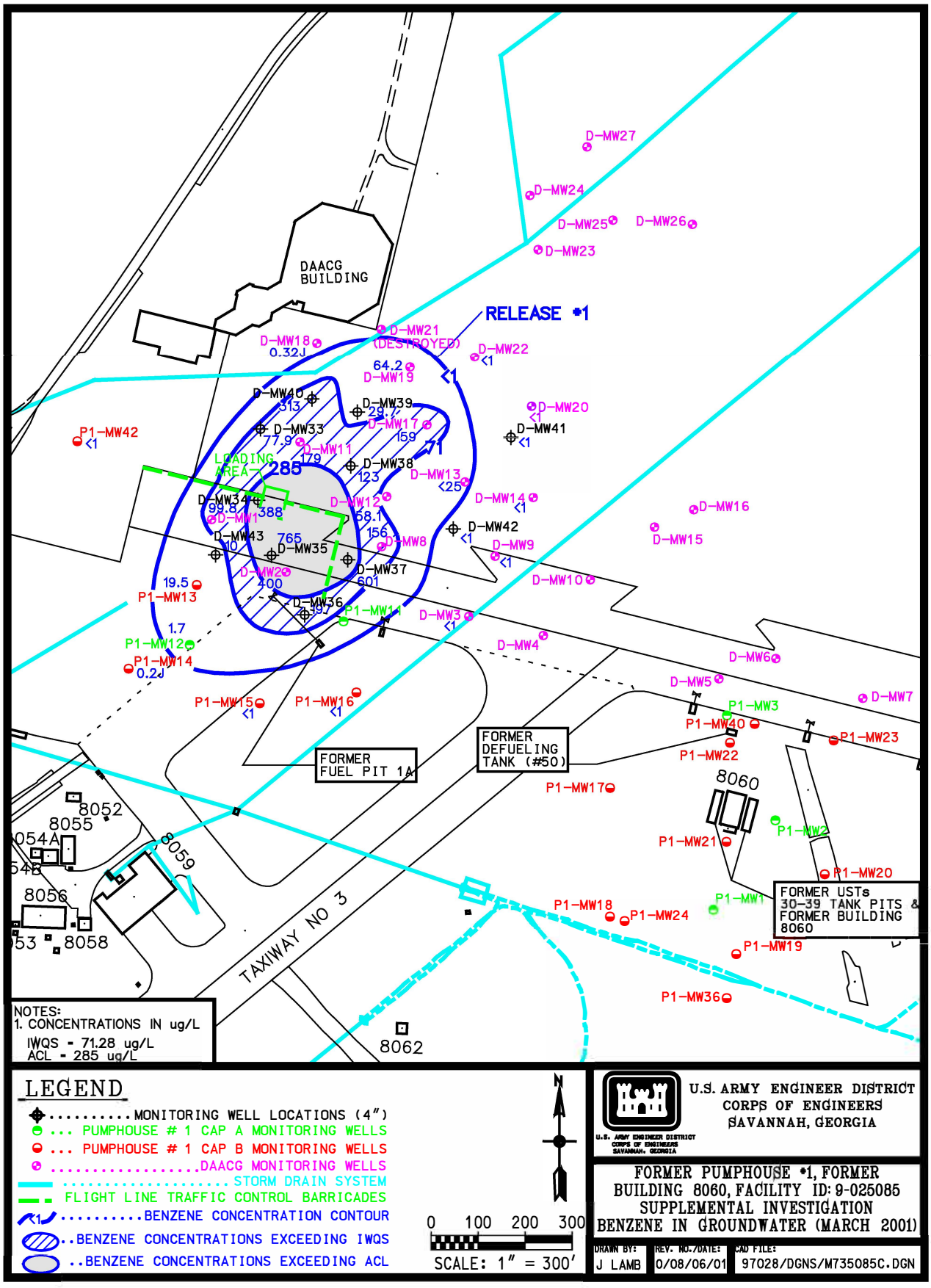

Figure 5. Benzene Groundwater Quality Map (March 2001) at the Former Pumphouse #1 Site, Facility ID #9-025085

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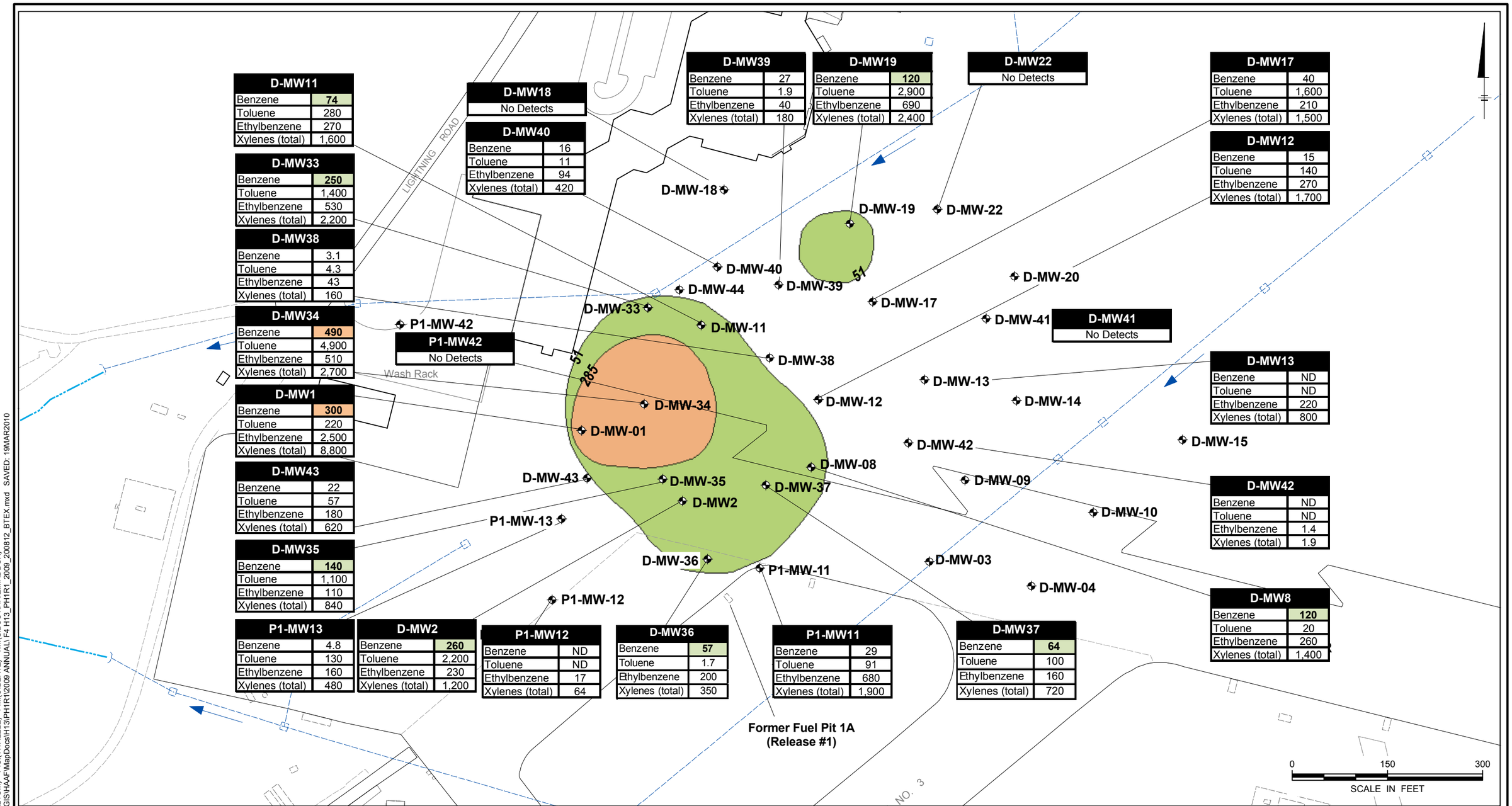

LEGEND

- Surface Water Drainage System
- Surface Water Drainage Canal
- Surface Water Flow Direction
- Monitor Well
- Benzene Concentrations Exceed IWQS (51 µg/L)
- Benzene Concentrations Exceed ACL (285 µg/L)
- ND Not Detected

Constituent	IWQS	ACL
Benzene	51	285
Toluene	5,980	800,000
Ethylbenzene	2,100	114,800
Xylenes (total)	N/A	N/A

NOTES:
1) Samples collected on December 16-18, 2008.
2) All concentrations reported in micrograms per liter (µg/L).
3) BTEX was analyzed by Method 8260B.
4) Shaded values exceed the In-Stream Water Quality Standard (IWQS) or Alternate Concentration Limit (ACL).
5) If duplicate samples were collected, the higher value of the parent of duplicate sample is listed.

REFERENCE: SAGIS (2008).

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #1)
FORMER BUILDING 8060, FACILITY ID #9-025085
2009 ANNUAL MONITORING REPORT

BTEX Concentrations in Groundwater Monitor Wells (December 2008)

ARCADIS

FIGURE 6

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) PIC:(T.TALELE) PM:(C.BERTZ) TM:(S.BOSTIAN/E.MADDOX)
PROJECT: GP08HAFS.H138.NB1R1 PATH: G:\GIS\HAAF\MapDocs\H1SIPH1R1\2009 ANNUAL\F4 H13_PH1R1_2009_200812_BTEX.mxd SAVED: 19MAR2010

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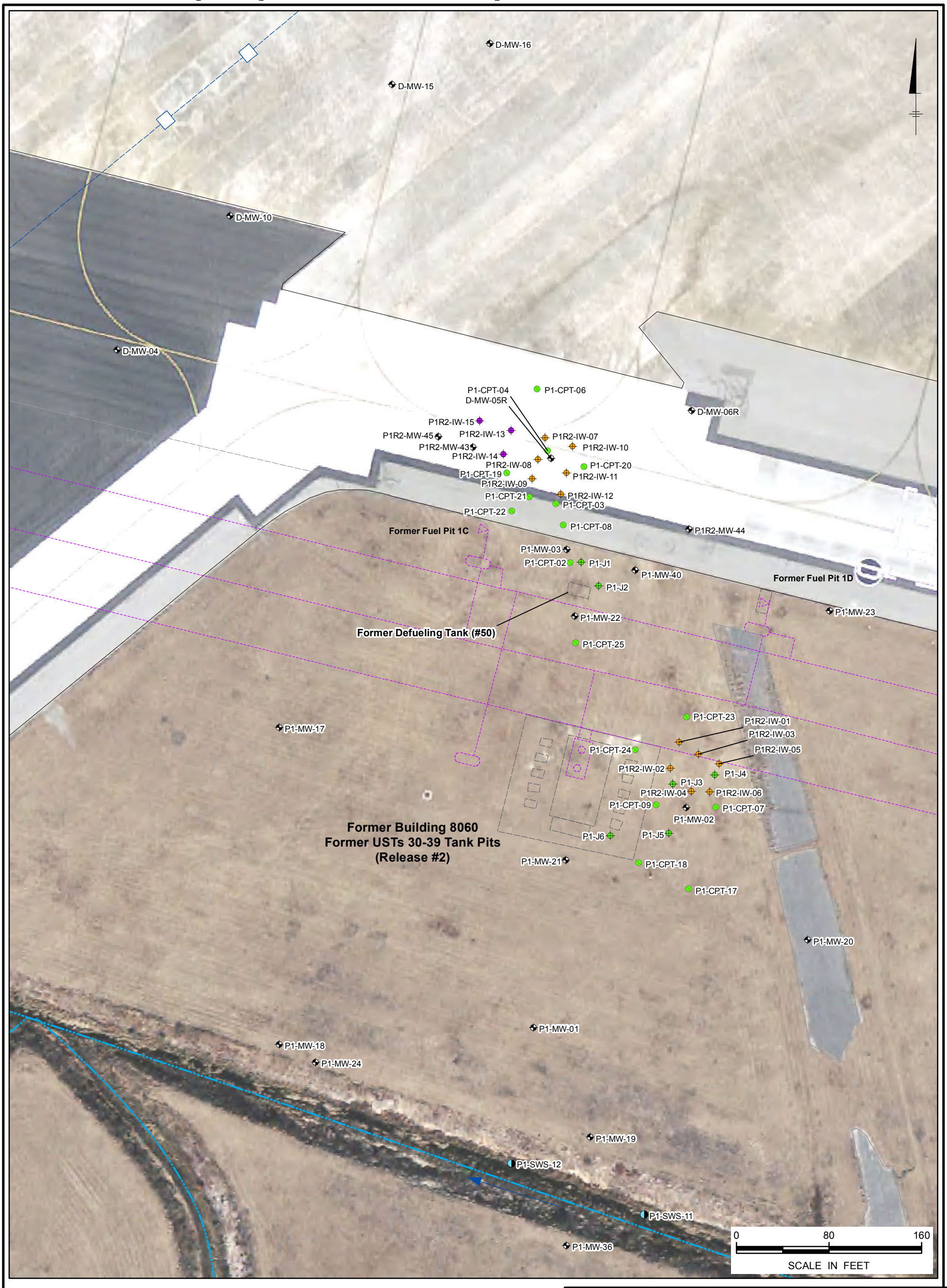
PROJECT: 10153001.0001 PATH: Z:\GISPROJECTS_ENV\PIKA\HAAF_PIKA\MAPDOCS\H13\P1R2\CAP PROGRESS 27 201807\F2 P1R2_N27 SITE.MXD SAVED: 7/24/2018 BY: MGI01044



PROJECTION: NAD83 State Plane Georgia East Feet
AERIAL SOURCE: U.S. ARMY (2011).

LEGEND

- Storm Water Drainage Canal
- Surface Water Flow Direction
- Storm Water Drainage System
- Former Fuel Transfer Line
- Monitor Well (shallow)
- Former ORC (Oxygen Releasing Compound) Injection Well (Installed 2006)
- Injection Well (Installed February 2010)
- Injection Well (Installed January 2011 - Not Surveyed)
- CPT (Cone Penetrometer Technology) Well
- Surface Water Sample

NOTE: Former ORC injection wells were not surveyed. Location is approximate.

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT #27 (OCTOBER 2017 TO JUNE 2018)

Site Map of Former Pumphouse #1 (Release #2)

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FIGURE
7

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CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:(T.TAHALE) PM:(S.GIBBONS) PIKATM:(L.BASILIO)
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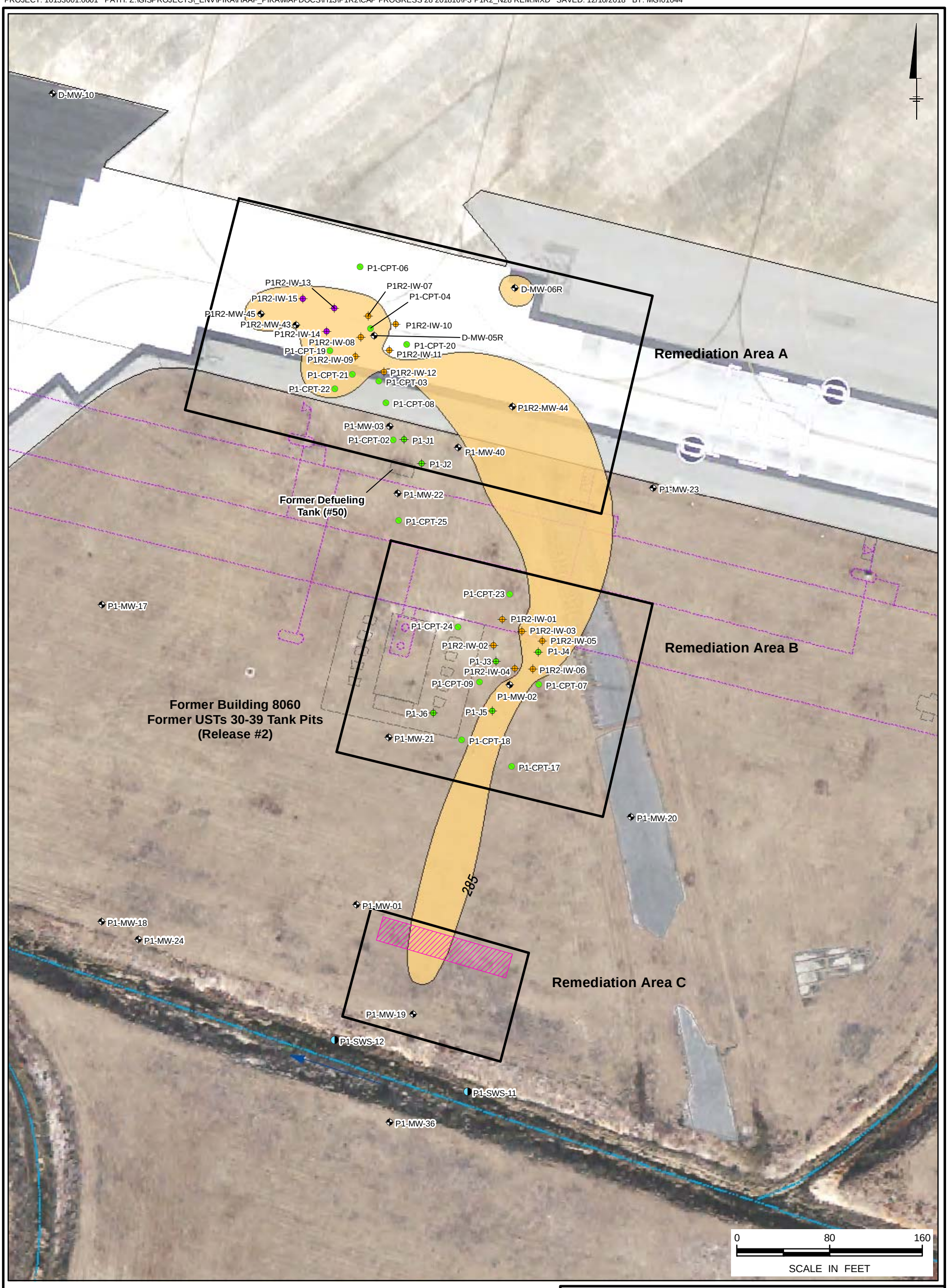

PROJECTION: NAD83 State Plane Georgia East Feet
REFERENCE: SAGIS (2008).

LEGEND

- Storm Water Drainage Canal
- Surface Water Flow Direction
- Former Fuel Transfer Line
- Remedial Target Area
- Benzene Concentration Exceeds ACL (285 µg/L) (contour based on June 2018 data)
- Calcium Peroxide Application Area (March 4, 2010, February 23, 2011, June 4-6, 2014, and December 10-14, 2018)
- Monitoring Well (shallow)
- Former ORC (Oxygen Releasing Compound) Injection Well (Installed 2006)
- Injection Well (Installed February 2010)
- Injection Well (Installed January 2011 - Not Surveyed)
- CPT (Cone Penetrometer Technology) Well
- Surface Water Sample

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT #28 (JUNE 2018 TO DECEMBER 2018)

Remediation Areas with Existing Wells Shown

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FIGURE
8

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P1R2-IW-13		
Date	6/5/18	10/16/18
B	**1,800 J**	**1,800**
T	8,100 J	8,200
E	1,100 J	1,100
X	3,300 J	3,900
S	950	290

P1R2-MW-43		
Date	6/5/18	10/16/18
B	**480 J**	51
T	770 J	63
E	110 J	17
X	630 J	44
S	0.62 J	1.6

P1R2-IW-10		
Date	6/5/18	10/17/18
B	210 J	**490**
T	40 U	52
E	1,000 J	1,100
X	1,800 J	1,400
S	58	NA

P1-CPT-19		
Date	6/5/18	10/16/18
B	**2,300 J**	**1,900**
T	19,000 J	11,000
E	710 J	620 J
X	3,000 J	3,000
S	15 S	0.63 J

D-MW-05R		
Date	6/5/18	10/17/18
B	**350 J**	**750**
T	37 J	110
E	730 J	990
X	910 J	1,500
S	130	200

D-MW-10
D-MW-04
D-MW-06R
P1-CPT-06
P1R2-IW-15
P1R2-IW-13
P1R2-MW-45
P1R2-MW-43
P1R2-IW-07
P1R2-IW-10
P1-CPT-04
P1R2-IW-14
D-MW-05R
P1R2-IW-08
P1-CPT-20
P1-CPT-19
P1R2-IW-09
P1R2-IW-11
P1-CPT-21
P1R2-IW-12
P1-CPT-03
P1-CPT-22
P1-CPT-08
P1R2-MW-44
285
Former Fuel Pit 1C
P1-MW-03
P1-CPT-02
P1-J1
P1-MW-40
P1-J2
Former Defueling Tank (#50)
Former Fuel Pit 1D
P1-MW-22
P1-MW-23
P1-CPT-25
P1-CPT-23
P1R2-IW-01
P1-MW17

Remediation Area A

Former Building 8060
Former USTs 30-39 Tank Pits

PROJECTION: NAD83 State Plane Georgia East Feet
REFERENCE: SAGIS (2008).

0 60 120
SCALE IN FEET

LEGEND

- Storm Water Drainage Canal
- Former Fuel Transfer Line
- Remedial Target Area
- Monitoring Well (shallow)
- Former ORC (Oxygen Releasing Compound) Injection Well (Installed 2006)
- Injection Well (Installed February 2010)
- Injection Well (Installed January 2011 - Not Surveyed)
- CPT (Cone Penetrometer Technology) Well
- Benzene Concentration Exceeds ACL (285 µg/L)

PERSULFATE INJECTION DATES:
-- February 4 through March 14, 2010 (IW-1 through IW-12)
-- December 1 through December 16, 2010 (IW-1 through 12)
-- January 31 through February 4, 2011 (IW-13 through 15)
-- June 5 through June 21, 2012 (IW-5 and IW-7 through IW-15)
-- June 17 through June 28, 2013 (IW-5 and IW-7 through IW-15)
-- May 19 through May 29, 2014 (IW-5 and IW-7 through IW-15)
-- November 29 thru December 1, 2016 (IW-7 through IW-9 and IW-13 through IW-15)

IWQS - In-Stream Water Quality Standard
ACL - Alternate Concentration Limit

B - Benzene
T - Toluene
E - Ethylbenzene
X - Total Xylenes
S - Sulfate

NS - Not Sampled
NA - Not Analyzed

NOTES:
1) All concentrations reported in micrograms per liter (µg/L) except sulfate is reported in milligrams per liter (mg/L).
2) Benzene contours estimated based on June 2018 and historic data.
3) Injection wells P1R2-IW-13, P1R2-IW-14, and P1R2-IW-15 were installed between October 5, 2010 and December 7, 2010 (after first injection).

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT #28 (JUNE 2018 - DECEMBER 2018)

Remediation Area A
Injection Performance Monitoring
(June 2018 - December 2018)

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FIGURE **9**

CITY: Citrix DIV/GROUP: IM/DV LD: K. Sinsabaugh PIC:(T.TAHALE) PM:(S.GIBBONS) PIKATM:(L.BASILIO)
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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CITY: Citrix DIV/GROUP: IM/DV LD: K. Sinsabaugh PIC:(T.TAHALE) PM:(S.GIBBONS) PIKATM:(L.BASILIO)
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Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

P1R2-MW-44
P1-MW-03
P1-CPT-02
P1-J1
P1-MW-40
P1-J2
P1-MW-23
P1-MW-22
P1-CPT-25
P1-MW-17
P1-CPT-23
P1R2-IW-01
P1-CPT-24
P1R2-IW-03
P1R2-IW-02
P1R2-IW-05
P1-J4
P1-J3
P1R2-IW-06
P1R2-IW-04
P1-CPT-09
P1-CPT-07
P1-MW-02
P1-J6
P1-J5
P1-MW-21
P1-CPT-18
285
P1-CPT-17
P1-MW-20
P1-MW-01
P1-MW-18
P1-MW-24
P1-MW-19
P1-SWS-12
P1-SWS-11
P1-MW-36

Former Building 8060
Former USTs 30-39
Tank Pits
(Release #2)

Remediation Area B

Remediation Area C

P1-J4		
Date	6/6/18	10/17/18
B	**630**	**630**
T	240	260
E	730	910
X	1,300	2,900
S	60	44

P1R2-IW-05		
Date	6/6/18	10/17/18
B	**540 Q**	**410**
T	5,400 J	3,400
E	480 J	450
X	2,000 J	1,900
S	12	11

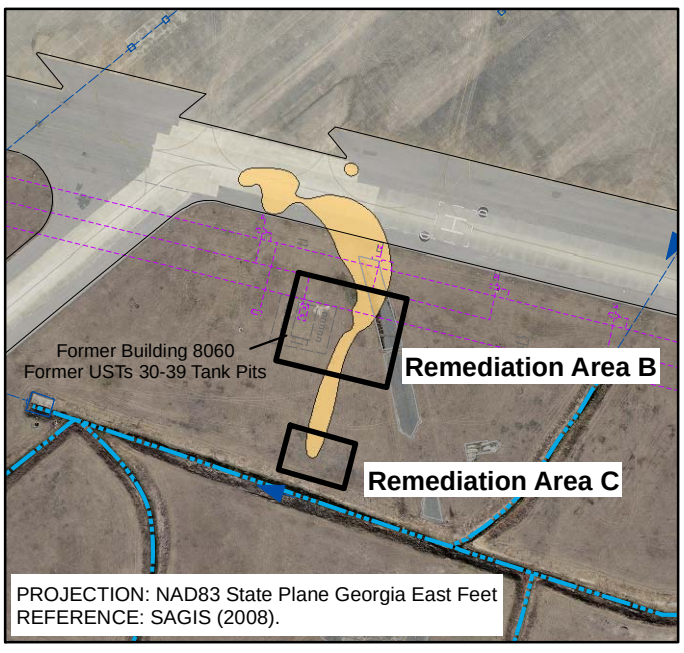
P1-CPT-07		
Date	6/6/18	10/17/18
B	74	16
T	19	31
E	96	28
X	1,000	270
S	1.0	0.82 J

P1-MW-02		
Date	6/6/18	10/16/18
B	**870**	**550**
T	12,000	7,900
E	1,500	1,400
X	5,700	5,500
S	1.6	4.5

P1-SWS-12		
Date	6/6/18	10/17/18
B	0.80 U	0.80 U
T	0.80 U	0.43 J
E	0.80 U	1.7
X	1.4 J	35.0
S	NA	NA

P1-SWS-11		
Date	6/6/18	10/17/18
B	0.80 U	0.80 U
T	0.80 U	0.80 U
E	0.80 U	0.80 U
X	2.8	2.3
S	NA	NA

P1-MW-19		
Date	6/6/18	10/17/18
B	58	26 J
T	11 J	6.7 J
E	71	56 J
X	1,900	1800 J
S	1.1	0.39 J



PROJECTION: NAD83 State Plane Georgia East Feet
REFERENCE: SAGIS (2008).

B - Benzene
T - Toluene
E - Ethylbenzene
X - Total Xylenes
S - Sulfate

NS - Not Sampled
NA - Not Analyzed

J - Estimated Value
U - Value not Detected
B - Detected in the Method Blank
Q - Surrogate Failure

IWQS - In-Stream Water Quality Standard
ACL - Alternate Concentration Limit

NOTES:
1) All concentrations reported in micrograms per liter (µg/L) except sulfate is reported in milligrams per liter (mg/L).
2) Calcium peroxide applications were completed on March 4, 2010, February 23, 2011, June 4-6, 2014, and December 10-14, 2018 in Area C.
3) Benzene contours estimated based on June 2018 and historic data.

