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December 29, 2023

ELECTRONICALLY TRANSMITTED

Mr. Jason C. Odom
ESCA Case Manager
McClellan Development Authority
4975 Bains Gap Road
Anniston, Alabama 36205

RE: ADEM Review and Concurrence: *Response to Comment for Corrective Measures Effectiveness Reports for Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7), for 2019, 2020, and 2021;* dated October 16, 2023
Fort McClellan, Calhoun County, Alabama
Facility I.D. No. AL4210020562

Dear Mr. Odom:

The Alabama Department of Environmental Management (ADEM or the Department) has completed its review of the McClellan Development Authority's (MDA) *Response to Comment for Corrective Measures Effectiveness Reports (CMER) for Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7) for 2019, 2020, and 2021*. Based on this review, MDA has adequately addressed ADEM's comment on the subject CMERs and submitted slip pages incorporating the necessary edits. Therefore, the Department concurs with the Response to Comment and the subject CMERs.

If you have any questions concerning this matter, please contact Mrs. Brandi Little of the Remediation Engineering Section at 334-274-4226 or via email at blittle@adem.alabama.gov.

Sincerely,



Ashley T. Mastin, Chief
Governmental Hazardous Waste Branch
Land Division

ATM/JBR/BCL/mlw

cc: Ms. Lisa Holstein/Army
Mr. Richard Satkin/Matrix
Mr. Gerald Hardy/Matrix





Matrix Environmental Services, LLC
283 Rucker St.
Anniston, AL 36205
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matrixdesigngroup.com

October 16, 2023

Ms. Ashley T. Mastin, Chief
c/o Mrs. Brandi Little
Governmental Hazardous Waste Branch Land Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

SUBJECT: Response to ADEM Review and Comments dated October 5, 2023, RE:
*Corrective Measures Effectiveness Reports (CMERs) for Landfill 3, Parcel 80(6)
and Fill Area Northwest of Reilly Airfield, Parcel 229(7), for 2019, 2020, and 2021*

Dear Ms. Mastin:

On behalf of the McClellan Development Authority (MDA), Matrix Environmental Services, LLC (MES) is pleased to submit the Response to ADEM Review and Comments dated October 5, 2023, RE: *Corrective Measures Effectiveness Reports for Landfill, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)* for 2019, 2020, and 2021. Revised pages to each CMER is included herein. Hard copies of the revised pages to be inserted into the original documents will be mailed.

Please contact me at (256) 847-0780 should you have any questions or comments.

Sincerely,
MATRIX ENVIRONMENTAL SERVICES, LLC

A handwritten signature in black ink that reads "Richard Satkin".

Richard Satkin, P.G.
McClellan Program Manager

Enclosure

CC: Mrs. Brandi Little, ADEM (two paper copies)
Mr. Jason Odom, MDA (transmittal letter only)
Ms. Lisa Holstein, U.S. Army (one paper copy)
MES Files (one paper copy)

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Response to ADEM Review and Comments dated October 5, 2023

Corrective Measures Effectiveness Reports (CMERs) for Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7), for 2019, 2020, and 2021

General Comment:

As stated in ADEM's June 14, 2019 comment letter for the Corrective Measures Implementation Report (CMIR), additional transition zone wells should be installed west of the site (i.e., West of Highway 21). These wells are necessary to: 1) define the western boundary of the plume in the transition zone; 2) verify that the groundwater flow direction is controlled by the fault lying west of Highway 21; and, 3) verify that the groundwater plume in the transition zone is not migrating to offsite properties west of the fault. Furthermore, samples from additional downgradient transition zone wells would help assess the effectiveness of the corrective measures on offsite groundwater. Please address.

MDA Response:

Per ADEM's request, two transition wells were installed west of the site in December 2021. These wells were sampled and then abandoned. Matrix notified ADEM of the planned well abandonment in our February 23, 2022 transmittal letter for the Responses to ADEM Review and Evaluations dated June 22, 2023 on the CMIR. A notation of the request for additional wells has been added to the 2019, 2020, and 2021 Corrective Measures Effective Reports.



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October 5, 2023

ELECTRONICALLY TRANSMITTED

Mr. Jason C. Odom
ESCA Case Manager
McClellan Development Authority
4975 Bains Gap Road
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RE: ADEM Review and Comments: *Corrective Measures Effectiveness Reports (CMERs) for Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7), for 2019, 2020, and 2021*
Fort McClellan, Calhoun County, Alabama
Facility I.D. No. AL4210020562

Dear Mr. Odom:

The Alabama Department of Environmental Management (ADEM or the Department) has completed the review of the aforementioned documents and has determined that the McClellan Development Authority's (MDA) *CMERs for Landfill 3 and FANWR* are incomplete and additional information and/or data will be required.

Comments regarding MDA's CMERs are provided in the attached document. Responses may be submitted in the form of a revised CMER or appropriate revised pages and figures to be inserted in the original submission. If the MDA chooses to submit revised pages, please date or code each page and figure. For example, **25(r-11/15/23)** would be page 25 revised November 15, 2023.

To facilitate the Department's review, please return a copy of the Department's comments with annotations in the left margin, which identify the CMERs revised pages, figures, tables, *etc.* where the MDA's response to each comment item is recorded.



Mr. Jason Odom

October 5, 2023

Page 2 of 3

If you have any questions concerning this matter, please contact Mrs. Brandi Little of the Remediation Engineering Section at 334-274-4226 or via email at blittle@adem.alabama.gov.

Sincerely,



Ashley T. Mastin, Chief
Governmental Hazardous Waste Branch
Land Division

Attachment

ATM/JBR/BCL/jlm

cc: Mr. Justin Rigdon/ADEM
Ms. Lisa Holstein/Army
Mr. Richard Satkin/Matrix
Mr. Gerald Hardy/Matrix

ATTACHMENT
ADEM Review Comments
CMERs for Monitoring Events, Landfill 3
and FANWR, Parcels 80(6) and 229(7)
for 2019, 2020 and 2021
Fort McClellan, Alabama

General Comment

1. As stated in ADEM's June 14, 2019 comment letter for the Corrective Measures Implementation Report (CMIR), additional transition zone wells should be installed west of the site (i.e., West of Highway 21). These wells are necessary to: 1) define the western boundary of the plume in the transition zone; 2) verify that the groundwater flow direction is controlled by the fault lying west of Highway 21; and, 3) verify that the groundwater plume in the transition zone is not migrating to offsite properties west of the fault. Furthermore, samples from additional downgradient transition zone wells would help assess the effectiveness of the corrective measures on offsite groundwater. Please address.

**Corrective Measures Effectiveness Report
November 2018 to May 2019 Monitoring Events
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly
Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Prepared for:



MCCLELLAN
DEVELOPMENT AUTHORITY

**McClellan Development Authority
Anniston, Alabama**

Prepared by:



**283 Rucker Street
Anniston, AL 36205**

**(256) 847-0780
Fax (256) 874-0905**

**September 2019
Revised October 2023**

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LIST OF ACRONYMS

1,1,2,2 – PCA	1,1,2,2 - Tetrachlorethane
1,1,2 – TCA	1,1,2 - Trichloroethane
ADEM	Alabama Department of Environmental Management
CA	Cleanup Agreement
Cis-1,2 – DCE	Cis-1,2 - Dichloroethene
CMER	Corrective Measures Effectiveness Report
CMIP	Corrective Measures Implementation Report
COC	Constituent of Concern
DHG	Dissolved Hydrocarbon Gas
DO	Dissolved oxygen
DQS	Data Quality Summary
EBS	Environmental Baseline Study
EE/CA	Engineering Evaluation and Cost Analysis
ESE	Environmental Science & Engineering, Inc.
EVO	Emulsified vegetable oil
FANWR	Fill Area Northwest of Reilly Airfield, Parcel 229(7)
Final RFI	Final Resource Conservation Recovery Act Facility Investigation Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly, Parcel 229(7) (MES, 2008)
FLUTe	Flexible Underground Technologies
GPS	Groundwater Protection Standard
IDW	Investigation Derived Waste
ISB	In situ bioremediation
IT	IT Corporation
LF3	Landfill 3, Parcel 80(6)
LUC	Land use control
McClellan	Former Fort McClellan
MCL	Maximum Contaminant Level
MDA	McClellan Development Authority
MES	Matrix Environmental Services, LLC
ORP	Oxidation-reduction potential
PERC	Tetrachloroethene
QA	Quality Assurance
QAP	Quality Assurance Plan
RBTL	Risk-Based Target Level
RCRA	Resource Conservation Recovery Act
RFI	RCRA Facility Investigation
RI	Remedial Investigation
SAIC	Science Applications International Corporation
SAP	Sampling and Analysis Plan
Shaw	Shaw Environmental, Inc.
SI	Site Investigation
Site	Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)

TCE	Trichloroethene
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
UIC	Underground Injection Control
VC	Vinyl Chloride
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

This Corrective Measures Effectiveness Report (CMER) presents information regarding groundwater remediation at Landfill 3 (LF3), Parcel 80(6) and Fill Area Northwest of Reilly Airfield (FANWR), Parcel 229(7) (collectively referred to as the Site) located at the former Fort McClellan (McClellan) in Anniston, Alabama. Figure 1 shows a parcel location map of the Site. This report was prepared by Matrix Environmental Services, LLC (MES) on behalf of the McClellan Development Authority (MDA). The purpose of this CMER is to document the effectiveness of the remedial action for contaminated groundwater at the Site during the reporting period from November 2018 to May 2019.

Previous investigations at the Site identified 1,1,2,2-tetrachloroethane (1,1,2,2-PCA), 1,1,2-trichloroethane (1,1,2-TCA), tetrachloroethene (PERC), trichloroethene (TCE) and vinyl chloride (VC) as the primary corrective action constituents of concern (COCs) in groundwater requiring corrective measures. In situ bioremediation (ISB) was implemented from March 20 through May 23, 2017 for the remediation of the volatile organic compounds (VOCs) through a transect of 17 injection wells. The injected solutions included the following permitted amendments: (i) a custom formulation of SRS[®]-SD, an emulsified vegetable oil (EVO) product pre-mixed with the pH buffer sodium bicarbonate (i.e., baking soda); (ii) KB-1[®] Primer, a blend of amino acids, potassium bicarbonate, and sodium sulfite; (iii) KB-1[®] Plus (bioaugmentation culture [bacterial]); and (iv) potable water, in both aerobic and anaerobic states.

Semi-annual sampling was performed in November 2018 and May 2019 during this second reporting period following implementation of the groundwater corrective action. To aid in assessing groundwater flow at the Site, horizontal and vertical hydraulic gradients were calculated and groundwater elevation maps with estimated potentiometric contours for November 2018 were constructed for the residuum zone, transition zone, fractured bedrock, and deep fractured bedrock. Groundwater elevation maps with estimated potentiometric contours for May 2019 were constructed for the transition zone, fractured bedrock, and deep fractured bedrock.

Groundwater samples were collected in November 2018 and May 2019 in select on-site and off-site residuum, transition, bedrock, and deep bedrock monitoring wells and analyzed for VOCs, dissolved hydrocarbon gases (DHGs), total organic carbon (TOC), and field parameters in accordance with the 2018 Corrective Measures Implementation Report (CMIR) which includes all the wells in the Cleanup Agreement. Anions (sulfate and sodium) were analyzed in select wells in accordance with the Underground Injection Control (UIC) permit (ALSI9908665). The analytical results for the primary COCs were compared to historical analytical results from previous sampling events and to groundwater protection standards (GPS). During this reporting period, three of the five COCs (1,1,2,2-PCA, TCE, VC) exceeded the GPS in off-site groundwater samples and four of the five COCs exceeded the GPS in the on-site groundwater samples (1,1,2,2-PCA, TCE, PERC, VC). No GPSs were exceeded in on-site wells OLF-73, OLF-G75, OLF-78, and PPMP-229-GP12 and off-site wells OLF-G21, OLF-G24, OLF-G31, OLF-G32, OLF-G34, OLF-G35, OLF-G36, OLF-G47, OLF-G48, OLF-G52 and OLF-G70.

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1.0 INTRODUCTION

This Corrective Measures Effectiveness Report (CMER) presents information regarding groundwater remediation at Landfill 3 (LF3), Parcel 80(6) and Fill Area Northwest of Reilly Airfield (FANWR), Parcel 229(7) (collectively referred to as the Site) located at the former Fort McClellan (McClellan) in Anniston, Alabama. Figure 1 shows a parcel location map of the Site. This report was prepared by Matrix Environmental Services, LLC (MES) on behalf of the McClellan Development Authority (MDA). The purpose of this CMER is to document the effectiveness of the remedial action for contaminated groundwater at the Site during the reporting period from November 2018 to May 2019.

1.1 Report Organization

This CMER is organized as follows:

- Section 1.0 - summarizes the project background, purpose of the CMER, and report organization
- Section 2.0 - presents a summary of the Site characterization
- Section 3.0 - describes the activities conducted during this reporting period
- Section 4.0 - presents the results during this reporting period
- Section 5.0 - presents the summary, conclusions, and recommendations
- Section 6.0 - provides the references cited in this report
- Tables that support the CMER
- Figures that support the CMER
- Appendix A contains the groundwater levels and sample collection logs
- Appendix B contains the chain-of-custody records
- Appendix C contains the data quality summary
- Appendix D contains the analytical data and laboratory reports

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2.0 SITE CHARACTERIZATION

This section summarizes the Site description and physical setting, land use, previous investigations, and corrective measures activities performed at the Site.

2.1 Site Description and Physical Setting Summary

LF3 and FANWR are located in the northwestern corner of McClellan just east of Alabama State Highway 21, approximately 4.5 miles north-northeast of central Anniston, Alabama; 1.3 miles east of central Weaver, Alabama; and 3.9 miles south-southwest of Jacksonville, Alabama. Land in the vicinity of LF3 and the FANWR is generally undeveloped, with limited residential and commercial land use clustered along Alabama State Highway 21.

LF3 is approximately 23 acres in size. The landfill is bounded by Alabama State Highway 21 to the west, Gobbler Road to the east, wooded areas and the boundary of McClellan to the north, and wetlands and Cave Creek to the south. LF3 served as the primary sanitary landfill at McClellan from 1946 to 1967. Reports indicate that landfill received residential/municipal refuse, industrial wastes (i.e., empty pesticide containers, paint containers, waste oil), and construction debris. The landfill is unlined and was constructed using trench/fill operations with waste placed in trenches to an average depth of 22 feet (ft).

FANWR is approximately 8 acres in size and is also located in the northwestern corner of McClellan, adjacent to the former Reilly Airfield and west-southwest of Reilly Lake. The northeastern boundary of FANWR is adjacent to small streams and forested wetlands that form the headwaters of Reilly Lake. FANWR was first identified from an aerial photograph taken in 1954. Disposal practices at the FANWR are not known. Wastes reportedly observed in the unit include paint containers, fluorescent bulbs and ballasts, waste oils, and construction debris. The maximum waste depth encountered during field investigation activities was 15 ft.

Both LF3 and FANWR were operated by the U.S. Army and closed prior to the existence of any Federal or State environmental regulations governing landfills. Neither LF3 or FANWR were closed with an engineered cap or cover system. To comply with the substantive intent of Federal and State environmental regulations for historical (i.e., legacy) landfills, an engineered cover was constructed at both locations (MES, 2010). This included the placement of a low permeability soil cover designed to minimize future direct exposure to wastes which were disposed of at each location, to promote drainage while controlling erosion, to minimize leaching of contaminants to groundwater, and to function with low maintenance requirements.

2.2 Land Use and Land Use Controls

Proposed future land use for the Site is categorized as industrial conservation district in accordance with City of Anniston McClellan, Overlay Redevelopment District, April 2012 prepared by The East Alabama Regional Planning and Development Commission.

Environmental Covenant Number FY11-01.00 filed in Calhoun County Probate on September 23, 2011 documents the land use control measures placed on FANWR to ensure there are no unacceptable risks to human health and the environment and to prevent exposure to

contaminants. Land use controls include: required maintenance and repair of the engineered cap; signs and monuments to outline the parcel boundary; prohibition of residential use, digging or excavation and installation of any well for extraction of groundwater for purposes of consumptive or other uses; and use of the property is restricted to surface use only.