0 60 120
SCALE IN FEET

LEGEND

- Storm Water Drainage Canal
- Surface Water Flow Direction
- Former Fuel Transfer Line
- Remedial Target Area
- Calcium Peroxide Application Area
- Monitoring Well (shallow)
- Former ORC (Oxygen Releasing Compound) Injection Well (Installed 2006)
- Injection Well (Installed February 2010)
- CPT (Cone Penetrometer Technology) Well
- Benzene Concentration Exceeds ACL (285 µg/L)

PERSULFATE INJECTION DATES:
-- February 4 through March 14, 2010 (IW-1 through IW-12)
-- December 1 through December 16, 2010 (IW-1 through 12)
-- January 31 through February 4, 2011 (IW-13 through 15)
-- June 5 through June 21, 2012 (IW-5 and IW-7 through IW-15)
-- June 17 through June 28, 2013 (IW-5 and IW-7 through IW-15)
-- May 19 through May 29, 2014 (IW-5 and IW-7 through IW-15)

HUNTER army AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT #28 (JUNE 2018 - DECEMBER 2018)

Remediation Areas B and C
Injection Performance Monitoring
(June 2018 - December 2018)

PIKA
ARCADIS
a joint venture

FIGURE
10

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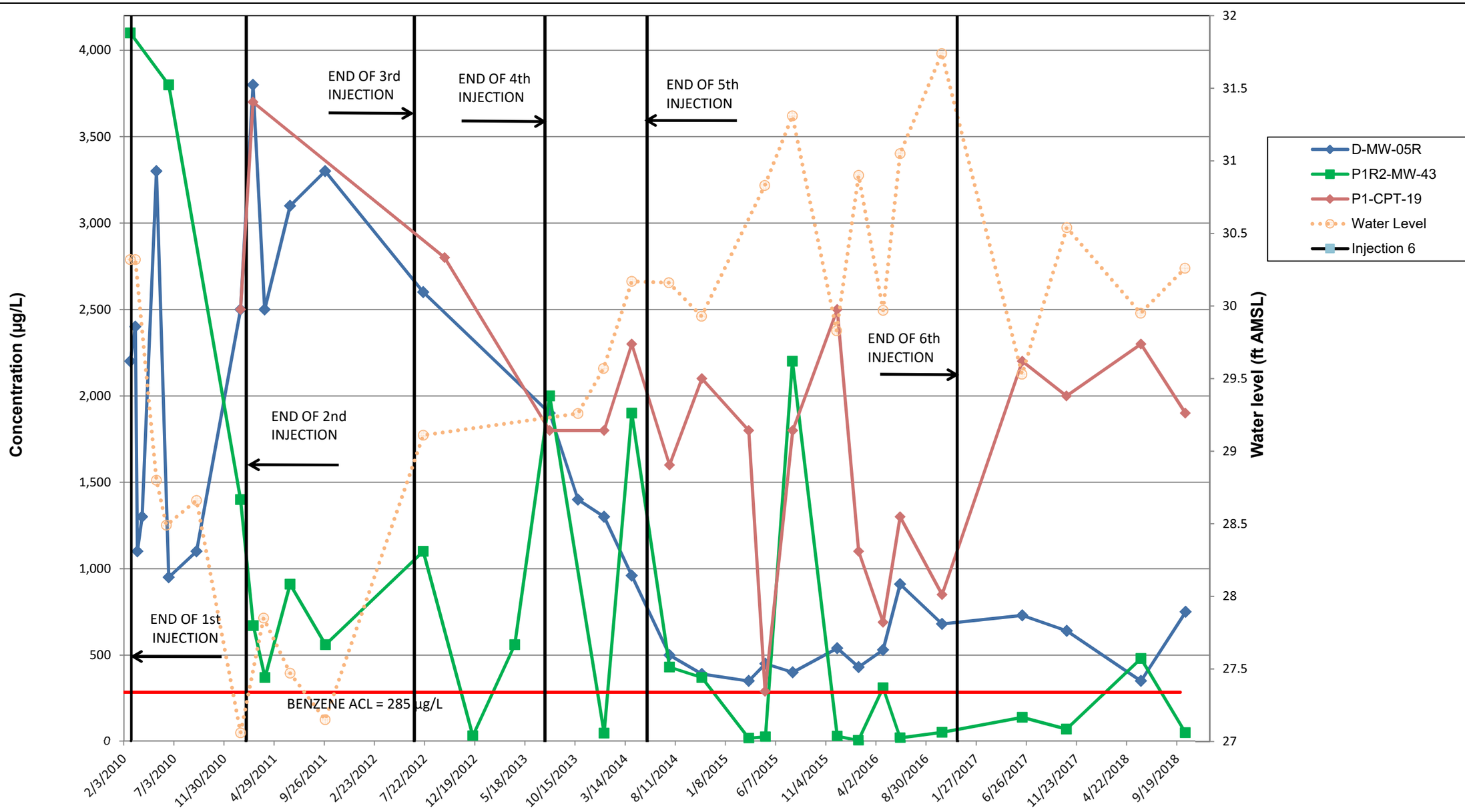

PIKA ARCADIS A JOINT VENTURE

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT NO. 28
(JUNE 2018 - DECEMBER 2018)

BENZENE CONCENTRATIONS VERSUS TIME IN AREA A MONITOR WELLS

FIGURE

11

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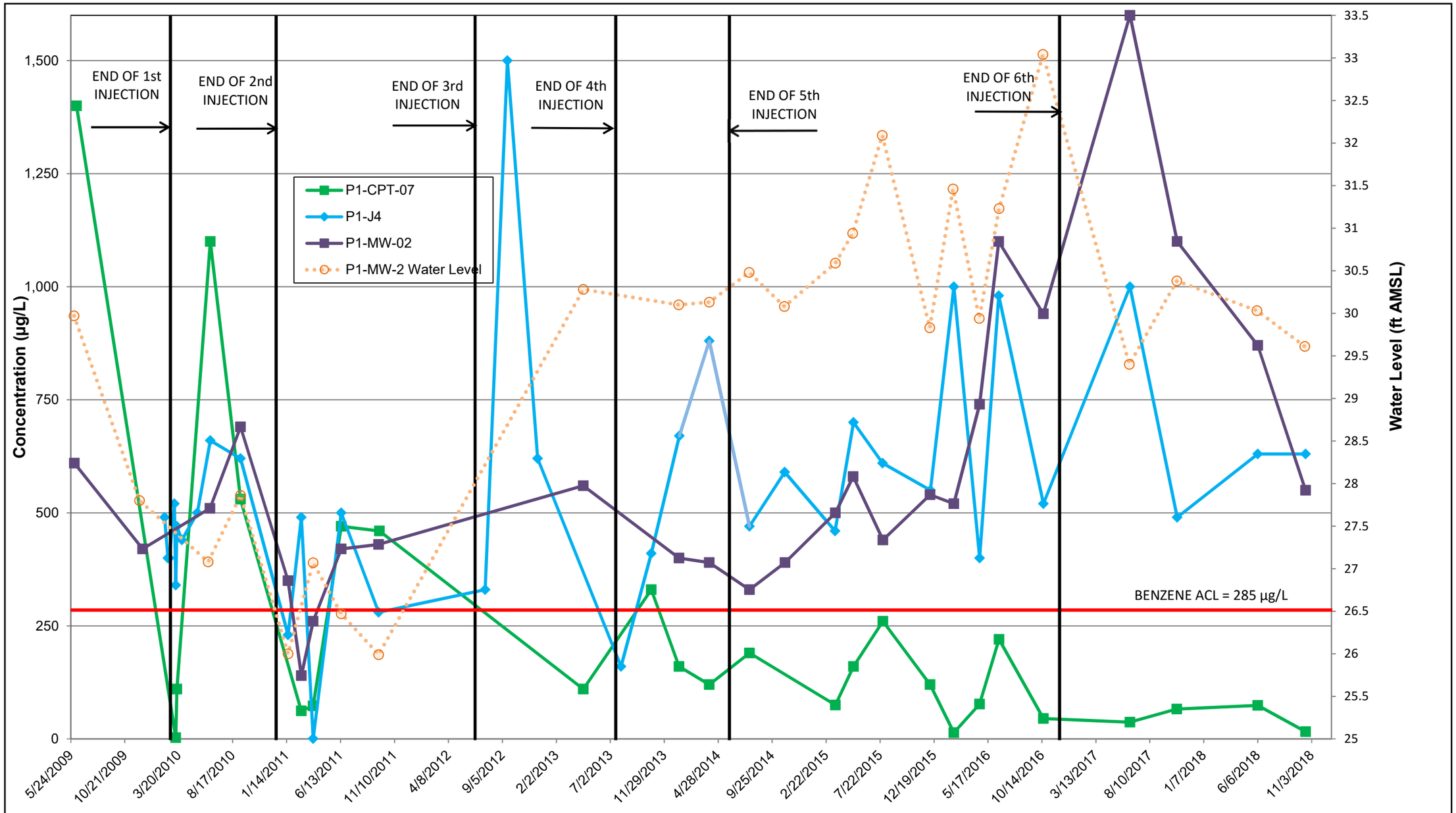

PIKA ARCADIS A JOINT VENTURE	HUNTER ARMY AIRFIELD, GEORGIA **FORMER PUMPHOUSE #1 (RELEASE #2)** **FORMER BUILDING 8060, FACILITY ID #9-025085*2** **CAP PROGRESS REPORT NO. 28** **(JUNE 2018 - DECEMBER 2018)**	**BENZENE CONCENTRATIONS VERSUS TIME IN AREA B MONITOR WELLS**	FIGURE **12**

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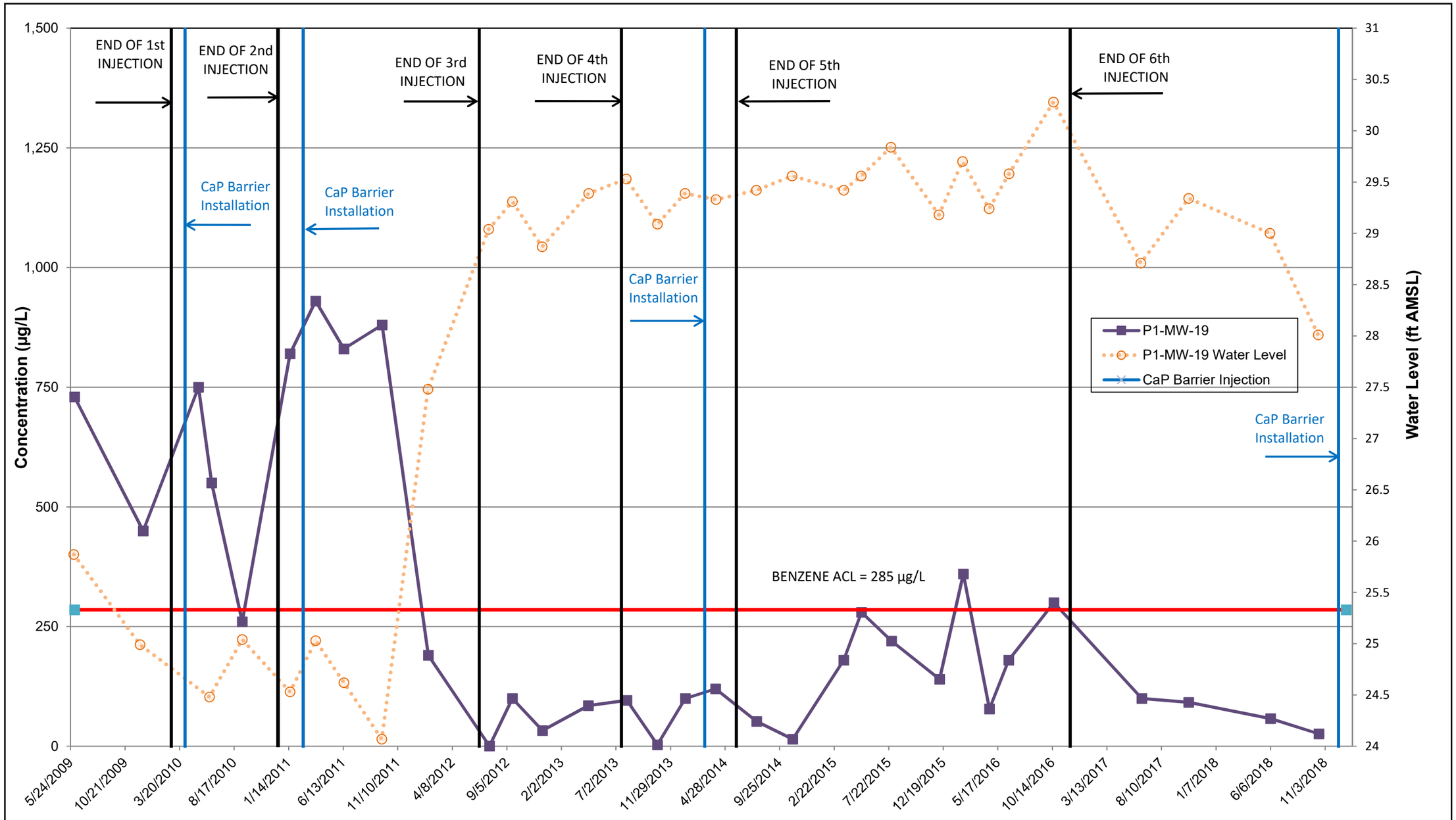

PIKA ARCADIS A JOINT VENTURE

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT NO. 28
(JUNE 2018 - DECEMBER 2018)

BENZENE CONCENTRATIONS VERSUS TIME IN AREA C MONITOR WELLS

FIGURE

13

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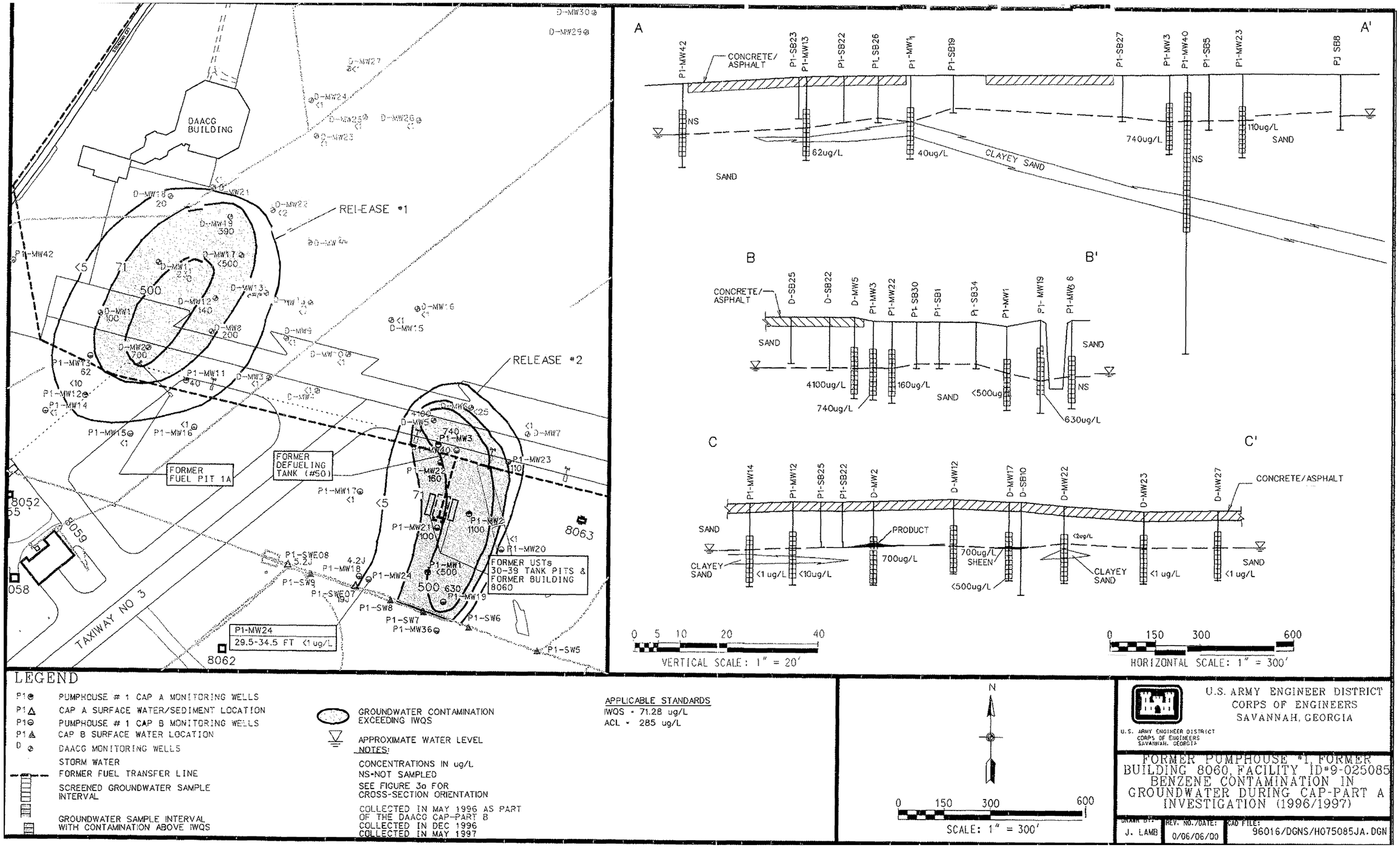

Figure 14. Benzene Contamination in Groundwater Determined During the CAP-Part A Site Investigation at the Former Pumphouse #1 Site, Facility ID #9-025085

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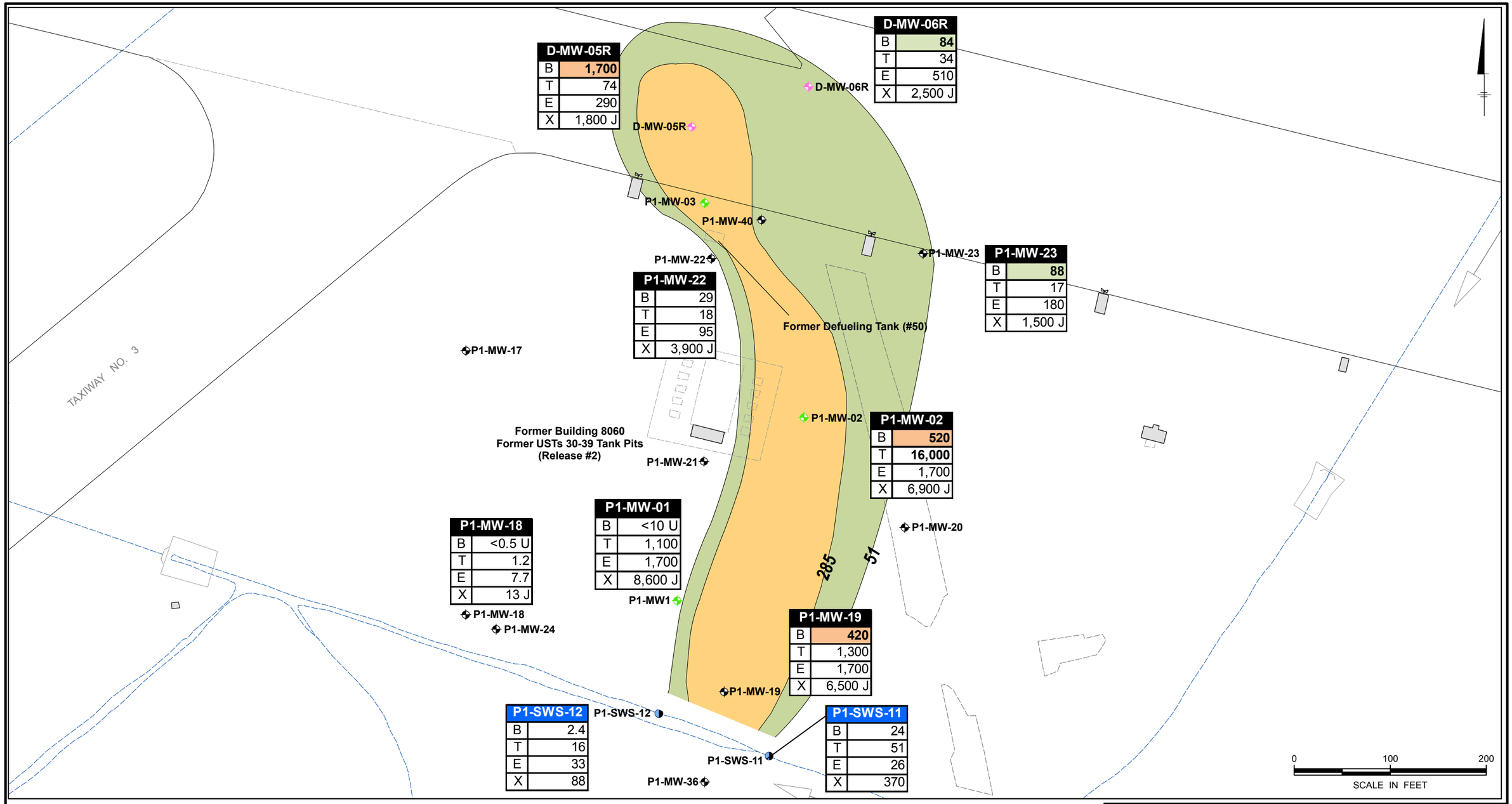

LEGEND

- Monitor Well (Pumphouse #1 CAP-A)
- Monitor Well (Pumphouse #1 CAP-B)
- Monitor Well (DAACG)
- Surface Water Sample
- Benzene Concentration Exceeds IWQS (51 µg/L)
- Benzene Concentration Exceeds ACL (285 µg/L)
- Surface Water Drainage Canal
- Surface Water Flow Direction

REFERENCE: Sixth Annual Monitoring Only Report (SAIC 2008).

ACRONYMS		IWQS	ACL
B	Benzene	51	285
T	Toluene	5,980	800,000
E	Ethylbenzene	2,100	114,800
X	Xylenes (total)	NRC	---

NOTES:
1) All concentrations reported in micrograms per liter (µg/L).
2) **BOLD** - Concentration exceeds the IWQS.

J - Estimated Value
U - Not Detected

IWQS - In-Stream Water Quality Standard
ACL - Alternate Concentration Limit
NRC - No Regulatory Criteria

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
FIFTEENTH SEMI-ANNUAL MONITORING REPORT WITH
ADDENDUM TO REVISED CORRECTIVE ACTION PLAN – PART B

BTEX Concentrations in Groundwater Monitor Wells and Surface Water Samples (December 2008)

ARCADIS

FIGURE
15

CITY:(KNOXVILLE) DIV/GROUP:(ENV) DB:(B.ALTOM) LD:(B.ALTOM) PIC:(E.WERTH) PM:(C.BERTZ) TM:(S.BOSTIAN/E.MADDOX)
PROJECT: GP08HAFS.F13B.EH1R2 PATH: G:\GIS\GP08HAFS\H13\2009 P1H1R2 15TH SEMIANNUAL\ F3-3 H13_PH1R2_15TH_BTEX_GW200812.mxd SAVED: 21AUG2009

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APPENDIX A

HUNTER ARMY AIRFIELD UST SITES

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Chronology of Events for HAAF Non-UU/UE UST Sites

USTs		Identity	Status	CAP A/B	UST Status; Piping Status	No Further Action (NFA) Date	Last Sampling Date	Groundwater Remaining Concentration (ug/L)				Soil Remaining Concentra-tion (mg/Kg)	Comments
Line #	UST #/ Bldg #							Benzene	Toluene	Ethyl-benzene	Xylene	Benzene	
1	17-20/ Bldg 710 (HAA-03)	9-025029	NFA 2- 10,000 gal (gas); 2- 12,000 gal (diesel)	CAP B	Removed/Removed	9/15/2000	Groundwater 1/30/2000; Soil 2/17/2000	ACL 59,300	N/A	N/A	N/A	STL 0.017	
								268	18.8J	348	540	0.0016U	
2	23,24 / Bldg 1310	9-025073	NFA 1-5,000 gal (gas); 1- 5,000 gal (diesel)	CAP B	Removed/ Removed	2/26/2004	Groundwater 6/8/2001; Soil 4/07/2001	ACL 15,100	N/A	N/A	N/A	ATL 3.67	
								393	N/A	N/A	N/A	0.365	
3	25, 26 / Bldg 1343	9-025008	NFA (BTEX) 1-6,000 gal (gas); 1-15,000 gal (diesel)	CAP B TCE remains (HAA-17)	Removed/ Removed	8/19/2008 (NFA for BTEX only)	Groundwater 4/15/2008	ACL 340 IWQS 71.28	IWQS 200,000	IWQS 29,000	N/A	N/A	TCE remains at site (renamed as HAA-17)
								140	4.3	84	28	N/A	
4	30-39; 50 Bldg 8060 (HAA-13 PH1R1;R2)	9-025085 (R1,R2)	Active Remediation 10-25K gal (gas); 1-50K gal (gas - defueling)	CAP B	Removed/ Removed; Closed-in-Place / Removed	Active Remediation	5/9/2019 ; 5/7/ 2019	ACL 285/" "	ACL 800,000/ " "	ACL 114,800/ " "	None/ " "	N/A / " "	
								510; 1,800	5200; 7,100	1100; 1,500	5200; 6,000	N/A; N/A	
5	40-49 / Bldg 8065 (Old PH2)	9-025086	NFA 10-256K gal (gas)	CAP B	Removed/ Closed -In -Place	8/3/2010	12/15/2009	ACL 469	ACL 1,316,000	N/A	N/A	N/A	
								69	6.6	390	96	N/A	
6	51-61/ Bldg 8084 Old PH6; new PH3)	9-025087	Active Remediation 10-50K gal (gas) DLA	CAP B (Amended GUST)	Removed/ Removed	Active Remediation	2019						Active site HAA-13
7	82-92 / Bldg 5059 (Old PH 6)	9-025090	NFA 10-50K gal (gas); 1-50K gal (gas - defueling)	CAP B	Removed/ Removed; Closed-in-Place / Removed	11/20/1998	Groundwater 5/6/1997; Soil 5/7/1997	IWQS 71.28	IWQS 28,718	N/A	N/A	STL 0.120	
								11	110	N/A	N/A	0.32	
8	118X-123X/ Bldg 133	9-025653	NFA (6) 4-6k gal (Gas); 1-4k gal (gas); 1-1k gal (used POL)	CAP Part B	All Removed/ Removed	12/19/2005	Groundwater 4/2005	ACL-255	MCL-200000	MCL - 28,718	Not known	Not known	
								30.8	1.0 U	25.6	3.9	N/A	

a. Corrective Action Plan (CAP); Part-A or Part-B

b. The regulatory action level is the concentration required to meet requirements for unlimited use and unrestricted exposure (UU/UE). The concentration required to request NFA is often higher. For reference the regulatory action levels for benzene in groundwater is 5.0 µg/L; for toluene in groundwater, 700 µg/L, for ethylbenzene in groundwater, 1,000 µg/L, and for xylene in groundwater, 10,000 µg/L. The regulatory action level for benzene in soil is 0.008 mg/kg (Unless noted otherwise).

J - value is estimated

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APPENDIX B

SITE INSPECTION FORMS

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PERIODIC REVIEW SITE INSPECTION REPORT

Site Name:	US Army Installation Hunter Army Airfield
Contract #:	W912HN18D1007
Location:	Savannah, Georgia
Dates(s) of Inspection:	February 4, 2020
In Attendance:	Charlene Torres (DAWSON) Breanna Stout (DAWSON) Algeana Stevenson (Hunter Army Airfield)
Prepared by:	Breanna Stout (DAWSON)

SITE VISIT ACTIVITY SUMMARY

The inspection team met at approximately 8:30AM at Building 615 to begin the Site Inspection. The team started by collecting requested documents from the Administrative Record, provided by Ms. Stevenson. Prior to traveling to the site, itinerary and the need for personal protective equipment was discussed. The site fencing, special access restrictions, and active airfield status did not allow for the site inspection team to walk on site. Observations were made from the exterior of the fence. Ms. Stevenson provided the inspection team with project background and current status.

1154A.1015 - (HAA-13/Pump Houses #1 #2 and #6)

- The inspection team observed and photographed Hunter Army Airfield.
    - The team confirmed the implementation of monitored natural attenuation (MNA).
        - Monitoring wells were adequately labeled and well maintained.
    - The area within Hunter Army Airfield was observed to be restricted by fencing.
        - The fencing was adequately locked and well maintained.
    - The team was informed that no vandalism or trespassing has occurred on site.
    - The team was informed that no changes in land use have occurred on or off site.
    - The roads were observed to be in good condition with no damage.
    - The overall site conditions were well maintained.

DOCUMENT REQUISITION / ADMINISTRATIVE RECORD

Prior to the site inspection, DAWSON requested files from Ms. Stevenson. She provided DAWSON with the requested files on DVD. Ms. Stevenson informed the team that any construction on base goes through the Environmental Prevention and Compliance Branch to ensure LUCs are followed properly and in accordance with the selected remedy.

INTERVIEWS

The inspection team confirmed that Ms. Stevenson and Mr. Scott Bostian (O&M Contractor) will provide interview answers via electronic correspondence to DAWSON at their earliest convenience.

RECOMMENDATIONS

DAWSON has no recommendations for Hunter Army Airfield.

I. SITE INFORMATION

Site name: Hunter Army Airfield	**Date of inspection:** February 4, 2020
Location and Region: Savannah, Georgia	**EPA ID:** GA4210022733
Agency, office, or company leading the periodic review: Dawson Solutions, LLC	**Weather/temperature:** Clear, 70°F

Remedy Includes: (Check all that apply)

- ☐ Landfill cover/containment
- ☒ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☒ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls
- ☒ Other In-situ chemical oxidation (ISCO) and calcium peroxide (CaP) barrier

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M site manager** Scott Bostian, PE Senior Engineer
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____
   Problems, suggestions; ☒ Report attached Interview questions were requested to be answered via email.

2. **O&M staff** _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____
   Problems, suggestions; ☐ Report attached _____
   _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency Hunter Army Airfield
Contact Algeana Stevenson RCRA Section Supervisor February 3, 2020 912-767-7922
Name Title Date Phone no.
Problems; suggestions; ☒ Report attached Interview questions were requested to be answered via email.

Agency _____
Contact _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

4. **Other interviews** (optional) ☐ Report attached.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**

☒ O&M manual	☒ Readily available	☐ Up to date	☐ N/A
☒ As-built drawings	☒ Readily available	☐ Up to date	☐ N/A
☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A

Remarks O&M manual found on the installation website.

2. **Site-Specific Health and Safety Plan** ☐ Readily available ☐ Up to date ☒ N/A
☐ Contingency/Emergency Response Plan ☐ Readily available ☐ Up to date ☒ N/A
Remarks _____

3. **O&M and OSHA Training Records** ☐ Readily available ☐ Up to date ☒ N/A
Remarks _____

4. **Permits and Service Agreements**

☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A
☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A
☐ Other permits _____	☐ Readily available	☐ Up to date	☒ N/A

Remarks _____

5. **Gas Generation Records** ☐ Readily available ☐ Up to date ☒ N/A
Remarks _____

6. **Settlement Monument Records** ☐ Readily available ☐ Up to date ☒ N/A
Remarks _____

7. **Groundwater Monitoring Records** ☒ Readily available ☒ Up to date ☐ N/A
Remarks _____

8. **Leachate Extraction Records** ☐ Readily available ☐ Up to date ☒ N/A
Remarks _____

9. **Discharge Compliance Records**

☐ Air	☐ Readily available	☐ Up to date	☒ N/A
☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A

Remarks _____

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A
Remarks _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for State
☐ PRP in-house ☐ Contractor for PRP
☐ Federal Facility in-house ☒ Contractor for Federal Facility
☐ Other _____
_____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date
☐ Funding mechanism/agreement in place
Original O&M cost estimate _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From _____ To _____ _____ ☐ Breakdown attached
Date Date Total cost
From _____ To _____ _____ ☐ Breakdown attached
Date Date Total cost
From _____ To _____ _____ ☐ Breakdown attached
Date Date Total cost
From _____ To _____ _____ ☐ Breakdown attached
Date Date Total cost
From _____ To _____ _____ ☐ Breakdown attached
Date Date Total cost

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons:

The inspection team did not identify any unanticipated or unusually high O&M costs during this review period.

V. ACCESS AND INSTITUTIONAL CONTROLS ☐ Applicable ☒ N/A

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads damaged** ☐ Location shown on site map ☒ Roads adequate ☐ N/A

Remarks _____
_____

B. Other Site Conditions

Remarks _____
_____
_____

VII. LANDFILL COVERS ☐ Applicable ☒ N/A

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

IX. GROUNDWATER/SURFACE WATER REMEDIES ☒ Applicable ☐ N/A

A. Groundwater Extraction Wells, Pumps, and Pipelines ☐ Applicable ☒ N/A

B. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable ☒ N/A

C. Treatment System ☒ Applicable ☐ N/A

1. **Treatment Train** (Check components that apply)
   - ☐ Metals removal ☐ Oil/water separation ☒ Bioremediation
   - ☐ Air stripping ☐ Carbon adsorbers
   - ☐ Filters _____
   - ☐ Additive (*e.g.*, chelation agent, flocculent) _____
   - ☐ Others _____
   - ☐ Good condition ☐ Needs Maintenance
   - ☐ Sampling ports properly marked and functional
   - ☐ Sampling/maintenance log displayed and up to date
   - ☐ Equipment properly identified
   - ☐ Quantity of groundwater treated annually _____
   - ☐ Quantity of surface water treated annually _____

   Remarks _____

2. **Electrical Enclosures and Panels** (properly rated and functional)
   ☒ N/A ☐ Good condition ☐ Needs Maintenance

   Remarks _____

3. **Tanks, Vaults, Storage Vessels**
   ☒ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs Maintenance

   Remarks _____

4. **Discharge Structure and Appurtenances**
   ☒ N/A ☐ Good condition ☐ Needs Maintenance

   Remarks _____

5. **Treatment Building(s)**
   ☒ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair
   ☐ Chemicals and equipment properly stored

   Remarks _____

6. **Monitoring Wells** (pump and treatment remedy)

☒ Properly secured/locked ☒ Functioning ☒ Routinely sampled ☒ Good condition

☐ All required wells located ☐ Needs Maintenance ☐ N/A

Remarks _____

_____

D. Monitoring Data

1. Monitoring Data

☒ Is routinely submitted on time ☒ Is of acceptable quality

2. Monitoring data suggests:

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☒ Properly secured/locked ☒ Functioning ☒ Routinely sampled ☒ Good condition

☐ All required wells located ☐ Needs Maintenance ☐ N/A

Remarks _____

_____

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

Remarks: The selected remedy at Hunter Army Airfield includes MNA, in-situ chemical oxidation, and installation of a calcium peroxide barrier. Groundwater monitoring data suggests further monitoring and installation of additional monitoring wells is required to evaluate the effectiveness of the remedies.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Remarks: The site inspection team did not identify any issues or observations related to the implementation and scope of O&M procedures.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

Remarks: There were no issues or observations to suggest that the protectiveness of the remedy may be compromised in the future.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

Remarks: The site inspection team did not identify any opportunities for optimization of the remedy.

Site Inspection Team Roster	
Algeana Stevenson	Fort Stewart
Breanna Stout	DAWSON
Charlene Torres	DAWSON

APPENDIX C

SITE INSPECTION PHOTOGRAPH LOG

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Photograph 1 **Location:** Hunter Army Airfield **Date:** February 4, 2020 **Description:** View toward Release Area No. 1 from the N. Lightning Road fence line looking southeast. Due to access restrictions and active flight line operations, Release Area No. 1 and Release No. 2 could not be accessed by site inspection personnel. Well in foreground is a representative well at HAAF located southwest of the wash rack, but is not associated with the monitoring programs of either Release Area No. 1 or Release Area No. 2	
Photograph 2 **Location:** Hunter Army Airfield **Date:** February 4, 2020 **Description** View toward Release Area No. 1 from the N. Lightning Road fence line looking southeast. Due to access restrictions and active flight line operations, Release Area No. 1 and Release No. 2 could not be accessed by site inspection personnel. Well in foreground is a representative well at HAAF located southwest of the wash rack, but is not associated with the monitoring programs of either Release Area No. 1 or Release Area No. 2	

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APPENDIX D

INTERVIEWS

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INTERVIEW RECORD

Site Name:
Subject: Five-Year Review **Date:**
Type: ☐ Telephone ☑ Visit ☐ Other ☐ Incoming ☐ Outgoing
Location of Visit:

Contact Made By:

Name:
Title:
Organization: Dawson Solutions, LLC

Individual Contacted:

Name: Algeana Stevenson
Title: Supervisor, Chemical Eng.
Organization: Fort Stewart DPW Prevention & Compliance Branch
Telephone No: (912)767-7922 or (912)210-2950
Fax No:
E-Mail Address: algeana.l.stevenson.civ@mail.mil
Street Address: 1550 Veterans Parkway
City: Fort Stewart **State:** GA **Zip:**

Summary of Conversation:
O&M Staff Questions

1. What is your overall impression of the project? (general sentiment)

Overall projects are progressing as anticipated.

2. Is the remedy functioning as expected? How well is the remedy performing?

Yes

3. What does the monitoring data show? Are there any trends that show contaminant levels are decreasing?

Groundwater monitoring is generally showing a trend of decrease for contaminant levels.

4. Is there a continuous on-site O&M presence? If so, please describe staff and activities. If there is not a continuous on-site presence, describe staff and frequency of site inspections and activities.

Currently all O&M projects are under remediation contracts that perform all regulatory approved O&M activities.

5. Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.

No

6. Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.

No

7. Have there been opportunities to optimize O&M, or sampling efforts? Please describe changes and resultant or desired cost savings or improved efficiency.

No

8. Do you have any comments, suggestions, or recommendations regarding the project?

Not at this time.

INTERVIEW RECORD

Site Name: Fort Stewart and Hunter Army Airfield **Date:** March 9, 2020
Subject: Periodic Review
Type: ☒ Telephone ☐ Visit ☐ Other ☐ Incoming ☐ Outgoing
Location of Visit: N/A

Contact Made By:

Name: Breanna Stout
Title: Project Specialist
Organization: Dawson Solutions, LLC

Individual Contacted:

Name: Curtis Scott Bostian
Title: Senior Engineer
Organization: Arcadis
Telephone No: 919-415-2291
E-Mail Address: curtis.bostian@arcadis.com
Street Address: 5420 Wade Park Boulevard, Suite 350
City: Raleigh **State:** North Carolina **Zip:** 27607

Summary of Conversation:
O&M Staff Questions

1. What is your overall impression of the project? (general sentiment)

Mr. Bostian stated the sites at both Fort Stewart (FST) and Hunter Army Airfield (HAA) are making progress. He noted the Arcadis contract with HAA ended before the implementation of remedies at the larger sites; however, Arcadis managed HAA-013 during the application of the injection remedy. Arcadis completed investigative documents for HAA-001, HAA-015, and HAA-017, Mr. Bostian relayed the next contractor is responsible for implementation.

2. Is the remedy functioning as expected? How well is the remedy performing?

Mr. Bostian informed DAWSON that HAA-013, which has two sites, Release One and Release Two, is making progress. He stated Release One received calcium peroxide injections and monitored natural attenuation (MNA) parameters show decreasing contaminants. Mr. Bostian reported only one or two wells are keeping the site open. Release Two, receiving sodium persulfate injections, is not progressing as quickly as Release One according to Mr. Bostian. He believes reduction occurs more slowly at Release Two because the contaminant mass is more significant than initially anticipated. He specified the injections are taking place as scheduled, and there have been no issues at either site.

3. What does the monitoring data show? Are there any trends that show contaminant levels are decreasing?

Mr. Bostian replied HAA-013 shows decreasing contaminant concentrations across most of the Release One site. He noted at the Release Two site, monitoring data in one injection area suggests COCs are falling, but the majority of the data shows the contaminant plume is stable. He stated monitoring data at other FST sites suggest contaminant levels are decreasing.

4. Is there a continuous on-site O&M presence? If so, please describe the staff and activities. If there is not continuous on-site presence, describe staff and frequency of site inspections and activities.

Mr. Bostian reported there is not a continuous O&M presence at any HAA site, as the three largest remedies are not yet in the implementation phase. For FST, Mr. Bostian stated FST-013 was excavated, followed by MNA, and does not require continuous O&M presence. Mr. Bostian noted the Biosparge system in place at FST-026 required constant O&M presence until three years ago when it was taken off-line. FST-039 received an injection in early 2019; there have not been any other injections at the site since. Mr. Bostian stated quarterly sampling would take place at HAA-001, HAA-015, and HAA-017 after remedy implementation. He detailed HAA-013, and FST-026 receive semi-annual sampling, FST-013 annual sampling, and FST-039 will switch from more frequent post-injection monitoring to semi-annual monitoring.

5. Have there been any significant changes in the O&M requirements, maintenance schedules, or sampling routines since start-up or the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.

Mr. Bostian responded that O&M requirements were reduced significantly at FST-026 after monitoring data reported the contaminant plume as stable and decreasing. This led to a shutdown of the Biosparge system to study rebounding effects. Mr. Bostian noted levels are stable in surface water at HAA-013.

6. Have there been unexpected O&M difficulties or costs at the site since start-up or in the last five years? If so, please give details.

Mr. Bostian stated there had not been unexpected O&M difficulties or costs at HAA or FST within the last five years.

7. Have there been opportunities to optimize O&M or sampling efforts? Please describe changes and resultant/desired cost savings or improved efficiency.

Mr. Bostian noted shutting down the FST-026 Biosparge System facilitated site optimization from a cost standpoint. He also mentioned efforts to reduce sampling frequency at FST-013 and FST-026 optimized O&M. Mr. Bostian noted reduced sampling frequency at FST-039 after the first year of post-injection monitoring. He also noted sampling frequency was reduced HAA-013 at the Release One site.

8. Do you have any comments, suggestions, or recommendations regarding the project?

Mr. Bostian reiterated HAA is changing O&M contractors. He noted MNA at Release One is advancing but Release Two could benefit from optimization and evaluation of additional source mass. He thinks the injection remedy works fine, as Arcadis was able to reach the target volumes and field of influence required, but he noted rebounding occurs quickly. Mr. Bostian stated the contaminant mass might be more significant than projected. According to monitoring data, FST-013 is progressing to acceptable levels. Mr. Bostian noted decreasing contaminant concentrations demonstrate conditions are favorable for MNA at FST-026. He stated FST-039 would require an evaluation after data is published to assess the injection strategy in anticipation of the next injection. Mr. Bostian's only recommendation was to continue groundwater optimization and monitoring.

APPENDIX E

DATA TABLES AND TREND GRAPHS

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FORMER PUMP HOUSE #1, RELEASE #1

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Table 2b
Historical BTEX Concentrations in Groundwater
CAP Progress Report No. 21 (June 2018 to October 2018)
Former Pumphouse #1 (Release #1) Former Building 8060 - Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-CPT-43	D-CPT-43 (092011)	9/20/2011	6.1	0.30 J	6.5	44	56.6
D-CPT-43	D-CPT-43-8-16	8/29/2016	12	240	350	1300	1902
D-MW-01	AK0122	3/10/2001	99.8	17.3	119	776	1012.1
D-MW-01	AK0132	12/14/2006	95.9	43.9	605	1930	2674.8
D-MW-01	AK0152	12/6/2007	17.9	5.1	228	512	763
D-MW-01	D-MW1 (121608)	12/16/2008	300	220	2500	8800	11820
D-MW-01	D-MW1 (060509)	6/5/2009	120	120	780	3700	4720
D-MW-01	D-MW1 (120909)	12/9/2009	25	90	280	1000	1395
D-MW-01	D-MW-01 (062910)	6/29/2010	55	150	800	2700	3705
D-MW-01	D-MW-01 (090710)	9/7/2010	90	330	1100	4000	5520
D-MW-01	D-MW-01 (121610)	12/16/2010	71	270	890	3300	4531
D-MW-01	D-MW-01 (033111)	3/31/2011	130	1800	1100	4600	7630
D-MW-01	D-MW-01	4/24/2012	2.1	0.76	0.79	5.7	9.35
D-MW-01	D-MW-01_20121016	10/16/2012	74 J	60 J	810 J	2700 J	3644
D-MW-01	H13-D-MW-01(041613)	4/16/2013	41	36	480	1900	2457
D-MW-01	D-MW-01(102313)	10/23/2013	2.2	1.0 U	0.77 J	4.3	6.5
D-MW-01	D-MW-01(040114)	4/1/2014	49	80	830	3100	4059
D-MW-01	D-MW-01(102914)	10/29/2014	55	650	830	3100	4635
D-MW-01	D-MW-01(050515)	5/5/2015	96	16	49	970	1131
D-MW-01	D-MW-01(121015)	12/10/2015	7.2 J	71	520	1800	2398.2
D-MW-01	D-MW-01(041316)	4/13/2016	22	170	670	2000	2862
D-MW-01	D-MW-01-8-16	8/26/2016	11 U	160 J	460 J	1500 J	2131
D-MW-01	DUP-03-8-16	8/26/2016	11 U	150	380	1200	1741
D-MW-01	D-MW-01(102016)	10/20/2016	16 U	120	460	1700	2280
D-MW-01	D-MW-01(061317)	6/13/2017	16	60	860	3000	3936
D-MW-01	D-MW-01(102717)	10/27/2017	9.1 J	11	270	970	1260.1
D-MW-01	D-MW-01(060718)	6/7/2018	41	1700	970	3,600	6311
D-MW-02	AK0222	3/11/2001	400	11200	1050	4940	17590
D-MW-02	AK0232	12/14/2006	399	2430	659	1940	5428
D-MW-02	AK0252	12/6/2007	204	2550	324	1650	4728
D-MW-02	D-MW2 (121708)	12/17/2008	260	2200	230	1200	3890
D-MW-02	D-MW2 (060509)	6/5/2009	440	3700	260	2000	6400
D-MW-02	D-MW2 (120909)	12/9/2009	150	1400	160	840	2550
D-MW-02	D-MW-02 (062910)	6/29/2010	170	1500	350	1600	3620
D-MW-02	D-MW-02 (090710)	9/7/2010	280	2600	330	1500	4710
D-MW-02	D-MW-02 (121610)	12/16/2010	200	1400	360	1200	3160
D-MW-02	D-MW-02 (033111)	3/31/2011	310	2700	690	1,900 J	5600
D-MW-02	D-MW-02 (092011)	9/20/2011	130	1000	400	1100	2630
D-MW-02	DUP-D-MW-02 (092011)	9/20/2011	130	1000	390	1100	2620
D-MW-02	D-MW-02	4/25/2012	210	2500	410	1600	4720
D-MW-02	D-MW-02_20121016	10/16/2012	99	1300	190	780	2369
D-MW-02	H13-D-MW-02(041613)	4/16/2013	230	2700	500	2200	5630
D-MW-02	D-MW-02(102313)	10/23/2013	120	1900	290	1000	3310
D-MW-02	D-MW-02(033114)	3/31/2014	200	2400	380	1200	4180
D-MW-02	D-MW-02(102914)	10/29/2014	110	1400	330	830	2670
D-MW-02	D-MW-02(050515)	5/5/2015	160	2100	470	1100	3830
D-MW-02	D-MW-02(121015)	12/10/2015	56	970	240	810	2076
D-MW-02-8-16	D-MW-02(041416)	4/14/2016	110	710	190	660	1670
D-MW-02	D-MW-02(041416)	8/24/2016	80	1400	180	840	2500
D-MW-02	D-MW-02(102016)	10/20/2016	37	460	170	710	1377
D-MW-02	D-MW-02(061317)	6/13/2017	120 J	1,100 J	260	1200	2680
D-MW-02	D-MW-02(102617)	10/26/2017	22	410	61	280	773
D-MW-02	D-MW-02(060818)	6/8/2018	120	1,700	180	750	2750
D-MW-02	D-MW-02(101918)	10/19/2018	47	880	120	510	1557
Alternate Concentration Limits			285	800000	114800	--	--

Notes included on last page

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Former Pumphouse #1 (Release #1) Former Building 8060 - Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-03	AK0322	3/11/2001	1 U	1 U	**0.21 J**	**0.74 J**	**0.95**
D-MW-03	AK0332	12/14/2006	1 U	**0.563 J**	**0.518 J**	**2.2**	**3.281**
D-MW-03	AK0352	12/5/2007	1 U	1 U	1 U	1 U	ND
D-MW-03	D-MW-03 (121710)	12/17/2010	0.5 U	0.5 U	0.5 U	0.5 U	ND
D-MW-03	D-MW-03_20121017	10/17/2012	0.5 U	0.5 U	0.5 U	0.5 U	ND
D-MW-03	D-MW-03-8-16	8/24/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-04	D-MW-04 (092011)	9/20/2011	0.5 U	0.5 U	0.5 U	0.5 U	ND
D-MW-04	D-MW-04-8-16	8/24/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-08	AK0822	3/11/2001	**156**	**31.4**	**389**	**1930**	**2506.4**
D-MW-08	AK0832	12/14/2006	**113**	**51.2**	**258**	**1390**	**1812.2**
D-MW-08	AK0852	12/5/2007	**118**	**26.4**	**312**	**1610**	**2066.4**
D-MW-08	D-MW8 (121708)	12/17/2008	**120**	**20**	**260**	**1400**	**1800**
D-MW-08	D-MW8 (120809)	12/8/2009	**90**	**7**	**210**	**940**	**1247**
D-MW-08	D-MW-08_20121017	10/17/2012	**54**	**8.7 J**	**390**	**1500**	**1952.7**
D-MW-08	D-MW-08-8-16	8/24/2016	**30**	4.8 U	**190**	**570**	**1928**
D-MW-09	AK0922	3/9/2001	1 U	1 U	1 U	**0.54 J**	**0.54**
D-MW-09	AK0932	12/13/2006	1 U	1 U	1 U	1 U	ND
D-MW-09	AK0952	12/5/2007	1 U	1 U	1 U	1 U	ND
D-MW-09	D-MW-9-8-16	8/26/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-10	D-MW-10-8-16	8/26/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-11	AK1122	3/10/2001	**179**	**398**	**187**	**1490**	**2254**
D-MW-11	AK1132	12/14/2006	**78**	**312**	**352**	**1750**	**2492**
D-MW-11	AK1152	12/6/2007	**90.3**	**277**	**247**	**1580**	**2194.3**
D-MW-11	D-MW11 (121708)	12/17/2008	**74**	**280**	**270**	**1600**	**2224**
D-MW-11	D-MW11(060809)	6/8/2009	**62**	**340**	**270**	**1500**	**2172**
D-MW-11	D-MW11 (120909)	12/9/2009	**160**	**230**	**230**	**1500**	**2120**
D-MW-11	D-MW11 (102313)	10/23/2013	**13**	**150**	**280**	**1400**	**1843**
D-MW-11	D-MW-11-8-16	8/25/2016	**26**	**33**	**190**	**900**	**1149**
D-MW-12	AK1222	3/11/2001	**58.1**	**123**	**222**	**2020**	**2423.1**
D-MW-12	AK1232	12/14/2006	**15.2**	**63**	**337**	**1940**	**2355.2**
D-MW-12	AK1252	12/5/2007	**8.77**	**69.1**	**174**	**605**	**856.87**
D-MW-12	D-MW12 (121708)	12/17/2008	**15**	**140**	**270**	**1700**	**2125**
D-MW-12	D-MW12 (120809)	12/8/2009	**8.1**	**16**	**110**	**630**	**764.1**
D-MW-12	D-MW-12-8-16	8/26/2016	**1.6**	**0.82 J**	**28**	**130**	**159.6**
D-MW-13	AK1322	3/9/2001	25.0 U	36.2 U	**861**	**3200**	**4061**
D-MW-13	AK1332	12/15/2006	1 U	**3.27 J**	**332**	**721**	**1053**
D-MW-13	AK1352	12/5/2007	1 U	**2.13**	**334**	**633**	**969.13**
D-MW-13	D-MW13 (121708)	12/17/2008	2.5 U	2.5 U	**220**	**800**	**1020**
D-MW-13	D-MW-13-8-16	8/25/2016	0.86 U	0.96 U	**120**	**250**	**370**
D-MW-14	AK1422	3/9/2001	1 U	1 U	**0.2 J**	**1.4 J**	**1.6**
D-MW-14	AK1432	12/13/2006	1 U	1 U	1 U	1 U	ND
D-MW-14	AK1452	12/5/2007	1 U	1 U	1 U	1 U	ND
D-MW-14	D-MW-14-8-16	8/25/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-15	D-MW-15-8-16	8/26/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-16	D-MW-16-8-16	8/26/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-17	AK1722	3/11/2001	**159**	**3550**	**364**	**3250**	**7323**
D-MW-17	AK1732	12/15/2006	**45.6**	**1280**	**264**	**1810**	**3399.6**
Alternate Concentration Limits			**285**	**800000**	**114800**	**--**	**--**

Notes included on last page

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Former Pumphouse #1 (Release #1) Former Building 8060 - Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-17	AK1752	12/7/2007	**51.5**	**2680**	**297**	**1420**	**4448.5**
D-MW-17	D-MW17 (121708)	12/17/2008	**40**	**1600**	**210**	**1500**	**3350**
D-MW-17	D-MW17 (121009)	12/10/2009	**30**	**1500**	**260**	**1400**	**3190**
D-MW-17	D-MW-17-8-16	8/25/2016	**14 J**	**1100**	**410**	**1900**	**3424**
D-MW-18	AK1822	3/10/2001	**0.32 J**	**1.4**	**0.61 J**	**4.3**	**6.63**
D-MW-18	AK1832	12/15/2006	1 U	1 U	1 U	1 U	ND
D-MW-18	AK1852	12/6/2007	1 U	1 U	1 U	1 U	ND
D-MW-18	D-MW18 (121708)	12/17/2008	0.5 U	0.5 U	0.5 U	0.5 U	ND
D-MW-18	D-MW18 (120809)	12/8/2009	0.5 U	0.5 U	0.5 U	0.5 U	ND
D-MW-18	D-MW-18-8-16	8/25/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-19	AK1922	3/9/2001	**64.2**	**1510**	**365**	**1450**	**3389.2**
D-MW-19	AK1932	12/15/2006	**98.6**	**2270**	**705**	**2170**	**5243.6**
D-MW-19	AK1952	12/6/2007	**96.3**	**2280**	**692**	**811**	**3879.3**
D-MW-19	D-MW19 (121708)	12/17/2008	**120**	**2900**	**690**	**2400**	**6110**
D-MW-19	D-MW19(060509)	6/5/2009	**65**	**2000**	**430**	**1600**	**4095**
D-MW-19	D-MW19 (120909)	12/9/2009	**79**	**1500**	**410**	**1400**	**3389**
D-MW-19	D-MW-19-8-16	8/25/2016	**8.5**	**440**	**120**	**490**	**1058.5**
D-MW-20	AK2022	3/9/2001	1 U	1 U	1 U	3 U	ND
D-MW-20	AK2032	12/15/2006	1 U	**0.436 J**	1 U	**0.458 J**	**0.894**
D-MW-20	AK2052	12/6/2007	1 U	1 U	1 U	**0.281 J**	**0.281**
D-MW-20	D-MW-20-8-16	8/25/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-22	AK2222	3/9/2001	1 U	**0.33 J**	1 U	3 U	**0.33**
D-MW-22	AK2232	12/15/2006	1 U	1 U	1 U	1 U	ND
D-MW-22	AK2252	12/7/2007	1 U	1 U	1 U	1 U	ND
D-MW-22	D-MW22 (121708)	12/17/2008	0.5 U	0.5 U	0.5 U	0.5 U	ND
D-MW-22	D-MW-22-8-16	8/25/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-23	D-MW-23-8-16	8/29/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-25	D-MW-25-8-16	8/29/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-26	D-MW-26-8-16	8/29/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
D-MW-33	AK3322	3/9/2001	**77.9**	**774**	**470**	**2060**	**3381.9**
D-MW-33	AK3332	12/14/2006	**115**	**1130**	**287**	**1140**	**2672**
D-MW-33	AK3352	12/6/2007	**240**	**1180**	**557**	**2240**	**4217**
D-MW-33	D-MW33 (11708)	12/17/2008	**250**	**1400**	**530**	**2200**	**4380**
D-MW-33	D-MW33 (120909)	12/9/2009	**120**	**470**	**310**	**1200**	**2100**
D-MW-33	D-MW-33 (092011)	9/20/2011	**110**	**58**	**130**	**490**	**788**
D-MW-33	H13-D-MW-33 (041613)	4/16/2013	**34**	**16**	**80**	**330**	**460**
D-MW-33	H13-D-MW-33 (040114)	4/1/2014	**180**	**880**	**390**	**1800**	**3250**
D-MW-33	D-MW-33(102814)	10/28/2014	**51**	**40**	**180**	**720**	**991**
D-MW-33	D-MW-33(050515)	5/5/2015	**28**	**14**	**67**	**280**	**389**
D-MW-33	D-MW-33(121015)	12/10/2015	**25**	**52**	**60**	**260**	**397**
D-MW-33	D-MW-33(041416)	4/14/2016	**27**	**27**	**52**	**170**	**276**
D-MW-33	D-MW-33-8-16	8/25/2016	**46**	**33**	**84**	**370**	**533**
D-MW-33	D-MW-33(102016)	10/20/2016	**38**	**12**	**57**	**240**	**347**
D-MW-33	D-MW-33(061417)	6/14/2017	**38**	**18**	**11**	**99**	**166**
D-MW-33	D-MW-33(102717)	10/27/2017	**38**	**6.5**	**47**	**210**	**301.5**
D-MW-33	D-MW-33(060718)	6/7/2018	**36**	**12.0**	**35**	**170**	**253**
D-MW-34	AK3422	3/11/2001	**388**	**8180**	**1060**	**4740**	**14368**
D-MW-34	AK3432	12/14/2006	**254**	**2220**	**175**	**1490**	**4139**
D-MW-34	AK3452	12/6/2007	**935**	**8270**	**1000**	**4680**	**14885**
D-MW-34	D-MW34 (121608)	12/16/2008	**490 J**	**4,900 J**	**510 J**	**2,700 J**	**0**
Alternate Concentration Limits			**285**	**800000**	**114800**	**--**	**--**

Notes included on last page

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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-34	DUP-HAA13RI-1 (121608)	12/16/2008	240 J	2,400 J	220 J	1,300 J	4160
D-MW-34	D-MW34 (060509)	6/5/2009	730	9200	910	4800	15640
D-MW-34	D-MW34 (120909)	12/9/2009	370	2300	470	2300	5440
D-MW-34	DUP-HAA13RI-1 (120909)	12/9/2009	350	2100	400	2000	4850
D-MW-34	D-MW-34 (062910)	6/29/2010	490	3800	670	3200	8160
D-MW-34	DUP-1 (062910)	6/29/2010	41	350	58	300	749
D-MW-34	D-MW-34 (090710)	9/7/2010	570	3400	580	3300	7850
D-MW-34	DUP1 (090710)	9/7/2010	290	1700	300	1700	3990
D-MW-34	D-MW-34 (121610)	12/16/2010	290	2500	270	1600	4660
D-MW-34	D-MW-34 (033111)	3/31/2011	310	2500	390	2400	5600
D-MW-34	D-MW-34 (092011)	9/20/2011	78	560	110	640	1388
D-MW-34	D-MW-34	4/24/2012	280	3100	360	2900	6640
D-MW-34	D-MW-34_20121016	10/16/2012	420 J	3900	410	3200	7930
D-MW-34	P1R1-DUP-1_20121016	10/16/2012	150 J	3100	390	3200	6840
D-MW-34	H13-D-MW-34(041613)	4/16/2013	350	4400	460	3300	8510
D-MW-34	H13-Dup1(041613)	4/16/2013	370	4500	490	3400	8760
D-MW-34	D-MW-34(102313)	10/23/2013	160	1100	280	1600	3140
D-MW-34	Dup1(102313)	10/23/2013	170	1100	300	1700	3270
D-MW-34	D-MW-34(040114)	4/1/2014	240	2500	430	2300	5470
D-MW-34	Dup1(040114)	4/1/2014	250	2,500 H	450	2,600 H	5800
D-MW-34	D-MW-34(102814)	10/28/2014	100	710	230	1100	2140
D-MW-34	Dup1(102814)	10/28/2014	95	690	210	1100	2095
D-MW-34	D-MW-34(050515)	5/5/2015	72	300	100	630	1102
D-MW-34	Dup-01(050515)	5/5/2015	75	310	110	720	1215
D-MW-34	D-MW-34(121015)	12/10/2015	63	290	90	510	953
D-MW-34	Dup-01(121015)	12/10/2015	64	310	95	540	1009
D-MW-34	D-MW-34(041316)	4/13/2016	36	200	57	260	553
D-MW-34	D-MW-34-8-16	8/26/2016	30	130	49	320	529
D-MW-34	Dup-01(102016)	10/20/2016	33	230	52	290	605
D-MW-34	D-MW-34(102016)	10/20/2016	32	220	50	270	572
D-MW-34	Dup-01(061317)	6/13/2017	74	320	160	940	1494
D-MW-34	D-MW-34(061317)	6/13/2017	77	340	160	980	1557
D-MW-34	D-MW-34(102717)	10/27/2017	24	89	42	260	415
D-MW-34	Dup-01(102717)	10/27/2017	24	89	42	260	415
D-MW-34	D-MW-34(060818)	6/8/2018	8.1	3.7	2.3	42	56
D-MW-34	Dup-01	6/8/2018	8.2	4.4	2.3	43	58
D-MW-34	D-MW-34(101918)	10/19/2018	31	85	80	370	566
D-MW-34	Dup-01	10/19/2018	32	88	81	450	651
D-MW-35	AK3522	3/11/2001	765	29600	1280	6370	38015
D-MW-35	AK3532	12/14/2006	143	922	126	1400	2591
D-MW-35	AK3552	12/6/2007	330	3180	130	1010	4650
D-MW-35	D-MW35 (121708)	12/17/2008	140	1100	110	840	2190
D-MW-35	DUP-HAA13R1-2 (121708)	12/17/2008	140	1000	98	740	1978
D-MW-35	D-MW35 (060509)	6/5/2009	260	1700	72	720	2752
D-MW-35	D-MW35 (120809)	12/8/2009	190	2900	86	890	4066
D-MW-35	DUP-HAA13R1-2 (120809)	12/8/2009	180	2600	78	830	3688
D-MW-35	D-MW-35 (062910)	6/29/2010	62	1300	40	390	1792
D-MW-35	D-MW-35 (090710)	9/7/2010	410	7300	180	1700	9590
D-MW-35	D-MW-35 (121710)	12/17/2010	120	2000	74	840	3034
D-MW-35	D-MW-35 (033111)	3/31/2011	0.50 U	0.50 U	0.50 U	0.50 U	ND
D-MW-35	D-MW-35 (092011)	9/20/2011	76	610	130	750	1566
D-MW-35	D-MW-35	4/24/2012	84	1300	120	650	2154
D-MW-35	D-MW-35_20121016□	10/16/2012	58	1200	100	590	1948
D-MW-35	H13-D-MW-35(041613)	4/16/2013	31	330	25	220	606
D-MW-35	D-MW-35(102313)	10/23/2013	74	950	52	530	1606
D-MW-35	D-MW-35(040114)	4/1/2014	38	500	36	360	934
Alternate Concentration Limits			285	800000	114800	--	--

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Table 2b
Historical BTEX Concentrations in Groundwater
CAP Progress Report No. 21 (June 2018 to October 2018)
Former Pumphouse #1 (Release #1) Former Building 8060 - Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-35	D-MW-35(102914)	10/29/2014	89	1500	75	660	2324
D-MW-35	D-MW-35(050615)	5/6/2015	61	1100	51	580	1792
D-MW-35	D-MW-35(121015)	12/10/2015	69	1400	60	580	2109
D-MW-35	D-MW-35(041316)	4/13/2016	76	1200	55	580	1911
D-MW-35	D-MW-35-8-16	8/24/2016	95	2100	270	1800	4265
D-MW-35	D-MW-35(102016)	10/20/2016	31	310	30	160	531
D-MW-35	D-MW-35(061317)	6/13/2017	88	540	87	420	1135
D-MW-35	D-MW-35(102617)	10/26/2017	70	430	95	560	1155
D-MW-35	D-MW-35(060818)	6/8/2018	45	90	85	200	420
D-MW-35	D-MW-35(101918)	10/19/2018	13	46	15	36	110
D-MW-36	AK3622	3/9/2001	197	2050	586	2120	4953
D-MW-36	AK3632	12/13/2006	131	18	234	379	762
D-MW-36	AK3652	12/6/2007	116	10.5	165	369	660.5
D-MW-36	D-MW36 (121608)	12/16/2008	57	1.7	200	350	608.7
D-MW-36	D-MW36 (120809)	12/8/2009	340	190	200	650	1380
D-MW-36	D-MW-36 (062910)	6/29/2010	72	4.9	37	22	136
D-MW-36	D-MW-36 (090710)	9/7/2010	41	17	280	510	848
D-MW-36	D-MW-36 (121710)	12/17/2010	92	2.1	76	64	234.1
D-MW-36	D-MW-36 (033111)	3/31/2011	28	0.87	12	13	53.87
D-MW-36	D-MW-36 (091911)	9/19/2011	52	1.3	60	91	204.3
D-MW-36	D-MW-36	4/25/2012	34	4.7 J	690	1700	2428.7
D-MW-36	H13-D-MW-36(041713)	4/17/2013	100	7.9	47	31	185.9
D-MW-36	D-MW-36(102313)	10/23/2013	160	9.7	100	120	389.7
D-MW-36	D-MW-36(033114)	3/31/2014	79	10 U	85	12	176
D-MW-36	D-MW-36(102914)	10/29/2014	120	7.5	130	130	387.5
D-MW-36	D-MW-36(050615)	5/6/2015	150	12	110	49	321
D-MW-36	D-MW-36(121015)	12/10/2015	83	9.5 J	25	58	175.5
D-MW-36	D-MW-36(041416)	4/14/2016	89	2.6 J	40	15	146.6
D-MW-36	Dup-01(041416)	4/14/2016	94	1.9 J	40	14	149.9
D-MW-36	D-MW-36-8-16	8/24/2016	68	1.8	67	100	236.8
D-MW-36	D-MW-36(102016)	10/20/2016	160	13	33	120	326
D-MW-36	D-MW-36(061317)	6/13/2017	120	4.3	9.8	34	168.1
D-MW-36	D-MW-36(102617)	10/26/2017	210	9.2	24	110	353.2
D-MW-36	D-MW-36(060818)	6/8/2018	69	1.0	4.8	17	92
D-MW-36	D-MW-36(101918)	10/19/2018	88	11	21	94	214
D-MW-37	AK3722	3/10/2001	601	5340	423	1860	8224
D-MW-37	AK3732	12/13/2006	18.5	130	14.5	79.3	242.3
D-MW-37	AK3752	12/7/2007	212	407	77.1	384	1080.1
D-MW-37	D-MW37 (121708)	12/17/2008	64	100	160	720	1044
D-MW-37	D-MW37(060809)	6/8/2009	260	1200	230	850	2540
D-MW-37	D-MW37 (120809)	12/8/2009	11	28	20	88	147
D-MW-37	D-MW-37 (062910)	6/29/2010	79 B	350 B	25	130	584
D-MW-37	D-MW-37 (090710)	9/7/2010	430	2100	200	980	3710
D-MW-37	D-MW-37 (121710)	12/17/2010	75	100	84	400	659
D-MW-37	D-MW-37 (033111)	3/31/2011	340	4700	290	1500	6830
D-MW-37	D-MW-37 (092011)	9/20/2011	16	0.77	62	130	208.77
D-MW-37	D-MW-37	4/25/2012	530	2300	450	2000	5280
D-MW-37	D-MW-37_20121017	10/17/2012	200	600	110	630	1540
D-MW-37	H13-D-MW-37(04/17/13)	4/17/2013	35	50	35	160	280
D-MW-37	D-MW-37(102313)	10/23/2013	600	1300	810	3100	5810
D-MW-37	D-MW-37(040114)	4/1/2014	470	1500	480	2100	4550
D-MW-37	D-MW-37(102914)	10/29/2014	400	1100	720	2700	4920
D-MW-37	D-MW-37(050615)	5/6/2015	450	980	830	3200	5460
D-MW-37	D-MW-37(121015)	12/10/2015	160	250	79	430	919
D-MW-37	D-MW-37(041416)	4/14/2016	290	400	370	1500	2560
Alternate Concentration Limits			285	800000	114800	--	--