2.3 Summary of Previous Investigations

Numerous investigations have been performed to evaluate site conditions at LF3 and FANWR. These investigations can be summarized as follows:

- 1993 Site Investigation at LF 3 (Science Applications International Corporation [SAIC])
- 1994 – 1995 Remedial Investigation (RI) by SAIC
- 1998 Environmental Baseline Study (EBS) performed by Environmental Science & Engineering, Inc. (ESE)
- 1999 FANWR SI by IT
- 2002 Fill Area Definition Investigations at LF3 and FANWR by IT
- 2002 Engineering Evaluation/Cost Analysis performed by IT
- 2001 – 2003 Phase I-III Supplemental RIs performed by Shaw Environmental, Inc. (Shaw)
- 2002 – 2006 miscellaneous wetland determinations, fill area delineation, and landfill gas investigation performed by Shaw, MES, and Geosyntec
- 2008 RCRA Facility Investigation (RFI) performed by MES
- 2008 Corrective Measures Implementation Plan (CMIP) and 2011 CMIP Addendum for Groundwater performed by MES and Geosyntec included pre-design investigations in preparation of the in situ bioremediation (ISB) remedy design
- 2018 Corrective Measures Implementation Report (CMIR) for Groundwater by MES and Geosyntec included additional pre-design investigations for the ISB design performed after the submission of the CMIP and CMIP Addendum

2.4 Corrective Measures

Based on the risk assessment performed in the *Final RFI* (MES, 2008), the primary corrective action constituents of concern (COCs) in groundwater are 1,1,2,2-tetrachloroethane (1,1,2,2-PCA), 1,1,2-trichloroethane (1,1,2-TCA), tetrachloroethene (PERC), trichloroethene (TCE) and vinyl chloride (VC). A secondary tier of ancillary COCs was also identified; these COCs play a minor role in groundwater risk levels and mitigation of these COCs is not expected to materially affect groundwater risk levels. Based on the data assessment presented in the *Final RFI* (MES, 2008), there were no complete surface water, sediment, or soil exposure pathways for the human or ecological receptors at the Site.

Groundwater in situ bioremediation (ISB) corrective measures was implemented between March and May 2017 for treatment of chlorinated VOCs in accordance with the Underground Injection

Control (UIC) permit (ALSI9908665; dated January 27, 2017). A total volume of 437,710 gallons of amendment solutions were injected. The following amendments were injected into 17 injection wells: (i) a custom formulation of SRS[®]-SD, a food-grade, biodegradable emulsified vegetable oil (EVO) pre-mixed with pH buffer sodium bicarbonate (i.e., baking soda); (ii) KB-1[®] Primer a blend of amino acids, potassium bicarbonate, and sodium sulfite; (iii) KB-1[®] Plus (bioaugmentation culture [bacterial]); and (iv) potable water, in both aerobic and anaerobic states. Details of the corrective measures activities are documented in the *Corrective Measures Implementation Report (CMIR) For Groundwater, Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7) (CMIR)* (MES, 2018).

The goal of ISB is to create a biologically active zone in the immediate vicinity of the injection transect to promote favorable geochemical conditions to achieve the following corrective action objectives:

- protect downgradient groundwater in a residential scenario at the point of exposure well OLF-G52
- protect City of Weaver and City of Jacksonville drinking water supplies
- control ongoing contributions of solvent mass to the off-Site plume
- reduce solvent mass and plume footprint within the off-Site plume

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3.0 SUMMARY OF SECOND YEAR ACTIVITIES

This section describes the groundwater sampling activities performed during the second year following ISB implementation. Table 3-1 summarizes the wells and analytes sampled.

**Table 3-1: Groundwater Monitoring Summary, November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	November 2018					May 2019				
	Field Parameters	VOCs	Anions	DHGs	TOC	Field Parameters	VOCs	Anions	DHGs	TOC
OLF-G06						x		x		
OLF-G07	x	x	x			x	x	x		
OLF-G08	x		x			x		x		
OLF-G12	x	x	x			x	x	x		
OLF-G18	x	x				x	x			
OLF-G20	x	x	x			x	x	x		
OLF-G21	x	x				x	x			
OLF-G22	x	x	x			x	x	x		
OLF-G23	x	x	x			x	x	x		
OLF-G24	x	x	x			x	x	x		
OLF-G31	x	x				x	x			
OLF-G32	x	x				x	x			
OLF-G33	x	x	x							
OLF-G34	x	x	x							
OLF-G35	x	x	x			x	x	x		
OLF-G36	x	x	x			x	x	x		
OLF-G42	x	x				x	x			
OLF-G47	x	x				x	x			
OLF-G48	x	x				x	x			
OLF-G52	x	x				x	x			
OLF-G70	x	x				x	x			
OLF-G71 Port 1	x	x	x			x	x	x		
OLF-G71 Port 2	x	x	x			x	x	x		
OLF-G71 Port 3	x	x	x			x	x	x		
OLF-G71 Port 4	x	x	x			x	x	x		
OLF-G71 Port 5	x	x	x			x	x	x		
OLF-G72 Port 1	x	x	x	x	x	x	x	x	x	x
OLF-G72 Port 2	x	x	x	x	x	x	x	x	x	x
OLF-G72 Port 3	x	x	x	x	x	x	x	x	x	x
OLF-G72 Port 4	x	x	x	x	x	x	x	x	x	x
OLF-G72 Port 5	x	x	x	x	x	x	x	x	x	x
OLF-G72 Port 6	x	x	x	x	x	x	x	x	x	x
OLF-G73 Port 1	x	x	x	x	x	x	x	x	x	x
OLF-G73 Port 2	x	x	x	x	x	x	x	x	x	x
OLF-G73 Port 3	x	x	x	x	x	x	x	x	x	x
OLF-G73 Port 4	x	x	x	x	x	x	x	x	x	x
OLF-G73 Port 5	x	x	x	x	x	x	x	x	x	x
OLF-G74 Port 1	x	x	x		x	x	x	x		x
OLF-G74 Port 2	x	x	x		x	x	x	x		x

Well ID	November 2018					May 2019				
	Field Parameters	VOCs	Anions	DHGs	TOC	Field Parameters	VOCs	Anions	DHGs	TOC
OLF-G74 Port 3	x	x	x		x	x	x	x		x
OLF-G74 Port 4	x	x	x		x	x	x	x		x
OLF-G74 Port 5	x	x	x		x	x	x	x		x
OLF-G75 Screen 1	x	x				x	x			
OLF-G75 Screen 2	x	x				x	x			
OLF-G75 Screen 3	x	x				x	x			
OLF-G75 Screen 4	x	x				x	x			
OLF-G75 Screen 5	x	x				x	x			
OLF-G75 Screen 6	x	x				x	x			
OLF-G77	x	x	x	x	x	x	x	x	x	x
OLF-G78	x	x	x			x	x	x		
PPMP-229-GP12	x	x				x	x			

Notes: OLF-G06 was dry in November 2018. OLF-G33 and OLF-G34 abandoned in February 2019.

3.1 Groundwater Sampling

Figure 2 shows locations of the monitoring wells and injection wells at the Site. Before groundwater samples were collected, water levels were measured to the nearest hundredth of a foot using a Solinst™ water level indicator and recorded. Depth to water measurements at the multi-level (Flexible Liner Underground Technologies (FLUTE) wells were collected from within the sample tubing of each FLUTE port following the manufacture's procedures using a narrow-diameter Solinst™ water level indicator and recorded.

Groundwater samples from conventional monitoring wells were collected using low-flow sampling procedures, i.e., using an adjustable rate pump to remove water from the screened interval at a rate that produces minimal drawdown, as well as turbidity in the sample. Teflon tubing leading from the discharge side of the submersible pump was connected to a flow-through cell equipped with either a YSI 556 Multiparameter Meter or YSI Professional Plus to measure chemical and physical parameters. These measurements were used to indicate when groundwater quality stabilized and sampling could begin. Groundwater samples from FLUTE wells were collected using inert nitrogen gas to purge water from the sample port following the manufacture's procedures.

Chemical and physical field screening parameters included pH, conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), total dissolved solids (TDS), turbidity, and temperature. Groundwater levels and volume of groundwater removed were also recorded. The monitoring well sample collection logs are provided in Appendix A.

Laboratory-supplied sample bottles were filled, labeled, placed in a chilled cooler, and shipped under chain-of-custody procedures to TestAmerica Laboratories, Inc. (TestAmerica). The chain-of-custody forms for the groundwater samples collected during the sampling events are provided in Appendix B.

3.2 Management of Investigation Derived Waste

Investigative derived waste (IDW) was managed as described in the *SAP* (MES, 2016). The aqueous IDW generated during the groundwater sampling was collected and containerized in a 55-gallon drum stored onsite.

3.3 Data Quality Review

MES reviewed the analytical data for the groundwater samples in accordance with the *Quality Assurance Plan (QAP)* (MES, 2005) to assess compliance with the Quality Assurance (QA) objectives, and to assess hard copy and electronic deliverable consistency and integrity. The Data Quality Summary (DQS) is included in Appendix C. The analytical data and laboratory reports are included in Appendix D.

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4.0 RESULTS OF SECOND YEAR SAMPLING

This section discusses results from groundwater sampling conducted at the Site during the November 2018 – May 2019 reporting period. Two semi-annual sampling events were conducted during the second year as designated in the CMIR (Table 7 – Performance and Monitoring Program) and met the requirements for semiannual monitoring as specified in the Cleanup Agreement (Table V.1) and UIC permit ALSI9908665.

4.1 Groundwater Sampling

This section discusses the results of the groundwater sampling events at the Site.

4.1.1 Groundwater Levels

Groundwater elevations measured in the residuum, transition, bedrock, and deep bedrock monitoring wells during the November 2018 and May 2019 groundwater sampling events are presented in Table 4-1. In May 2019, water levels were collected only at those wells where laboratory analyses were performed. Groundwater elevation maps with estimated potentiometric contours for November 2018 and May 2019 for residuum zone, transition zone, fractured bedrock and deep fractured bedrock are presented in Figures 3 – 6. A potentiometric contour map for the residuum zone in May 2019 was not developed due to the lack of water level measurements.

Regional groundwater flow directions in residuum, transition, and bedrock zones typically follow topography, which at the Site generally slopes gently towards the north. The main geologic influence on local groundwater flow is the inferred fault located west of the Site that roughly parallels Alabama State Highway 21. Groundwater in the transition zone shows essentially uniform northwesterly flow towards the inferred splay fault. Groundwater within the fractured bedrock at the Site generally flows north-northwest toward the inferred fault then follows along the path of the fault toward the north-northeast. On the northwest side of the fault, local groundwater also flows toward the fault before following the fault toward the north-northeast.

To further aid in assessing groundwater flow at the Site, horizontal and vertical hydraulic gradients were calculated for November 2018 and are presented in Tables 4-2. The horizontal hydraulic gradients in November 2018 in the residuum, transition and bedrock zones ranged from 0.008 ft/ft to 0.053 ft/ft with the highest hydraulic gradients measured in the transition zone. The wells indicated for the hydraulic gradient were not collected in May 2019.

Vertical hydraulic gradients in November 2018 between the residuum, transition zone, and fractured bedrock ranged from -0.149 ft /ft to 0.194 ft/ft. The strongest upward vertical gradient (-0.149 ft/ft) was observed between bedrock well OLF-G69 and transition well OLF-G68. The strongest downward vertical gradient (0.194 ft/ft) was observed between residuum well OLF-G58 and transition well OLF-G68. The convergent vertical gradients may indicate that the transition zone has greater groundwater flow in this area, drawing groundwater from zones above and below the transitional geology. Groundwater elevations for the indicated wells were not collected in the May 2019.

4.1.2 Groundwater Field Parameter Results

Measurements of field screening parameters, including pH, conductivity, DO, ORP, TDS, turbidity, and temperature, were used to indicate when groundwater quality had stabilized and sampling could begin during the November 2018 and May 2019 groundwater sampling events and are presented in Table 4-4.

4.1.3 Analytical Data and Data Quality Review

The analytical data and laboratory reports for the November 2018 and May 2018 sampling events are provided in Appendix D. Appendix C provides the DQS. MES reviewed the analytical data in accordance with the *QAP* (MES, 2005). Based on the data quality review, the analytical data generated for these monitoring events are adequate to fulfill program objectives and are suitable for preparation of this report. A more detailed discussion of the analytical results can be found in the DQS.

4.1.4 Summary of Groundwater Analytical Results

The primary COC analytical results for the November 2018 and May 2019 groundwater sampling events, along with historical analytical results from previous sampling events, for on-site and off-site wells are shown in Tables 4-5 and 4-6, respectively. In addition, the COC concentrations were compared to the groundwater protection standards (GPS). The GPS for on-site wells is the groundskeeper risk-based target level (RBTL) and in off-site wells is the residential RBTL, except in cases where the RBTL is less than the maximum contaminant level (MCL), the RBTL is the MCL. During this reporting period, three of the five COCs (1,1,2,2-PCA, TCE, VC) exceeded the GPS in off-site groundwater samples collected and four of the five COCs exceeded the GPS in the on-site groundwater samples (1,1,2,2-PCA, TCE, PERC, VC). Elevated DHGs (Appendix D) were observed in on-site multi-level wells OLF-G72 and OLF-G73, located downgradient of the injection transect, indicating favorable conditions for dichlorination of the primary COCs, this remains consistent in most ports in the second year.

4.2 Distribution of Corrective Action COCs in Groundwater

The distribution of the primary COCs during the November 2018 and May 2019 sampling events are shown for on-site and off-site wells in Figures 7 and 8, respectively. In the on-site wells, 1,1,2,2-PCA GPS was exceeded in OLF-G07, VC GPS was exceeded in OLF-G20 and OLF-G42 (November 2018 only), OLF-G71, OLF-G72, 1,1,2,2 – PCA and VC GPSs were exceeded in OLF-G74. Well OLF-G77 exceeded GPSs for 1,1,2,2 – PCA, PERC, TCE and VC. No GPSs were exceeded in wells OLF-G73, OLF-G75, OLF-G78, and PPMP-229-GP12.

In the off-site wells, 1,1,2,2 – TCA, TCE, and VC GPSs were exceeded in OLF-G12 and OLF-G23. Well OLF-G22 and OLF-G33 exceeded the 1,1,2,2-PCA and TCE. Well OLF-G18 exceeded the TCE GPS. No GPSs were exceeded in wells OLF-G21, OLF-G24, OLF-G31, OLF-G32, OLF-G34, OLF-G35, OLF-G36, OLF-G47, OLF-G48, OLF-G52 and OLF-G70. Off-site well COC concentrations during this reporting period are similar to historical concentrations and is expected to show gradual improvements over time from the ISB corrective measures

effect of decreasing the continued contribution of solvents to off-site groundwater and the effects of natural attenuation processes of dilution, diffusion, and sorption.

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5.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This section summarizes the activities performed during the reporting period from November 2018 to May 2019 and presents the results, conclusions, and recommendations.

5.1 Summary of Activities

Activities conducted at the Site included:

- Collected groundwater level measurements and field parameters during November 2018 and May 2019 sampling events
- Collected groundwater samples from select wells for VOCs, DHGs, anions (sulfate, chloride, nitrate), and TOC
- Compared analytical results to GPSs

5.2 Summary of Results

Of the five primary COCs, three (1,1,2,2-TCA, TCE, VC) exceeded the GPS in off-site groundwater samples and four COCs exceeded the GPS in the on-site groundwater samples (1,1,2,2-TCA, TCE, PERC, VC) at the Site during this reporting period. No GPSs were exceeded in on-site wells OLF-G73, OLF-G75, OLF-G78, and PPMP-229-GP12 and off-site wells OLF-G21, OLF-G24, OLF-G31, OLF-G32, OLF-G34, OLF-G35, OLF-G36, OLF-G47, OLF-G48, OLF-G52 and OLF-G70.

5.3 Conclusions and Recommendations

One year of semi-annual performance monitoring was conducted in accordance with the UIC Permit ALSI9908665 and CMIR and met the requirements for semiannual monitoring as specified in the Cleanup Agreement. The presence of DHGs in on-site multi-level wells OLF-G72 and OLF-G73, located downgradient of the injection transect, indicate favorable geochemical conditions have been established for dichlorination of the primary COCs and is occurring at the Site. MDA will submit a CMIP modification request to switch to annual monitoring as indicated in the approved CMIR and will continue with semiannual monitoring of the subset of wells until receipt of concurrence on the CMIP modification.

We note ADEM has requested the installation of additional transition wells be located west of the site in their comments dated June 14, 2019 on the CMIR.