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Table 2b
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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-37	D-MW-37-8-16	8/24/2016	**230**	**300**	**600**	**1900**	**3030**
D-MW-37	DUP-01-8-16	8/24/2016	**220**	**290**	**620**	**2200**	**3330**
D-MW-37	D-MW-37(102016)	10/20/2016	**110**	**26**	**29**	**270**	**435**
D-MW-37	D-MW-37(061317)	6/13/2017	**230**	**110**	**900**	**3600**	**4840**
D-MW-37	D-MW-37(102717)	10/27/2017	**200**	**330**	**580**	**2,100**	**3210**
D-MW-37	D-MW-37(060718)	6/7/2018	**48**	**32**	**44**	**240**	**364**
D-MW-37	D-MW-37(101918)	10/19/2018	**61**	**25**	**11**	**170**	**267**
D-MW-38	AK3822	3/9/2001	**123**	**2410**	**738**	**3730**	**7001**
D-MW-38	AK3832	12/14/2006	**18.8**	**116**	**291**	**1300**	**1725.8**
D-MW-38	AK3852	12/7/2007	**3.97**	**3.65**	**80**	**283**	**370.62**
D-MW-38	D-MW38 (121708)	12/17/2008	**3.1**	**4.3**	**43**	**160**	**210.4**
D-MW-38	D-MW38 (120809)	12/8/2009	**2.6 J**	**6.1 J**	**19 J**	**74 J**	**101**
D-MW-38	D-MW-38-8-16	8/26/2016	**1.9**	**1.8**	**25**	**120**	**148.7**
D-MW-39	AK3922	3/9/2001	**29.7**	**98.4**	**340**	**2010**	**2478.1**
D-MW-39	AK3932	12/15/2006	1 U	**0.273 J**	**18.6**	**9.74**	**28.34**
D-MW-39	AK3952	12/7/2007	**1.7**	**0.259 J**	**64.8**	**32.6**	**99.1**
D-MW-39	D-MW39 (121708)	12/17/2008	**2.7**	**1.9**	**40**	**180**	**224.6**
D-MW-39	D-MW39 (120809)	12/8/2009	**0.91**	**0.51**	**13**	**50**	**64.42**
D-MW-39	D-MW-39-8-16	8/25/2016	**5.1**	**3.2 J**	**56**	**280**	**344**
D-MW-40	AK4022	3/9/2001	**313**	**75.3**	**959**	**4230**	**5577.3**
D-MW-40	AK4032	12/15/2006	**8.09**	**4.95**	**46.4**	**181**	**240.44**
D-MW-40	AK4052	12/7/2007	**5.94**	**2.25**	**44.1**	**170**	**222.29**
D-MW-40	D-MW40 (121708)	12/17/2008	**16**	**11**	**94**	**420**	**541**
D-MW-40	D-MW40 (120809)	12/8/2009	**21**	**12**	**160**	**800**	**993**
D-MW-40	D-MW-40-8-16	8/25/2016	**20**	**16 J**	**160**	**930**	**1126**
D-MW-41	AK4122	3/9/2001	1 U	1 U	1 U	**0.43 J**	**ND**
D-MW-41	AK4132	12/13/2006	1 U	**0.266 J**	1 U	**0.474 J**	**ND**
D-MW-41	AK4152	12/7/2007	1 U	**0.492 J**	1 U	**0.464 J**	**ND**
D-MW-41	D-MW41 (121708)	12/17/2008	0.5 U	0.5 U	0.5 U	0.5 U	**ND**
D-MW-41	D-MW 41 (060509)	6/5/2009	0.5 U	0.5 U	0.5 U	0.5 U	**ND**
D-MW-41	D-MW-41-8-16	8/25/2016	0.43 U	0.48 U	0.33 U	0.23 U	**ND**
D-MW-42	AK4222	3/9/2001	1 U	**112**	**192**	**962**	**1266**
D-MW-42	AK4232	12/13/2006	1 U	**0.392 J**	**2.59**	**10.2**	**12.79**
D-MW-42	AK4252	12/7/2007	1 U	1 U	**1.63**	**2.07**	**3.7**
D-MW-42	D-MW42 (121708)	12/17/2008	0.5 U	0.5 U	**1.4**	**1.9**	**3.3**
D-MW-42	D-MW 42 (060509)	6/5/2009	0.5 U	0.5 U	**8.2**	**25**	**33.2**
D-MW-42	D-MW42 (120809)	12/8/2009	**0.094 J**	**0.26 J**	**20**	**28**	**48**
D-MW-42	D-MW-42_20121017	10/17/2012	0.5 UJ	0.5 UJ	**4.6 J**	**5 J**	**9.6 J**
D-MW-42	D-MW-42-8-16	8/25/2016	0.43 U	0.48 U	**2.9**	**5.4**	**9.3**
D-MW-43	AK4322	3/9/2001	**10**	**157**	**36.8**	**161**	**364.8**
D-MW-43	AK4332	12/15/2006	**28.4**	**119**	**200**	**562**	**909.4**
D-MW-43	AK4352	12/8/2007	**9.99**	**158**	**--**	**269**	**519.79**
D-MW-43	D-MW-43 (121808)	12/18/2008	**22**	**57**	**180**	**620**	**879**
D-MW-43	D-MW-43 (120809)	12/8/2009	**24**	**190**	**300**	**900**	**1414**
D-MW-43	D-MW-43 (062910)	6/29/2010	**11**	**20**	**60**	**170**	**261**
D-MW-43	D-MW-43 (090710)	9/7/2010	**11**	**11**	**85**	**250**	**357**
D-MW-43	D-MW-43 (121710)	12/17/2010	**17**	**56**	**180**	**630**	**883**
D-MW-43	D-MW-43 (033111)	3/31/2011	**11**	**6.1**	**100**	**340**	**457.1**
D-MW-43	D-MW-43-8-16	8/24/2016	**10**	**51**	**360**	**1300**	**1721**
D-MW-44	AK4432	1/17/2007	**23.2**	**85**	**225**	**496**	**829.2**
Alternate Concentration Limits			**285**	**800000**	**114800**	**--**	**--**

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Table 2b
Historical BTEX Concentrations in Groundwater
CAP Progress Report No. 21 (June 2018 to October 2018)
Former Pumphouse #1 (Release #1) Former Building 8060 - Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-44	AK4452	12/7/2007	**13.1**	**78.9**	**54.2**	**206**	**352.2**
D-MW-44	D-MW-44-8-16	8/25/2016	**14**	**15**	**72**	**380**	**481**
P1-MW-11	P1-MW11 (121608)	12/16/2008	**29**	**91**	**680**	**1900**	**2700**
P1-MW-11	P1-MW11 (120909)	12/9/2009	**54**	**3.2**	**320**	**540**	**917.2**
P1-MW-11	PI-MW-11_20121017	10/17/2012	**22**	**3.7 J**	**490**	**1200**	**1715.7**
P1-MW-11	P1-MW-11-8-16	8/29/2016	**7.2**	**2.1**	**260**	**510**	**779.3**
P1-MW-12	AN1222	3/11/2001	**1.7**	**2.1**	**138**	**440**	**581.8**
P1-MW-12	AN1232	12/13/2006	**1.42**	**0.452 J**	**234**	**247**	**482.872**
P1-MW-12	AN1252	12/7/2007	**1.02**	**0.307 J**	**265**	**211**	**477.327**
P1-MW-12	P1-MW12 (121608)	12/16/2008	0.5 U	0.5 U	**17**	**64**	**81**
P1-MW-12	P1-MW12 (120809)	12/8/2009	**0.40 J**	**0.56 J**	**60**	**320**	**380.96**
P1-MW-12	P1-MW-12-8-16	8/26/2016	0.43 U	0.48 U	**14**	**110**	**115**
P1-MW-13	AN1322	3/9/2001	**19.5**	**493**	**182**	**788**	**1482.5**
P1-MW-13	AN1332	12/15/2006	**6.82**	**50.6**	**252**	**899**	**1208.42**
P1-MW-13	AN1352	12/8/2007	**7.43**	**194**	**195**	**536**	**932.43**
P1-MW-13	P1-MW13 (121608)	12/16/2008	**4.8**	**130**	**160**	**480**	**774.8**
P1-MW-13	P1-MW13 (120809)	12/8/2009	**2.2**	**31**	**120**	**280**	**433.2**
P1-MW-13	P1-MW-13-8-16	8/24/2016	4.3 U	**120**	**290**	**930**	**1344**
P1-MW-14	AN1422	3/10/2001	**0.2 J**	**1.5**	**1.2**	**6**	**8.9**
P1-MW-14	AN1432	12/13/2006	1 U	1 U	1 U	1 U	ND
P1-MW-14	AN1452	12/8/2007	1 U	**0.263 J**	1 U	**0.317 J**	**0.58**
P1-MW-14	P1-MW-14-8-16	8/29/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
P1-MW-15	AN1522	3/10/2001	1 U	**0.29 J**	**0.24 J**	**1.3 J**	**1.83**
P1-MW-15	AN1532	12/13/2006	1 U	1 U	1 U	1 U	ND
P1-MW-15	AN1552	12/7/2007	1 U	1 U	1 U	1 U	ND
P1-MW-15	P1-MW-15-8-16	8/29/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
P1-MW-16	AN1622	3/10/2001	1 U	**0.27 J**	1 U	0.4 U	**0.27**
P1-MW-16	P1-MW-16-8-16	8/29/2016	0.43 U	0.48 U	0.33 U	0.23 U	**0.27**
P1-MW-42	AN4222	3/9/2001	1 U	1 U	1 U	**0.48 J**	**0.48**
P1-MW-42	P1-MW42 (121708)	12/17/2008	0.5 U	0.5 U	0.5 U	0.5 U	ND
P1-MW-42	P1-MW42 (120809)	12/8/2009	0.5 U	0.5 U	0.5 U	0.5 U	ND
P1-MW-42	P1-MW-42-8-16	8/26/2016	0.43 U	0.48 U	0.33 U	0.23 U	ND
P1R1-MW-01	P1R1-MW-01 (032910)	3/29/2010	**13**	**88**	**6.2**	**440**	**547**
P1R1-MW-01	P1R1-MW-01 (062910)	6/29/2010	**5**	**0.78**	**17**	**180**	**203**
P1R1-MW-01	P1R1-MW-01 (090710)	9/7/2010	**27**	**28**	**77**	**740**	**872**
P1R1-MW-01	P1R1-MW-01 (121710)	12/17/2010	**64**	**13**	**47**	**990**	**1114**
P1R1-MW-01	P1R1-MW-01 (033111)	3/31/2011	**94**	**2.4 J**	**19**	**1300**	**1415.4**
P1R1-MW-01	P1R1-MW-01 (092011)	9/20/2011	**170**	**24**	**14**	**2200**	**2408**
P1R1-MW-01	P1R1-MW-01	4/24/2012	**370**	**39**	**36**	**4100**	**4545**
P1R1-MW-01	PIRI-MW-01_20121016	10/16/2012	**46**	**7.5 J**	**16 J**	**1,900 J**	**1969.5**
P1R1-MW-01	H13-PIRI-MW-01(041613)	4/16/2013	**80**	**2.7 J**	**7.7**	**740**	**827.7**
P1R1-MW-01	PIRI-MW-01(102313)	10/23/2013	**41**	**2.2 J**	**10**	**560**	**613.2**
P1R1-MW-01	PIRI-MW-01(040114)	4/1/2014	**9.8**	**0.19 J**	**1.4**	**90**	**101.39**
P1R1-MW-01	PIRI-MW-01(102814)	10/28/2014	**62**	**3.9**	**64**	**480**	**609.9**
P1R1-MW-01	PIRI-MW-01(050515)	5/5/2015	**45**	**53**	**680**	**2500**	**3278.19**
P1R1-MW-01	PIRI-MW-01(120915)	12/9/2015	**6.4 J**	**9.8 J**	**150**	**570**	**736.2**
P1R1-MW-01	PIRI-MW-01(041416)	4/14/2016	**7.3 J**	**19**	**39**	**600**	**665.3**
Alternate Concentration Limits			**285**	**800000**	**114800**	**--**	**--**

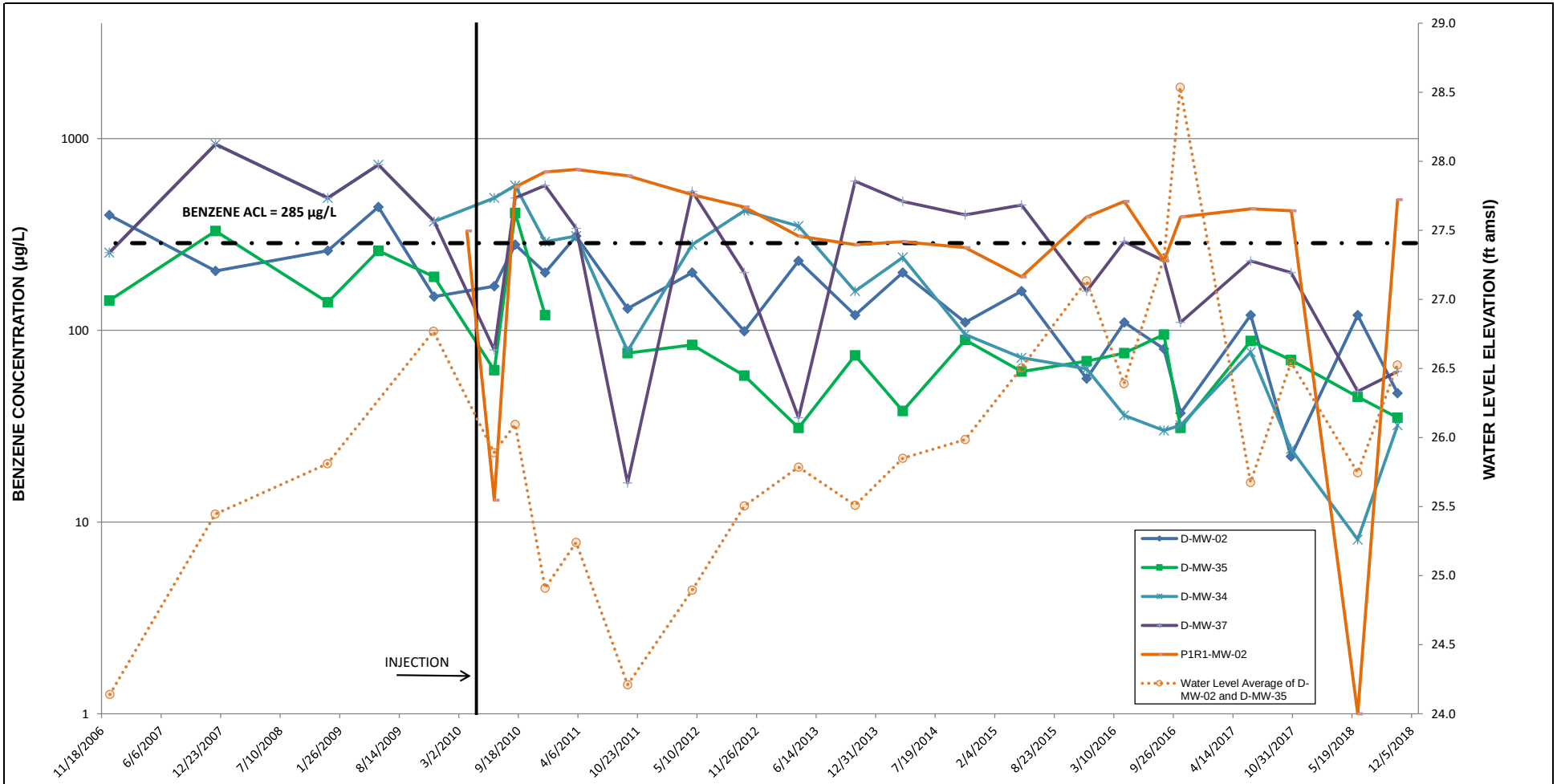
Notes included on last page

Table 2b
Historical BTEX Concentrations in Groundwater
CAP Progress Report No. 21 (June 2018 to October 2018)
Former Pumphouse #1 (Release #1) Former Building 8060 - Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1R1-MW-01	P1R1-MW01-8-16	8/26/2016	**9 J**	**100**	**150**	**610**	**869**
P1R1-MW-01	PIRI-MW-01(102016)	10/20/2016	**4.6 J**	**8.9 J**	**270**	**1300**	**1583.5**
P1R1-MW-01	PIRI-MW-01(061317)	6/13/2017	**2.4**	**1.2**	**1**	**140**	**144.6**
P1R1-MW-01	PIRI-MW-01(102717)	10/27/2017	**12**	**4.0 U**	**9.6**	**210**	**231.6**
P1R1-MW-01	PIRI-MW-01(060618)	6/6/2018	**61**	**46**	**53.0**	**1300**	**1460**
P1R1-MW-01	PIRI-MW-01(101918)	10/19/2018	**15**	**1.0**	**2.7**	**240**	**259**
P1R1-MW-02	P1R1-MW-02 (032910)	3/29/2010	**330**	**610**	**4300**	**2600**	**7840**
P1R1-MW-02	P1R1-MW-02 (062910)	6/29/2010	**13**	**140**	**21**	**92**	**266**
P1R1-MW-02	P1R1-MW-02 (090710)	9/7/2010	**560**	**7100**	**720**	**3300**	**11680**
P1R1-MW-02	P1R1-MW-02 (121610)	12/16/2010	**670**	**7700**	**770**	**3600**	**12740**
P1R1-MW-02	P1R1-MW-02 (033111)	3/31/2011	**690**	**9400**	**790**	**3500**	**14380**
P1R1-MW-02	P1R1-MW-02 (092011)	9/20/2011	**640**	**8600**	**670**	**3200**	**13110**
P1R1-MW-02	P1R1-MW-02	4/24/2012	**510**	**5800**	**580**	**2000**	**8890**
P1R1-MW-02	DUP-1	4/24/2012	**550**	**5600**	**620**	**2000**	**8770**
P1R1-MW-02	PIRI-MW-02_20121016	10/16/2012	**440**	**4800**	**470**	**2200**	**7910**
P1R1-MW-02	H13-PIRI-MW-02(041613)	4/16/2013	**310**	**5500**	**650**	**3900**	**10360**
P1R1-MW-02	PIRI-MW-02(102313)	10/23/2013	**280**	**4300**	**670**	**3600**	**8850**
P1R1-MW-02	PIRI-MW-02(040114)	4/1/2014	**290**	**4500**	**620**	**3200**	**8610**
P1R1-MW-02	PIRI-MW-02(102814)	10/28/2014	**270**	**4000**	**860**	**4200**	**9330**
P1R1-MW-02	PIRI-MW-02(050515)	5/5/2015	**190**	**2100**	**740**	**3400**	**6430**
P1R1-MW-02	PIRI-MW-02(120915)	12/9/2015	**390**	**5100**	**890**	**4300**	**10680**
P1R1-MW-02	PIRI-MW-02(041416)	4/14/2016	**470**	**6,300 J**	**910**	**3900**	**11580**
P1R1-MW-02	P1R1-MW02-8-16	8/26/2016	**230**	**1700**	**400**	**1900**	**4230**
P1R1-MW-02	DUP-02-8-16	8/26/2016	**200**	**1400**	**310**	**1500**	**3410**
P1R1-MW-02	PIRI-MW-02(102016)	10/20/2016	**390**	**4600**	**930**	**4600**	**11580**
P1R1-MW-02	PIRI-MW-02(061417)	6/13/2017	**430**	**6400**	**760**	**3700**	**11580**
P1R1-MW-02	PIRI-MW-02(102717)	10/27/2017	**420**	**3,500**	**640**	**2,900**	**7460**
P1R1-MW-02	PIRI-MW-02(060618)	6/8/2018	**1.1**	**17**	**4.3**	**26**	**48**
P1R1-MW-02	PIRI-MW-02(101918)	10/19/2018	**480**	**5,200**	**1000**	**5,200**	**11880**
P1R1-IW-02	P1R1-IW-02 (032910)	3/29/2010	**250**	**1100**	**28000**	**5600**	**34950**
P1R1-IW-02	P1R1-IW-02 (062910)	6/29/2010	**0.35 J**	**1.3**	**7.2**	**15**	**24**
P1R1-IW-02	P1R1-IW-02 (090710)	9/7/2010	**2.3**	**30**	**5.8**	**24**	**62**
P1R1-IW-02	P1R1-IW-02	4/25/2012	**Dry**				
P1R1-IW-10	P1R1-IW-10	4/25/2012	**760**	**16000**	**3000**	**25000**	**44,760**
Alternate Concentration Limits			**285**	**800000**	**114800**	**--**	**--**

Notes:

	Sampled in October 2018
BTEX	benzene, toluene, ethylbenzene, and xylenes
ND	Not Detected
µg/L	micrograms per liter
B	Indicates the compound was detected in the method blank.
J	Indicates that the value for the compound is estimated.
U	Indicates that the compound was not detected at the concentration reported.
--	no Alternate Concentration Limit established.
	Indicates that the compound was detected above the Alternate Concentration Limit.
	Indicates additional samples taken by Savannah Corps of Engineers as requested by GA EPD.



PIKA ARCADIS A JOINT VENTURE

HUNTER ARMY AIRFIELD
FORMER PUMPHOUSE #1 (RELEASE #1)
FORMER BUILDING 8060, FACILITY ID #9-025085*1
CAP PROGRESS REPORT NO. 21
(JUNE 2018 - OCTOBER 2018)

Benzene Concentrations Versus Time in Select Wells

FIGURE

4a

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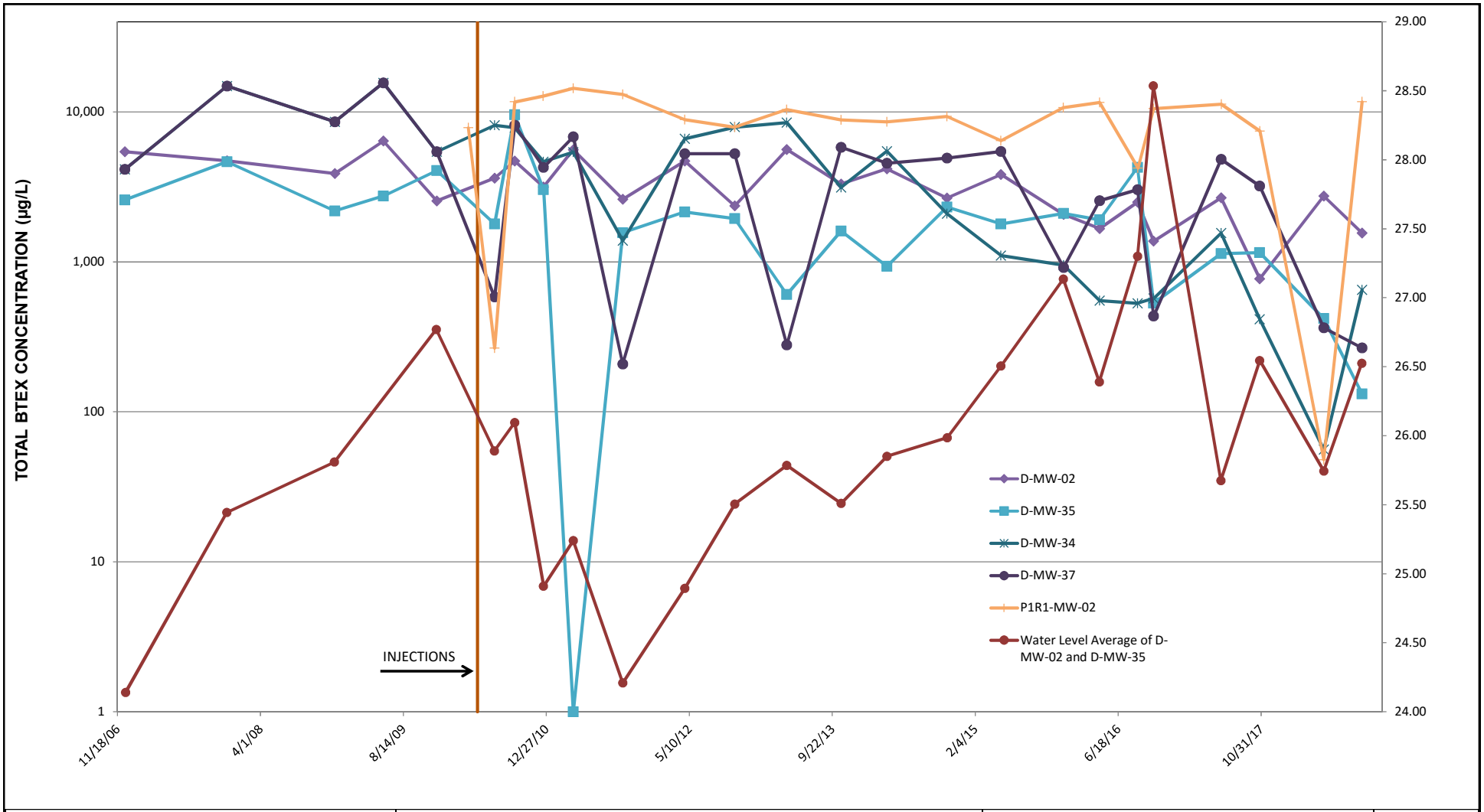

PIKA ARCADIS A JOINT VENTURE

HUNTER ARMY AIRFIELD
FORMER PUMPHOUSE #1 (RELEASE #1)
FORMER BUILDING 8060, FACILITY ID #9-025085*1
CAP PROGRESS REPORT NO. 21
(JUNE 2018 - OCTOBER 2018)

Total BTEX Concentrations Versus Time in Select Wells

FIGURE

4b

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FORMER PUMP HOUSE #1, RELEASE #2

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Table 2
Historical Groundwater and Surface Water Analytical Results
CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-05	H833MW0502	11/3/1999	3,400	2,000	1,200	5,250	11,850
D-MW-05	AK0512	2/23/2000	4,580	6,860	1,560	5,800	18,800
D-MW-05	AK0522	9/6/2001	3,970	7,490	1,390	5,040	17,890
D-MW-05	AK0532	3/15/2002	3,380	1,220	1,340	4,940	10,880
D-MW-05R	AK0542	1/25/2003	3,800	6,900	1,360	4,650	16,710
D-MW-05R	AK0552	6/21/2003	2,590	1,530	881	3,300	8,301
D-MW-05R	AK0562	7/16/2004	3,160	1,020	925	4,630	9,735
D-MW-05R	AK0572	1/14/2005	1,810 J	164 J	688 J	3,240 J	5,902
D-MW-05R	AK0582	7/16/2005	3,360	734	893	4,030	9,017
D-MW-05R	AK0592	1/16/2006	3,060	369	918	4,380	8,727
D-MW-05R	AK0502	7/20/2006	3,480	155	995	4,260	8,890
D-MW-05R	AK05A2	10/23/2006	3,900	357	1,370	5,610	11,137
D-MW-05R	AK05B2	1/17/2007	3,900	1,080	1,260	5,540	11,780
D-MW-05R	AK05C2	4/21/2007	3,870 J	292	1,320 J	4,190	9,672
D-MW-05R	AK05D2	7/14/2007	2,520 J	189 J	692 J	3,800 J	7201
D-MW-05R	AK05E2	1/28/2008	3,760	148	596	4,460	8,964
D-MW-05R	AK05F2	7/16/2008	2,090	65.1	568	3,110	5,833
D-MW-05R	D-MW-05R (121708)	12/17/2008	1,700	74	290	1,800 J	3,864
D-MW-05R	D-MW-05R (060309)	6/3/2009	4,100	110	660	5,100	9,970
D-MW-05R	D-MW-05R (121009)	12/10/2009	46	12	27	550	635
D-MW-05R	D-MW-05R (022210)	2/22/2010	2,200	150	640	3,800	6,790
D-MW-05R	D-MW-05R (030910)	3/9/2010	2,400	88	590	3,700	6,778
D-MW-05R	D-MW-05R (031510)	3/15/2010	1,100	44	290	2,000	3,434
D-MW-05R	D-MW-05R (032910)	3/29/2010	1,300	30	290	2,100	3,720
D-MW-05R	D-MW-05R (051110)	5/11/2010	3,300	77	830	3,700	7,907
D-MW-05R	D-MW-05R (061710)	6/17/2010	950	49	160	2,100	3,259
D-MW-05R	D-MW-05R (090810)	9/8/2010	1,100	31	290	1,500	2,921
D-MW-05R	D-MW-05R (011811)	1/18/2011	2,500	33	350	3,400	6,283
D-MW-05R	D-MW-05R (022411)	2/24/2011	3,800	10 U	440	3,400	7,640
D-MW-05R	D-MW-05R (033111)	3/31/2011	2,500	34	270	2,200	5,004
D-MW-05R	D-MW-05R (061511)	6/15/2011	3,100	110	560	3,500	7,270
D-MW-05R	D-MW-05R (092811)	9/28/2011	3,300	97	690	3,400	7,487
D-MW-05R	D-MW-05	7/18/2012	2,600	36	150	670	3,456
D-MW-05R	D-MW-05R (073113)	7/31/2013	1,900	220	570	580	3,270
D-MW-05R	D-MW-05R (102413)	10/24/2013	1,400	31	670	910	3,011
D-MW-05R	D-MW-05R (011014)	1/10/2014	1,300	110	790	970	3,170
D-MW-05R	D-MW-05R (040314)	4/3/2014	960	220	670	1,300	3,150
D-MW-05R	D-MW-05R (072514)	7/25/2014	500	110	1100	720	2,430
D-MW-05R	D-MW-05R (103014)	10/30/2014	390	45	1,100	640	2,175
D-MW-05R	D-MW-05R (031915)	3/19/2015	350	130	1,300	850	2,630
D-MW-05R	DUP1 (031915)	3/19/2015	410	220	1,200	760	2,590
D-MW-05R	HA13DMW05R(050715)	5/7/2015	450	300	1,600	980	3,330
D-MW-05R	D1(050715)	5/7/2015	430	260	1,600	960	3,250
D-MW-05R	HA13DMW05R(072915)	7/29/2015	400	57	1,700	740	2,897
D-MW-05R	D1(072915)	7/29/2015	410	56	1,700	750	2,916
D-MW-05R	HA13DMW05R(120815)	12/8/2015	540	30	900	750	2,220
D-MW-05R	D1(120815)	12/8/2015	550	31	940	770	2,291
D-MW-05R	HA13DMW05R(021116)	2/11/2016	430	14	880	470	1,794
D-MW-05R	HA13DMW05R(042416)	4/24/2016	530	28	610	760	1,928
Alternate Concentration Limit			285	800,000	114,800	—	—

NOTES INCLUDED ON LAST PAGE

Table 2
Historical Groundwater and Surface Water Analytical Results
CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
D-MW-05R	DUP1 (042416)	4/24/2016	500	27	590	750	1,867
D-MW-05R	D-MW-05R-6-16	6/14/2016	910	82	1,200	1,100	3,292
D-MW-05R	HA13P1R2MW05R(101816)	10/18/2016	690	840	1,200	1,300	4,030
D-MW-05R	DUP1 (101816)	10/18/2016	680	780	1,200	1,200	3,860
D-MW-05R	HA13DMW05R(061517)	6/15/2017	730	88	1,200	1,100	3,118
D-MW-05R	DUP1 (061517)	6/15/2017	700	79	1,200	1,100	3,079
D-MW-05R	HA13DMW05R(102617)	10/26/2017	640	940	110	860	2,550
D-MW-05R	DUP1 (102617)	10/26/2017	660	960	120	900	2,640
D-MW-05R	HA13DMW05R(060518)	6/5/2018	350 J	37 J	730 J	910 J	2,027
D-MW-05R	DUP1 (060518)	6/5/2018	370 J	39 J	740 J	950 J	2,099
D-MW-05R	HA13DMW05R(101718)	10/17/2018	750	110	990	1,500	3,350
D-MW-05R	DUP1 (101718)	10/17/2018	750	110	950	1,400	3,210
D-MW-06	AK0622	9/6/2001	428	844	1,010	4,080	6,362
D-MW-06	AK0632	3/15/2002	288	421	705	2,850	4,264
D-MW-06R	AK0642	1/25/2003	342	1,440	1,140	4,000	6,922
D-MW-06R	AK0652	6/21/2003	520	137	1,260	3,830	5,747
D-MW-06R	AK0662	7/16/2004	177	45	396	3,450	4,068
D-MW-06R	AK0672	1/14/2005	222 J	183 J	657 J	3,360 J	4,422
D-MW-06R	AK0682	7/16/2005	289	159 U	545	3,430	4,264
D-MW-06R	AK0692	1/16/2006	315	67.5	880	5,220	6,483
D-MW-06R	AK0602	7/20/2006	129	56.8 U	735	4,130	5,050
D-MW-06R	AK06B2	1/17/2007	37.5	47.8	573	3,790	4,448
D-MW-06R	AK06D2	7/13/2007	49.5	18.8 J	371	3,070	3,509
D-MW-06R	AK06E2	1/28/2008	109	49.6	657	3,920	4,736
D-MW-06R	AK06F2	7/16/2008	44.4	28.2	890	4,280	5,243
D-MW-06R	D-MW-06R (121708)	12/17/2008	84	34	510	2,500 J	3,128
D-MW-06R	D-MW-06R (060409)	6/4/2009	100	44	510	3,900	4,554
D-MW-06R	D-MW-06R (121009)	12/10/2009	110	33	740	4,000	4,883
D-MW-06R	D-MW-06R (061710)	6/17/2010	98	36	960	4,700	5,794
D-MW-06R	D-MW-06R-6-16	6/13/2016	290	42 J	270	4,900	5,502
P1-MW-01	HT4-MW01	12/9/1996	500 U	16,000	1,900	9,500	27,400
P1-MW-01	PH1MW0102	11/3/1999	17 J	6,500	1,800	10,000	16,800
P1-MW-01	AN0122	9/6/2001	200 U	7,930	2,120	8,290	18,340
P1-MW-01	AN0132	3/14/2002	2.5	1,910	1,900	9,440	13,253
P1-MW-01	AN0142	1/25/2003	4.5 J	7,830	2,270	10,900	21,005
P1-MW-01	AN0152	6/21/2003	100 U	6,560	2,080	10,800	19,440
P1-MW-01	AN0162	7/16/2004	5.6	4,180	1,800	8,910	14,895
P1-MW-01	AN0172	1/14/2005	6.4	4,220 J	1,420 J	6,690 J	12,336
P1-MW-01	AN0182	7/16/2005	4.2	3,140	1,990	11,100	16,234
P1-MW-01	AN0192	1/16/2006	4	3,250	2,030	11,100	16,384
P1-MW-01	AN0102	7/20/2006	20 U	2,690	1,880	8,580	13,150
P1-MW-01	AN01B2	1/17/2007	6.56	2,090	1,570	7,530	11,197
P1-MW-01	AN01D2	7/13/2007	7.77	962 J	683 J	3,650 J	5,303
P1-MW-01	AN01E2	1/28/2008	2.14	1,590	1,580	9,680	12,852
P1-MW-01	AN01F2	7/16/2008	6.02	1,330	2,000	9,080	12,416
P1-MW-01	P1-MW-01 (121708)	12/17/2008	10 U	1,100	1,700	8,600 J	11,400
P1-MW-01	P1-MW-01 (060409)	6/4/2009	50 U	650	1,800	12,000	14,450
P1-MW-01	P1-MW-01 (121009)	12/10/2009	10 U	640	1,500	9,200	11,340
P1-MW-01	P1-MW-01 (061510)	6/15/2010	20 U	1,000	1,800	12,000	14,800
P1-MW-01	P1-MW-01-6-16	6/17/2016	43 U	120	830	5,800	6,750
P1-MW-02	HT4-MW02	12/9/1996	1,100	25,000	1,400	5,900	33,400
P1-MW-02	PH1MW0202	11/3/1999	1,000	19,000	1,600	7,700	28,300
P1-MW-02	AN0222	9/6/2001	932	21,200	1,470	6,050	29,652
P1-MW-02	AN0232	3/14/2002	1,030	25,800 J	1,440	5,620	33,890
P1-MW-02	AN0242	1/25/2003	714	19,700	1,640	6,820	28,874
P1-MW-02	AN0252	6/21/2003	1,020	26,200	1,990	7,760	36,970
Alternate Concentration Limit			285	800,000	114,800	—	—

NOTES INCLUDED ON LAST PAGE

Table 2
Historical Groundwater and Surface Water Analytical Results
CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-MW-02	AN0262	7/16/2004	654	22,000	2,030	8,040	32,724
P1-MW-02	AN0272	1/14/2005	762 J	19,200 J	1,420 J	5,630 J	27,012
P1-MW-02	AN0282	7/16/2005	724	19,300	1,590	6,770	28,384
P1-MW-02	AN0292	1/16/2006	943	20,300	2,400	10,800	34,443
P1-MW-02	AN0202	7/20/2006	970	24,500	1,880	7,770	35,120
P1-MW-02	AN02A2	10/23/2006	622	22,800	2,060	8,230	33,712
P1-MW-02	AN02B2	1/22/2007	1,070	19,600 J	1,600	6,240	28,510
P1-MW-02	AN02C2	4/21/2007	525	17,800	1,780	6,380	26,485
P1-MW-02	AN02D2	7/19/2007	163	6,380	997	4,020	11,560
P1-MW-02	AN02E2	1/28/2008	457	13,800	1,450	6,050	21,757
P1-MW-02	AN02F2	7/16/2008	614	17,200	2,200	8,970	29,004
P1-MW-02	P1-MW-02 (121708)	12/17/2008	520	16,000	1,700	6,900 J	25,120
P1-MW-02	P1-MW-02 (060309)	6/3/2009	610	17,000	2,100	8,400	28,110
P1-MW-02	P1-MW-02 (121009)	12/10/2009	420	13,000	1,400	6,400	21,220
P1-MW-02	P1-MW-02 (061510)	6/15/2010	510	14,000	1,400	6,000	21,910
P1-MW-02	P1-MW-02 (090810)	9/8/2010	690	20,000	2,000	8,000	30,690
P1-MW-02	P1-MW-02 (011811)	1/18/2011	350	13,000	1,600	6,800	21,750
P1-MW-02	P1-MW-02 (02411)	2/24/2011	140	11,000	1,400	6,200	18,740
P1-MW-02	P1-MW-02 (032911)	3/29/2011	260	6,600	850	3,500	11,210
P1-MW-02	P1-MW-02 (061511)	6/15/2011	420	10,000	1,900	8,000	20,320
P1-MW-02	DUP1 (061511)	6/15/2011	440	9,300	1,800	7,900	19,440
P1-MW-02	P1-MW-02 (092711)	9/27/2011	430	4,300	1,600	6,500	12,830
P1-MW-02	P1-MW-02 (041813)	4/18/2013	560	7,000	1,400	5,400	14,360
P1-MW-02	P1-MW-02 (010914)	1/9/2014	400	8,200	1,600	6,500	16,700
P1-MW-02	P1-MW-02 (040214)	4/2/2014	390	7,000	1,600	5,900	14,890
P1-MW-02	P1-MW-02 (072414)	7/24/2014	330	7,000	1,300	5,400	14,030
P1-MW-02	P1-MW-02 (103114)	10/31/2014	390	7,800	1,100	4,600	13,890
P1-MW-02	P1-MW-02 (032015)	3/20/2015	500	9,900	1,400	5,600	17,400
P1-MW-02	HA13P1MW02(050715)	5/7/2015	580	7,800	1,500	6,200	16,080
P1-MW-02	HA13P1MW02(073015)	7/30/2015	440	9,100	1,000	4,200	14,740
P1-MW-02	HA13P1MW02(120715)	12/7/2015	540	7,900	1,200	5,000	14,640
P1-MW-02	HA13P1MW02(021216)	2/12/2016	520	2,800	1,200	4,500	9,020
P1-MW-02	HA13P1MW02(042416)	4/24/2016	740	1,800	1,400	4,500	8,440
P1-MW-02	P1-MW-02-6-16	6/16/2016	1100	3,800	1,200	2,700	8,800
P1-MW-02	DUP-5-6-16	6/16/2016	1000	3,500	1,100	2,600	8,200
P1-MW-02	HA13P1MW02(101816)	10/18/2016	940	7,300	1,300	3,300	12,840
P1-MW-02	HA13P1MW02(061617)	6/16/2017	1600	9,900	1,400	3,900	16,800
P1-MW-02	HA13P1MW02(102517)	10/25/2017	1100	14,000	1,300	4,900	21,300
P1-MW-02	HA13P1MW02(60618)	6/6/2018	870	12,000	1,500	5,700	20,070
P1-MW-02	HA13P1MW02(101618)	10/16/2018	550	7,900	1,400	5,500	15,350
P1-MW-03	AN03D2	7/15/2007	184 J	1,260 J	843 J	5,990 J	8,277
P1-MW-03	P1-MW-03 (060409)	6/4/2009	92	3,100	1,700	8,100	12,992
P1-MW-03	P1-MW-03-6-16	6/15/2016	43 U	130	760	5,000	5,933
P1-MW-17	AN17D2	7/15/2007	1 U	1 U	1 U	1.52	1.52
P1-MW-17	P1-MW-17 (060309)	6/3/2009	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-MW-17	P1-MW-17-6-16	6/20/2016	0.43 U	0.48 U	0.33 U	0.23 U	1.5 U
P1-MW-18	MW1801	5/30/1997	4.2 J	57	19	110	190
P1-MW-18	PH1MW1802	11/3/1999	25 U	530	370	1,650	2,300
P1-MW-18	AN1822	9/6/2001	0.22 J	24.3	14.5	43.6	83
P1-MW-18	AN1832	3/14/2002	1 U	38.2	30	118	186
P1-MW-18	AN1842	1/25/2003	1 U	36.5	61.3	169	267
P1-MW-18	AN1852	6/21/2003	2 U	85.9	157	446	689
Alternate Concentration Limit			285	800,000	114,800	—	—

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Table 2
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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-MW-18	AN1862	7/16/2004	1 U	74.1	110	370	554
P1-MW-18	AN187	1/14/2005	2.8 J	141 J	42.5 J	147 J	333
P1-MW-18	AN1882	7/16/2005	1 U	18.3	38.8	118	175
P1-MW-18	AN1892	1/16/2006	1 U	9.6	22.8	75.8	108
P1-MW-18	AN1802	7/20/2006	1 U	10.3	13.9	54.7	79
P1-MW-18	AN18B2	1/17/2007	1 U	10.8	44	150	205
P1-MW-18	AN18D2	7/15/2007	2 U	38.6	55.7	331	425
P1-MW-18	P1-MW-18 (121708)	12/17/2008	0.5 U	1.2	7.7	13 J	22
P1-MW-18	P1-MW-18 (121009)	12/10/2009	2.5 U	12	63	260	335
P1-MW-18	P1-MW-18 (020212)	2/2/2012	4.5	360	310	1,400	2,075
P1-MW-18	P1-MW-18-6-16	6/17/2016	4.3 U	210	520	1,900	2,630
P1-MW-19	MW1901	5/29/1997	630	1,900	530	2,400	5,460
P1-MW-19	PH1MW1902	11/3/1999	200	6,400	1,800	7,800	15,100
P1-MW-19	AN1922	9/6/2001	832	5,830	1,200	4,510	12,372
P1-MW-19	AN1932	3/14/2002	510	5,410	972	3,710	10,602
P1-MW-19	AN1942	1/25/2003	682	1,510	988	4,130	7,310
P1-MW-19	AN1952	6/21/2003	876	2,230	1,470	5,180	9,756
P1-MW-19	AN1962	7/16/2004	571	6,170	1,630	6,390	14,761
P1-MW-19	AN1972	1/14/2005	402 J	1,320 J	1,040 J	3,800 J	6,562
P1-MW-19	AN1982	7/16/2005	500	1,790	1,540	5,830	9,660
P1-MW-19	AN1992	1/16/2006	333	2,590	1,890	7,850	12,663
P1-MW-19	AN1902	7/20/2006	371	3,220	1,810	7,130	12,531
P1-MW-19	AN19B2	1/17/2007	376	2,710	1,860	7,000	11,946
P1-MW-19	AN19D2	7/14/2007	452	4,050	1750	6,910	13,162
P1-MW-19	AN19E2	1/28/2008	461	1,620	1,380	5,640	9,101
P1-MW-19	AN19F2	7/16/2008	518	1,490	1,630	6,630	10,268
P1-MW-19	P1-MW-19 (121708)	12/17/2008	420	1,300	1,700	6,500 J	9,920
P1-MW-19	P1-MW-19 (060409)	6/4/2009	730	390	1,700	6,600	9,420
P1-MW-19	P1-MW-19 (121009)	12/10/2009	450	320	1,300	5,700	7,770
P1-MW-19	P1-MW-19 (051110)	5/11/2010	750	1,800	310	9,500	12,360
P1-MW-19	P1-MW-19 (061610)	6/16/2010	550	450	1,400	6,700	9,100
P1-MW-19	P1-MW-19 (090810)	9/8/2010	260	230	4,100	1,000	5,590
P1-MW-19	P1-MW-19 (011811)	1/18/2011	820	340	1,600	6,500	9,260
P1-MW-19	P1-MW-19 (032911)	3/29/2011	930	74	1,600	6,100	8,704
P1-MW-19	P1-MW-19 (061511)	6/15/2011	830	350	1,800	7,200	10,180
P1-MW-19	P1-MW-19 (092811)	9/28/2011	880	470	1,500	6,100	8,950
P1-MW-19	P1-MW-19 (020212)	2/2/2012	190	510	560	4,300	5,560
P1-MW-19	P1-MW-19	7/19/2012	0.5 U	61	180	1,200	1,441
P1-MW-19	P1-MW-19 (092012)	9/20/2012	100	1,400	510	2,600	4,610
P1-MW-19	P1-MW-19 (121212)	12/12/2012	33	450	240	1,300	2,023
P1-MW-19	P1-MW-19 (041713)	4/17/2013	85	630	470	2,300	3,485
P1-MW-19	P1-MW-19 (080113)	8/1/2013	96	150	490	1,700	2,436
P1-MW-19	P1-MW-19 (102513)	10/25/2013	3 J	11	230	740	981
P1-MW-19	P1-MW-19 (010914)	1/9/2014	100	110	520	2,300	3,030
P1-MW-19	P1-MW-19 (040214)	4/2/2014	120	16	440	1,400	1,976
P1-MW-19	P1-MW-19 (072414)	7/24/2014	52	8.6	300	1,100	1,461
P1-MW-19	P1-MW-19 (103114)	10/31/2014	15	4.5	140	520	680
P1-MW-19	P1-MW-19 (032015)	3/20/2015	180	20	530	2,900	3,630
Alternate Concentration Limit			285	800,000	114,800	—	—

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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-MW-19	HA13P1MW19(050815)	5/8/2015	280	20	760	3,300	4,360
P1-MW-19	HA13P1MW19(073015)	7/30/2015	220	80 U	650	3,100	3,970
P1-MW-19	HA13P1MW19(120815)	12/8/2015	140	19	160	2,100	2,419
P1-MW-19	HA13P1MW19(021216)	2/12/2016	360	30 J	740	3,600	4,700
P1-MW-19	HA13P1MW19(04246)	4/24/2016	78	6.4 J	89	1,200	1,367
P1-MW-19	P1-MW-19-6-16	6/16/2016	180	38	520	2,700	3,438
P1-MW-19	HA13P1MW19(101816)	10/18/2016	300	28 J	870	4,200	5,370
P1-MW-19	HA13P1MW19(061517)	6/15/2017	100	16	160	2,600	2,876
P1-MW-19	HA13P1MW19(102417)	10/24/2017	92	140	14	2,300	2,546
P1-MW-19	HA13P1MW19(060618)	6/6/2018	58	11 J	71	1,900	2,040
P1-MW-19	HA13P1MW19(101718)	10/17/2018	26 J	6.7 J	56 J	1800 J	1,889
P1-MW-20	AN20D2	7/15/2007	0.319 J	1.18 U	0.301 J	2.52	3.14
P1-MW-20	P1-MW-20 (060309)	6/3/2009	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
P1-MW-20	P1-MW-20-6-16	6/16/2016	0.43 U	0.48 U	0.33 U	0.23 U	1.5 U
P1-MW-21	AN2102	7/20/2006	64.4	182	377	991	1,614
P1-MW-21	AN21A2	10/23/2006	56.8	2,240	486	1,320	4,103
P1-MW-21	AN21B2	1/22/2007	3.23	5.56	226	663	898
P1-MW-21	AN21C2	4/21/2007	2.14	6.35	334	401	743
P1-MW-21	AN21E2	1/28/2008	0.567 J	9.45 U	361	811	1,172
P1-MW-21	AN21F2	1/28/2008	2.98	1.37	249	622	875
P1-MW-21	P1-MW-21 (060509)	6/5/2009	10 U	74	1,100	4,400	5,574
P1-MW-21	P1-MW-21 (061510)	6/15/2010	10 U	17	1,300 J	5,300 J	6,617
P1-MW-21	P1-MW-21-6-16	6/17/2016	8.6 U	14 J	790	2,600	3,390
P1-MW-22	MW2201	5/29/1997	160	80 J	200	6,200	6,660
P1-MW-22	PH1MW2202	11/3/1999	250 U	250 U	150 J	8,300	8,250
P1-MW-22	AN2222	9/6/2001	91.9	67.4 U	178	6,350	6,687
P1-MW-22	AN2232	3/14/2002	123	100 U	112	6,480	6,715
P1-MW-22	AN2242	1/25/2003	78.2	50 U	156	6,050	6,284
P1-MW-22	AN2252	6/21/2003	126	9 J	90.2	6,340	6,565
P1-MW-22	AN2262	7/16/2004	40.7	39.1 U	85.7	5,400	5,566
P1-MW-22	AN2272	1/14/2005	52.8	12.5 U	82.5 J	8,430 J	8,565
P1-MW-22	AN2282	7/16/2005	43.7	28.0 U	61.3	2,700	2,805
P1-MW-22	AN2292	1/16/2006	57.5	10.7	65.1	5,250	5,383
P1-MW-22	AN2202	7/20/2006	58.7	20 U	74.2	5,530	5,663
P1-MW-22	AN22A2	10/23/2006	58.1	15.2 J	77.6	7,000	7,151
P1-MW-22	AN22B2	1/17/2007	35.5	12.5	55.1	2,000	2,103
P1-MW-22	AN22C2	4/21/2007	26.5	3	51.4	4,580	4,661
P1-MW-22	AN22D2	7/14/2007	18.1	12.7 U	60.5	3,000	3,079
P1-MW-22	AN22E2	1/28/2008	32.6	6.81 U	28.1	2,190	2,251
P1-MW-22	AN22F2	7/16/2008	24.6	7.32	77.8	4,650	4,760
P1-MW-22	P1-MW-22 (121708)	12/17/2008	29	18	95	3,900 J	4,042
P1-MW-22	P1-MW-22 (060409)	6/4/2009	26	72	190	4,000	4,288
P1-MW-22	P1-MW-22 (121009)	12/10/2009	19	17	80	3,000	3,116
P1-MW-22	P1-MW-22 (061710)	6/17/2010	10	12	86	2,700	2,808
P1-MW-22	P1-MW-22 (090810)	9/8/2010	340	660	130	2,800	3,930
P1-MW-22	P1-MW-22 (032911)	3/29/2011	11	10	100	3,200	3,321
P1-MW-22	P1-MW-22-6-16	6/15/2016	2.2 U	2.4 U	5.1	380	385
P1-MW-23	MW2301	5/30/1997	110	62	180	1,100	1,452
P1-MW-23	PH1MW2302	11/3/1999	330	110	830	3,720	4,360
P1-MW-23	AN2322	9/6/2001	661	70.8 U	975	4,630	6,337
P1-MW-23	AN2332	3/14/2002	510	50 U	818	4,180	5,508
P1-MW-23	AN2342	1/25/2003	709	127	1,080	4,210	6,126
Alternate Concentration Limit			285	800,000	114,800	—	—

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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-MW-23	AN2352	6/21/2003	542	140	1,290	5,050	7,022
P1-MW-23	AN2362	7/16/2004	360	24	544	3,400	4,328
P1-MW-23	AN2372	1/15/2004	660	38.9	694	3,240	4,633
P1-MW-23	AN2382	7/16/2005	129	31.0 U	474	1,750	2,353
P1-MW-23	AN2392	1/16/2006	442	35.9	875	4,580	6,033
P1-MW-23	AN2302	7/20/2006	527	27.9 U	754	4,410	5,691
P1-MW-23	AN23B2	1/17/2007	88.6	9.18 J	189	1,530	1,817
P1-MW-23	AN23D2	7/14/2007	27.5	5.74	175	896	1,104
P1-MW-23	AN23E2	1/28/2008	72.1	36.9	495	1,940	2,544
P1-MW-23	AN23F2	7/16/2008	71	10.6	144	1,280	1,506
P1-MW-23	P1-MW-23 (121708)	12/17/2008	88	17	180	1,500 J	1,785
P1-MW-23	P1-MW-23 (060409)	6/4/2009	61	20	200	1,500	1,781
P1-MW-23	P1-MW-23 (121009)	12/10/2009	190	26	160	2,500	2,876
P1-MW-23	P1-MW-23 (061710)	6/17/2010	660	55	220	6,100	7,035
P1-MW-23	P1-MW-23 (020112)	2/1/2012	54	14	35	1300	1,403
P1-MW-23	P1-MW-23 (041813)	4/18/2013	2.8	0.5 U	0.62	7.5	11
P1-MW-23	P1-MW-23-6-16	6/16/2016	0.56 J	0.48 U	0.73 J	6.5	7
P1-MW-24	P1-MW-24-6-16	6/17/2016	0.43 U	0.48 U	0.33 U	0.23 U	1.5 U
P1-MW-36	AN36D2	7/15/2007	1 U	1 U	1 U	0.374 J	0.374
P1-MW-36	P1-MW-36 (020212)	2/2/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-MW-36	P1-MW-36-6-16	6/20/2016	0.43 U	0.48 U	0.33 U	0.23 U	1.5 U
P1-MW-40	AN40D2	7/15/2007	17.2	1.46 U	4.37	48.4	69.97
P1-MW-40	P1-MW-40 (090810)	9/8/2010	3.3	18	5.7	470	497
P1-MW-40	P1-MW-40 (041813)	4/18/2013	120	1900	630	2900	5550
P1R2-MW-43	D-MW-43 (022210)	2/22/2010	4,100	22,000	1,200	5,000	32,300
P1R2-MW-43	P1R2-MW-43 (061710)	6/17/2010	3,800	14,000	1,200	4,600	23,600
P1R2-MW-43	P1R2-MW-43 (011811)	1/18/2011	1,400	9,200	520	2,100	13,220
P1R2-MW-43	P1R2-MW-43 (022511)	2/25/2011	670	4,900	300	1,600	7,470
P1R2-MW-43	P1R2-MW-43 (040111)	4/1/2011	370	5,800	110	1,200	7,480
P1R2-MW-43	P1R2-MW-43 (061511)	6/15/2011	910	7,700	510	2,700	11,820
P1R2-MW-43	P1R2-MW-43 (092911)	9/29/2011	560	7,500	230	1,100	9,390
P1R2-MW-43	P1R2-MW-43	7/18/2012	1,100	4,700	140	1,400	7,340
P1R2-MW-43	P1-MW-43 (121312)	12/13/2012	32	260	3.2 J	60	355
P1R2-MW-43	P1R2-MW-43 (073113)	7/31/2013	2,000	510	140	2,000	4,650
P1R2-MW-43	P1R2-MW-43 (011014)	1/10/2014	48	56	5.7	81	191
P1R2-MW-43	P1R2-MW-43 (040314)	4/3/2014	1,900	12,000	1,600	5,600	21,100
P1R2-MW-43	P1R2-MW-43 (072514)	7/25/2014	430	1,100	120	1,000	2,650
P1R2-MW-43	P1R2-MW-43 (103014)	10/30/2014	370	37	46	370	823
P1R2-MW-43	P1R2-MW-43 (0311915)	3/19/2015	19	100	6.4	46	171
P1R2-MW-43	HA13P1R2MW43(050715)	5/7/2015	27	23	5.6	27	82.6
P1R2-MW-43	HA13P1R2MW43(072815)	7/28/2015	2,200	2,000	420	1,900	6,520
P1R2-MW-43	HA13P1R2MW43(120815)	12/8/2015	31	17	7.6	66	122
P1R2-MW-43	HA13P1R2MW43(021016)	2/10/2016	5.8	4.5	1.3	8.0	19.6
P1R2-MW-43	HA13P1R2MW43(042416)	4/24/2016	310	72	44	430	856
P1R2-MW-43	P1R2-MW-43-6-16	6/14/2016	21	1	4.6	31	58
P1R2-MW-43	HA13P1R2MW43(101816)	10/18/2016	53	10	4.8	6.4	74
P1R2-MW-43	HA13P1R2MW43(061617)	6/16/2017	140 J	15 J	35	210	245
P1R2-MW-43	HA13P1R2MW43(102517)	10/25/2017	71	20	4.2	180	275
P1R2-MW-43	HA13P1R2MW43(060518)	6/5/2018	480 J	770 J	110 J	630 J	1,990
P1R2-MW-43	HA13P1R2MW43(101618)	10/16/2018	51	63	17	44	175
Alternate Concentration Limit			285	800,000	114,800	—	—

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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1R2-MW-44	D-MW-44 (022210)	2/22/2010	820	5,200	1,800	6,900	14,720
P1R2-MW-44	P1R2-MW-44 (061710)	6/17/2010	790	8,900	2,200	7,600	19,490
P1R2-MW-44	P1R2-MW-44 (041813)	4/18/2013	920	560	1,400	5,600	8,480
P1R2-MW-44	P1R2-MW-44 (072514)	7/25/2014	1,100	100	1,300	5,800	8,300
P1R2-MW-44	P1R2-MW-44-6-16	6/15/2016	900	29 J	770	5,800	7,470
P1R2-MW-45	P1R2-MW-45 (121610)	12/16/2010	1,700	23,000	1,200	4,800	30,700
P1R2-MW-45	P1R2-MW-45 (022511)	2/25/2011	1,900	23,000	1,400	5,900	32,200
P1R2-MW-45	P1R2-MW-45 (041813)	4/18/2013	1,600	13,000	1,300	5,300	21,200
P1R2-MW-45	P1R2-MW-45-6-16	6/13/2016	3,100	8,400	1,300	5,600	18,400
P1R2-IW-01	P1R2-IW-01 (022411)	2/24/2011	39	3000	470	2200	5709
P1R2-IW-01	P1R2-IW-01 (061511)	6/15/2011	450	17,000	2,000	9,400	28,850
P1R2-IW-01	P1R2-IW-01 (020112)	2/1/2012	280	4,800	1,400	6,000	12,480
P1R2-IW-01	P1R2-IW-01 (121212)	12/12/2012	130	360	520	1,300	2,310
P1R2-IW-01	P1R2-IW-01-6-16	6/16/2016	3.8	3.4	24	99	130
P1R2-IW-02	P1R2-IW-02 (022210)	2/22/2010	2.3	0.94	0.36 J	0.50 U	3.6
P1R2-IW-02	P1R2-IW-02 (032911)	3/29/2011	980	27,000	2,500	11,000	41,480
P1R2-IW-02	P1R2-IW-02 (092711)	9/27/2011	360	5,400	2,100	7,500	15,360
P1R2-IW-02	P1R2-IW-02 (121212)	12/12/2012	110	29	760	1,100	1,999
P1R2-IW-02	P1R2-IW-02-6-16	6/16/2016	9.7	2.6	130	220	362
P1R2-IW-03	P1R2-IW-03 (030810)	3/8/2010	730	20,000	2,100	8,300	31,130
P1R2-IW-03	P1R2-IW-03 (032911)	3/29/2011	260	11,000	1,300	6,100	18,660
P1R2-IW-03	P1R2-IW-03 (061511)	6/15/2011	250	11,000	1,900	7,900	21,050
P1R2-IW-03	P1R2-IW-03 (020112)	2/1/2012	200	2,200	1,200	5,500	9,100
P1R2-IW-03	P1R2-IW-03 (121212)	12/12/2012	310	140	680	1,700	2,830
P1R2-IW-03	P1R2-IW-03 (080113)	8/1/2013	600	330	920	650	2,500
P1R2-IW-03	P1R2-IW-03-6-16	6/16/2016	350	2,500	270	1,300	4,420
P1R2-IW-04	P1R2-IW-04 (030810)	3/8/2010	600	16,000	1,900	7,900	26,400
P1R2-IW-04	P1R2-IW-04 (022411)	2/24/2011	22	11,000	1,400	5,600	18,022
P1R2-IW-04	P1R2-IW-04 (061511)	6/15/2011	130	1,600	400	1,500	3,630
P1R2-IW-04	P1R2-IW-04 (020112)	2/1/2012	330	1,100	1,500	6,200	9,130
P1R2-IW-04	P1R2-IW-04-6-16	6/16/2016	27	180	110	170	487
P1R2-IW-05	P1R2-IW-05 (020910)	2/9/2010	610	12,000	1,200	5,000	18,810
P1R2-IW-05	P1R2-IW-05 (021810)	2/18/2010	8.2	1.3	0.50 U	0.39 J	9.89
P1R2-IW-05	P1R2-IW-05 (030810)	3/8/2010	760	7,500	400	1,400	10,060
P1R2-IW-05	P1R2-IW-05 (031210)	3/12/2010	500	7,100	720	2,900	11,220
P1R2-IW-05	P1R2-IW-05 (031510)	3/15/2010	620	7,800	480	3,000	11,900
P1R2-IW-05	P1R2-IW-05 (032910)	3/29/2010	730	11,000	1,300	4,700	17,730
P1R2-IW-05	P1R2-IW-05 (090810)	9/8/2010	2,300	4,500	3,200	34,000	44,000
P1R2-IW-05	P1R2-IW-05 (022411)	2/24/2011	560	9,100	940	3,600	14,200
P1R2-IW-05	P1R2-IW-05 (061511)	6/15/2011	1,200	20,000	1,700	6,400	29,300
P1R2-IW-05	P1R2-IW-05	7/19/2012	210	16	0.50 U	0.50 U	226
P1R2-IW-05	P1R2-IW-05 (092012)	9/19/2012	1,200	11,000	1,000	4,700	17,900
P1R2-IW-05	P1R2-IW-05 (102413)	10/24/2013	1,000	16,000	1,000	4,400	22,400
P1R2-IW-05	P1R2-IW-05 (103014)	10/30/2014	880	14,000	760	3,400	19,040
P1R2-IW-05	P1R2-IW-05 (031915)	3/19/2015	980	15,000	670	3,800	20,450
P1R2-IW-05	HA13P1R2IW05 (050715)	5/7/2015	590	6,800	470	3,200	11,060
P1R2-IW-05	HA13P1R2IW05(072915)	7/29/2015	520	160 U	570	380	1,470
P1R2-IW-05	HA13P1R2IW05(120815)	12/8/2015	660	3,000	500	980	5,140
P1R2-IW-05	HA13P1R2IW05(021116)	2/11/2016	6.5	3.9	11	50	71.4
P1R2-IW-05	HA13P1R2IW05(042416)	4/24/2016	430	1,600	340	1,300	3,670
Alternate Concentration Limit			285	800,000	114,800	—	—