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6.0 REFERENCES

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TABLES

**Table 4-1: Groundwater Elevations,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Measurement Date	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Depth to Water (feet BTOC)	Groundwater Elevation (feet)
November 2018						
LF4-MW01	Residuum	11/8/2018	737.13	739.79	21.19	718.60
LF4-MW02	Residuum	11/8/2018	738.50	738.50	25.25	713.25
LF4-MW03	Residuum	11/8/2018	739.78	739.78	18.21	721.57
LF4-MW04	Residuum	11/8/2018	743.35	743.35	11.44	731.91
LF4-MW05	Residuum	11/8/2018	753.32	753.32	15.55	737.77
OLF-G04	Transition	11/8/2018	745.03	747.45	48.12	699.33
OLF-G05	Transition	11/7/2018	738.23	740.23	40.27	699.96
OLF-G06	Transition	11/7/2018	747.78	750.06	72.45	677.61
OLF-G07	Transition	11/7/2018	739.10	741.36	48.04	693.32
OLF-G08	Transition	11/7/2018	737.60	739.30	37.09	702.21
OLF-G09	Residuum	11/8/2018	738.95	741.25	32.21	709.04
OLF-G10	Residuum	11/8/2018	746.35	748.42	26.48	721.94
OLF-G12	Transition	11/7/2018	745.75	745.43	70.34	675.09
OLF-G15	Residuum	11/8/2018	734.21	736.78	22.28	714.50
OLF-G17	Transition	11/7/2018	739.56	741.24	28.34	712.90
OLF-G18	Transition	11/7/2018	742.01	741.60	45.75	695.85
OLF-G19	Transition	11/7/2018	744.50	744.08	53.32	690.76
OLF-G20	Bedrock	11/7/2018	739.17	741.43	61.34	680.09
OLF-G21	Bedrock	11/7/2018	742.76	742.57	60.24	682.33
OLF-G22	Bedrock	11/7/2018	746.67	746.54	71.56	674.98
OLF-G23	Bedrock	11/7/2018	744.17	743.89	69.00	674.89
OLF-G24	Transition	11/7/2018	743.90	743.56	69.19	674.37
OLF-G25	Bedrock	11/7/2018	745.17	745.04	60.68	684.36
OLF-G26	Transition	11/7/2018	745.16	745.04	69.43	675.61
OLF-G29	Bedrock	11/7/2018	770.62	770.25	96.19	674.06
OLF-G30	Deep Bedrock	11/7/2018	770.92	770.66	97.12	673.54
OLF-G31	Bedrock	11/7/2018	794.25	793.69	116.32	677.37
OLF-G32	Deep Bedrock	11/7/2018	793.64	793.41	119.95	673.46
OLF-G33	Bedrock	11/7/2018	737.26	736.98	68.97	668.01
OLF-G34	Deep Bedrock	11/7/2018	737.42	737.07	64.56	672.51
OLF-G35	Deep Bedrock	11/7/2018	743.40	742.82	69.04	673.78
OLF-G36	Deep Bedrock	11/7/2018	746.74	746.09	71.38	674.71
OLF-G37	Bedrock	11/8/2018	769.57	769.37	89.72	679.65
OLF-G38	Deep Bedrock	11/8/2018	737.63	739.92	66.33	673.59
OLF-G40	Transition	11/8/2018	737.20	739.51	22.51	717.00
OLF-G41	Transition	11/8/2018	746.50	748.62	27.21	721.41

**Table 4-1: Groundwater Elevations,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Measurement Date	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Depth to Water (feet BTOC)	Groundwater Elevation (feet)
OLF-G42	Bedrock	11/8/2018	746.20	748.41	73.90	674.51
OLF-G43	Bedrock	11/7/2018	761.50	761.05	94.51	666.54
OLF-G44	Deep Bedrock	11/7/2018	760.00	759.82	97.24	662.58
OLF-G45	Bedrock	11/8/2018	719.00	721.50	42.21	679.29
OLF-G46	Deep Bedrock	11/8/2018	719.80	722.08	44.92	677.16
OLF-G47	Bedrock	11/7/2018	717.40	717.46	60.71	656.75
OLF-G48	Deep Bedrock	11/7/2018	717.60	717.63	50.77	666.86
OLF-G49	Transition	11/7/2018	753.30	753.30	83.02	670.28
OLF-G50	Bedrock	11/7/2018	753.49	753.62	83.64	669.98
OLF-G51	Deep Bedrock	11/7/2018	753.63	753.69	*	*
OLF-G52	Deep Bedrock	11/7/2018	723.99	723.83	68.09	655.74
OLF-G53	Transition	11/8/2018	739.74	742.56	44.54	698.02
OLF-G54	Residuum	11/7/2018	737.03	739.65	20.59	719.06
OLF-G55	Transition	11/7/2018	737.10	740.09	27.87	712.22
OLF-G56	Residuum	11/7/2018	744.09	747.27	29.12	718.15
OLF-G57	Transition	11/7/2018	744.09	747.57	29.39	718.18
OLF-G58	Residuum	11/7/2018	740.01	743.42	18.54	724.88
OLF-G66	Transition	11/7/2018	741.11	743.95	25.71	718.24
OLF-G67	Bedrock	11/7/2018	741.52	743.98	25.53	718.45
OLF-G68	Transition	11/7/2018	739.59	742.30	36.98	705.32
OLF-G69	Bedrock	11/7/2018	740.64	742.94	31.03	711.91
OLF-G70	Deep Bedrock	11/7/2018	722.11	722.11	62.57	659.54
OLF-G71 (Port 1)	Multi-Level	11/14/2018	739.49	742.76	45.08	697.68
OLF-G71 (Port 2)	Multi-Level	11/14/2018	739.49	742.77	61.54	681.23
OLF-G71 (Port 3)	Multi-Level	11/14/2018	739.49	742.75	61.69	681.06
OLF-G71 (Port 4)	Multi-Level	11/14/2018	739.49	742.73	66.78	675.95
OLF-G71 (Port 5)	Multi-Level	11/14/2018	739.49	742.72	66.96	675.76
OLF-G72 (Port 1)	Multi-Level	11/14/2018	744.11	747.40	70.14	677.26
OLF-G72 (Port 2)	Multi-Level	11/13/2018	744.11	747.42	47.69	699.73
OLF-G72 (Port 3)	Multi-Level	11/13/2018	744.11	747.43	71.72	675.71
OLF-G72 (Port 4)	Multi-Level	11/13/2018	744.11	747.37	69.19	678.18
OLF-G72 (Port 5)	Multi-Level	11/13/2018	744.11	747.40	71.92	675.48
OLF-G72 (Port 6)	Multi-Level	11/13/2018	744.11	747.36	70.59	676.77
OLF-G73 (Port 1)	Multi-Level	11/13/2018	745.97	749.56	72.50	677.06
OLF-G73 (Port 2)	Multi-Level	11/13/2018	745.97	749.56	73.86	675.70
OLF-G73 (Port 3)	Multi-Level	11/13/2018	745.97	749.58	73.90	675.68
OLF-G73 (Port 4)	Multi-Level	11/13/2018	745.97	749.56	73.92	675.64
OLF-G73 (Port 5)	Multi-Level	11/13/2018	745.97	749.62	73.93	675.69

**Table 4-1: Groundwater Elevations,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Measurement Date	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Depth to Water (feet BTOC)	Groundwater Elevation (feet)
OLF-G74 (Port2)	Multi-Level	11/12/2018	747.28	750.79	75.84	674.95
OLF-G75	Multi-Level	11/8/2018	TBD	749.71	75.16	674.55
OLF-G76	Multi-Level	11/8/2018	TBD	747.00	73.06	673.94
OLF-G77	Transition	11/7/2018	744.08	747.04	63.83	683.21
OLF-G78	Transition	11/7/2018	745.92	748.99	72.61	676.38
OLF-G79	Deep Bedrock	11/7/2018	743.70	746.31	71.43	674.88
PPMP-229-GP08	Bedrock	11/8/2018	728.91	731.89	22.70	709.19
PPMP-229-GP09	Residuum	11/8/2018	730.50	733.24	14.18	719.06
PPMP-229-GP10	Transition	11/8/2018	729.59	732.31	14.76	717.55
PPMP-229-GP11	Transition	11/7/2018	741.54	744.13	30.81	713.32
PPMP-229-GP12	Bedrock	11/7/2018	741.47	743.79	30.75	713.04
PPMP-229-GP13	Residuum	11/8/2018	717.87	720.16	39.38	680.78
PPMP-229-GP14	Transition	11/8/2018	718.31	720.98	41.81	679.17
May 2019						
OLF-G06	Transition	4/30/2019	747.78	750.06	65.21	Dry
OLF-G07	Transition	4/30/2019	739.10	741.36	41.77	699.59
OLF-G08	Transition	4/30/2019	737.60	739.30	30.94	708.36
OLF-G12	Transition	4/30/2019	745.75	745.43	61.76	683.67
OLF-G18	Transition	4/30/2019	742.01	741.60	38.60	703.00
OLF-G20	Bedrock	4/30/2019	739.17	741.43	52.87	688.56
OLF-G21	Bedrock	4/30/2019	742.76	742.57	51.47	691.10
OLF-G22	Bedrock	4/30/2019	746.67	746.54	63.08	683.46
OLF-G23	Bedrock	4/30/2019	744.17	743.89	65.51	678.38
OLF-G24	Transition	4/30/2019	743.9	743.56	61.19	682.37
OLF-G31	Bedrock	4/30/2019	794.25	793.69	102.38	691.31
OLF-G32	Deep Bedrock	4/30/2019	793.64	793.41	109.71	683.70
OLF-G35	Deep Bedrock	4/30/2019	743.40	742.82	60.52	682.30
OLF-G36	Deep Bedrock	4/30/2019	746.74	746.09	62.53	683.56
OLF-G42	Bedrock	4/30/2019	746.20	748.41	65.56	682.85
OLF-G47	Bedrock	4/30/2019	717.40	717.46	57.73	659.73
OLF-G48	Deep Bedrock	4/30/2019	717.60	717.63	45.47	672.16
OLF-G52	Deep Bedrock	4/30/2019	723.99	723.83	48.87	674.96
OLF-G70	Deep Bedrock	4/30/2019	722.11	722.11	58.65	663.46
OLF-G71 (Port 1)	Multi-Level	5/1/2019	739.49	742.76	38.67	704.09
OLF-G71 (Port 2)	Multi-Level	5/1/2019	739.49	742.77	53.60	689.17
OLF-G71 (Port 3)	Multi-Level	5/1/2019	739.49	742.75	53.02	689.73
OLF-G71 (Port 4)	Multi-Level	5/1/2019	739.49	742.73	58.14	684.59

**Table 4-1: Groundwater Elevations,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Measurement Date	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Depth to Water (feet BTOC)	Groundwater Elevation (feet)
OLF-G71 (Port 5)	Multi-Level	5/1/2019	739.49	742.72	58.57	684.15
OLF-G72 (Port 1)	Multi-Level	5/1/2019	744.11	747.40	61.47	685.93
OLF-G72 (Port 2)	Multi-Level	5/2/2019	744.11	747.42	61.95	685.47
OLF-G72 (Port 3)	Multi-Level	5/2/2019	744.11	747.43	63.62	683.81
OLF-G72 (Port 4)	Multi-Level	5/2/2019	744.11	747.37	63.80	683.57
OLF-G72 (Port 5)	Multi-Level	5/2/2019	744.11	747.40	62.79	684.61
OLF-G72 (Port 6)	Multi-Level	5/2/2019	744.11	747.36	62.85	684.51
OLF-G73 (Port 1)	Multi-Level	5/1/2019	745.97	749.56	65.18	684.38
OLF-G73 (Port 2)	Multi-Level	5/1/2019	745.97	749.56	65.79	683.77
OLF-G73 (Port 3)	Multi-Level	5/1/2019	745.97	749.58	65.57	684.01
OLF-G73 (Port 4)	Multi-Level	5/1/2019	745.97	749.56	65.32	684.24
OLF-G73 (Port 5)	Multi-Level	5/1/2019	745.97	749.62	19.31	730.31
OLF-G74 (Port 1)	Multi-Level	5/1/2019	747.28	750.79	27.00	723.79
OLF-G74 (Port 2)	Multi-Level	5/1/2019	747.28	750.79	28.60	722.19
OLF-G74 (Port 3)	Multi-Level	5/1/2019	747.28	750.79	66.40	684.39
OLF-G74 (Port 4)	Multi-Level	5/1/2019	747.28	750.77	22.70	728.07
OLF-G74 (Port 5)	Multi-Level	5/1/2019	747.28	750.77	21.90	728.87
OLF-G75	Multi-Level	4/30/2019	TBD	749.71	66.68	683.03
OLF-G77	Transition	4/30/2019	744.08	747.04	56.59	690.45
OLF-G78	Transition	4/30/2019	745.92	748.99	64.23	684.76
PPMP-229-GP12	Bedrock	4/30/2019	741.47	743.79	26.31	717.48

Notes:

BTOC = Below top of casing

* Unable to get water level meter in port.

**Table 4-2: Horizontal Hydraulic Gradients,
November 2018
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Upgradient Monitoring Well	Well Type	Groundwater Elevation	Downgradient Monitoring Well	Well Type	Groundwater Elevation	Estimated Groundwater Flow Direction	Horizontal Distance	Elevation Difference (feet)	Horizontal Gradient (feet per foot)
<u>November 2018</u>									
OLF-G56	Residuum	718.15	OLF-G15	Residuum	714.50	North	1854	3.65	0.002
OLF-G40	Transition	717.00	OLF-G12	Transition	675.09	Northwest	1201	41.91	0.035
OLF-G17	Transition	712.90	OLF-G26	Transition	675.61	North	700	37.29	0.053
OLF-G21	Bedrock	682.33	OLF-G43	Bedrock	666.54	Northeast	2050	15.79	0.008
OLF-G22	Bedrock	674.98	OLF-G47	Bedrock	656.75	Northeast	1849	18.23	0.010
OLF-G37	Bedrock	679.65	OLF-G43	Bedrock	666.54	Northeast	1717	13.11	0.008
OLF-G30	Deep Bedrock	673.54	OLF-G44	Deep Bedrock	662.58	Northeast	1349	10.96	0.008
OLF-G46	Deep Bedrock	677.16	OLF-G52	Deep Bedrock	655.74	Northwest	909	21.42	0.024
OLF-G36	Deep Bedrock	674.71	OLF-G44	Deep Bedrock	662.58	North	1293	12.13	0.009

Notes:

Elevations in feet above mean sea level.

**Table 4-3: Vertical Hydraulic Gradients,
November 2018
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well Cluster IDs	Well Completion Zone	Midpoint of Screen Elevation	Groundwater Elevation (Nov 18)	dH (Nov 18)	dL	Vertical Hydraulic Gradient (Nov 18) (feet per foot)
OLF-G10	residuum	723.85	721.94	0.53	52.35	0.010
OLF-G41	transition	671.50	721.41			
OLF-G56	residuum	709.09	718.15	-0.03	22.50	-0.001
OLF-G57	transition	686.59	718.18			
LF4-MW1	residuum	709.63	718.60	1.60	86.63	0.0185
OLF-G40	transition	623.00	717.00			
OLF-G58	residuum	716.01	724.88	19.56	100.71	0.194
OLF-G68	transition	615.30	705.32			
OLF-G68	transition	615.30	705.32	-6.59	44.36	-0.149
OLF-G69	bedrock	570.94	711.91			
OLF-G54	residuum	705.03	719.06	6.84	40.43	0.169
OLF-G55	transition	664.6	712.22			
PPMP-229-GP09	residuum	699.24	719.06	1.51	18.93	0.080
PPMP-229-GP10	transition	680.31	717.55			
PPMP-229-GP10	transition	680.31	717.55	8.36	148.90	0.056
PPMP-229-GP08	bedrock	531.41	709.19			
PPMP-229-GP13	residuum	680.16	680.78	1.61	17.18	0.094
PPMP-229-GP14	transition	662.98	679.17			
PPMP-229-GP14	transition	662.98	679.17	-0.12	115.18	-0.001
OLF-G45	bedrock	547.80	679.29			
OLF-G45	bedrock	547.80	679.29	2.13	67.20	0.032
OLF-G46	deep bedrock	480.60	677.16			
OLF-G24	transition	656.80	674.37	-0.52	74.73	-0.007
OLF-G23	bedrock	582.07	674.89			

**Table 4-3: Vertical Hydraulic Gradients,
November 2018
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well Cluster IDs	Well Completion Zone	Midpoint of Screen Elevation	Groundwater Elevation (Nov 18)	dH (Nov 18)	dL	Vertical Hydraulic Gradient (Nov 18) (feet per foot)
OLF-G66	transition	644.95	718.24	-0.21	44.97	-0.005
OLF-G67	bedrock	599.98	718.45			
PPMP-229-GP11	transition	675.13	713.32	0.28	94.34	0.003
PPMP-229-GP12	bedrock	580.79	713.04			
OLF-G18	transition	689.01	695.85	13.52	108.35	0.125
OLF-G21	bedrock	580.66	682.33			
OLF-G26	transition	653.06	675.61	-8.75	70.49	-0.124
OLF-G25	bedrock	582.57	684.36			
OLF-G07	transition	682.10	693.32	13.23	105.03	0.126
OLF-G20	bedrock	577.07	680.09			
OLF-G12	transition	665.75	675.09	0.11	81.58	0.001
OLF-G22	bedrock	584.17	674.98			
OLF-49	transition	653.30	670.28	0.30	48.81	0.0061
OLF-50	bedrock	604.49	669.98			
OLF-G22	bedrock	584.17	674.98	0.27	88.73	0.003
OLF-G36	deep bedrock	495.44	674.71			
OLF-G23	bedrock	582.07	674.89	1.11	91.17	0.012
OLF-G35	deep bedrock	490.90	673.78			
OLF-50	bedrock	604.49	669.98	--	99.86	--
OLF-51	deep bedrock	504.63	*			
OLF-G33	bedrock	563.26	668.01	-4.50	79.34	-0.057
OLF-G34	deep bedrock	483.92	672.51			
OLF-G43	bedrock	548.40	666.54	3.96	76.00	0.052
OLF-G44	deep bedrock	472.40	662.58			

**Table 4-3: Vertical Hydraulic Gradients,
November 2018
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well Cluster IDs	Well Completion Zone	Midpoint of Screen Elevation	Groundwater Elevation (Nov 18)	dH (Nov 18)	dL	Vertical Hydraulic Gradient (Nov 18) (feet per foot)
OLF-G42	bedrock	582.50	728.12			
OLF-G47	bedrock	405.40	656.75	-10.11	82.80	-0.122
OLF-G48	deep bedrock	322.60	666.86			
OLF-G29	bedrock	555.52	674.06	0.52	71.40	0.007
OLF-G30	deep bedrock	484.12	673.54			
OLF-G31	bedrock	579.25	677.37	3.91	66.61	0.059
OLF-G32	deep bedrock	512.64	673.46			

Notes:

Elevations in feet above mean sea level.