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Table 2
Historical Groundwater and Surface Water Analytical Results
CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1R2-IW-05	P1R2-IW-05-6-16	6/16/2016	260	1,000	200	800	2,260
P1R2-IW-05	HA13P1R2IW05(101816)	10/18/2016	360	2,600	470	1,800	5,230
P1R2-IW-05	HA13P1R2IW05(061617)	6/16/2017	720	5,400	610	2,500	9,230
P1R2-IW-05	HA13P1R2IW05(060518)	6/5/2018	540 Q	160	1,600	730	2,680
P1R2-IW-05	HA13P1R2IW05(101718)	10/17/2018	410	3,400	450	1,900	6,160
P1R2-IW-06	P1R2-IW-06 (020910)	2/9/2010	530	14,000	1,500	6,000	22,030
P1R2-IW-06	P1R2-IW-06 (021810)	2/18/2010	510	14,000	1,700	6,700	22,910
P1R2-IW-06	P1R2-IW-06 (032911)	3/29/2011	75	980	650	2,800	4,505
P1R2-IW-06	P1R2-IW-06 (061511)	6/15/2011	120	330	950	3,100	4,500
P1R2-IW-06	P1R2-IW-06 (020112)	2/1/2012	710	2,800	1,300	4,900	9,710
P1R2-IW-06	P1R2-IW-06 (080113)	8/1/2013	220	260	460	300	1,240
P1R2-IW-06	P1R2-IW-06 (1024113)	10/24/2013	220	3,000	830	3,000	7,050
P1R2-IW-06	P1R2-IW-06-6-16	6/16/2016	610	5,400	500	1,800	8,310
P1R2-IW-07	P1R2-IW-07 (022410)	2/24/2010	3,000	3,000	720	5,700	12,420
P1R2-IW-07	P1R2-IW-07 (022610)	2/26/2010	1.0 U	1.0 U	1.0 U	2.0 U	5.0 U
P1R2-IW-07	P1R2-IW-07 (030910)	3/9/2010	110	77	11	4.2	202
P1R2-IW-07	P1R2-IW-07 (031510)	3/15/2010	220	130	23	27	400
P1R2-IW-07	P1R2-IW-07 (032910)	3/29/2010	1,000	1,900	240	860	4,000
P1R2-IW-07	P1R2-IW-07 (090810)	9/8/2010	2,600	750	7,400	3,400	14,150
P1R2-IW-07	P1R2-IW-07 (022411)	2/24/2011	2,800	2,600	300	1,500	7,200
P1R2-IW-07	P1R2-IW-07 (032911)	3/29/2011	3,000	3,200	500	2,500	9,200
P1R2-IW-07	P1R2-IW-07 (061511)	6/15/2011	2,900	3,100	480	3,300	9,780
P1R2-IW-07	P1R2-IW-07	7/18/2012	400	760	87	370	1,617
P1R2-IW-07	P1R2-IW-07 (121312)	12/13/2012	1,900	4,900	680	3,000	10,480
P1R2-IW-07	P1R2-IW-07 (102413)	10/24/2013	1,100	7,000	990	3,800	12,890
P1R2-IW-07	P1R2-IW-07-6-16	6/13/2016	320	46	670	430	1,466
P1R2-IW-07	DUP-1-6-16	6/13/2016	420	42	750	470	1,682
P1R2-IW-08	P1R2-IW-08 (022210)	2/22/2010	2,400	1,200	450	5,100	9,150
P1R2-IW-08	P1R2-IW-08 (032911)	3/29/2011	41	170	20	100	331
P1R2-IW-08	P1R2-IW-08 (092811)	9/28/2011	230	300	16	94	640
P1R2-IW-08	P1R2-IW-08 (020112)	2/1/2012	770	670	200	950	2,590
P1R2-IW-08	P1R2-IW-08 (0920112)	9/20/2012	1,400	10,000	580	2,900	14,880
P1R2-IW-08	P1R2-IW-08 (0110114)	1/10/2014	330	610	66	240	1,246
P1R2-IW-08	P1R2-IW-08-6-16	6/14/2016	490	1,300	540	940	3,270
P1R2-IW-09	P1R2-IW-09 (030310)	3/3/2010	730	3,200	550	2,900	7,380
P1R2-IW-09	P1R2-IW-09 (033111)	3/31/2011	1,300	11,000	500	2,400	15,200
P1R2-IW-09	P1R2-IW-09 (092911)	9/29/2011	2,600	14,000	1100	4,900	22,600
P1R2-IW-09	P1R2-IW-09 (092012)	9/20/2012	1,200	12,000	830	3,100	17,130
P1R2-IW-09	P1R2-IW-09 (040314)	4/3/2014	1,300	8,100	710	2,100	12,210
P1R2-IW-09	P1R2-IW-09-6-16	6/15/2016	690	3,400	920	3,300	8,310
P1R2-IW-10	P1R2-IW-10 (030310)	3/3/2010	2,800	2,100	440	4,900	10,240
P1R2-IW-10	P1R2-IW-10 (033111)	3/31/2011	2,300	1,900	540	2,800	7,540
P1R2-IW-10	P1R2-IW-10 (092811)	9/28/2011	2,500	1,700	690	4,600	9,490
P1R2-IW-10	P1R2-IW-10	7/18/2012	180	480	190	1,200	2,050
P1R2-IW-10	P1R2-IW-10 (092012)	9/20/2012	2,200	1,800	430	2,300	6,730
P1R2-IW-10	P1R2-IW-10 (040214)	4/2/2014	1,100	1,700	440	2,900	6,140
P1R2-IW-10	P1R2-IW-10 (072514)	7/25/2014	200	360	99	480	1,139
P1R2-IW-10	P1R2-IW-10 (103014)	10/30/2014	420	670	270	2,900	4,260
P1R2-IW-10	P1R2-IW-10 (031915)	3/19/2015	290	160	320	1,000	1,770
P1R2-IW-10	HA13P1R2IW10(050715)	5/7/2015	320	210	550	2,500 J	3,580
P1R2-IW-10	HA13P1R2IW10(072915)	7/29/2015	320	82	540	700	1,642
Alternate Concentration Limit			285	800,000	114,800	—	—

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CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1R2-IW-10	HA13P1R2IW10(120815)	12/8/2015	490	1,500	610	1,500	4,100
P1R2-IW-10	HA13P1R2IW10(021116)	2/11/2016	380	56	1900	760	3,096
P1R2-IW-10	HA13P1R2IW10(042416)	4/24/2016	290	85	1500	650	2,525
P1R2-IW-10	P1R2-IW-10-6-16	6/13/2016	360	36	1600	490	2,486
P1R2-IW-10	HA13P1R2IW10(101816)	10/18/2016	280	1,400	1800	3,000	6,480
P1R2-IW-10	HA13P1R2IW10(061517)	6/15/2017	300	180	1400	1,700	3,580
P1R2-IW-10	HA13P1R2IW10(102617)	10/26/2017	500	1,100	1,100	3,000	5,700
P1R2-IW-10	HA13P1R2IW10(060518)	6/5/2018	210 J	40 U	1,000 J	1,800 J	3,050
P1R2-IW-10	HA13P1R2IW10(101718)	10/17/2018	490	52	1,100	1,400	3,042
P1R2-IW-11	P1R2-IW-11 (030310)	3/3/2010	2,200	3,200	930	4,900	11,230
P1R2-IW-11	P1R2-IW-11 (033111)	3/31/2011	1,800	1,900	460	3,200	7,360
P1R2-IW-11	P1RW-IW-11 (092811)	9/28/2011	1,800	2,000	550	3,700	8,050
P1R2-IW-11	P1RW-IW-11 (092012)	9/20/2012	1,500	2,600	730	2,400	7,230
P1R2-IW-11	P1RW-IW-11 (011014)	1/10/2014	690	1,300	660	1,400	4,050
P1R2-IW-11	P1R2-IW-11-6-16	6/14/2016	79	180	220	1,000	1,479
P1R2-IW-11	DUP-1-6-16	6/14/2016	67	140	250	1,100	1,557
P1R2-IW-12	P1R2-IW-12 (030310)	3/3/2010	480	2,900	340	930	4,650
P1R2-IW-12	P1R2-IW-12 (022411)	2/24/2011	500	2,500	250	1,000	4,250
P1R2-IW-12	P1R2-IW-12 (033111)	3/31/2011	55	470	92	320	937
P1R2-IW-12	P1R2-IW-12 (061511)	6/15/2011	1,200	3,400	850	3,400	8,850
P1R2-IW-12	P1R2-IW-12	7/18/2012	26	28	8	25	87
P1R2-IW-12	P1R2-IW-12 (092012)	9/20/2012	510	370	440	580	1,900
P1R2-IW-12	P1R2-IW-12 (102413)	10/24/2013	360	440	550	780	2,130
P1R2-IW-12	P1R2-IW-12-6-16	6/14/2016	45	42	120	1,700	1,907
P1R2-IW-13	P1R2-IW-13 (121610)	12/16/2010	3,700	1,800	510	5,100	11,110
P1R2-IW-13	P1R2-IW-13 (022511)	2/24/2011	130	2,200	< 25	430	2,760
P1R2-IW-13	P1R2-IW-13 (033111)	3/31/2011	1,400	7,000	460	1,900	10,760
P1R2-IW-13	P1R2-IW-13 (092911)	9/29/2011	2,900	3,600	440	4,500	11,440
P1R2-IW-13	P1R2-IW-13	7/18/2012	680	4,400	300	1,500	6,880
P1R2-IW-13	P1R2-IW-13 (121312)	12/13/2012	1,900	7,600	600	3,000	13,100
P1R2-IW-13	P1R2-IW-13 (103014)	10/30/2014	1,100	5,900	730	2,800	10,530
P1R2-IW-13	P1R2-IW-13 (031915)	3/19/2015	1,500	8,000	920	2,800	13,220
P1R2-IW-13	HA13P1R2IW13(050715)	5/7/2015	2,000	11,000	1,200	4,400	18,600
P1R2-IW-13	HA13P1R2IW13(072915)	7/29/2015	1,600	7,800	950	3,100	13,450
P1R2-IW-13	HA13P1R2IW13(120815)	12/8/2015	2,100	14,000	1,200	4,700	22,000
P1R2-IW-13	HA13P1R2IW13(021016)	2/10/2016	2,300	9,100	1,100	4,100	16,600
P1R2-IW-13	HA13P1R2IW13(042416)	4/24/2016	1,700	11,000	890	3,800	17,390
P1R2-IW-13	P1R2-IW-13-6-16	6/13/2016	1,800	7,100	850	3,100	12,850
P1R2-IW-13	HA13P1R2IW13(101816)	10/18/2016	2,600	18,000	1,300	4,900	26,800
P1R2-IW-13	HA13P1R2IW13(061517)	6/15/2017	1,300	7,600	910	2,700	12,510
P1R2-IW-13	HA13P1R2IW13(102517)	10/25/2017	1,600	6,600	1,000	2,900	12,100
P1R2-IW-13	HA13P1R2IW13(060518)	6/5/2018	1,800 J	8,100 J	1,100 J	3,300 J	14,300
P1R2-IW-13	HA13P1R2IW13(101618)	10/16/2018	1,800	8,200	1100	3,900	15,000
P1R2-IW-14	P1R2-IW-14 (121610)	12/16/2010	3,600	6,000	1,200	5,300	16,100
P1R2-IW-14	P1R2-IW-14 (022411)	2/24/2011	350	920	18	71	1,359
P1R2-IW-14	P1R2-IW-14 (033111)	3/31/2011	1,400	8,700	520	2,100	12,720
P1R2-IW-14	P1R2-IW-14 (092911)	9/29/2011	3,200	8,300	700	3,700	15,900
P1R2-IW-14	P1R2-IW-14 (092012)	9/20/2012	1,600	3,600	470	2,100	7,770
P1R2-IW-14	P1R2-IW-14 (102413)	10/24/2013	1,300	4,200	700	2,600	8,800
P1R2-IW-14	P1R2-IW-14-6-16	6/14/2016	1,500	7,300	740	2,600	12,140
P1R2-IW-15	P1R2-IW-15 (121610)	12/16/2010	2,300	1,900	750	4,700	9,650
P1R2-IW-15	P1R2-IW-15 (022511)	2/25/2011	450	1,600	72	340	2,462
P1R2-IW-15	P1R2-IW-15 (033111)	3/31/2011	1,400	4,500	350	1,400	7,650
P1R2-IW-15	P1R2-IW-15 (092911)	9/29/2011	1,600	2,600	970	5,700	10,870
P1R2-IW-15	P1R2-IW-15	7/18/2012	920	5,300	350	1,800	8,370
P1R2-IW-15	P1R2-IW-15 (121212)	12/12/2012	2,700	7,900	540	4,700	15,840
Alternate Concentration Limit			285	800,000	114,800	—	—

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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1R2-IW-15	P1R2-IW-15 (102413)	10/24/2013	2,600	9,500	700	3,700	16,500
P1R2-IW-15	P1R2-IW-15-6-16	6/13/2016	1,800	5,100	780	2,700	10,380
P1-J1	AN0118	7/20/2006	69.5	292	1,040	5,060	6,462
P1-J1	ANJ128	1/17/2007	59.7	138	707	2,530	3,435
P1-J2	AN0218	7/20/2006	268	3,230	1,430	5,860	10,788
P1-J2	ANJ228	1/17/2007	245	1,480	1,420	5,860	9,005
P1-J3	AN0318	7/20/2006	900	17,600	1,570	6,670	26,740
P1-J3	P1-J3 (022210)	2/22/2010	200	970	4,000	4,600	9,770
P1-J3	P1-J3 (061710)	6/17/2010	370	6,200	1,300	5,300	13,170
P1-J3	P1-J3 (090910)	9/9/2010	170	920	1,500	3,500	6,090
P1-J3	P1-J3 (022411)	2/24/2011	160	2,200	1,100	5,200	8,660
P1-J3	P1-J3 (032911)	3/29/2011	390	4,700	1,500	7,100	13,690
P1-J3	P1-J3 (061511)	6/15/2011	130	550	440	1,800	2,920
P1-J3	P1-J3 (020112)	2/1/2012	300	38	1,600	4,100	6,038
P1-J3	P1-J3 (011014)	1/10/2012	8.1	6.2	160	570	744
P1-J3	P1-J3 (040214)	4/2/2014	18.0	11.0	170	320	519
P1-J3	P1-J3 (072514)	7/25/2014	150	570	630	2,800	4,150
P1-J3	P1-J3-6-16	6/16/2016	140	740	470	2,000	3,350
P1-J4	AN0418	7/20/2006	729	10,700	1,390	5,190	18,009
P1-J4	ANJ428	1/22/2007	1,160	20,800	1,600	6,230	29,790
P1-J4	P1-J4 (020910)	2/9/2010	490	9,600	1,100	4,700	15,890
P1-J4	P1-J4 (021810)	2/18/2010	400	5,000	970	3,600	9,970
P1-J4	P1-J4 (022210)	2/22/2010	400	4,900	660	2,600	8,560
P1-J4	P1-J4 (030810)	3/8/2010	520	3,800	310	540	5,270
P1-J4	P1-J4 (031210)	3/12/2010	340	7,600	1,000	4,600	13,540
P1-J4	P1-J4 (031510)	3/15/2010	470	6,800	1,000	4,300	12,570
P1-J4	P1-J4 (032910)	3/29/2010	440	6,400	870	3,600	11,310
P1-J4	P1-J4 (051110)	5/11/2010	500	14,000	1,100	5,200	20,800
P1-J4	P1-J4 (061610)	6/16/2010	660	14,000	1,100	4,700	20,460
P1-J4	P1-J4 (090810)	9/8/2010	620	8,800	1,200	4,900	15,520
P1-J4	P1-J4 (090810)	1/18/2011	230	3,000	320	1,100	4,650
P1-J4	P1-J4 (022411)	2/24/2011	490	3,000	320	1,100	4,910
P1-J4	P1-J4 (032911)	3/29/2011	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
P1-J4	P1-J4 (061511)	6/15/2011	500	11,000	1,600	6,200	19,300
P1-J4	P1-J4 (092711)	9/27/2011	280	3,700	1,600	6,000	11,580
P1-J4	P1-J4	7/19/2012	330	930	67	130	1,457
P1-J4	P1-J4 (092012)	9/19/2012	1500	11,000	910	3,700	17,110
P1-J4	P1-J4 (121212)	12/12/2012	620	4,100	690	2,900	8,310
P1-J4	P1-J4 (080113)	8/1/2013	160	560	88	140	948
P1-J4	P1-J4 (102413)	10/24/2013	410	3,800	500	2,300	7,010
P1-J4	P1-J4 (011014)	1/10/2014	670	6,800	800	3,000	11,270
P1-J4	P1-J4 (040214)	4/2/2014	880	7,400	900	3,700	12,880
P1-J4	P1-J4 (072414)	7/24/2014	470	1,600	79	140	2,289
P1-J4	P1-J4 (103014)	10/30/2014	590	6,100	620	3,200	10,510
P1-J4	P1-J4 (031915)	3/19/2015	460	2,700	520	2,500	6,180
P1-J4	HA13P1J4(050815)	5/8/2015	700	530	630	2,200	4,060
P1-J4	HA13P1J4(072915)	7/29/2015	610	480	930	1,500	3,520
P1-J4	HA13P1J4(120815)	12/8/2015	550	46	730	2,000	3,326
Alternate Concentration Limit			285	800,000	114,800	—	—

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Table 2
Historical Groundwater and Surface Water Analytical Results
CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-J4	HA13P1J4(021216)	2/12/2016	1,000	3,800	710	2,000	7,510
P1-J4	HA13P1J4(042416)	4/24/2016	400	150	360	900	1,810
P1-J4	P1-J4-6-16	6/16/2016	980	2,500	800	2,400	6,680
P1-J4	HA13P1J4(101816)	10/18/2016	520	380	780	2,400	4,080
P1-J4	HA13P1J4(061617)	6/16/2017	1,000	110	900	2,000	4,010
P1-J4	HA13P1J4(10/2517)	10/25/2017	490	730	2,200	2,400	5,820
P1-J4	HA13P1J4(060618)	6/6/2018	630	240	730	1,300	2,900
P1-J4	HA13P1J4(10/1718)	10/17/2018	630	260	910	2900	4700
P1-J5	AN0518	7/20/2006	601	15,000	1,620	6,870	24,091
P1-J5	ANJ528	1/17/2007	379	14,100	1,590	6,040	22,109
P1-J5	P1-J5 (041813)	4/18/2013	350	3,300	670	2,900	7,220
P1-J6	AN0618	7/20/2006	114	1,900	967	3,040	6,021
P1-J6	ANJ628	1/22/2007	68	248	326	514	1,156
P1-CPT-02	P1-CPT-02-6-16	6/15/2016	22 U	24 U	26 J	3800	3,800
P1-CPT-03	P1-CPT-03-6-16	6/13/2016	16	95	29	91	231
P1-CPT-06	P1-CPT-06-6-16	6/13/2016	0.86 J	0.48 U	0.33 U	0.72 J	2.3 J
P1-CPT-07	AP0738	7/15/2007	728 J	1,770 J	560 J	2,110 J	5,168
P1-CPT-07	P1-CPT-07 (060309)	6/3/2009	1,400	5,600	880	2,800	10,680
P1-CPT-07	CPT-07 (031210)	3/12/2010	2.7	25	6.4	35	69
P1-CPT-07	CPT-07 (031510)	3/15/2010	110	940	300	2,100	3,450
P1-CPT-07	P1-CPT-07 (061510)	6/15/2010	1,100	18,000	880	3,400	23,380
P1-CPT-07	P1-CPT-07 (090910)	9/9/2010	530	600	380	2,600	4,110
P1-CPT-07	P1-CPT-07 (022411)	2/24/2011	62	14	320	1,900	2,296
P1-CPT-07	P1-CPT-07 (032911)	3/29/2011	73	330	2.7	330	736
P1-CPT-07	P1-CPT-07 (061511)	6/15/2011	470	1,000	530	2,300	4,300
P1-CPT-07	P1-CPT-07 (092911)	9/29/2011	460	2,100	340	1,500	4,400
P1-CPT-07	P1-CPT-07 (041813)	4/18/2013	110	18	150	1,300	1,578
P1-CPT-07	P1-CPT-07 (102413)	10/24/2013	330	48 J	780	3,300	4,410
P1-CPT-07	P1-CPT-07 (010914)	1/9/2014	160	63	390	2,100	2,713
P1-CPT-07	P1-CPT-07 (040214)	4/2/2014	120	17	340	1,300	1,777
P1-CPT-07	P1-CPT-07 (072414)	7/24/2014	190	87	620	2,700	3,597
P1-CPT-07	P1-CPT-07 (032015)	3/20/2015	75	10	100	700	885
P1-CPT-07	HA13CPT07(050815)	5/8/2015	160	73	400	2,100	2,733
P1-CPT-07	HA13CPT07(073015)	7/30/2015	260	35 J	610	2,600	3,470
P1-CPT-07	HA13CPT07(120715)	12/7/2015	120	270	71	1,800	2,261
P1-CPT-07	HA13CPT07(021116)	2/11/2016	14	51	49	210	324
P1-CPT-07	D1(021116)	2/11/2016	19	73	73	300	465
P1-CPT-07	HA13CPT07(042416)	4/24/2016	77	660	160	1,200	2,097
P1-CPT-07	P1-CPT-07-6-16	6/17/2016	220	810	700	2,500	4,230
P1-CPT-07	DUP-6-6-16	6/17/2016	210	830	780	2,800	4,620
P1-CPT-07	HA13P1CPT07(101816)	10/18/2016	45	12	90	570	717
P1-CPT-07	HA13P1CPT07(061617)	6/16/2017	37	18	83	740	878
P1-CPT-07	HA13P1CPT07(102417)	10/24/2017	66	190	34	1,300	1,590
P1-CPT-07	HA13P1CPT07(060618)	6/6/2018	74	19	96	1,000	1,189
P1-CPT-07	HA13P1CPT07(101718)	10/17/2018	16	31	28	270	345
P1-CPT-08	P1-CPT-08-6-16	6/15/2016	24	110	52	160	346
P1-CPT-09	AP0928	1/23/2007	785	23,400	1,540	6,660	32,385
P1-CPT-09	P1-CPT-09 (090910)	9/9/2010	1,200	1,800	37,000	8,100	48,100
P1-CPT-09	P1-CPT-09 (073113)	7/31/2013	54	380	1,400	7,300	9,134
P1-CPT-09	P1-CPT-09-6-16	6/17/2016	20	220	1,100	5,600	6,940
P1-CPT-17	AP1738	7/15/2007	906	12,000	579	2,700	16,185
P1-CPT-17	P1-CPT-17 (041813)	4/18/2013	33	2,100	960	6,000	9,093
P1-CPT-17	P1-CPT-17-6-16	6/20/2016	4.3 U	150	350	2,000	2,500
P1-CPT-18	P1-CPT-18-6-16	6/20/2016	4.3 U	11	220	1,400	1,631
P1-CPT-19	AP1938	7/15/2007	1,830	3,910	298	2,270	8,308
P1-CPT-19	P1-CPT-19 (090810)	9/8/2010	3,000	440	77	2,400	5,917
Alternate Concentration Limit			285	800,000	114,800	—	—

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Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-CPT-19	DUP1 (090810)	9/8/2010	2,700	410	72	2,300	5,482
P1-CPT-19	P1-CPT-19 (011811)	1/18/2011	2,500	380	340	2,300	5,520
P1-CPT-19	P1-CPT-19 (022411)	2/24/2011	3,700	1,600	570	3,800	9,670
P1-CPT-19	P1-CPT-19 (092012)	9/20/2012	2,800	5,300	920	2,900	11,920
P1-CPT-19	P1-CPT-19 (073113)	7/31/2013	1,800	1,000	610	980	4,390
P1-CPT-19	P1-CPT-19 (011014)	1/10/2014	1,800	5,000	630	1,600	9,030
P1-CPT-19	P1-CPT-19 (040314)	4/3/2014	2,300	8,000	650	2,500	13,450
P1-CPT-19	DUP-01 (040314)	4/3/2014	2,300	8,300	690	2,600	13,890
P1-CPT-19	P1-CPT-19 (072514)	7/25/2014	1,600	790	700	1,400	4,490
DUP-01	DUP-01 (072514)	7/25/2014	1,500	620	670	1,400	4,190
P1-CPT-19	P1-CPT-19 (103014)	10/30/2014	2,100	6,400	720	2,800	12,020
DUP-01	DUP-01 (103014)	10/30/2014	2,200	6,700	750	2,900	12,550
P1-CPT-19	P1-CPT-19 (031915)	3/19/2015	1,800	9,800	650	2,900	15,150
P1-CPT-19	HA13P1CPT19(050715)	5/7/2015	290	180	490	2,200	3,160
P1-CPT-19	HA13P1CPT19(072915)	7/29/2015	1,800	2,600	1,100	4,200	9,700
P1-CPT-19	HA13P1CPT19(120815)	12/8/2015	2,500	15,000	750	3,400	21,650
P1-CPT-19	HA13P1CPT19(021116)	2/11/2016	1,100	4,700	490	2,200	8,490
P1-CPT-19	HA13P1CPT19(042416)	4/24/2016	690	6,100	260	1,300	8,350
P1-CPT-19	P1-CPT-19-6-16	6/14/2016	1,300	4,000	380	1,700	7,380
P1-CPT-19	HA13P1CPT19(101816)	10/18/2016	850	690	510	2,100	4,150
P1-CPT-19	HA13P1CPT19(061517)	6/15/2017	2,200	15,000	610	2,800	20,610
P1-CPT-19	HA13P1CPT19(102517)	10/25/2017	2,000	6,600	700	2,500	11,800
P1-CPT-19	HA13P1CPT19(60518)	6/5/2018	2,300 J	19,000 J	710 J	3,000 J	25,010
P1-CPT-19	HA13P1CPT19(101618)	10/16/2018	1,900	11,000	620 J	3,000	16,520
P1-CPT-20	P1-CPT-20 (022411)	2/24/2011	120	110	3.9	76	310
P1-CPT-20	P1-CPT-20 (092811)	9/28/2011	50	2.8	41	59	153
P1-CPT-20	P1-CPT-20 (073113)	7/31/2013	120	2.1 J	6.2	28	156
P1-CPT-20	P1-CPT-20-6-16	6/14/2016	100	780	120.0	300	1,300
P1-CPT-21	P1-CPT-21-6-16	6/15/2016	1200	1800	380.0	1,200	4,580
P1-CPT-22	AP2238	7/15/2007	471	989	186	1,310	2,956
P1-CPT-22	P1-CPT-22 (090810)	9/8/2010	870	590	2,300	3,300	7,060
P1-CPT-22	P1-CPT-22 (073113)	7/31/2013	950	190	780	4,100	6,020
P1-CPT-22	P1-CPT-22-6-16	6/15/2016	370	93	620	3,300	4,383
P1-CPT-22	DUP-3-6-16	6/15/2016	390	89	670	3,500	4,649
P1-CPT-23	P1-CPT-23 (041813)	4/18/2013	190	1900	430	2,100	4,620
P1-CPT-23	P1-CPT-23-6-16	6/16/2016	90	2400	280	1,100	3,870
P1-CPT-24	P1-CPT-24-6-16	6/16/2016	5	16	14	25	60
P1-CPT-25	P1-CPT-25-6-16	6/16/2016	11 U	1600	460	2,900	4,960
P1-DB-01	AN0128	1/11/2008	20.7	22.8	7.95	96.1	147.55
P1-DB-02	AN0228	1/11/2008	16.7	14.2	27.4	94	152
P1-DB-03	AN0328	1/12/2008	15.2	5.88	189	815	1,025
P1-DB-04	AN0428	1/13/2008	514	4,420 J	937	3,330	9,201
P1-DB-05	AN0528	1/12/2008	1,910	11,200	752	2,700	16,562
P1-DB-06	AN0628	1/12/2008	2,200	1,860	1,190	4,170	9,420
P1-DB-07	AN0728	1/12/2008	333	1,070	363	1,070	2,836
P1-DB-08	AN0828	1/12/2008	588	556	1,210	4,570	6,924
P1-DB-09	AN0928	1/13/2008	1 U	3.71	1.2	4.48	9.39
P1-DB-10	AN1028	1/13/2008	280	1,060 J	721	2,390	4,451
P1-DB-11	AN1128	1/13/2008	5.01 J	0.656 J	9.03 J	10.2 J	25
P1-DB-12	AN1228	1/13/2008	280	915	1,550 J	4,540	7,285
P1-DB-13	AN1328	1/11/2008	1,210	14,300	1,160	3,820	20,490
P1-DB-14	AN1428	1/11/2008	116	84.9	612	1,830	2,643
Alternate Concentration Limit			285	800,000	114,800	—	—

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Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-DB-15	AN1528	1/14/2008	7.06	2,030	858	4,460	7,355
P1-DB-16	AN1628	1/14/2008	9.13	297	384	2,040	2,730
P1-DB-17	AN1728	1/14/2008	5.51	1,020	1,210	6,980	9,216
P1-DB-18	AN1828	1/14/2008	810	25,400	1,480	5,650	33,340
P1-DB-19	AN1928	1/11/2008	463	6,440	1,230	4,130	12,263
P1-DB-20	AN2028	1/10/2008	63	12,200	1,360	5,470	19,093
P1-DB-21	AN2128	1/10/2008	188	8,930	1,020	4,410	14,548
P1-DB-22	AN2228	1/10/2008	915	19,800	1,380	6,030	28,125
P1-DB-23	AN2328	1/11/2008	1,160	22,100	1,180	3,990	28,430
P1-DB-24	AN2428	1/10/2008	40.1	11,700	1,420	5,670	18,830
P1-DB-25	AN2528	1/10/2008	2.08	4.15	9.01	8.63	24
P1-DB-26	AN2628	1/10/2008	1.71	11.5	54.1 J	191 J	258
P1-DB-27	AN2728	1/10/2008	0.424 J	163	227	1,500	1,890
P1-DB-28	AN2828	1/10/2008	120	5,020	1,520	7,990	14,650
P1-DB-29	AN2928	1/10/2008	28.6	2,510	1,070	4,910	8,519
P1-DB-30	AN3028	1/9/2008	2.21	2,500	1,630	8,640	12,772
P1-DB-31	AN3128	1/9/2008	25.5	3,130	1,570	8,630	13,356
P1-DB-32	AN3228	1/9/2008	7.18	1,500	1,380	5,840	8,727
P1-DB-33	AN3328	1/9/2008	2.7	2,520	884	5,000	8,407
P1-DB-34	AN3428	1/9/2008	1 U	1,670	1,630	8,210	11,510
P1-DB-35	AN3528	1/9/2008	598	11,700	1,470	6,000	19,768
P1-SWS-11	AN1119	7/19/2007	357	11,900	1,640	8,990	22,887
P1-SWS-11	P1-SWS-11 (121808)	12/18/2008	24	51	26	370	471
P1-SWS-11	P1-SWS-11 (121009)	12/10/2009	1.4	2	3.1	17	24
P1-SWS-11	P1-SWS-11 (061410)	6/14/2010	1.1	0.18 J	1.1	7.8	10
P1-SWS-11	P1-SWS-11 (090810)	9/8/2010	1.0	1.5	0.28 J	8	10.5
P1-SWS-11	P1-SWS-11 (061511)	6/15/2011	20	2.5	12	160	194.5
P1-SWS-11	P1-SWS-11 (092811)	9/28/2011	1.4	0.32 J	0.94	8.4	10.7
P1-SWS-11	P1-SWS-11 (020212)	2/2/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-11	P1-SWS-11	7/19/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-11	P1-SWS-11 (091912)	9/19/2012	0.50 U	0.50 U	0.50 U	0.30 J	2.0 U
P1-SWS-11	P1-SWS-11 (121312)	12/13/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-11	P1-SWS-11 (041713)	4/17/2013	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-11	P1-SWS-11 (080113)	8/1/2013	0.50 U	0.50 U	0.23 J	0.8	2.3 U
P1-SWS-11	P1-SWS-11 (102513)	10/25/2013	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
P1-SWS-11	P1-SWS-11 (010914)	1/9/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-11	P1-SWS-11 (040314)	4/3/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-11	P1-SWS-11 (072414)	7/24/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-11	P1-SWS-11 (103014)	10/30/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-11	P1-SWS-11 (032015)	3/20/2015	0.5 U	0.5 U	0.5 U	0.89	0.89
P1-SWS-11	HA13P1SWS11(050815)	5/8/2015	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
P1-SWS-11	HA13P1SWS11(073015)	7/30/2015	0.40 U	0.80 U	0.80 U	0.80 U	0.80 U
P1-SWS-11	HA13P1SWS11(120815)	12/8/2015	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
P1-SWS-11	HA13P1SWS11(021216)	2/12/2016	0.44 J	1.0	1.7	8.4	11.54
P1-SWS-11	HA13P1SWS11(042416)	4/24/2016	0.40 U	0.80 U	0.80 U	0.80 U	0.80 U
P1-SWS-11	HA13P1SWS11(101716)	10/17/2016	0.80 U	0.80 U	0.80 U	0.96 J	0.96 J
P1-SWS-11	HA13P1SWS11(061517)	6/15/2017	0.80 U	0.80 U	0.80 U	1.1 J	1.1 J
P1-SWS-11	HA13P1SWS11(102417)	10/24/2017	0.80 U	0.80 U	0.80 U	0.80 U	0.80 U
P1-SWS-11	HA13P1SWS11(060618)	6/6/2018	0.80 U	0.80 U	0.80 U	2.8	2.8
P1-SWS-11	HA13P1SWS11(101718)	10/17/2018	0.80 U	0.80 U	0.80 U	2.3	2.3
Alternate Concentration Limit			285	800,000	114,800	—	—
In-Stream Water Quality Standard			51	5,980	2,100	—	—

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Table 2
Historical Groundwater and Surface Water Analytical Results
CAP Progress Report No. 28 (June 2018 - December 2018)
Former Pumphouse #1 (Release #2)
Former Building 8060
Hunter Army Airfield, Georgia

Sample Location	Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
P1-SWS-12	AN1219	7/19/2007	0.457 J	1 U	0.255 J	4.25	4.962
P1-SWS-12	P1-SWS-12 (121808)	12/18/2008	2.4	16	33	88	139
P1-SWS-12	P1-SWS-12 (121009)	12/10/2009	1.5	15	12	50	78
P1-SWS-12	P1-SWS-12 (061410)	6/14/2010	2.7	14	16	95	128
P1-SWS-12	P1-SWS-12 (090810)	9/8/2010	4.4	20	23	110	157
P1-SWS-12	P1-SWS-12 (061511)	6/15/2011	1.5	10	16	110	138
P1-SWS-12	P1-SWS-12 (092811)	9/28/2011	4.1	17	14	80	115
P1-SWS-12	P1-SWS-12 (020212)	2/2/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-12	P1-SWS-12	7/19/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-12	P1-SWS-12 (091912)	9/19/2012	0.50 U	0.50 U	0.50 U	0.31 J	2.0 U
P1-SWS-12	P1-SWS-12 (121312)	12/13/2012	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-12	P1-SWS-12 (041713)	4/17/2013	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-12	P1-SWS-12 (080113)	8/1/2013	0.50 U	0.50 U	0.50 U	0.50 U	2.0 U
P1-SWS-12	P1-SWS-12 (102513)	10/25/2013	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
P1-SWS-12	P1-SWS-12 (010914)	1/9/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-12	P1-SWS-12 (040314)	4/3/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-12	P1-SWS-12 (072414)	7/24/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-12	P1-SWS-12 (103014)	10/30/2014	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U
P1-SWS-12	P1-SWS-12 (032015)	3/20/2015	0.5 U	0.5 U	0.25 J	1.1	1.35
P1-SWS-12	HA13P1SWS12(050815)	5/8/2015	0.5 U	0.5 U	0.5 U	1.7	1.7
P1-SWS-12	HA13P1SWS12(073015)	7/30/2015	0.40 U	0.80 U	0.78 J	4.6	5.38
P1-SWS-12	HA13P1SWS12(120815)	12/8/2015	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
P1-SWS-12	HA13P1SWS12(021216)	2/12/2016	1.5	1.9	2.1	12	17.5
P1-SWS-12	HA13P1SWS12(042416)	4/24/2016	0.40 U	0.80 U	0.80 U	0.80 U	0.80 U
P1-SWS-12	HA13P1SWS12(101716)	10/17/2016	0.80 U	0.49 J	0.80 U	1.8	2.3
P1-SWS-12	HA13P1SWS12(061517)	6/15/2017	0.80 U	0.80 U	0.80 U	1.3	1.3
P1-SWS-12	HA13P1SWS12102417)	10/24/2017	0.80 U	0.80 U	0.80 U	0.85 J	0.85 J
P1-SWS-12	HA13P1SWS12(060618)	6/6/2018	0.80 U	0.80 U	0.80 U	1.4 J	1.4
P1-SWS-12	HA13P1SWS12(101718)	10/17/2018	0.80 U	0.43 J	1.7	35	37
Alternate Concentration Limit			285	800,000	114,800	—	—
In-Stream Water Quality Standard			51	5,980	2,100	—	—

NOTES:

—	Regulatory value not established.
µg/L	Micrograms per liter.
BTEX	Benzene, toluene, ethylbenzene, and xylenes.
U	Constituent was not detected above the laboratory reporting limit.
J	Constituent concentration was qualifed as estimated.
Q	Surrogate failure.
	Groundwater constituent concentration exceeded the Alternate Concentration Limit.
	Surface water constituent concentration exceeded the In-Stream Water Quality Standard.
	Sampled October 2018
	Indicates additional samples taken by Savannah Corps of Engineers

Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
30-Day Performance Monitoring Event (Post-4th Injection) – July 2013									
AREA A									
P1R2-IW-07	NA	NA	NA	NA	NA	NA	32	NA	NA
P1R2-IW-12	NA	NA	NA	NA	NA	NA	8.5	NA	NA
P1R2-IW-14	NA	NA	NA	NA	NA	NA	38	NA	NA
P1-CPT-19	29.76	5.02	0.21	4.96	3.67	-147.0	2.5	93	NA
P1-CPT-20	29.47	6.46	0.15	407	2.91	-168.8	5.5	0.45 J	NA
P1-CPT-22	28.24	5.54	0.12	117	6.76	-127.9	NA	1.0 U	NA
P1R2-MW-43	27.62	5.39	0.16	485	3.19	-112.1	0	0.52 J	NA
D-MW-5R	28.51	4.33	0.15	766	2.04	-134.9	2.5	410	NA
AREA B									
P1R2-IW-03	24.73	5.97	0.27	161	29.6	-166.2	2.5	55	NA
P1R2-IW-05	NA	NA	NA	NA	NA	NA	5.5	NA	NA
P1R2-IW-06	25.15	6.09	0.20	112	40.5	-169.3	5.5	18	NA
P1-CPT-09	24.76	5.79	0.25	115	14.0	-112.8	NA	1.0 U	NA
P1-J4	25.38	3.88	0.16	4890	36.0	215.0	8.5	2,600	NA
AREA C									
P1-MW-19	24.09	5.67	0.63	63	4.89	-146.1	NA	5.1	NA
P1-SWS-11	26.65	6.01	3.67	31	3.48	12.4	NA	NA	NA
P1-SWS-12	26.36	5.68	3.73	25	5.09	35.1	NA	NA	NA
90-Day Performance Monitoring Event (Post-4th Injection) – October 2013									
AREA A									
P1R2-IW-07	26.12	3.02	0.42	4286	10.7	241.9	0.0	8,200	0.0
P1R2-IW-12	25.75	3.42	0.24	2459	327.0	134.7	8.5	5,700	0.5
P1R2-IW-14	23.76	2.92	0.34	2607	12.7	227.8	2.5	2,700	0.0
P1R2-IW-15	22.76	2.77	0.39	3213	4.93	256.5	5.5	2,900	0.0
D-MW-5R	26.80	4.60	0.21	769	10.3	52.7	2.0	470	1.0

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
AREA B									
P1R2-IW-05	24.20	3.45	0.16	532	6.13	210.5	5.5	400	0.0
P1R2-IW-06	23.48	5.18	0.39	96	62.0	21.5	5.5	6.5	2.0
P1-CPT-07	23.18	5.37	0.06	97	21.0	86.2	2.5	1.2	0.1
P1-J4	24.51	3.08	0.22	1145	41.0	113.0	5.5	680	0.7
AREA C									
P1-MW-19	20.74	5.32	0.39	73	8.34	30.0	2.5	7.2	0.5
P1-SWS-11	19.32	5.89	6.88	57	40.3	126.2	NA	NA	NA
P1-SWS-12	19.19	6.24	8.22	50	8.57	70.2	NA	NA	NA
180-Day Performance Monitoring Event (Post-4th Injection) – January 2014									
AREA A									
P1R2-IW-08	23.30	3.14	0.33	4582	54.9	227.0	5.5	3100	0.0
P1R2-IW-11	22.47	3.26	0.34	1094	22.5	135.5	14.5	590	0.0
P1-CPT-19	21.87	5.52	0.42	191	17.7	2.4	2.5	7.5	2.0
P1R2-MW-43	21.81	6.27	0.55	171	3.15	13.7	2.5	1.1	0.5
D-MW-05R	24.11	4.30	0.28	2608	9.72	42.2	2.5	1500	1.5
AREA B									
P1-CPT-07	18.91	6.00*	0.48	71	27.30	-284.1	5.5	<1.0	0.0
P1-MW-02	19.24	5.93*	0.35	54	42.8	-282.1	0.0	2.0	1.0
P1-J3	20.19	5.20	0.39	90	3.9	109.7	2.5	4.9	0.7
P1-J4	21.27	3.85	0.43	100	36.5	97.0	11.5	31	0.7
AREA C									
P1-MW-19	20.30	6.05*	0.80	73	10.1	-288.4	0.0	6.6	0.3
P1-SWS-11	12.76	5.96*	9.98	48	3.51	-223.0	NA	NA	NA
P1-SWS-12	10.97	6.06*	8.85	58	4.16	-262.6	NA	NA	NA

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
270-Day Performance Monitoring Event (Post-4th Injection) – April 2014									
AREA A									
P1R2-IW-09	21.35	3.87	0.19	2433	>1000	191.5	NA	2600	0.3
D-MW-05R	22.84	3.94	0.12	2348	29.4	-11.1	NA	2800	5.0
P1R2-MW-43	22.61	4.97	0.58	93	5.7	135.6	NA	1.0 U	0.0
P1R2-IW-10	23.66	3.10	0.21	5373	22.9	278.3	NA	6100	0.0
P1-CPT-19	22.03	5.40	1.93	260	10.9	-50.5	NA	17	5.0
AREA B									
P1-CPT-07	21.42	5.37	0.06	66	36.9	260.0	NA	1.0 U	0.0
P1-MW-02	20.27	5.01	0.18	61	23.3	-30.7	NA	1.0 U	2.0
P1-J3	20.47	5.43	0.23	88	5.83	-34.5	NA	4.9	1.0
P1-J4	20.85	4.61	0.16	58	32.5	-34.8	NA	89	5.0
AREA C									
P1-MW-19	21.73	5.47	0.31	82	7.49	-2.6	NA	4.2	1.0
P1-SWS-11	23.37	6.30	9.88	69	5.79	102.5	NA	NA	NA
P1-SWS-12	22.57	6.59	10.01	69	2.34	98.5	NA	NA	NA
60-Day Performance Monitoring Event (Post-5th Injection) – July 2014									
AREA A									
D-MW-05R	29.70	3.82	0.10	2109	19.74	-78.1	2.5	4,800	4.0
P1R2-MW-43	30.10	5.90	0.15	581	16.61	-189.4	1.0	1.5	1.0
P1R2-MW-44	30.50	4.98	0.15	89.2	2.57	-49.4	0	< 1.0	0.3
P1-CPT-19	31.80	5.44	0.11	303.6	24.44	-199.1	4.0	25	2.0
P1R2-IW-10	32.40	2.59	0.14	11428	24.17	406.3	5.5	26,000	0.1

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Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
AREA B									
P1-MW-02	23.70	4.44	0.13	55.3	15.54	-120.4	2.5	20	2.0
P1-CPT-07	23.50	5.28	0.08	71.8	38.61	-72.00	2.5	1.6	0.5
P1-J3	26.30	5.18	0.15	93.8	20.00	-192.8	2.5	30	0.7
P1-J4	24.20	2.58	0.07	2756	75.14	190.9	8.5	3,900	5.0
AREA C									
P1-MW-19	25.90	5.51	0.14	84.6	10.16	-152.3	2.5	5.8	1.5
P1-SWS-11	32.30	6.43	7.85	32.3	43.04	111.7	NA	NA	NA
P1-SWS-12	31.40	6.05	6.36	35.1	6.03	146.8	NA	NA	NA
2nd Quarter Performance Monitoring Event (Post-5th Injection) – October 2014									
AREA A									
D-MW-05R	27.90	3.93	0.14	1325	6.52	-9.1	0.0	3,100	0.5
P1R2-MW-43	27.40	6.24	0.16	358.5	0.00	-138.5	0.0	< 1.0	0.4
P1R2-IW-13	27.80	2.83	0.27	3276.0	1.31	288.0	5.5	7,900	0.0
P1-CPT-19	27.60	5.56	0.17	302.6	6.49	-161.5	5.5	0.94 J	2.0
P1R2-IW-10	27.30	2.92	0.20	3942	35.3	313.1	2.5	7,400	0.0
AREA B									
P1-MW-02	23.20	4.81	0.15	62.3	20.43	-114.8	2.5	4.8	1.0
P1R2-IW-05	23.80	3.36	0.16	1027	10.35	112.0	2.5	2,800	0.1
P1-J4	23.20	3.30	0.18	1099	62.96	-18.8	0.0	2,300	2.0
AREA C									
P1-MW-19	23.40	5.54	0.17	75.5	1.46	-111.0	0.0	3.6	1.0
P1-SWS-11	23.90	6.07	10.39	62.8	12.04	180.4	NA	NA	NA
P1-SWS-12	22.60	6.24	8.11	62.9	226.1	159.7	NA	NA	NA

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
3rd Quarter Performance Monitoring Event (Post-5th Injection) – March 2015									
AREA A									
D-MW-05R	20.85	3.91	0.43	1696	13.04	-44.0	0.0	2,100	1.0
P1R2-MW-43	19.44	6..31	0.58	230.0	1.24	54.2	0.0	3.2	0.0
P1R2-IW-13	21.52	2.96	0.59	1849.0	7.16	145.9	0.0	1,300	0.2
P1-CPT-19	19.88	5.52	0.48	355	17.02	-90.6	0.0	8.4	1.0
P1R2-IW-10	20.80	3.18	0.58	693	879	75.1	2.5	750	0.4
AREA B									
P1-MW-02	19.42	4.79	0.44	63.0	24.66	-40.2	0.0	1.5	1.0
P1-CPT-07	18.67	5.36	0.61	84	83.76	154.8	0.0	1.3	0.0
P1R2-IW-05	18.12	3.65	0.57	414	10.49	-14.9	2.5	470	0.7
P1-J4	18.52	4.10	0.49	310	91.09	-88.5	0.0	410	3.0
AREA C									
P1-MW-19	21.13	5.03	0.35	78	4.37	-50.8	0.0	1.1	1.0
P1-SWS-11	20.64	6.17	6.78	74	1.81	62.3	NA	NA	NA
P1-SWS-12	19.79	5.79	5.15	74	2.01	96.6	NA	NA	NA
4th Quarter Performance Monitoring Event (Post-5th Injection) – May 2015									
AREA A									
D-MW-05R	24.7	3.87	0.13	2438	18.67	-53.5	NA	2,000	3.0
P1R2-MW-43	23.4	6.38	0.24	203.4	2.28	-57.6	NA	1.0 U	0.3
P1R2-IW-13	23.7	2.96	0.21	1553	29.97	208.7	NA	710	0.3
P1-CPT-19	24.1	5.49	0.36	417.8	3.21	-145.7	NA	2.3	2.0
P1R2-IW-10	24.4	3.08	0.21	2399	404.1	123.1	8.5	3,700	NA

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Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
AREA B									
P1-MW-02	19.2	4.51	0.21	61.0	32.62	-108.5	NA	2.5	0.7
P1-CPT-07	21.7	5.38	0.24	89.6	35.91	9.2	NA	0.44 J	0.3
P1R2-IW-05	19.5	3.80	0.25	225.7	13.21	-62.3	5.5	180	2.0
P1-J4	21.6	3.74	0.24	381.2	45.63	-49.0	NA	300	5.0
AREA C									
P1-MW-19	22.7	5.03	0.14	70.1	12.79	-80.6	NA	2.4 J	0.3
P1-SWS-11	22.7	5.60	6.42	93.0	2.24	84.0	NA	NA	NA
P1-SWS-12	23.2	5.70	5.46	93.2	0.85	90.7	NA	NA	NA
5th Quarter Performance Monitoring Event (Post-5th Injection) – July 2015									
AREA A									
D-MW-05R	29.2	3.80	0.20	1246	7.49	9.8	NA	1600 B	1.0
P1R2-MW-43	28.9	5.85	0.40	462.5	1.57	-94.7	NA	< 1.0 UJ	0.0
P1R2-IW-13	27.4	3.02	0.30	1178	59.33	160.6	NA	710	NA
P1-CPT-19	29.5	5.44	0.27	314	5.89	-89.7	NA	2.0	0.8
P1R2-IW-10	29.6	3.37	0.25	415.8	253.3	76.5	NA	310 S	NA
AREA B									
P1-MW-02	24.2	4.41	0.84	94.0	18.11	-39.3	NA	3.1	5.0
P1-CPT-07	28.6	5.26	2.25	137.7	31.71	55.2	NA	0.5	0.1
P1R2-IW-05	25.5	5.11	1.46	137	45.50	-138.7	NA	13	10.0
P1-J4	23.8	3.89	0.38	183.4	72.84	-55.2	NA	31	10.0

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
AREA C									
P1-MW-19	26.3	5.06	0.32	104.5	3.64	-1.1	NA	0.96 J	0.8
P1-SWS-11	32.5	5.75	5.85	83.1	37.15	153.8	NA	NA	NA
P1-SWS-12	32.6	5.72	5.90	81	1.67	153.6	NA	NA	NA
6th Quarter Performance Monitoring Event (Post-5th Injection) – December 2015									
AREA A									
D-MW-05R	24.3	4.00	0.31	790	5.56	-75.0	NA	420	6.5
P1R2-MW-43	23.9	6.24	0.31	125.4	1.33	-156.3	NA	1.8	0
P1R2-IW-13	23.8	3.08	0.23	913	13.89	99.8	NA	300	**
P1-CPT-19	24.3	5.55	0.15	280.2	10.30	-207.9	NA	4.5	1.0
P1R2-IW-10	24.6	2.97	0.23	3383	42.77	210.9	NA	2,000	1.0
AREA B									
P1-MW-02	20.9	4.66	7.49	85.2	19.02	-86.3	NA	11	9.0
P1-CPT-07	21.5	5.50	0.60	74.3	13.97	-60.7	NA	<1.0 U	0
P1R2-IW-05	21.5	4.81	0.18	107.0	40.34	-131.5	NA	28	2.0
P1-J4	22.3	3.18	0.12	268.7	42.94	2.1	NA	84	7.5
AREA C									
P1-MW-19	22.4	4.39	0.19	51.2	2.38	-65.5	NA	3.4	0.1
P1-SWS-11	17.0	5.39	4.42	78.0	10.12	106.2	NA	NA	NA
P1-SWS-12	16.8	5.78	5.08	78.5	21.63	124.0	NA	NA	NA

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
7th Quarter Performance Monitoring Event (Post-5th Injection) – February 2016									
AREA A									
D-MW-05R	19.4	4.01	0.12	1403	2.88	-49.1	NA	750	3.0
P1R2-MW-43	16.4	6.37	0.30	92.7	5.29	-113.2	NA	0.44 J	<1
P1R2-IW-13	13.9	2.92	0.29	524.7	73.0	49.6	NA	190	<10
P1-CPT-19	19.3	5.70	0.17	389.8	5.24	-143.2	NA	1.7	0.2
P1R2-IW-10	18.2	3.09	0.23	822	14.51	73.8	NA	310	1.0
AREA B									
P1-MW-02	19.1	5.13	0.17	108.8	20.39	-137.6	NA	15	4.0
P1-CPT-07	16.7	5.19	0.26	39.8	11.85	73.4	NA	0.62 J	0.0
P1R2-IW-05	17.1	4.88	0.29	64.9	7.72	-88.4	NA	4.9	1.0
P1-J4	18.7	4.00	0.19	84.9	33.40	6.2	NA	23	1.0
AREA C									
P1-MW-19	19.9	4.55	0.21	49.0	6.29	-29.7	NA	2.0	0.1
P1-SWS-11	26.6	5.75	5.41	85.3	20.3	243.0	NA	NA	NA
P1-SWS-12	27.0	5.89	5.88	78.0	16.3	265.7	NA	NA	NA

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
8th Quarter Performance Monitoring Event (Post-5th Injection) – April 2016									
AREA A									
D-MW-05R	22.9	2.76	5.53	0.1	0.81	57.1	NA	740	5.0
P1R2-MW-43	23.3	6.07	0.11	317.1	2.30	-26.1	NA	2.7	0.0
P1R2-IW-13	24.4	3.66	0.05	477.7	3.88	36.4	NA	150	0.1
P1-CPT-19	25.1	5.48	0.12	107.6	8.79	-99.8	NA	4.7	0.0
P1R2-IW-10	25.5	3.61	0.08	7.26	4.81	95.8	NA	300	0.0
AREA B									
P1-MW-02	21.4	5.13	0.12	128.5	21.22	-162.1	NA	35	6
P1-CPT-07	21.0	5.51	0.18	80.4	8.00	-59.6	NA	1.6	0.0
P1R2-IW-05	22.8	5.39	0.10	107.6	15.53	-144.3	NA	18	2
P1-J4	20.9	4.61	0.10	227.6	32.32	-110.8	NA	100	6
AREA C									
P1-MW-19	21.8	5.28	0.14	59.2	5.75	-89.6	NA	2.3	0.2
P1-SWS-11	25.2	6.43	7.15	61.6	24.37	0.1	NA	NA	NA
P1-SWS-12	24.5	6.66	6.67	59.2	1.90	122.2	NA	NA	NA
United States Army Corps of Engineers Savannah District – June 2016									
AREA A									
D-MW-05R	26.1	4.04	0.31	1.863	0.00	62.4	NA	NA	NA
P1R2-MW-43	27.2	6.85	1.01	0.225	1.40	-22.5	NA	NA	NA
P1R2-IW-13	26.3	3.23	0.52	0.508	14.40	106.0	NA	NA	NA
P1-CPT-19	26.7	5.31	0.27	0.217	0.00	54.3	NA	NA	NA
P1R2-IW-10	26.3	3.33	0.45	0.506	23.5	153.2	NA	NA	NA

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Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
AREA B									
P1-MW-02	21.9	3.66	0.35	0.165	7.97	101.3	NA	NA	NA
P1-CPT-07	25.3	4.93	1.47	0.058	0.00	74.0	NA	NA	NA
P1R2-IW-05	22.9	5.15	0.96	0.064	22.50	102.5	NA	NA	NA
P1-J4	23.6	4.64	1.07	0.076	6.00	115.8	NA	NA	NA
AREA C									
P1-MW-19	25.5	5.12	0.80	0.057	8.49	156.6	NA	NA	NA
P1-SWS-11	NA	NA	NA	NA	NA	NA	NA	NA	NA
P1-SWS-12	NA	NA	NA	NA	NA	NA	NA	NA	NA
9th Quarter Performance Monitoring Event (Post-5th Injection) – October 2016									
AREA A									
D-MW-05R	28.2	4.17	0.09	2386.0	43.52	-74.1	NA	740	10.0
P1R2-MW-43	28.7	6.49	0.08	342.9	140.30	-73.4	NA	0.33 J	29.2
P1R2-IW-13	29.2	3.37	0.21	228.8	17.60	-87.2	NA	8	1.0
P1-CPT-19	29.4	5.72	0.12	310.6	5.30	-213.6	NA	0.5 U	0.4
P1R2-IW-10	28.2	3.84	0.13	126.1	27.2	-86.5	NA	3	1.0
AREA B									
P1-MW-02	26.3	4.74	0.07	125.9	6.71	-28.5	NA	0.5 U	4
P1-CPT-07	26.6	5.65	0.10	104.7	26.73	-42.3	NA	0.5 U	0.0
P1R2-IW-05	27.3	4.47	0.12	72.3	16.19	-178.1	NA	0.50 U	2
P1-J4	26.1	4.00	0.12	79.8	29.67	-209.4	NA	13	6
AREA C									
P1-MW-19	25.1	5.00	0.14	93.2	3.29	7.7	NA	0.5 U	0.1
P1-SWS-11	26.6	5.75	5.41	85.3	20.3	243.0	NA	NA	NA
P1-SWS-12	27.0	5.89	5.88	78.0	16.3	265.7	NA	NA	NA

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Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
1st Semi-Annual Performance Monitoring Event (Post-6th Injection) – June 2017									
AREA A									
D-MW-05R	28.0	4.02	0.10	1261.0	8.26	-124.7	NA	630	5.0
P1R2-MW-43	26.9	6.21	0.14	255.4	1.63	-119.8	NA	0.5 U	1.0
P1R2-IW-13	27.2	2.43	0.24	3106.0	31.12	304.7	NA	2,000	0.0
P1-CPT-19	28.0	5.44	0.17	280.7	9.69	-170.5	NA	0.5 U	3.0
P1R2-IW-10	28.0	4.05	0.08	155.1	102.3	-44	NA	6.6	0.6
AREA B									
P1-MW-02	23.7	4.34	0.15	62.4	18.58	-80.9	NA	5.7	4.0
P1-CPT-07	22.7	5.09	0.13	66.8	7.71	58.1	NA	0.5 U	0.0
P1R2-IW-05	25.1	4.84	0.15	79.6	10.89	-85.9	NA	0.38 J	3.0
P1-J4	23.2	4.04	0.19	105.5	47.44	-68.3	NA	33	4.0
AREA C									
P1-MW-19	24.2	4.64	0.21	47.9	1.76	-17.0	NA	0.5 U	1.0
P1-SWS-11	30.4	5.65	3.74	69.6	2.13	82.5	NA	NA	NA
P1-SWS-12	30.6	5.79	4.33	71.1	1.95	102.2	NA	NA	NA
2nd Semi-Annual Performance Monitoring Event (Post-6th Injection) – October 2017									
AREA A									
D-MW-05R	25.3	3.55	0.12	712.0	6.81	-100.5	NA	380	4.0
P1R2-MW-43	26.8	6.21	0.18	328.1	0.00	109.5	NA	0.21 J	0.0
P1R2-IW-13	26.5	2.57	0.27	2088.0	10.60	184.8	NA	1,200	**
P1-CPT-19	25.3	5.81	0.17	324.3	9.82	-193.2	NA	0.50 U	3.0
P1R2-IW-10	25.7	3.18	0.18	646	44.58	-5.1	NA	280	1.0

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Table 3
Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
AREA B									
P1-MW-02	23.1	4.59	0.18	55.3	10.07	-138.4	NA	2.8	3.0
P1-CPT-07	23.8	5.72	0.18	100.9	7.54	-61.7	NA	0.50 U	0.2
P1R2-IW-05	21.6	5.47	0.21	109.0	12.18	-161.4	NA	6.2	2.0
P1-J4	23.8	5.04	0.16	78.4	31.67	-167.7	NA	4.4	4.0
AREA C									
P1-MW-19	23.6	5.12	0.08	45.3	1.89	-95.2	NA	0.35 J	1.0
P1-SWS-11	23.9	6.41	7.21	69.5	3.97	179	NA	NA	NA
P1-SWS-12	23.9	6.19	6.13	79.5	2.43	206	NA	NA	NA
3rd Semi-Annual Performance Monitoring Event (Post-6th Injection) – June 2018									
AREA A									
D-MW-05R	25.2	4.40	0.18	267.1	12.33	-103.5	NA	130	2.0
P1R2-MW-43	25.5	6.17	0.23	394.6	2.04	109.5	NA	0.62 J	0.0
P1R2-IW-13	27.4	3.25	0.45	889.0	7.32	17.9	NA	950	0.1
P1-CPT-19	27.6	5.60	0.20	344.6	21.49	344.6	NA	15 S	NA
P1R2-IW-10	26.8	4.60	0.17	153.1	95.6	-103.1	NA	58	1.0
AREA B									
P1-MW-02	24.2	5.15	0.21	69.3	18.34	-145.6	NA	1.6	1.0
P1-CPT-07	24.5	5.56	2.50	74.2	16.80	-21.8	NA	1.0	0.0
P1R2-IW-05	22.9	5.12	0.32	72.2	15.37	-157.5	NA	12.0	NA
P1-J4	21.6	4.68	0.30	66.8	25.20	-114.6	NA	60.0	6.0
AREA C									
P1-MW-19	23.9	5.26	0.26	46.8	5.6	-109.3	NA	1.1	0.2
P1-SWS-11	32.2	6.37	8.38	54.7	64,69	45.6	NA	NA	NA
P1-SWS-12	31.3	6.34	5.82	50.7	6.3	45.7	NA	NA	NA

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Groundwater Field Parameters and Persulfate/Sulfate/Sulfide Concentrations
CAP Progress Report No. 28 (June 2018 - December 2018)
HAA-13 Pumphouse #1 Release #2
Former Building 8060
Hunter Army Airfield, Georgia

Location ID	Temperature (°C)	pH	DO (mg/L)	Conductivity (µS/cm)	Turbidity	ORP (mV)	Persulfate anion (g/L) (Field Kit)	Sulfate (mg/L) (Analyzed at Lab)	Sulfide (mg/L) (Field Kit)
4th Semi-Annual Performance Monitoring Event (Post-6th Injection) – October 2018									
AREA A									
D-MW-05R	29.4	4.64	0.07	539	15.96	-212.3	NA	200	10.0
P1R2-MW-43	29.0	6.27	0.17	297.3	1.26	-199.7	NA	1.6	0.1
P1R2-IW-13	24.6	3.24	0.15	825	4.93	-57.5	NA	290	0.1
P1-CPT-19	29.4	5.55	0.12	306	12.76	-206.3	NA	0.63 J	0.4
P1R2-IW-10	29.3	4.47	0.15	466	38.99	-124.8	NA	NA	1.0
AREA B									
P1-MW-02	25.7	4.38	0.40	59.3	9.50	-156.1	NA	4.5	2.0
P1-CPT-07	25.3	5.13	0.18	76	7.18	-121.9	NA	0.82 J	0.0
P1R2-IW-05	26.1	4.90	0.28	122.1	12.35	-178.7	NA	11	0.2
P1-J4	24.9	4.47	0.20	86.8	15.48	-146.2	NA	44	3.0
AREA C									
P1-MW-19	25.7	4.54	0.34	39.7	2.38	-124.5	NA	0.39 J	0.2
P1-SWS-11	28.6	4.73	5.89	51.2	62.09	30.8	NA	NA	NA
P1-SWS-12	27.6	5.09	7.61	59.4	81.12	98.2	NA	NA	NA

Notes:

µS/cm - microSiemens per centimeter
mg/L - milligrams per liter
mV - millivolts
NA - Not Analyzed
* - probe malfunction
** - Brown color of groundwater interferes with test results
U - Constituent was not detected above the laboratory reporting limit.
J - Constituent concentration was qualifed as estimated.
S - MS/MSD failure