A negative value for vertical hydraulic gradient signifies an upward hydraulic gradient

ID = identification

dH = difference in groundwater elevation (feet)

dL = distance between screened intervals (feet)

NA = not applicable

**Table 4-4: Groundwater Field Parameters,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Sample Date	Temperature (°C)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Turbidity (NTU)	pH
<u>November 2018</u>									
OLF-G07	Transition	11/13/2018	14.36	53.0	4.57	172.4	0.034	5.8	5.21
OLF-G08	Transition	11/14/2018	11.06	138.0	7.27	139.3	0.090	13.9	5.71
OLF-G12	Transition	11/19/2018	22.00	95.4	5.51	210.6	0.062	9.0	5.44
OLF-G18	Transition	11/19/2018	22.40	85.7	2.12	23.8	0.056	29.8	6.64
OLF-G21	Bedrock	11/19/2018	19.43	491.0	1.78	-158.4	0.319	8.0	7.43
OLF-G22	Bedrock	11/27/2018	11.03	401.0	30.70	70.6	0.261	3.5	6.48
OLF-G23	Bedrock	11/15/2018	8.90	322.9	2.01	186.5	0.210	30.6	6.09
OLF-G24	Transition	11/15/2018	13.60	66.5	3.87	175.1	0.044	190.8	5.81
OLF-G31	Bedrock	11/26/2018	13.40	312.0	3.33	-50.0	0.209	8.9	8.06
OLF-G33	Bedrock	11/20/2018	17.39	381.0	2.83	28.7	0.248	2.9	6.99
OLF-G34	Deep Bedrock	11/19/2018	19.65	111.0	3.82	15.9	0.072	5.3	6.70
OLF-G36	Deep Bedrock	11/19/2018	19.50	462.0	1.98	-46.2	0.301	4.8	7.54
OLF-G42	Bedrock	11/19/2018	17.40	694.0	4.98	-45.2	0.449	9.0	7.36
OLF-G47	Bedrock	11/28/2018	14.50	372.3	5.11	92.2	0.242	31.4	7.35
OLF-G48	Deep Bedrock	11/15/2018	15.59	326.0	4.01	16.2	0.212	3.2	7.81
OLF-G52	Deep Bedrock	11/20/2018	18.57	367.0	2.46	-13.9	0.239	2.7	7.91
OLF-G70	Deep Bedrock	11/26/2018	16.66	349.0	3.66	85.6	0.227	4.0	7.78
OLF-G71 (Port 1)	Multi-Level	11/14/2018	14.60	973.0	2.12	-69.1	0.631	0.5	7.00
OLF-G71 (Port 2)	Multi-Level	11/14/2018	15.00	721.0	1.60	-113.3	0.468	0.2	7.38
OLF-G71 (Port 3)	Multi-Level	11/14/2018	11.30	867.0	1.26	-38.7	0.566	0.1	6.93
OLF-G71 (Port 4)	Multi-Level	11/14/2018	13.30	638.0	0.91	-109.5	0.415	0.5	7.27
OLF-G71 (Port 5)	Multi-Level	11/14/2018	13.30	601.8	0.48	-171.8	0.391	0.0	7.94
OLF-G72 (Port 1)	Multi-Level	11/13/2018	13.00	1001.0	0.76	-56.3	0.650	7.7	6.64
OLF-G72 (Port 2)	Multi-Level	11/13/2018	13.80	1188.0	3.67	10.6	0.774	22.1	5.98
OLF-G72 (Port 3)	Multi-Level	11/13/2018	14.30	670.0	1.44	-72.3	0.436	14.7	7.02
OLF-G72 (Port 4)	Multi-Level	11/13/2018	13.80	1409.0	2.28	-7.6	0.917	2.9	6.21
OLF-G72 (Port 5)	Multi-Level	11/13/2018	14.50	428.5	1.23	-30.5	0.279	0.9	6.99
OLF-G72 (Port 6)	Multi-Level	11/13/2018	14.00	448.1	2.19	-44.3	0.291	0.3	7.11

**Table 4-4: Groundwater Field Parameters,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Sample Date	Temperature (°C)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Turbidity (NTU)	pH
OLF-G73 (Port 1)	Multi-Level	11/13/2018	16.10	722.0	2.27	-77.4	0.468	2.9	6.67
OLF-G73 (Port 2)	Multi-Level	11/13/2018	14.10	568.6	1.47	-99.2	0.370	0.9	7.54
OLF-G73 (Port 3)	Multi-Level	11/13/2018	14.10	556.9	1.14	-98.7	0.362	0.0	8.10
OLF-G73 (Port 4)	Multi-Level	11/13/2018	15.10	346.3	7.14	-87.9	0.225	12.3	8.02
OLF-G73 (Port 5)	Multi-Level	11/13/2018	13.90	341.7	7.84	9.8	0.222	2.9	8.23
OLF-G74 (Port 1)	Multi-Level	11/12/2018	14.10	74.2	4.45	191.9	0.048	4.2	5.69
OLF-G74 (Port 2)	Multi-Level	11/12/2018	14.50	392.0	1.60	45.4	0.255	1.9	6.29
OLF-G74 (Port 3)	Multi-Level	11/12/2018	16.80	522.3	1.45	47.7	0.339	2.3	7.32
OLF-G74 (Port 4)	Multi-Level	11/12/2018	17.50	460.7	1.16	-92.1	0.300	2.5	7.49
OLF-G74 (Port 5)	Multi-Level	11/12/2018	16.90	458.1	1.50	-58.7	0.298	2.0	1.98
OLF-G75 (Screen 1)	Multi-Level	11/26/2018	10.00	49.8	6.99	221.5	0.033	111.1	5.55
OLF-G75 (Screen 2)	Multi-Level	11/26/2018	11.60	61.1	11.93	245.1	0.039	87.1	5.65
OLF-G75 (Screen 3)	Multi-Level	11/26/2018	15.90	557.5	2.63	101.9	0.363	9.1	7.48
OLF-G75 (Screen 4)	Multi-Level	11/27/2018	13.50	522.3	1.60	152.8	0.339	111.7	7.42
OLF-G75 (Screen 5)	Multi-Level	11/27/2018	10.90	520.7	1.95	152.4	0.339	98.9	7.43
OLF-G75 (Screen 6)	Multi-Level	11/27/2018	13.90	526.9	2.38	136.1	0.343	34.8	7.39
OLF-G77	Transition	11/13/2018	14.48	321.0	2.97	123.4	0.209	28.4	6.06
OLF-G78	Transition	11/12/2018	14.37	157.0	2.34	112.7	0.102	7.9	6.01
PPMP-229-GP12	Bedrock	11/14/2018	14.88	212.0	1.99	19.0	1.138	1.6	9.96
May 2019									
OLF-G06	Transition	5/6/2019	22.10	25.2	8.23	212.1	0.016	11.1	5.12
OLF-G07	Transition	5/7/2019	20.20	69.7	4.74	247.8	0.046	3.7	4.99
OLF-G08	Transition	5/7/2019	20.20	94.0	3.96	263.9	0.061	2.7	5.52
OLF-G12	Transition	5/8/2019	25.40	66.1	3.87	287.2	0.043	9.4	5.40
OLF-G18	Transition	5/9/2019	21.40	130.1	3.00	-124.9	0.085	10.1	6.26
OLF-G20	Bedrock	5/7/2019	21.00	724.0	0.54	-25.4	0.468	0.3	7.01
OLF-G21	Bedrock	5/9/2019	20.20	482.9	1.05	-74.3	0.314	9.1	7.21
OLF-G22	Bedrock	5/9/2019	26.30	360.5	1.29	161.1	0.235	1.6	6.30
OLF-G23	Bedrock	5/8/2019	22.30	339.6	1.13	188.8	0.220	2.6	6.09

**Table 4-4: Groundwater Field Parameters,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Sample Date	Temperature (°C)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Turbidity (NTU)	pH
OLF-G24	Transition	5/8/2019	26.50	44.3	1.87	273.1	0.029	43.3	5.36
OLF-G31	Bedrock	5/15/2019	18.90	0.3	5.40	211.1	0.209	10.6	7.36
OLF-G32	Deep Bedrock	5/14/2019	24.10	0.3	4.66	121.2	0.164	3.9	7.68
OLF-G35	Deep Bedrock	5/8/2019	24.70	410.8	1.95	-34.4	0.268	8.0	7.14
OLF-G36	Deep Bedrock	5/9/2019	22.00	450.2	2.35	-16.9	0.293	20.0	7.43
OLF-G42	Bedrock	5/13/2019	21.00	0.5	1.06	85.4	0.298	11.3	7.52
OLF-G47	Bedrock	5/9/2019	21.40	388.8	4.67	101.5	0.254	15.9	7.39
OLF-G48	Deep Bedrock	5/8/2019	27.10	136.8	0.99	-16.9	0.089	9.3	6.97
OLF-G52	Deep Bedrock	5/10/2019	29.50	355.5	1.55	-174.1	0.231	30.8	8.78
OLF-G70	Deep Bedrock	5/15/2019	20.70	389.9	3.09	79.2	0.253	2.5	7.58
OLF-G71 (Port 1)	Multi-Level	5/6/2019	21.00	954.0	0.57	-105.3	0.618	2.7	7.59
OLF-G71 (Port 2)	Multi-Level	5/6/2019	21.40	743.0	1.13	-132.7	0.481	0.7	7.96
OLF-G71 (Port 3)	Multi-Level	5/6/2019	20.60	885.0	0.58	-83.3	0.579	1.3	7.38
OLF-G71 (Port 4)	Multi-Level	5/6/2019	18.60	637.0	0.62	-110.5	0.416	0.5	7.54
OLF-G71 (Port 5)	Multi-Level	5/6/2019	20.50	603.0	0.68	-189.1	0.390	0.6	7.97
OLF-G72 (Port 1)	Multi-Level	5/2/2019	22.70	1036.0	1.36	-73.1	0.676	9.4	6.99
OLF-G72 (Port 2)	Multi-Level	5/2/2019	26.10	1176.0	0.49	-17.4	0.767	31.7	6.41
OLF-G72 (Port 3)	Multi-Level	5/2/2019	23.50	706.0	0.42	-105.9	0.462	2.8	7.50
OLF-G72 (Port 4)	Multi-Level	5/2/2019	20.50	885.0	0.43	-29.8	0.579	7.1	6.73
OLF-G72 (Port 5)	Multi-Level	5/2/2019	21.50	459.9	1.15	-57.9	0.299	2.6	7.35
OLF-G72 (Port 6)	Multi-Level	5/2/2019	19.50	461.8	1.55	-61.4	0.300	2.5	7.54
OLF-G73 (Port 1)	Multi-Level	5/1/2019	22.60	769.0	2.15	-68.7	0.501	1.3	7.01
OLF-G73 (Port 2)	Multi-Level	5/1/2019	28.00	509.0	1.04	-1.8	0.332	5.1	6.88
OLF-G73 (Port 3)	Multi-Level	5/1/2019	27.50	615.0	0.92	-102.1	0.397	3.5	7.52
OLF-G73 (Port 4)	Multi-Level	5/1/2019	27.40	568.0	1.17	-75.4	0.371	2.7	7.18
OLF-G73 (Port 5)	Multi-Level	5/1/2019	23.90	444.2	1.76	-59.8	0.289	4.2	7.60
OLF-G74 (Port 1)	Multi-Level	5/1/2019	27.00	67.3	5.50	121.1	0.044	0.5	5.71
OLF-G74 (Port 2)	Multi-Level	5/1/2019	22.90	370.2	1.19	18.9	0.241	0.6	5.71
OLF-G74 (Port 3)	Multi-Level	5/1/2019	22.40	459.0	0.47	-1.9	0.298	0.3	7.62

**Table 4-4: Groundwater Field Parameters,
November 2018 to May 2019
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Well ID	Well Type	Sample Date	Temperature (°C)	Conductivity (µs/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Turbidity (NTU)	pH
OLF-G74 (Port 4)	Multi-Level	5/1/2019	22.40	454.5	0.86	-49.9	0.296	1.2	7.63
OLF-G74 (Port 5)	Multi-Level	5/1/2019	23.50	432.8	0.65	-113.5	0.282	1.0	8.10
OLF-G75 (Screen 1)	Multi-Level	5/13/2019	18.60	46.9	7.97	207.3	0.031	9.9	5.56
OLF-G75 (Screen 2)	Multi-Level	5/13/2019	23.30	413.0	4.84	114.9	0.268	19.1	7.18
OLF-G75 (Screen 3)	Multi-Level	5/13/2019	19.90	483.9	3.02	102.1	0.315	7.2	7.39
OLF-G75 (Screen 4)	Multi-Level	5/14/2019	28.60	505.0	2.32	96.1	0.325	182.4	7.35
OLF-G75 (Screen 5)	Multi-Level	5/14/2019	21.60	498.3	1.64	93.3	0.330	17.1	7.37
OLF-G75 (Screen 6)	Multi-Level	5/14/2019	20.50	501.2	2.03	103.1	0.326	7.6	7.43
OLF-G77	Transition	5/6/2019	22.00	326.1	1.59	130.9	0.212	8.3	5.90
OLF-G78	Transition	5/6/2019	26.00	97.1	2.59	155.7	0.063	13.7	5.53
PPMP-229-GP12	Bedrock	5/14/2019	22.20	0.3	1.47	69.1	0.166	2.1	10.54

Notes:

°C = Degrees Celsius

mg/L = Milligrams per liter

µs/cm = Microsiemens per centimeter

mV = Millivolts

NM = Not measured

NTU = Nephelometric turbidity units

ORP = Oxidation-reduction potential

TDS = Total Dissolved Solids

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G07								
			7/29/04	2/22/06	1/14/08	1/20/11	6/14/16	11/13/17	5/16/18	11/13/18	5/7/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	39	130	150	96	48	25	51	29 F1	96
1,1,2-Trichloroethane	50.2	GS RBTL	0.55 J	1.1	1.9	1.3	0.71 J	0.4 J	0.61 J	< 1	1.2
Tetrachloroethylene	5	MCL	0.28 J	< 1	0.47 J	0.34 J	0.28 J	0.32 J	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	17	18	43	32	22	20	26	19	48
Vinyl Chloride	3.86	GS RBTL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G20								
			7/29/04	2/24/06	1/15/08	1/20/11	6/22/16	11/13/17	5/23/18	11/13/18	5/7/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	0.69 J	< 1	< 1	< 1	18	< 1	< 1	1.3	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	0.6 J	0.6 J	0.73 J	< 1	1.4	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	0.29 J	< 1	< 1	< 1	0.48 J	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	50	36	51	0.31 J	120	25	15	16	9.2
Vinyl Chloride	3.86	GS RBTL	7.3	7	11	< 0.8	10	7.5	8	10	6.5