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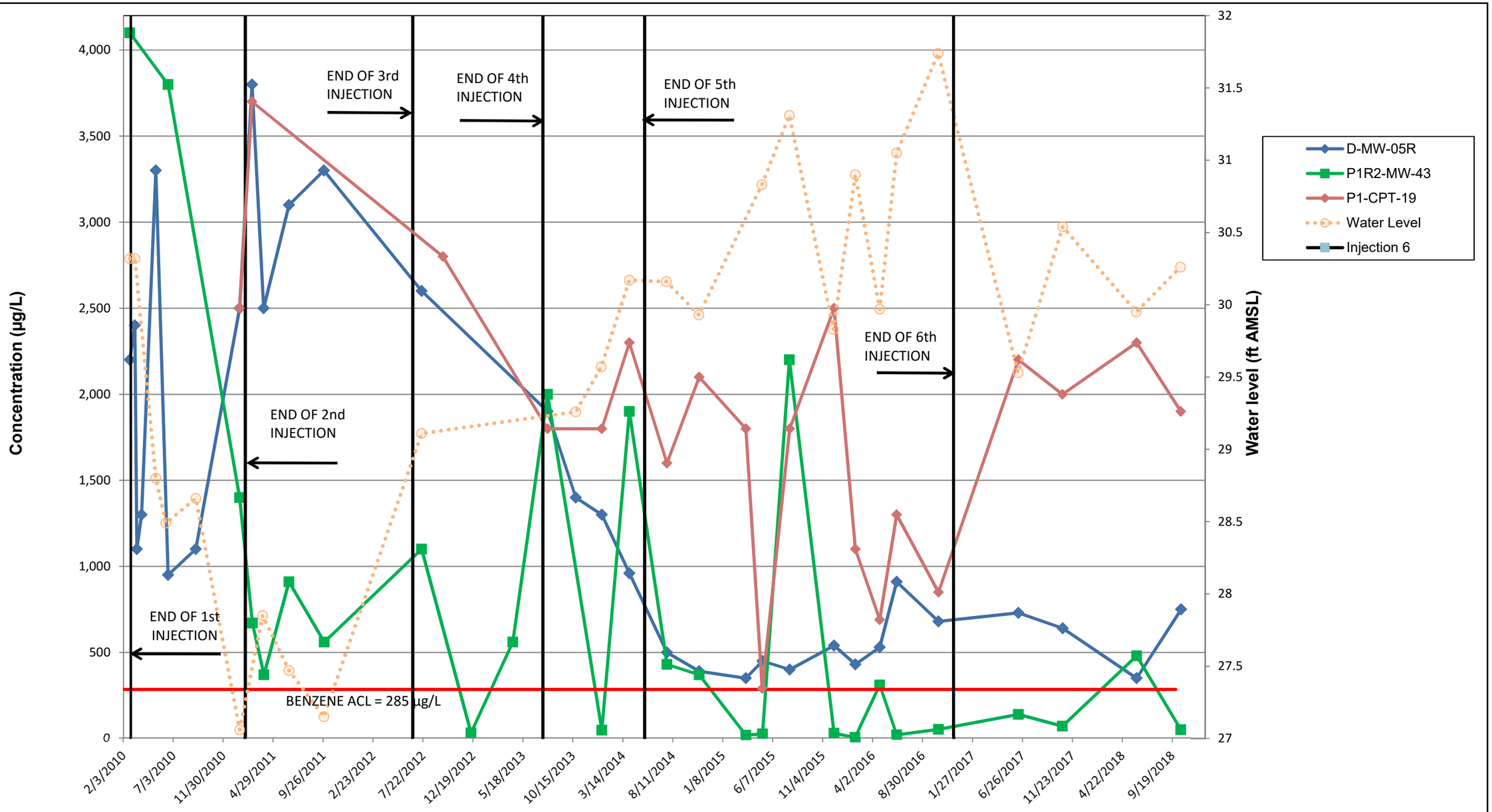

PIKA ARCADIS A JOINT VENTURE

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT NO. 28
(JUNE 2018 - DECEMBER 2018)

BENZENE CONCENTRATIONS VERSUS TIME IN AREA A MONITOR WELLS

FIGURE
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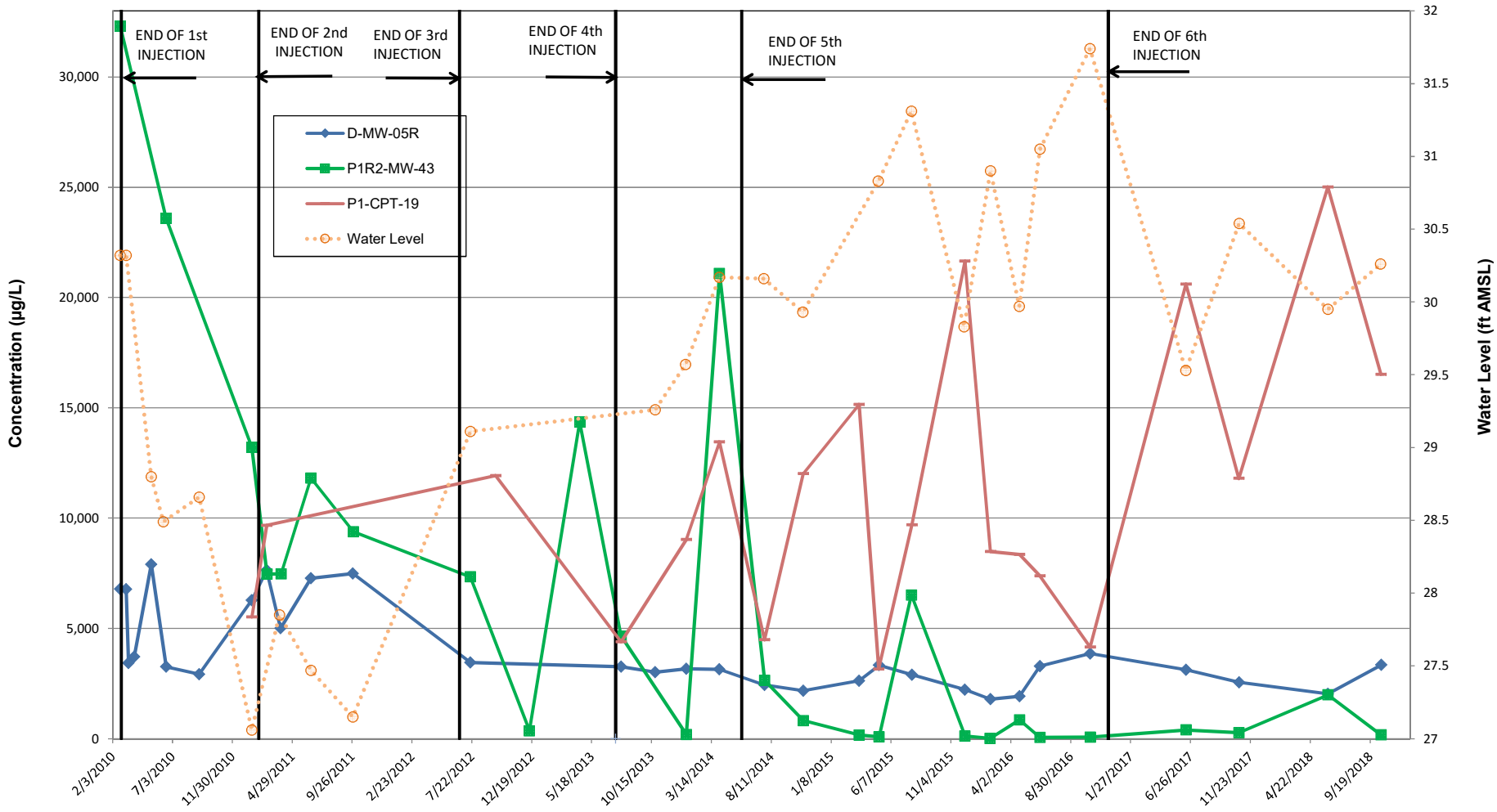

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FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT NO. 28
(JUNE 2018 - DECEMBER 2018)

TOTAL BTEX CONCENTRATIONS VERSUS TIME IN AREA A MONITOR WELLS

FIGURE
9

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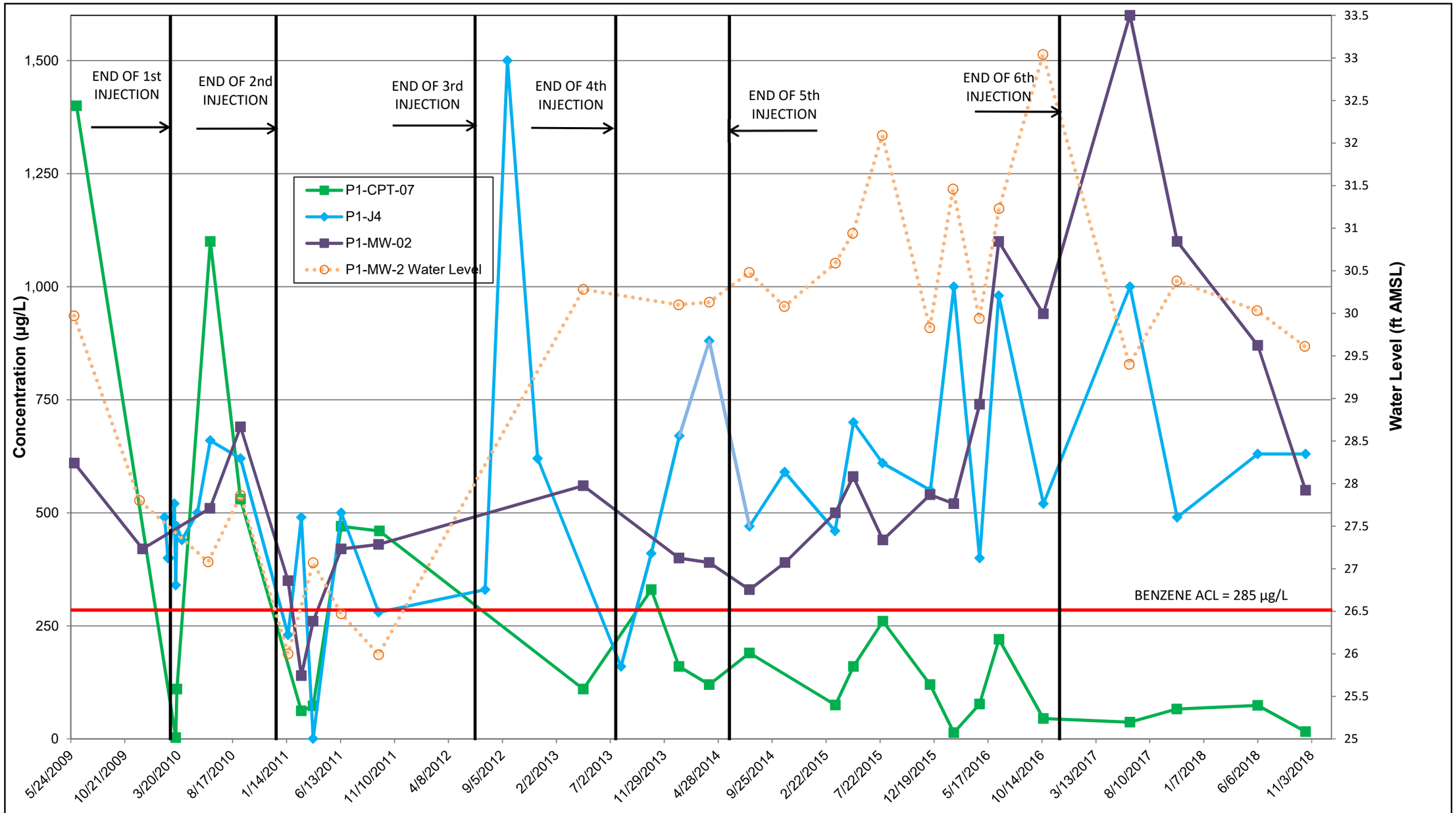

PIKA ARCADIS A JOINT VENTURE

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FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
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(JUNE 2018 - DECEMBER 2018)

BENZENE CONCENTRATIONS VERSUS TIME IN AREA B MONITOR WELLS

FIGURE

10

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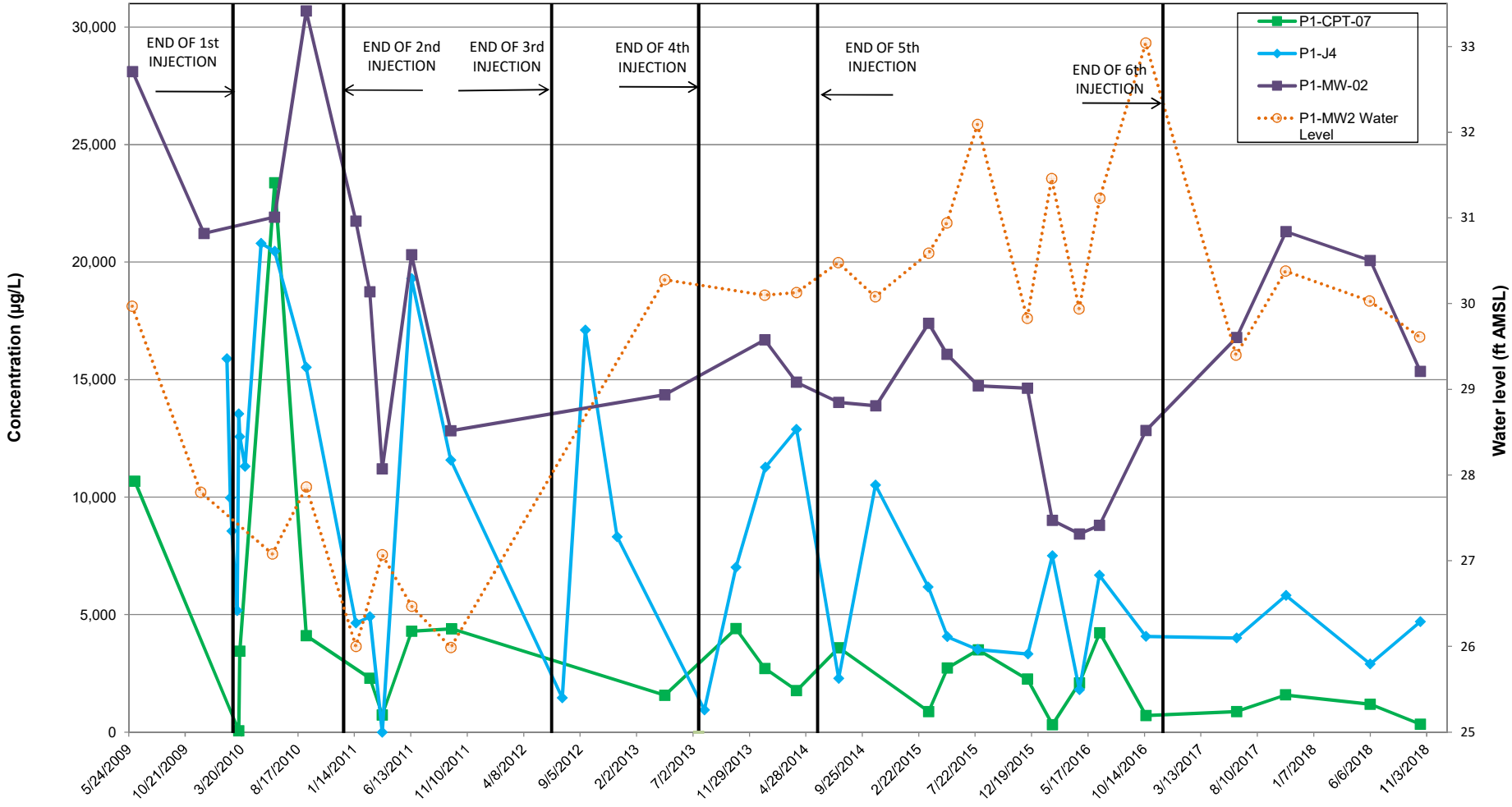

PIKA ARCADIS A JOINT VENTURE

HUNTER army AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
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(JUNE 2018 - DECEMBER 2018)

TOTAL BTEX CONCENTRATIONS VERSUS TIME IN AREA B MONITOR WELLS

FIGURE
11

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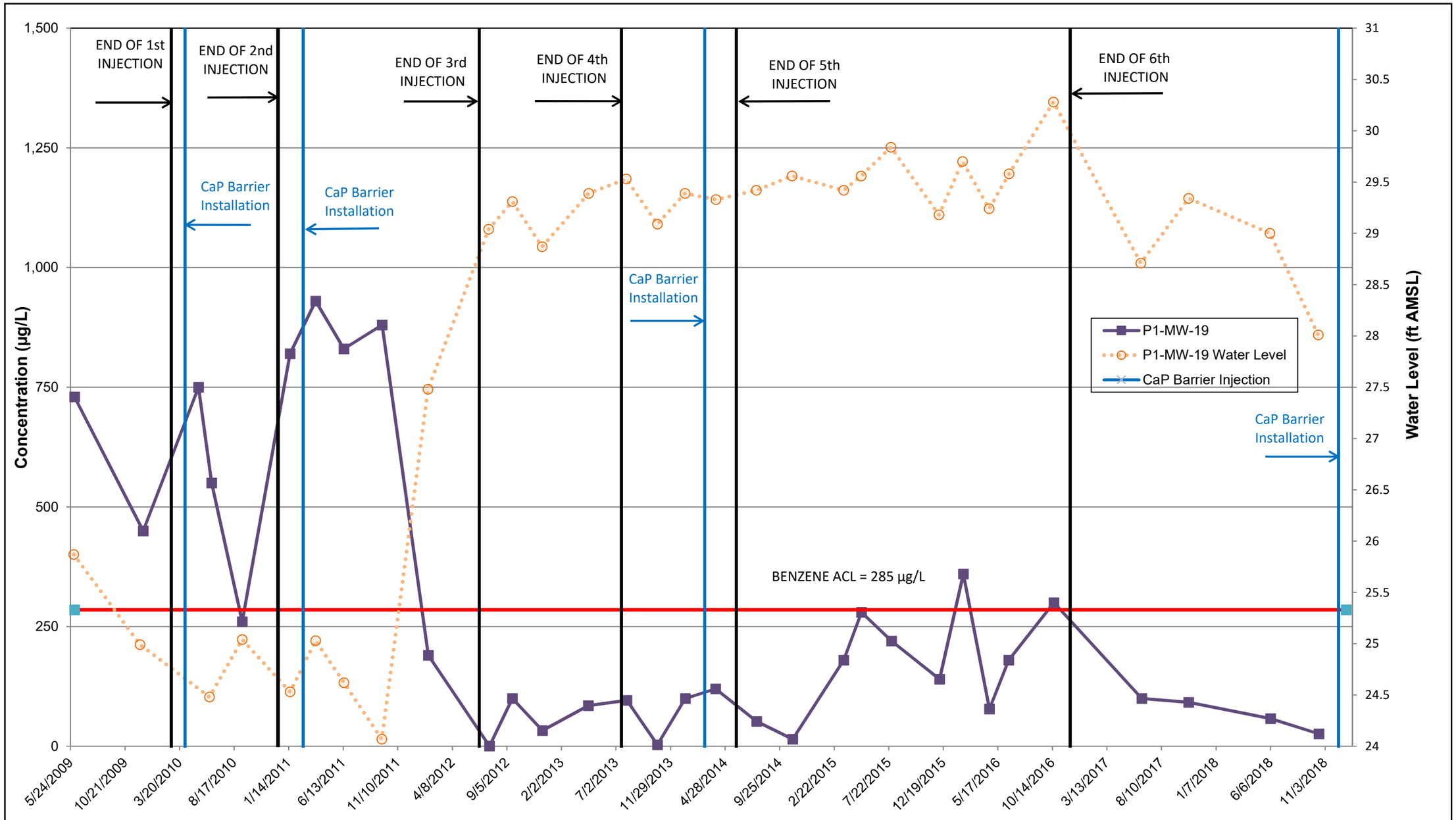

PIKA ARCADIS A JOINT VENTURE

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FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
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BENZENE CONCENTRATIONS VERSUS TIME IN AREA C MONITOR WELLS

FIGURE

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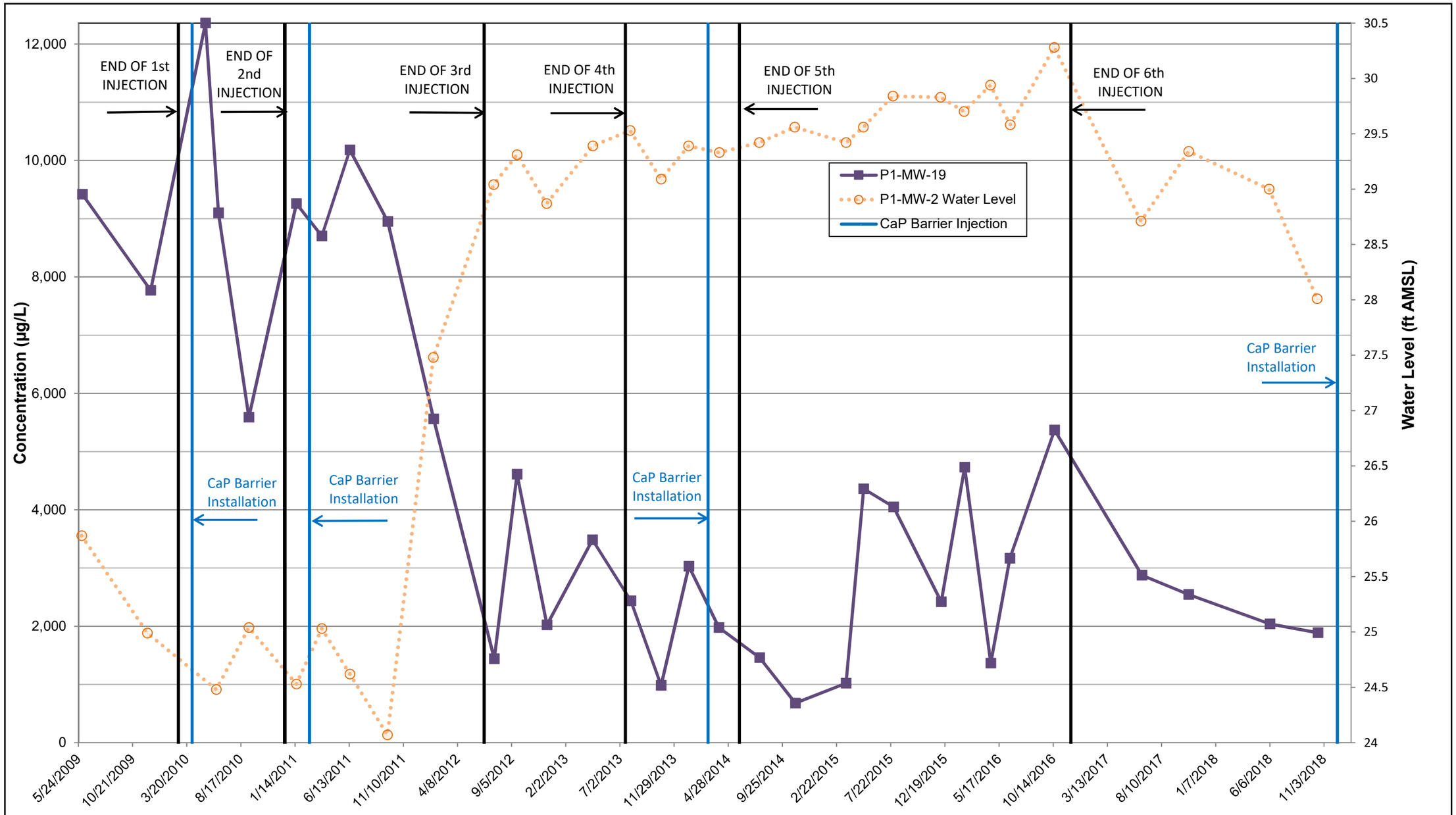

PIKA ARCADIS A JOINT VENTURE

HUNTER ARMY AIRFIELD, GEORGIA
FORMER PUMPHOUSE #1 (RELEASE #2)
FORMER BUILDING 8060, FACILITY ID #9-025085*2
CAP PROGRESS REPORT NO. 28
(JUNE 2018 - DECEMBER 2018)

TOTAL BTEX CONCENTRATIONS VERSUS TIME IN AREA C MONITOR WELLS

FIGURE
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APPENDIX F

FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

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FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

Sample Location	Remediation Areas (A, B or C)	Date Sampled	Benzene ACL 285 (µg/L)
D-MW-05R	A	2/22/2010	2,200
		3/9/2010	2,400
		3/15/2010	1,100
		3/29/2010	1,300
		5/11/2010	3,300
		6/17/2010	950
		9/8/2010	1,100
		1/18/2011	2,500
		2/24/2011	3,800
		3/31/2011	2,500
		6/15/2011	3,100
		9/28/2011	3,300
		7/18/2012	2,600
		7/31/2013	1,900
		10/24/2013	1,400
		1/10/2014	1,300
		4/3/2014	960
		7/25/2014	500
		10/30/2014	390
		3/19/2015	350
		5/7/2015	450
		7/29/2015	400
		12/8/2015	540
		2/11/2016	430
		4/24/2016	530
		6/14/2016	910
		10/18/2016	690
		6/15/2017	730
		10/26/2017	640
		10/17/2018	750
D-MW-06R	A	6/13/2016	290
P1-MW-02	B	6/15/2010	510
		9/8/2010	690
		1/18/2011	350
		6/15/2011	420
		9/27/2011	430
		4/18/2013	560
		1/9/2014	400
		4/2/2014	390
		7/24/2014	330
		10/31/2014	390
		3/20/2015	500
		5/7/2015	580
		7/30/2015	440
		12/7/2015	540
		2/12/2016	520
		4/24/2016	740
		6/16/2016	1,100
		10/18/2016	940
		6/16/2017	1,600
		10/25/2017	1,100
		6/6/2018	870
		10/16/2018	550

FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

Sample Location	Remediation Areas (A, B or C)	Date Sampled	Benzene ACL 285 (µg/L)
P1-MW-19	C	5/11/2010	750
		6/16/2010	550
		1/18/2011	820
		3/29/2011	930
		6/15/2011	830
		9/28/2011	880
		2/12/2016	360
		10/18/2016	300
P1-MW-22	A	9/8/2010	340
P1-MW-23	A	6/17/2010	660
P1R2-MW-43	A	2/22/2010	4,100
		6/17/2010	3,800
		1/18/2011	1,400
		2/25/2011	670
		4/1/2011	370
		6/15/2011	910
		9/29/2011	560
		7/18/2012	1,100
		7/31/2013	2,000
		4/3/2014	1,900
		7/25/2014	430
		10/30/2014	370
		7/28/2015	2,200
		4/24/2016	310
P1R2-MW-44	A	2/22/2010	820
		6/17/2010	790
		4/18/2013	920
		7/25/2014	1,100
		6/15/2016	900
P1R2-MW-45	A	12/16/2010	1,700
		2/25/2011	1,900
		4/18/2013	1,600
		6/13/2016	3,100
P1R2-IW-01	B	6/15/2011	450
P1R2-IW-02	B	3/29/2011	980
		9/27/2011	360
P1R2-IW-03	B	3/8/2010	730
		12/12/2012	310
		8/1/2013	600
		6/16/2016	350

FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

Sample Location	Remediation Areas (A, B or C)	Date Sampled	Benzene ACL 285 (µg/L)
P1R2-IW-04	**B**	3/8/2010	600
		2/1/2012	330
P1R2-IW-05	**B**	2/9/2010	610
		3/8/2010	760
		3/12/2010	500
		3/15/2010	620
		3/29/2010	730
		9/8/2010	2,300
		2/24/2011	560
		6/15/2011	1,200
		9/19/2012	1,200
		10/24/2013	1,000
		10/30/2014	880
		3/19/2015	980
		5/7/2015	590
		7/29/2015	520
		12/8/2015	660
		4/24/2016	430
		10/18/2016	360
		6/16/2017	720
		10/17/2018	410
P1R2-IW-06	**B**	2/9/2010	530
		2/18/2010	510
		2/1/2012	710
		6/16/2016	610
P1R2-IW-07	**A**	2/24/2010	3,000
		3/29/2010	1,000
		9/8/2010	2,600
		2/24/2011	2,800
		3/29/2011	3,000
		6/15/2011	2,900
		7/18/2012	400
		12/13/2012	1,900
		10/24/2013	1,100
		6/13/2016	320
P1R2-IW-08	**A**	2/22/2010	2,400
		2/1/2012	770
		9/20/2012	1,400
		1/10/2014	330
		6/14/2016	490
P1R2-IW-09	**A**	3/3/2010	730
		3/31/2011	1,300
		9/29/2011	2,600
		9/20/2012	1,200
		4/3/2014	1,300
		6/15/2016	690

FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

Sample Location	Remediation Areas (A, B or C)	Date Sampled	Benzene ACL 285 (µg/L)
P1R2-IW-10	A	3/3/2010	2,800
		3/31/2011	2,300
		9/28/2011	2,500
		9/20/2012	2,200
		4/2/2014	1,100
		10/30/2014	420
		3/19/2015	290
		5/7/2015	320
		7/29/2015	320
		12/8/2015	490
		2/11/2016	380
		4/24/2016	290
		6/13/2016	360
		6/15/2017	300
		10/26/2017	500
		10/17/2018	490
P1R2-IW-11	A	3/3/2010	2,200
		3/31/2011	1,800
		9/28/2011	1,800
		9/20/2012	1,500
		1/10/2014	690
P1R2-IW-12	A	3/3/2010	480
		2/24/2011	500
		6/15/2011	1,200
		9/20/2012	510
		10/24/2013	360
P1R2-IW-13	A	12/16/2010	3,700
		3/31/2011	1,400
		9/29/2011	2,900
		7/18/2012	680
		12/13/2012	1,900
		10/30/2014	1,100
		3/19/2015	1,500
		5/7/2015	2,000
		7/29/2015	1,600
		12/8/2015	2,100
		2/10/2016	2,300
		4/24/2016	1,700
		6/13/2016	1,800
		10/18/2016	2,600
		6/15/2017	1,300
		10/25/2017	1,600
		10/16/2018	1,800

FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

Sample Location	Remediation Areas (A, B or C)	Date Sampled	Benzene ACL 285 (µg/L)
P1R2-IW-14	A	12/16/2010	3,600
		2/24/2011	350
		3/31/2011	1,400
		9/29/2011	3,200
		9/20/2012	1,600
		10/24/2013	1,300
		6/14/2016	1,500
P1R2-IW-15	A	12/16/2010	2,300
		2/25/2011	450
		3/31/2011	1,400
		9/29/2011	1,600
		7/18/2012	920
		12/12/2012	2,700
		10/24/2013	2,600
		6/13/2016	1,800
P1-J3	B	6/17/2010	370
		3/29/2011	390
		2/1/2012	300
P1-J4	B	2/9/2010	490
		2/18/2010	400
		2/22/2010	400
		3/8/2010	520
		3/12/2010	340
		3/15/2010	470
		3/29/2010	440
		5/11/2010	500
		6/16/2010	660
		9/8/2010	620
		2/24/2011	490
		6/15/2011	500
		7/19/2012	330
		9/19/2012	1,500
		12/12/2012	620
		10/24/2013	410
		1/10/2014	670
		4/2/2014	880
		7/24/2014	470
		10/30/2014	590
		3/19/2015	460
		5/8/2015	700
		7/29/2015	610
		12/8/2015	550
		2/12/2016	1,000
		4/24/2016	400
		6/16/2016	980
		10/18/2016	520
		6/16/2017	1,000
		10/25/2017	490
		6/6/2018	630
		10/17/2018	630

FORMER PUMP HOUSE #1, RELEASE #2 GROUNDWATER EXCEEDANCES

Sample Location	Remediation Areas (A, B or C)	Date Sampled	Benzene ACL 285 (µg/L)
P1-J5	**B**	4/18/2013	350
P1-CPT-07	**B**	6/15/2010	1,100
		9/9/2010	530
		6/15/2011	470
		9/29/2011	460
		10/24/2013	330
P1-CPT-09	**A**	9/9/2010	1,200
		9/8/2010	3,000
		1/18/2011	2,500
		2/24/2011	3,700
		9/20/2012	2,800
		7/31/2013	1,800
		1/10/2014	1,800
		4/3/2014	2,300
		7/25/2014	1,600
		10/30/2014	2,100
		3/19/2015	1,800
		5/7/2015	290
		7/29/2015	1,800
		12/8/2015	2,500
		2/11/2016	1,100
		4/24/2016	690
		6/14/2016	1,300
		10/18/2016	850
		6/15/2017	2,200
P1-CPT-19	**A**	10/25/2017	2,000
		10/16/2018	1,900
P1-CPT-21	**A**	6/15/2016	1,200
P1-CPT-22	**A**	9/8/2010	870
		7/31/2013	950
		6/15/2016	370