VOCs (µg/L)	GPS	GPS Basis	OLF-G42							
			8/12/04	2/21/06	1/15/08	1/24/11	9/21/15	5/23/18	11/19/18	5/13/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	2.9	4.6	3.7	2.8	3.1	0.55 J	0.82 J	11
Vinyl Chloride	3.86	GS RBTL	5.4	0.94 J	75	47	12	1.9	29	1.4

VOCs (µg/L)	GPS	GPS Basis	OLF-G71-PORT1					
			2/18/16	6/22/16	11/7/17	5/16/18	11/14/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	32	9.4	0.21	5	5.8	7.4
1,1,2-Trichloroethane	50.2	GS RBTL	2.0 J	1.1	< 1	< 2	< 1	0.55 J
Tetrachloroethylene	5	MCL	< 1	0.46 J	< 1	< 2	< 1	< 1
Trichloroethene	205	GS RBTL	99	77	15	47	47	83
Vinyl Chloride	3.86	GS RBTL	5.5	5	4.8	6.9	6.7	6.2

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G71-PORT2					
			2/18/16	6/22/16	11/7/17	5/16/18	11/14/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	36	4.1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	2.2 J	0.81 J	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	0.25 J	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	99	39	12	9.7	11	10
Vinyl Chloride	3.86	GS RBTL	5.1	3.8	2	2.8	2.4	2.3

VOCs (µg/L)	GPS	GPS Basis	OLF-G71-PORT3					
			2/18/16	6/22/16	11/7/17	5/16/18	11/14/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	35	8.9	1.4	1.1	0.88 J	0.73 J
1,1,2-Trichloroethane	50.2	GS RBTL	2.1 J	0.64 J	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	0.35 J	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	93	46	47	58	54	52
Vinyl Chloride	3.86	GS RBTL	5.7	6.9	3.8	3.8	4.3	3.6

VOCs (µg/L)	GPS	GPS Basis	OLF-G71-PORT4					
			2/18/2016	6/22/16	11/7/17	5/16/18	11/14/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	30	2.3	1.9	1.1	0.73 J	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	2.1 J	0.99 J	0.25 J	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	0.6 J	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	100	12	23	25	24	22
Vinyl Chloride	3.86	GS RBTL	5.9	2.2	1.7	1.7	2.2	1.6

VOCs (µg/L)	GPS	GPS Basis	OLF-G71-PORT5					
			2/18/2016	6/22/16	11/7/17	5/16/18	11/14/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	30	0.64 J	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	2.2 J	0.57 J	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	61	4.8	0.97 J	< 1	< 1	1.3
Vinyl Chloride	3.86	GS RBTL	5.1	1.3	0.71 J	< 1	< 1	0.5 J

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G72-PORT1							
			2/18/2016	6/23/16	8/15/17	11/8/17	2/22/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	800	990	160	55	0.99 J	< 1	< 1	< 1 (UJ)
1,1,2-Trichloroethane	50.2	GS RBTL	19 J	23	26	19	3.6	< 1	< 1	< 1 (UJ)
Tetrachloroethylene	5	MCL	6.3	11	0.98 J	0.56 J	0.55 J	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	6.2	1300	11	4.6	0.75 J	< 1	< 1	< 1
Vinyl Chloride	3.86	GS RBTL	37	30	25	26	1.9	0.52 J	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G72-PORT2							
			2/18/16	6/23/16	8/15/17	11/8/17	2/22/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	350	650	110	52	15 (J)	5.1	< 5	0.76 J
1,1,2-Trichloroethane	50.2	GS RBTL	13 J	19	18	7.2	3.8 (J)	< 5	< 5	< 1
Tetrachloroethylene	5	MCL	4.5 J	9.2	0.74 J	0.41 J	0.27 J (J)	< 5	< 5	< 1
Trichloroethene	205	GS RBTL	730	1200	51	28	12 (J)	6.6	3.2 J	1.7
Vinyl Chloride	3.86	GS RBTL	47	38	35	18	23 (J)	18	13	4.4

VOCs (µg/L)	GPS	GPS Basis	OLF-G72-PORT3							
			2/18/2016	6/23/16	8/15/17	11/8/17	2/22/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	610	130	75	21	1.6	1.5	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	19 J	7.9	27	12	0.87 J	0.5 J	< 1	< 1
Tetrachloroethylene	5	MCL	4.8 J	1.9	0.63 J	0.33 J	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	790	250	49	28	12	19	0.95 J	17
Vinyl Chloride	3.86	GS RBTL	29	17	22	16	15	6.1	< 1	1.9

VOCs (µg/L)	GPS	GPS Basis	OLF-G72-PORT4							
			2/18/2016	6/23/16	8/15/17	11/8/17	2/22/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	290	42	100	38	12	2.3	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	9.1 J	2.4	40	19	5.3	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	2.7	0.7 J	0.58 J	0.74 J	0.43 J	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	460	94	100	70	28	10	1.9	1.5
Vinyl Chloride	3.86	GS RBTL	16	3	22	13	12	5.9	2.4	0.58 J

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G72-PORT5							
			2/18/2016	6/23/16	8/15/17	11/8/17	2/22/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	570	19	6.8	1.2	0.28 J	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	16 J	3.2	5.6	3.5	0.49 J	0.34 J	0.33 J	0.48 J
Tetrachloroethylene	5	MCL	4.5 J	0.32 J	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	780	28	12	2.6	6.2	9.9	8.7	22
Vinyl Chloride	3.86	GS RBTL	29	2	2.3	2	2.5	1.3	1.8	2.2

VOCs (µg/L)	GPS	GPS Basis	OLF-G72-PORT6							
			2/18/2016	6/23/16	8/15/17	11/8/17	2/22/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	410	2.8	8.3	3.4	2.1	0.75 J	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	11 J	0.39 J	1.7	1.1	0.9 J	0.68 J	0.69 J	0.47 J
Tetrachloroethylene	5	MCL	< 1	< 1	0.38 J	0.26 J	0.26 J	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	390	16	64	41	42	47	40	29
Vinyl Chloride	3.86	GS RBTL	16	0.48 J	0.86	0.46 J	0.53 J	< 1	0.59 J	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G73-PORT1							
			2/18/2016	6/23/16	8/14/17	11/8/17	2/20/18	5/17/18	11/13/18	5/2/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	530	540	110	6.5	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	12	13	19	5.1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	2.6	4.8	0.57 J	0.23 J	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	380	490	4.8	1.3	0.24 J	< 1	< 1	< 2 (UB)
Vinyl Chloride	3.86	GS RBTL	2.3	1.3	16	1.6	0.31 J	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G73-PORT2							
			2/18/2016	6/23/16	8/14/17	11/8/17	2/20/18	5/17/18	11/13/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	110	82	92	50	9.2	2	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	4.3 J	3.4	7.9	4.3	0.72 J	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	1.1	1.4	1.1	0.68 J	0.22 J	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	140	160	98	52	25	15	2.9	3.5 B (B)
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	3.2	9.4	7	4.1	0.81 J	< 1

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G73-PORT3							
			2/18/2016	6/23/16	8/14/17	11/8/17	2/20/18	5/17/18	11/13/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	16	10	23 (J)	28	37	< 1	7.8	3.1
1,1,2-Trichloroethane	50.2	GS RBTL	1.3 J	3.1	3.1 J	2.8	3	< 1	1.2	0.96 J
Tetrachloroethylene	5	MCL	< 1	0.33 J	< 5	0.88 J	0.79 J	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	34.0	58	100	130	150	7.7	89	61 B (B)
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 4	< 0.8	0.85	< 1	2.4	2.8

VOCs (µg/L)	GPS	GPS Basis	OLF-G73-PORT4							
			2/18/2016	6/23/16	8/14/17	11/8/17	2/20/18	5/17/18	11/13/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	2.7	0.25 J	4.1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	1.7 J	0.84 J	1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	12	7.5	7.5	9.8	9.7	6.6	5.3	6.2 H
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G73-PORT5							
			2/18/2016	6/23/16	8/14/17	11/8/17	2/20/18	5/16/18	11/13/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	0.5 J	0.27 J	< 1	< 1	< 1	< 1	0.53 J	< 1
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G74-PORT1			
			2/17/2016	5/16/18	11/12/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	2.9	3.4	4	3.3 H
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	1.1	2.4	2.5	2.6 H
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 1	< 1	< 1

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G74-PORT2			
			2/17/2016	5/16/18	11/12/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	17	160	89	39 H
1,1,2-Trichloroethane	50.2	GS RBTL	0.9 J	7.8	9	2.3 H
Tetrachloroethylene	5	MCL	< 5	< 5	0.82 J	< 1
Trichloroethene	205	GS RBTL	17	100	76	76 H
Vinyl Chloride	3.86	GS RBTL	< 0.8	16	25	14 H

VOCs (µg/L)	GPS	GPS Basis	OLF-G74-PORT3			
			2/17/16	5/16/18	11/12/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	<1	1.6	2.5	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	<1	0.67 J	1	< 1
Tetrachloroethylene	5	MCL	<1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	9	74	98	35 H
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G74-PORT4			
			2/17/16	5/16/18	11/12/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	<1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	<1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	<1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	<1	7.4	8.3	9.7 H
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G74-PORT5			
			2/17/16	5/16/18	11/12/18	5/1/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	<1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	<1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	<1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	<1	2.6	3.2	2.4 H
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 1	< 1	< 1

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G75-SCREEN1				
			7/29/15	9/22/15	5/30/18	11/26/18	5/13/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	< 1	0.6 J	< 1	< 1	< 1
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G75-SCREEN2				
			7/29/15	9/22/15	5/31/18	11/26/18	5/13/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	1.4	< 1	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	< 1	5.1	< 1	0.81 J	< 1
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G75-SCREEN3				
			7/29/15	9/22/15	5/31/18	11/26/18	5/13/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	1.3	RNA	< 1	< 1
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	RNA	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	RNA	< 1	< 1
Trichloroethene	205	GS RBTL	< 1	9.1	RNA	3.4	< 1
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	RNA	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G75-SCREEN4				
			7/29/15	9/22/15	5/30/18	11/27/18	5/14/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1 (UJ)
Trichloroethene	205	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G75-SCREEN5				
			7/29/15	9/22/15	5/30/18	11/27/18	5/14/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1 (UJ)
Trichloroethene	205	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

VOCs (µg/L)	GPS	GPS Basis	OLF-G75-SCREEN6				
			7/29/15	9/22/15	5/30/18	11/27/18	5/14/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1 (UJ)
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1 (UJ)
Trichloroethene	205	GS RBTL	< 1	0.6 J	< 1	< 1	< 1 (UJ)
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

VOCs (µg/L)	GPS	GPS Basis	OLF-G77							
			9/21/15	6/23/16	8/14/17	11/13/17	2/15/18	5/17/18	11/13/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	1600	2200	1700	1200	1400	1200	1000	1200
1,1,2-Trichloroethane	50.2	GS RBTL	30 J	37	29	28	33	26	27	32
Tetrachloroethylene	5	MCL	38	15	13	9.7	7.1	7	< 10	6.7
Trichloroethene	205	GS RBTL	1600	1600	1400	1100	870	790	620	670
Vinyl Chloride	3.86	GS RBTL	< 0.8	5.2	3.8	2.2	3.2	5.6	< 10	9.4

VOCs (µg/L)	GPS	GPS Basis	OLF-G78					
			9/21/2015	6/23/16	11/13/17	5/16/18	11/12/18	5/6/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	25	34	9.9	18	8	9.8
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	0.81 J	1.3	0.58 J	0.39 J	< 1
Tetrachloroethylene	5	MCL	< 1	0.31 J	< 1	< 1	< 1	< 1
Trichloroethene	205	GS RBTL	30	42	12	22	7	11
Vinyl Chloride	3.86	GS RBTL	< 0.8	0.2 J	0.2 J	< 1	< 1	< 1

**Table 4-5: On-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	PPMP-229-GP12						
			1/20/11	9/24/15	6/14/16	11/9/17	5/17/18	11/14/18	5/14/19
1,1,2,2-Tetrachloroethane	13.6	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
1,1,2-Trichloroethane	50.2	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
Trichloroethene	205	GS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
Vinyl Chloride	3.86	GS RBTL	< 0.8	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

Notes:

µg/L = micrograms per liter

Shaded indicates detection greater than the GPS.

GPS = Groundwater Protection Standard

GS = Groundskeeper

MCL = Maximum Contamination Limit

RBTL = Risk-Based Target Level

RNA = Requested; not analyzed due to an oversight.

Lab Flag

B = Analyte detected in an associated blank.

F1 = MS and/or MSD recovery is outside acceptance limits.

H = Extraction or analysis holding time exceeded.

J = Result is estimated; detected between the method detection limit and the reporting limit.

Validation Flag (in parentheses)

B = Analyte detected in an associated blank.

J = Result is estimated based on data validation.

UB = Analyte considered not detected based on concentration in associated blank.

UJ = Reporting limit estimated based on QC acceptance criteria outliers.

**Table 4-6: Off-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G12								
			8/15/04	3/2/06	1/14/08	2/1/11	6/20/16	11/16/17	5/22/18	11/19/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	390	770	510	370	320	360	390	310	230
1,1,2-Trichloroethane	7.2	RS RBTL	4.2	8.3	5.9	5	4.9	6.5	6	6.5	4.7 J
Tetrachloroethylene	5	MCL	2.3	2.2	1.1	1.3	2.4	2.8	< 5	< 5	< 5
Trichloroethene	38.3	RS RBTL	170	230	190	160	210	230	240	200	170
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 5	< 5	< 5

VOCs (µg/L)	GPS	GPS Basis	OLF-G18							
			8/12/04	1/14/08	2/1/11	6/21/16	11/15/17	5/23/18	11/19/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTL	< 1	< 1	< 1	< 1	0.59 J	< 1	< 1	52
Vinyl Chloride	2	MCL	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G21							
			8/12/04	1/16/08	1/31/11	6/21/16	11/14/17	5/23/18	11/19/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTL	< 1	< 1	< 1	< 1	0.63 J	< 1	< 1	< 1
Vinyl Chloride	2	MCL	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G22								
			8/15/04	3/2/06	1/16/08	2/1/11	6/20/16	11/15/17	5/22/18	11/27/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	58	37	66	73	100	190	140	100	58
1,1,2-Trichloroethane	7.2	RS RBTL	0.94 J	0.92 J	1.3	1.8	2.6	5.3	4.1 J	3	2.3
Tetrachloroethylene	5	MCL	0.64 J	0.25 J	0.38 J	0.5 J	1.3	1.3	< 5	1	0.96 J
Trichloroethene	38.3	RS RBTL	63	39	51	87	160	180	160	110	100
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 5 (UJ)	1.4	0.7 J

**Table 4-6: Off-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G23								
			8/15/04	3/1/06	1/16/08	2/1/11	6/21/16	11/14/17	5/21/18	11/15/18	5/8/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	220	220	300	290	210	260	200	230	150
1,1,2-Trichloroethane	7.2	RS RBTL	2.4	2.9	2.9	4.7	4.5	6.5	5.5	7.7	5.5
Tetrachloroethylene	5	MCL	1.7	0.64 J	0.87 J	1.1	1.8	1.4	1.3	< 5	< 5
Trichloroethene	38.3	RS RBTL	130	93	150	190	210	170	150	160	150
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	0.51 J	2.8	3.2 J	< 5

VOCs (µg/L)	GPS	GPS Basis	OLF-G24								
			8/15/04	3/1/06	1/14/08	2/1/11	6/21/16	11/14/17	5/21/18	11/15/18	5/8/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTL	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G31								
			8/14/04	2/27/06	1/17/08	1/25/11	6/22/16	11/9/17	5/18/18	11/26/18	5/15/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	0.57 J	< 1	< 1
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

VOCs (µg/L)	GPS	GPS Basis	OLF-G32								
			8/18/04	2/27/06	1/17/08	1/25/11	6/22/16	11/9/17	5/18/18	11/26/18	5/14/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
1,1,2-Trichloroethane	7.2	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
Trichloroethene	38.3	RS RBTL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 (UJ)
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

**Table 4-6: Off-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G33							
			8/16/04	3/1/06	1/16/08	2/2/11	6/15/16	11/14/17	5/21/18	11/20/18
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	2.2	2.3	2.2	< 1	4.4	3.4	3.8	4.5
1,1,2-Trichloroethane	7.2	RS RBTl	0.35 J	0.34 J	0.39 J	< 1	0.78 J	0.79 J	0.69 J	0.56 J
Tetrachloroethylene	5	MCL	0.54 J	0.21 J	0.29 J	< 1	0.59 J	0.59 J	< 1	< 1
Trichloroethene	38.3	RS RBTl	85	44	60	16	91	74	89	97
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G34							
			8/16/04	3/1/06	1/16/08	2/2/11	6/17/16	11/14/17	5/30/18	11/19/18
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	6.7	5.6	5	< 1	34	0.45 J	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	0.25 J	0.35 J	< 1	1.1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	0.37 J	< 1	< 1	< 1	0.65 J	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	34	20	34	1.3	86	2.8	2.3	1.2
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G35								
			8/15/04	3/1/06	1/16/08	2/1/11	6/21/16	11/15/17	5/21/18	11/15/18	5/8/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	< 1	< 1	1.8	< 1	< 1	0.43 J	1.8	1.9	< 1
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	0.39 J	< 1	2.2	< 1	1.4	1.4	9.3	11	4.7
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G36						
			8/15/04	3/2/06	6/20/16	11/15/17	5/30/18	11/19/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	< 1	< 1	< 1	0.33 J	< 1	< 1	1.4
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	< 1	< 1	< 1	4	1.3	0.61 J	0.61 J
Vinyl Chloride	2	MCL	< 1	< 1	< 0.8	< 0.8	< 1	< 1	< 1

**Table 4-6: Off-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

VOCs (µg/L)	GPS	GPS Basis	OLF-G47								
			8/18/04	2/28/06	1/18/08	2/2/11	6/16/16	11/14/17	5/22/18	11/28/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	1	1.4	1.5	< 1	2.5	2	1.9	1.9	2.3
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	< 1	0.2 J	< 1	0.32 J	0.38 J	< 1	0.4 J	0.35 J
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	15	9.6	11	3.8	28	29	32	34	34
Vinyl Chloride	2	MCL	< 1	< 1	< 1	0.28 J	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G48								
			8/18/04	2/28/06	1/18/08	2/3/11	6/16/16	11/14/17	5/22/18	11/15/18	5/8/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	< 1	< 1	< 1	< 1	0.22 J	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	1	0.46 J	1.4	1.7	3.9	3.5	3.9	3.8	1.2
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G52								
			8/18/04	2/27/06	1/18/08	1/31/11	6/15/16	11/8/17	5/21/18	11/20/18	5/9/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	4.2	2.1	2.6	3	6.4	6.7	7.7	8.7	5.9
Vinyl Chloride	2	MCL	< 1	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1

VOCs (µg/L)	GPS	GPS Basis	OLF-G70							
			2/28/06	1/17/08	1/27/11	6/15/16	11/8/17	5/21/18	11/26/18	5/15/19
1,1,2,2-Tetrachloroethane	2.03	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	7.2	RS RBTl	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethylene	5	MCL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	38.3	RS RBTl	2	2.8	3.7	6.5	7.4	8.2	8.1	9.3
Vinyl Chloride	2	MCL	< 1	< 1	< 0.8	< 0.8	< 0.8	< 1	< 1	< 1 (UJ)

**Table 4-6: Off-Site Groundwater Analytical Results for Corrective Action COCs,
Landfill 3, Parcel 80(6) and Fill Area Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama**

Notes:

µg/L = micrograms per liter

Shaded indicates detection greater than the GPS.

GPS = Groundwater Protection Standard

RS = Residential

MCL = Maximum Contamination Limit

RBTL = Risk-Based Target Level

Lab Flag

J = Result is estimated; detected between the method detection limit and the reporting limit.

Validation Flag (in parenthesis)

UJ = Reporting limit is estimated based on data validation.

FIGURES

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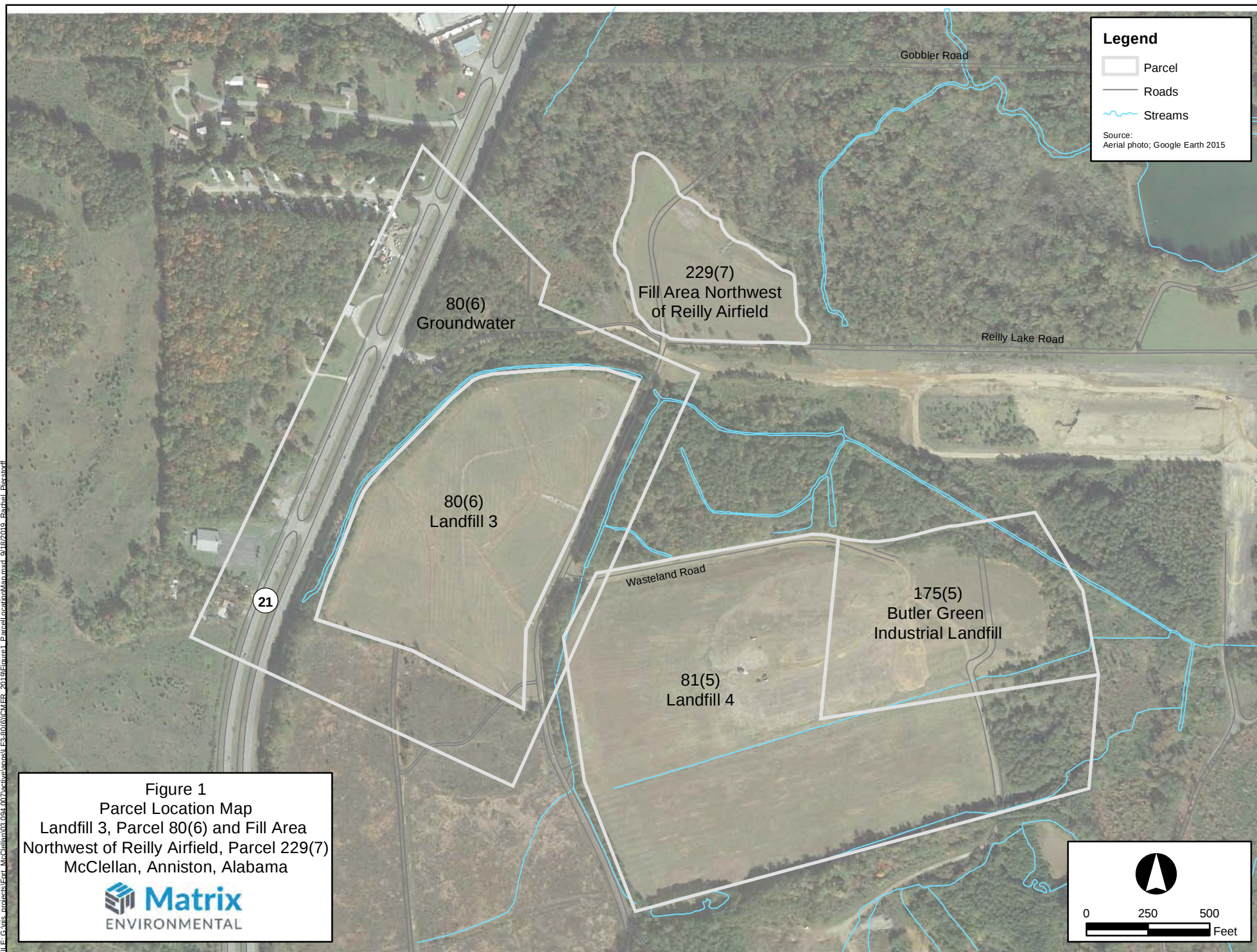


Figure 2
Well Location Map
Landfill 3, Parcel 80(6) and Fill Area
Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama



Legend

Groundwater Monitoring Wells

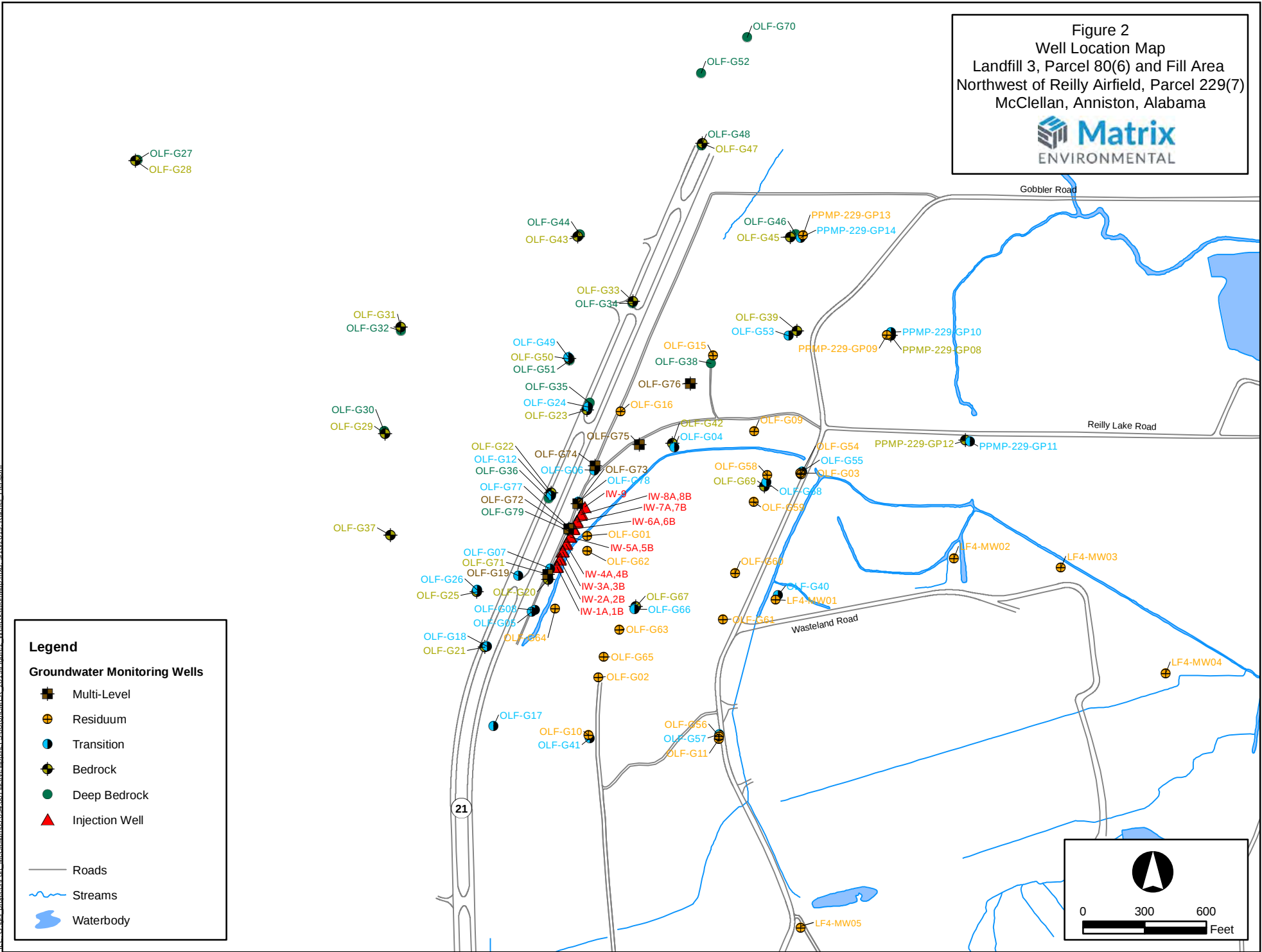
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- Residuum
- Transition
- Bedrock
- Deep Bedrock
- Injection Well

— Roads

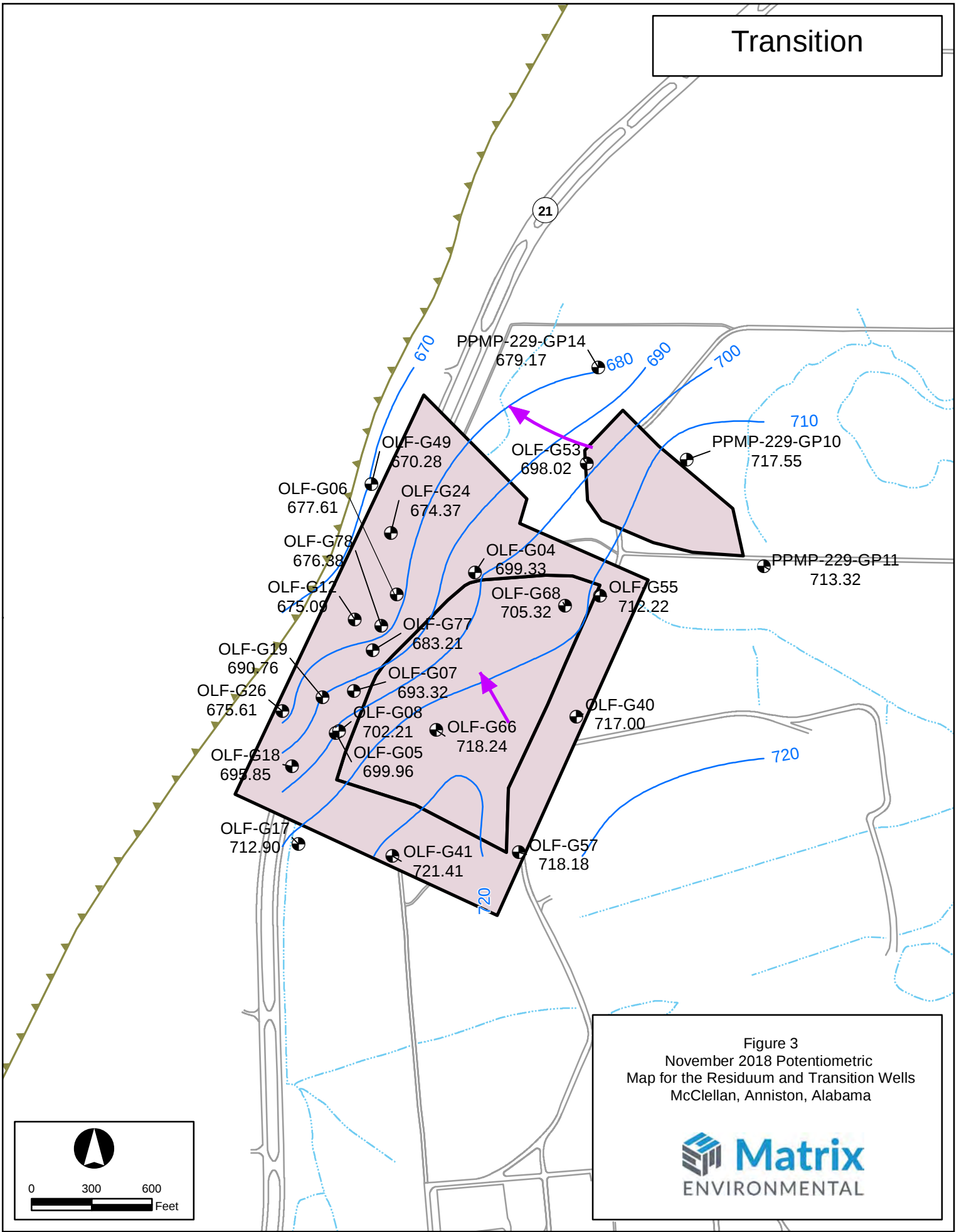
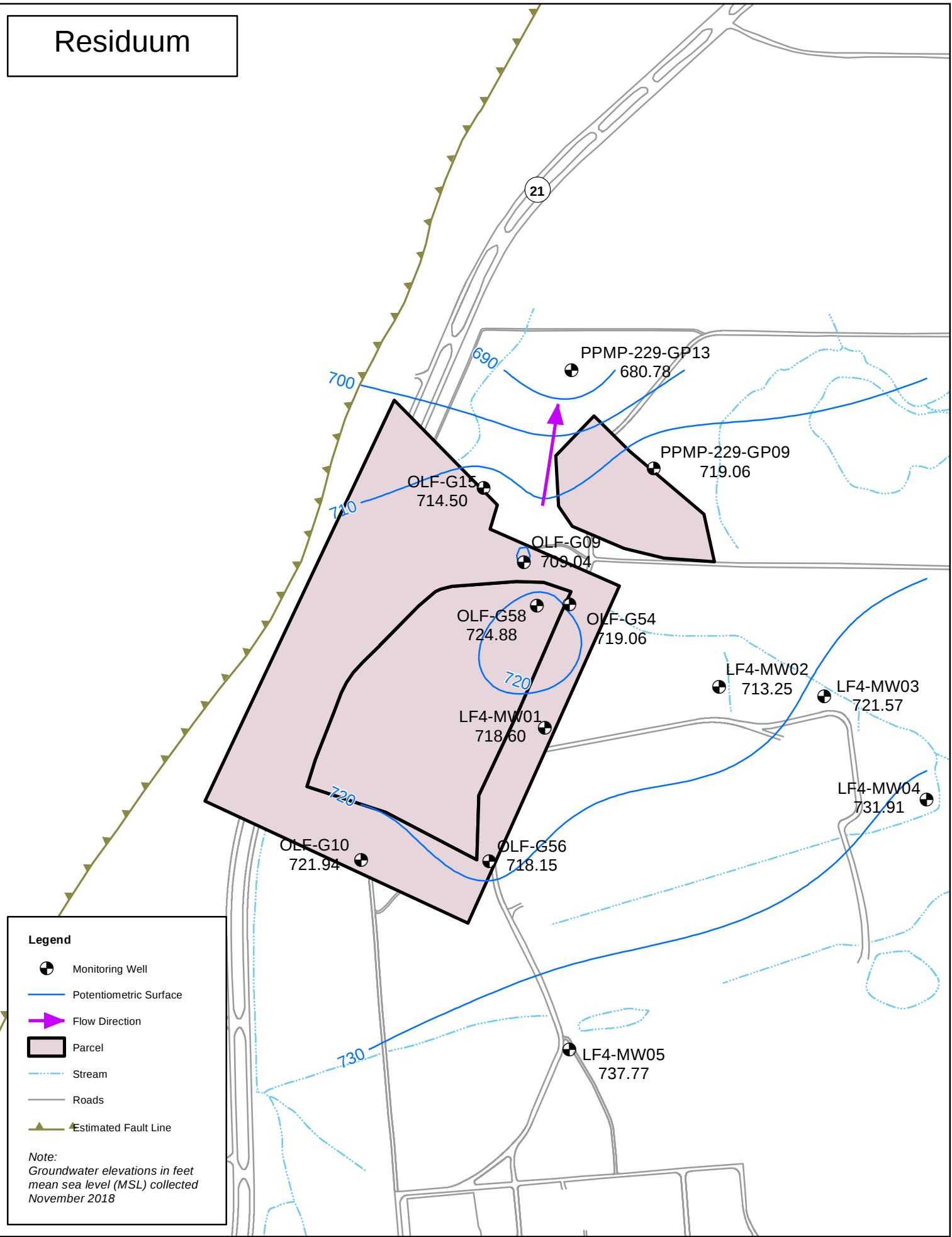
~ Streams

Waterbody

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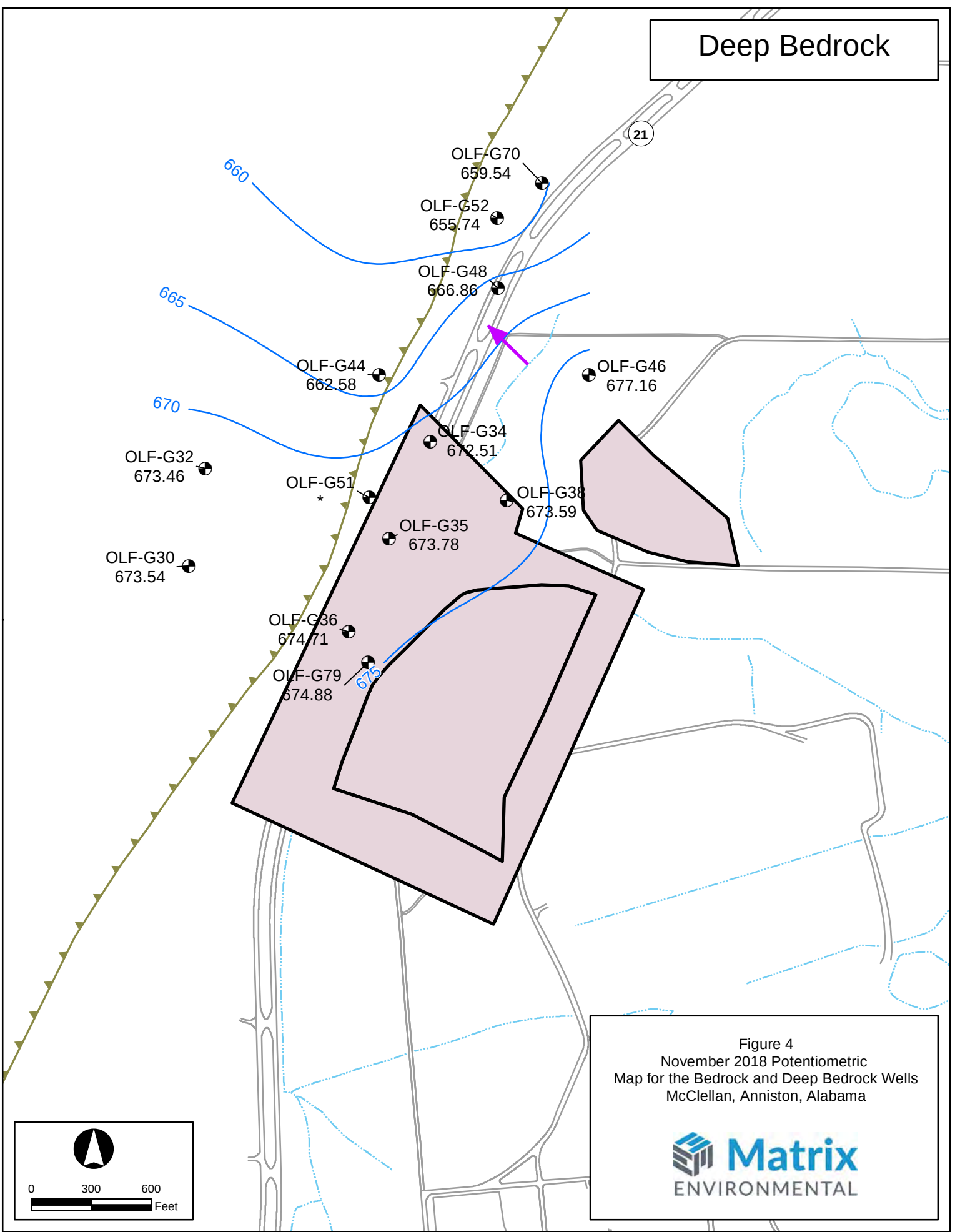
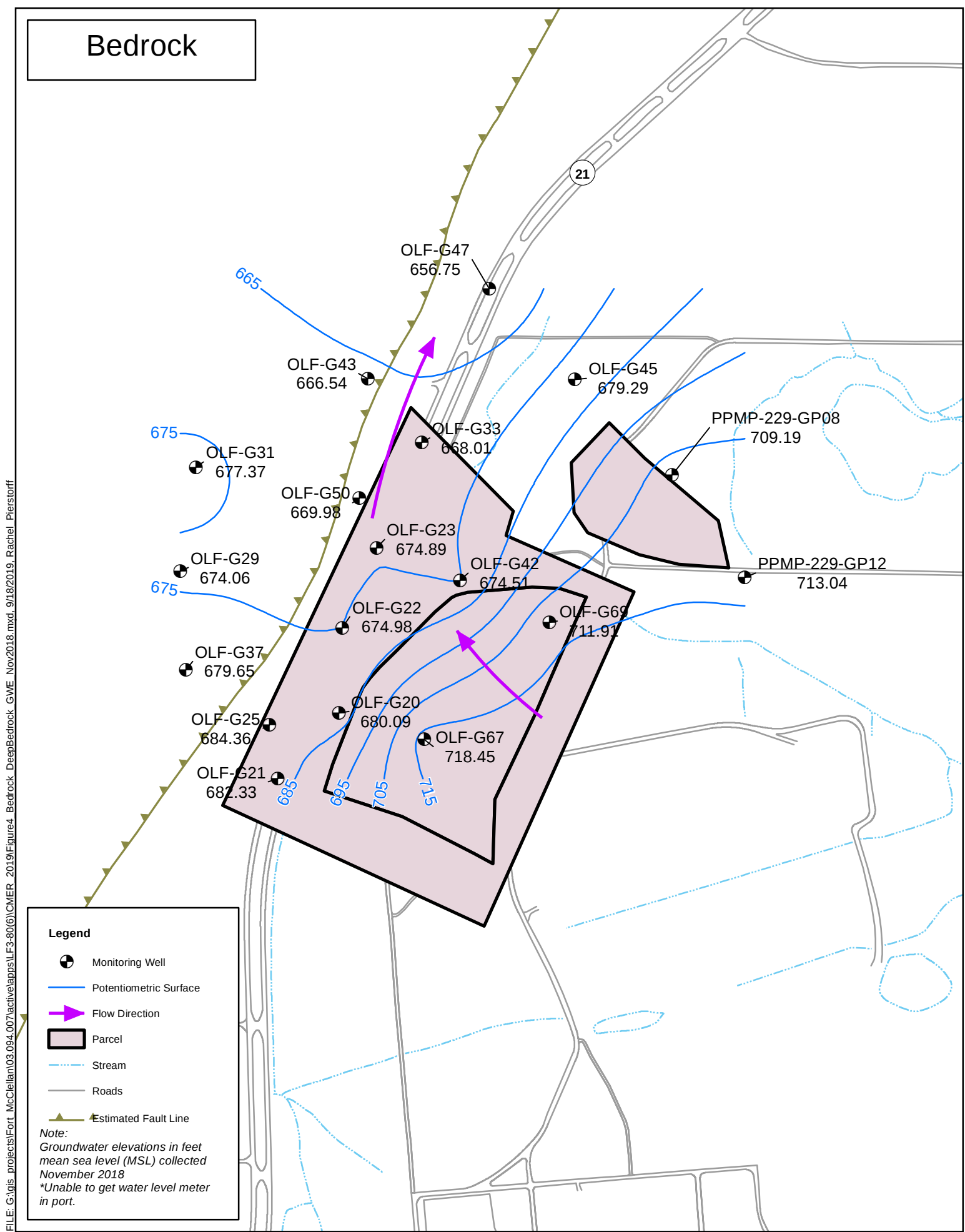
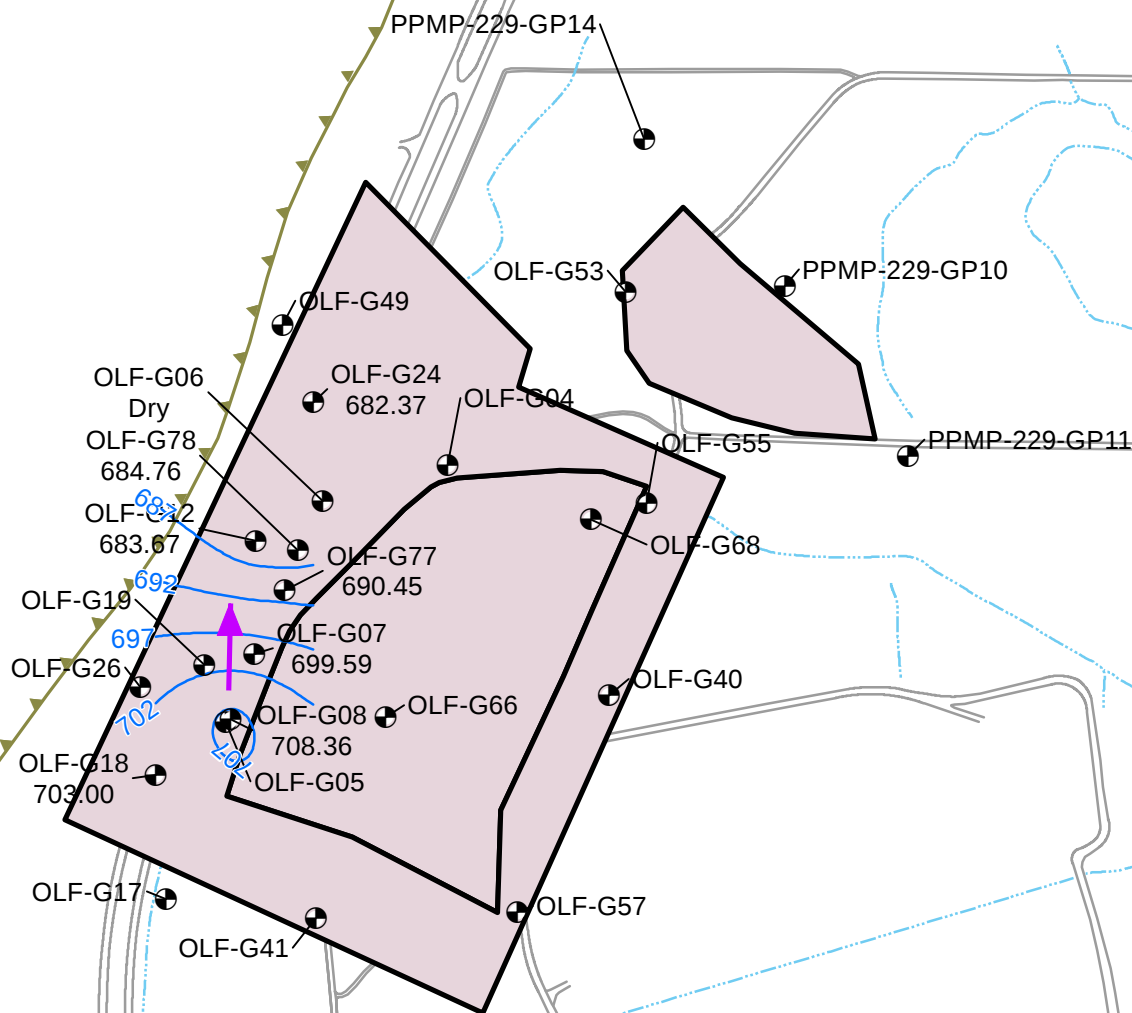


Figure 4
November 2018 Potentiometric
Map for the Bedrock and Deep Bedrock Wells
McClellan, Anniston, Alabama



Transition



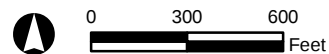
Legend

- Monitoring Well
- Potentiometric Surface
- Flow Direction
- Parcel
- Stream
- Roads
- Estimated Fault Line

Note:
Groundwater elevations in feet
mean sea level (MSL) collected
May 2019

Figure 5
May 2019 Potentiometric
Map for the Transition Wells
McClellan, Anniston, Alabama

Matrix
ENVIRONMENTAL



FILE: G:\gis_projects\Fort_McClellan\03.094.007\active\laps\F3-80(6)\CMER_2019\Figure6_Bedrock_DeepBedrock_GWE_May2019.mxd, 9/20/2019, Rachel_Pierstorff

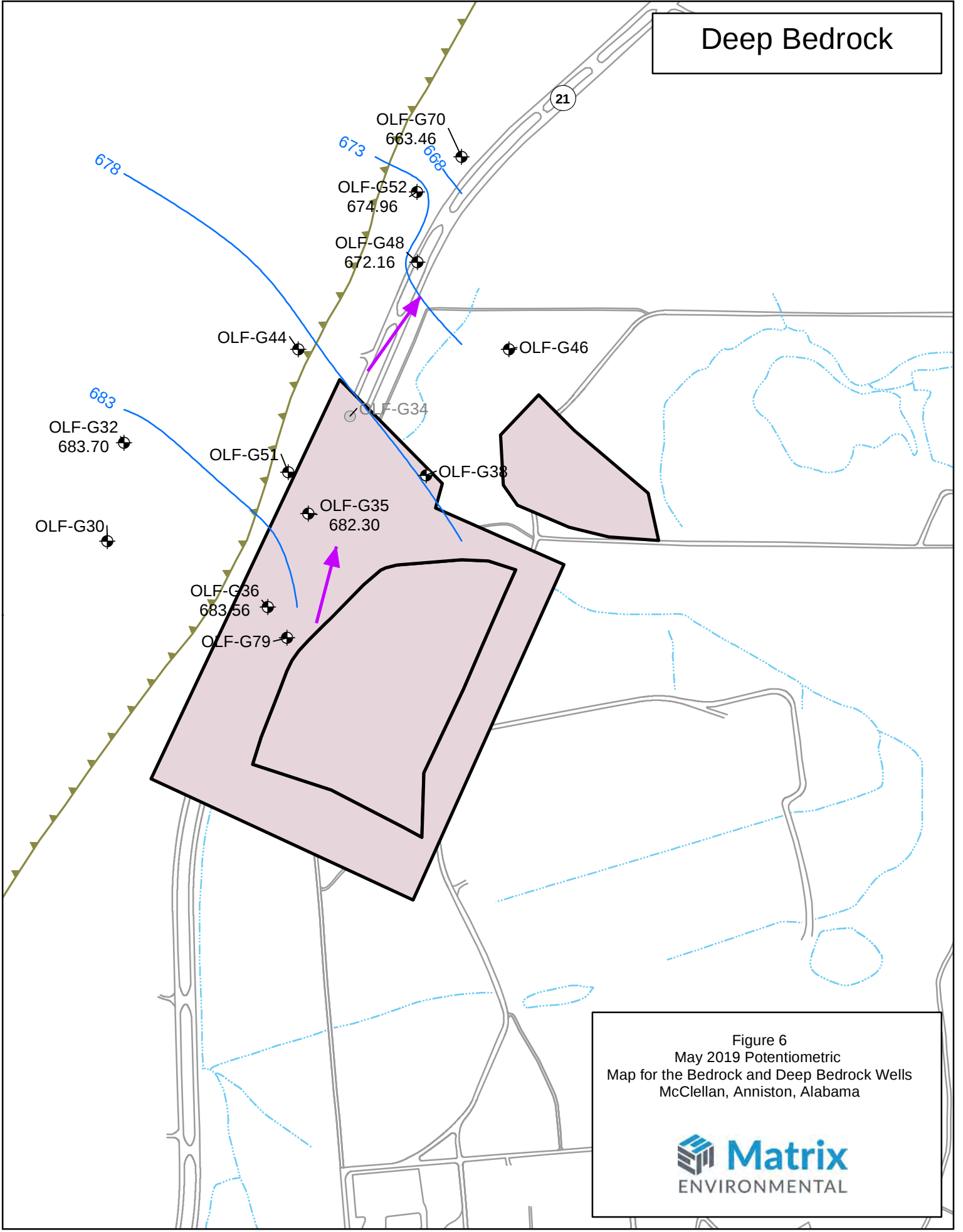
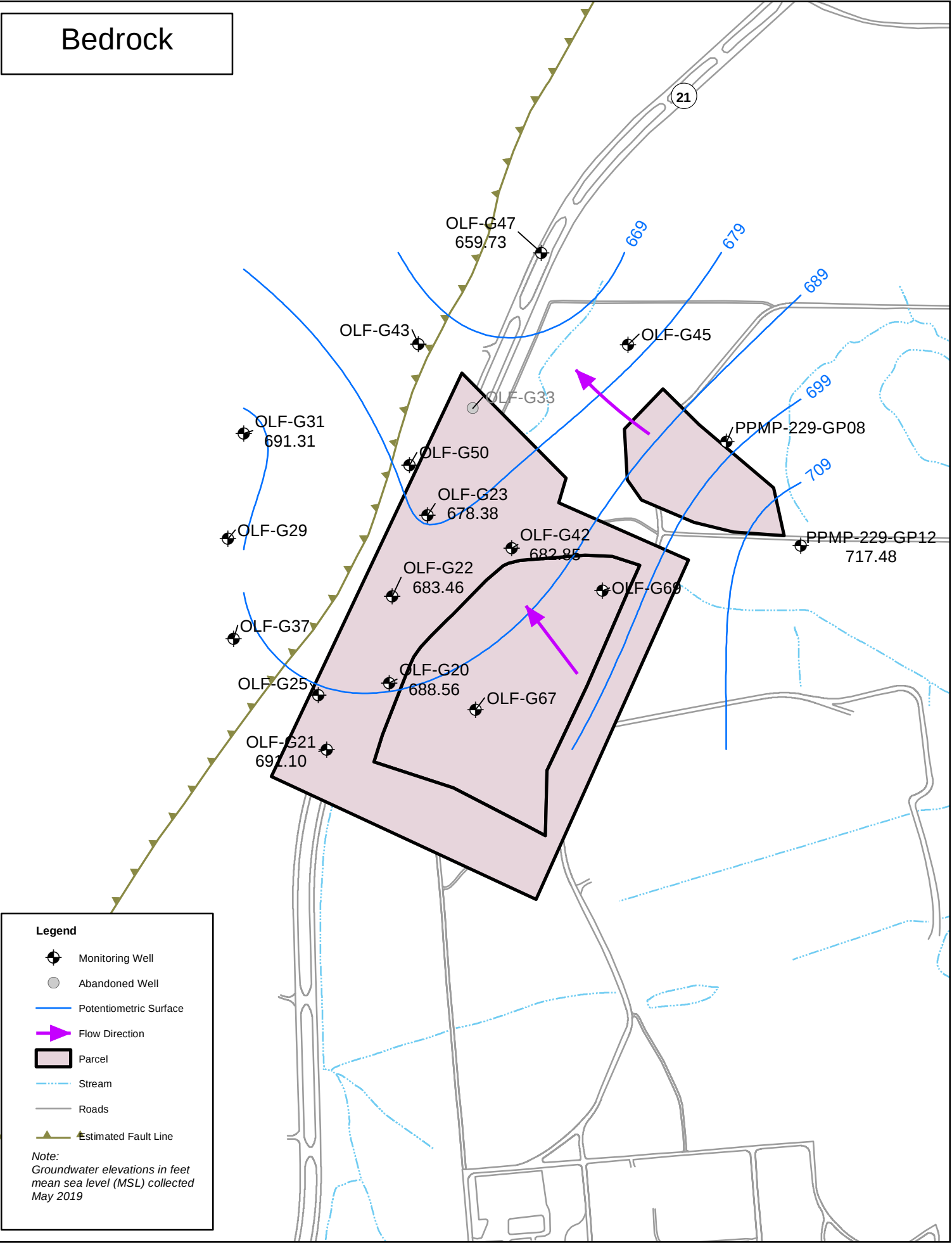


Figure 7
Corrective Action COCs in On-Site Groundwater Wells
Landfill 3, Parcel 80(6) and Fill Area
Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama



OLF-G07	11/13/18	5/7/19
1,1,2,2-PCA	29 F1	96
1,1,2-TCA	<1	1.2
PERC	<1	<1
TCE	19	48
VC	<1	<1

OLF-G71 P1	11/14/18	5/6/19
1,1,2,2-PCA	5.8	7.4
1,1,2-TCA	<1	0.55 J
PERC	<1	<1
TCE	47	83
VC	6.7	6.2
OLF-G71 P2	11/14/18	5/6/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	11	10
VC	2.4	2.3
OLF-G71 P3	11/14/18	5/6/19
1,1,2,2-PCA	0.88 J	0.73 J
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	54	52
VC	4.3	3.6
OLF-G71 P4	11/14/18	5/6/19
1,1,2,2-PCA	0.73 J	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	24	22
VC	2.2	1.6
OLF-G71 P5	11/14/18	5/6/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	<1	1.3
VC	<1	0.5 J

OLF-G72 P1	11/13/18	5/2/19	OLF-G72 P4	11/13/18	5/2/19
1,1,2,2-PCA	<1	<1 (UJ)	1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1 (UJ)	1,1,2-TCA	<1	<1
PERC	<1	<1	PERC	<1	<1
TCE	<1	<1	TCE	1.9	1.5
VC	<1	<1	VC	2.4	0.58 J
OLF-G72 P2	11/13/18	5/2/19	OLF-G72 P5	11/13/18	5/2/19
1,1,2,2-PCA	<5	0.76 J	1,1,2,2-PCA	<1	<1
1,1,2-TCA	<5	<1	1,1,2-TCA	0.33 J	0.48 J
PERC	<5	<1	PERC	<1	<1
TCE	3.2 J	1.7	TCE	8.7	22
VC	13	4.4	VC	1.8	2.2
OLF-G72 P3	11/13/18	5/2/19	OLF-G72 P6	11/13/18	5/2/19
1,1,2,2-PCA	<1	<1	1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1	1,1,2-TCA	0.69 J	0.47 J
PERC	<1	<1	PERC	<1	<1
TCE	0.95 J	17	TCE	40	29
VC	<1	1.9	VC	0.59 J	<1

OLF-G74 P1	11/12/18	5/1/19
1,1,2,2-PCA	4	3.3 H
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	2.5	2.6 H
VC	<1	<1
OLF-G74 P2	11/12/18	5/1/19
1,1,2,2-PCA	89	39 H
1,1,2-TCA	9	2.3 H
PERC	0.82 J	<1
TCE	76	76 H
VC	25	14 H
OLF-G74 P3	11/12/18	5/1/19
1,1,2,2-PCA	2.5	<1
1,1,2-TCA	1	<1
PERC	<1	<1
TCE	98	35 H
VC	<1	<1
OLF-G74 P4	11/12/18	5/1/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	8.3	9.7 H
VC	<1	<1
OLF-G74 P5	11/12/18	5/1/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	3.2	2.4 H
VC	<1	<1

OLF-G75 S1	11/26/18	5/13/19	OLF-G75 S4	11/27/18	5/14/19
1,1,2,2-PCA	<1	<1	1,1,2,2-PCA	<1	<1 (UJ)
1,1,2-TCA	<1	<1	1,1,2-TCA	<1	<1 (UJ)
PERC	<1	<1	PERC	<1	<1 (UJ)
TCE	<1	<1	TCE	<1	<1 (UJ)
VC	<1	<1	VC	<1	<1 (UJ)
OLF-G75 S2	11/26/18	5/13/19	OLF-G75 S5	11/27/18	5/14/19
1,1,2,2-PCA	<1	<1	1,1,2,2-PCA	<1	<1 (UJ)
1,1,2-TCA	<1	<1	1,1,2-TCA	<1	<1 (UJ)
PERC	<1	<1	PERC	<1	<1 (UJ)
TCE	0.81 J	<1	TCE	<1	<1 (UJ)
VC	<1	<1	VC	<1	<1 (UJ)
OLF-G75 S3	11/26/18	5/13/19	OLF-G75 S6	11/27/18	5/14/19
1,1,2,2-PCA	<1	<1	1,1,2,2-PCA	<1	<1 (UJ)
1,1,2-TCA	<1	<1	1,1,2-TCA	<1	<1 (UJ)
PERC	<1	<1	PERC	<1	<1 (UJ)
TCE	3.4	<1	TCE	<1	<1 (UJ)
VC	<1	<1	VC	<1	<1 (UJ)

OLF-G42	11/19/18	5/13/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	0.82 J	11
VC	29	1.4

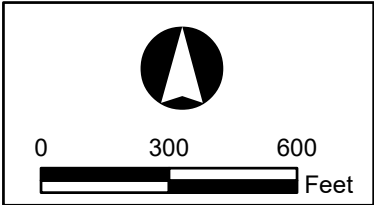
OLF-G73 P1	11/13/18	5/2/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	<1	<2 (UB)
VC	<1	<1
OLF-G73 P2	11/13/18	5/1/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	2.9	3.5 B (B)
VC	0.81 J	<1
OLF-G73 P3	11/13/18	5/1/19
1,1,2,2-PCA	7.8	3.1
1,1,2-TCA	1.2	0.96 J
PERC	<1	<1
TCE	89	61 B (B)
VC	2.4	2.8
OLF-G73 P4	11/13/18	5/1/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	5.3	6.2 H
VC	<1	<1
OLF-G73 P5	11/13/18	5/1/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	0.53 J	<1
VC	<1	<1

PPMP-229-12	11/14/18	5/14/19
1,1,2,2-PCA	<1	<1 (UJ)
1,1,2-TCA	<1	<1 (UJ)
PERC	<1	<1 (UJ)
TCE	<1	<1 (UJ)
VC	<1	<1 (UJ)

OLF-G78	11/12/18	5/6/19
1,1,2,2-PCA	8	9.8
1,1,2-TCA	0.39 J	<1
PERC	<1	<1
TCE	7	11
VC	<1	<1

OLF-G77	11/13/18	5/6/19
1,1,2,2-PCA	1000	1200
1,1,2-TCA	27	32
PERC	<10	6.7
TCE	620	670
VC	<10	9.4

OLF-G20	11/13/18	5/7/19
1,1,2,2-PCA	1.3	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	16	9.2
VC	10	6.5



Legend

Groundwater Monitoring Wells

- Multi-Level
- Residuum
- Transition

- Bedrock
- Deep Bedrock
- Injection Well
- Parcel

- Roads
- Streams
- Waterbody

Parameter	GPS	GPS Basis
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	13.6 µg/L	GS RBTL
1,1,2-Trichloroethane (1,1,2-TCA)	50.2 µg/L	GS RBTL
Tetrachloroethylene (PERC)	5 µg/L	MCL
Trichloroethene (TCE)	205 µg/L	GS RBTL
Vinyl Chloride (VC)	3.86 µg/L	GS RBTL

µg/L = micrograms per liter
GPS = groundwater protection standard
GS RBTL = groundskeeper risk-based target level
MCL = maximum contaminant level
S1 – S6 = Screen #
P1 – P5 = Port #
Shaded concentrations are greater than GPS
See Table 4-5 notes for a description of laboratory/validation flags

OLF-G31	11/26/18	5/15/19	OLF-G47	11/28/18	5/9/19	OLF-G48	11/15/18	5/8/19	OLF-G52	11/20/18	5/9/19
1,1,2,2-PCA	<1	<1	1,1,2,2-PCA	1.9	2.3	1,1,2,2-PCA	<1	<1	1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1	1,1,2-TCA	0.4 J	0.35 J	1,1,2-TCA	<1	<1	1,1,2-TCA	<1	<1
PERC	<1	<1	PERC	<1	<1	PERC	<1	<1	PERC	<1	<1
TCE	<1	<1	TCE	34	34	TCE	3.8	1.2	TCE	8.7	5.9
VC	<1	<1 (U)	VC	<1	<1	VC	<1	<1	VC	<1	<1

OLF-G70	11/26/18	5/15/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	8.1	9.3
VC	<1	<1 (U)

Figure 8
Corrective Action COCs in Off-Site
Groundwater Wells
Landfill 3, Parcel 80(6) and Fill Area
Northwest of Reilly Airfield, Parcel 229(7)
McClellan, Anniston, Alabama



OLF-G32	11/26/18	5/14/19
1,1,2,2-PCA	<1	<1 (U)
1,1,2-TCA	<1	<1 (U)
PERC	<1	<1 (U)
TCE	<1	<1 (U)
VC	<1	<1 (U)

OLF-G23	11/15/18	5/8/19
1,1,2,2-PCA	230	150
1,1,2-TCA	7.7	5.5
PERC	<5	<5
TCE	160	150
VC	3.2 J	<5

OLF-G22	11/27/18	5/9/19
1,1,2,2-PCA	100	58
1,1,2-TCA	3	2.3
PERC	1	0.96 J
TCE	110	100
VC	1.4	0.7 J

OLF-G12	11/19/18	5/9/19
1,1,2,2-PCA	310	230
1,1,2-TCA	6.5	4.7 J
PERC	<5	<5
TCE	200	170
VC	<5	<5

OLF-G36	11/19/18	5/9/19
1,1,2,2-PCA	<1	1.4
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	0.61 J	0.61 J
VC	<1	<1

OLF-G18	11/19/18	5/9/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	<1	52
VC	<1	<1

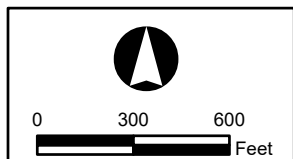
OLF-G21	11/19/18	5/9/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	<1	<1
VC	<1	<1

OLF-G33	11/20/18
1,1,2,2-PCA	4.5
1,1,2-TCA	0.56 J
PERC	<1
TCE	97
VC	<1

OLF-G34	11/19/18
1,1,2,2-PCA	<1
1,1,2-TCA	<1
PERC	<1
TCE	1.2
VC	<1

OLF-G35	11/15/18	5/8/19
1,1,2,2-PCA	1.9	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	11	4.7
VC	<1	<1

OLF-G24	11/15/18	5/8/19
1,1,2,2-PCA	<1	<1
1,1,2-TCA	<1	<1
PERC	<1	<1
TCE	<1	<1
VC	<1	<1



Legend

Groundwater Monitoring Wells

- Multi-Level
- Residuum
- Transition

Bedrock

Deep Bedrock

Injection Well

Parcel

Roads

Streams

Waterbody

Parameter	GPS	GPS Basis
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	2.03 µg/L	RS RBTL
1,1,2-Trichloroethane (1,1,2-TCA)	7.2 µg/L	RS RBTL
Tetrachloroethylene (PERC)	5 µg/L	MCL
Trichloroethene (TCE)	38.3 µg/L	RS RBTL
Vinyl Chloride (VC)	2 µg/L	MCL

µg/L = micrograms per liter
GPS = groundwater protection standard
RS RBTL = residential risk-based target level
MCL = maximum contaminant level
Shaded concentrations are greater than GPS

See Table 4-6 notes for a description of laboratory / validation flags