

**Final
Groundwater Sampling Report, June 2006
Former Motor Pool Area 3100
Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama**

Prepared for:



**McClellan Development Authority
McClellan, Anniston, Alabama**

Prepared by:



**1601 Blake Street, Suite 200
Denver, Colorado 80202
(303) 572-0200
Fax (303) 572-0202**

April 2011

This page intentionally left blank.

Final
Groundwater Sampling Report, June 2006
Former Motor Pool Area 3100
Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama



Matrix Environmental Services, LLC
1601 Blake Street, Suite 200
Denver, Colorado 80202

Plan Prepared By:

Jennie Keys
(Name)

Jennie Keys

(Signature)

MES Project Manager
(Title)

April 13, 2011
(Date)

Plan Reviewed By:

Richard Satkin, P.G.
(Name)

Richard S. Satkin

(Signature)

MES Program Manager
(Title)

April 13, 2011
(Date)

This page intentionally left blank.

TABLE OF CONTENTS

LIST OF TABLES	ii
LIST OF FIGURES	ii
LIST OF APPENDICES	ii
LIST OF ABBREVIATIONS AND ACRONYMS	iii
1.0 INTRODUCTION	1-1
1.1 Purpose and Objectives	1-1
1.2 Report Organization	1-2
2.0 BACKGROUND	2-1
2.1 Parcel Description	2-1
2.2 Previous Investigations	2-2
2.2.1 Environmental Baseline Study	2-2
2.2.2 UST Removal and Replacement	2-2
2.2.3 Site Investigation	2-2
3.0 SUMMARY OF JUNE 2006 SAMPLING ACTIVITIES	3-1
3.1 Groundwater Levels	3-1
3.2 Groundwater Sampling	3-1
3.3 Data Quality Review	3-2
4.0 RESULTS OF JUNE 2006 GROUNDWATER SAMPLING	4-1
4.1 Groundwater Levels	4-1
4.2 Analytical Data and Data Quality Review	4-2
4.3 Groundwater Field Parameter Results	4-2
4.4 Summary of June 2006 Groundwater Analytical Results	4-2
4.5 Comparison of June 2006 Groundwater Analytical Results to SSSLs and RBTLs	4-3
4.6 Degradation of Benzene	4-4
4.7 Impact of Training Area T-5 on the Groundwater at Motor Pool 3100	4-4
5.0 CONCLUSIONS AND RECOMMENDATIONS	5-1
6.0 REFERENCES	6-1

LIST OF TABLES

- 1 Monitoring Well Construction Summary and Groundwater Elevations, June 2006
- 1a Groundwater Elevations – November 2009
- 2 Summary of Stations and Analytical Parameters
- 3 Summary of Groundwater Detections Compared to SSSLs and RBTLs

LIST OF FIGURES

- 1 McClellan Site Map
- 2 Parcel Location Map
- 3 Sampling Locations, June 2006
- 4 Estimated Potentiometric Contours – Residuum, June 2006
- 4a Estimated Potentiometric Contours – Residuum, November 2009
- 5 VOCs Detected in Groundwater
- 6 Benzene Concentrations in Residuum Well FTA-146-MW02

LIST OF APPENDICES

- A Groundwater Analytical Results Collected by Shaw
- B Groundwater Sample Collection Logs, June 2006
- C Chains-of-Custody, June 2006
- D Validated Data Sheets, June 2006

LIST OF ABBREVIATIONS AND ACRONYMS

1,1,2,2-PCA	1,1,2,2-Tetrachloroethane
ADEM	Alabama Department of Environmental Management
amsl	Above mean sea level
ARBCA	<i>Alabama Risk-Based Corrective Action Guidance Manual</i>
Army	United States Department of the Army
bgs	below ground surface
BSV	Background screening value
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CA	Cleanup agreement
CERFA	Community Environmental Response Facilitation Act
COC	Constituent of concern
COPC	Constituent of potential concern
DO	Dissolved oxygen
DOD	United States Department of Defense
EBS	Environmental Baseline Study
EMAX	EMAX Laboratories, Inc.
ESCA	Environmental Services Cooperative Agreement
ESE	Environmental Science & Engineering, Inc.
ESV	Ecological screening value
IT	IT Corporation
JPA	Anniston-Calhoun County Fort McClellan Development Joint Powers Authority
LFS	Low-flow sampling
LUCs	Land use controls
McClellan	McClellan, Anniston, Alabama
MDA	McClellan Development Authority
MES	Matrix Environmental Services, LLC
NFA	No Further Action
µg/L	micrograms per liter
ORP	Oxidation-reduction potential
OWS	Oil/water separator
PCE	Tetrachloroethylene
QAP	<i>Quality Assurance Plan, Revision 1</i>
RBTL	Risk-based Target Level
SAP	<i>Installation-Wide Sampling and Analysis Plan</i>
SFSP	<i>Site-Specific Field Sampling Plan</i>
Shaw	Shaw Environmental, Inc.
SI	<i>Final Site Investigation Report</i>
Site	Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
SSSL	Site-Specific Screening Level
TCE	Trichloroethene
TDS	Total dissolved solids
U.S.	United States
UST	Underground storage tank
VOC	Volatile Organic Compound

This page intentionally left blank.

1.0 INTRODUCTION

Matrix Environmental Services, L.L.C. (MES) has prepared this report to summarize the results of a groundwater sampling event performed during June 2006 at the Former Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7) (Site) within McClellan, Anniston, Alabama (McClellan), formerly known as Fort McClellan.

This report was prepared by MES on behalf of the McClellan Development Authority (MDA), successor to the Anniston-Calhoun County Fort McClellan Development Joint Powers Authority (JPA). The JPA assumed from the United States (U.S.) Department of the Army (Army) the responsibility for environmental closure of certain sites at McClellan. Transfer of these sites to the JPA was conducted pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h)(3)(C) which allows federal agencies to transfer contaminated property before all necessary cleanup has taken place. The basis for the continuing effort at these parcels is an Environmental Services Cooperative Agreement (ESCA) dated September 29, 2003 between the JPA and the Army (Army, 2003). In September 2007 a new ESCA was negotiated, signed September 13, 2007 (Army, 2007a) and amended September 28 and 29, 2007 (Army, 2007b, 2007c), into which the 2003 ESCA was incorporated. In addition, the JPA negotiated a Cleanup Agreement (CA), amended November 2005, with the Alabama Department of Environmental Management (ADEM) that describes the responsibilities for completing the investigation and remediation of potentially impacted sites at McClellan (ADEM, 2003, 2005, and 2009). The proposed future land use of the Site is as an educational campus as proposed in the Re-Use Plan (EDAW, Inc. in 1997 as amended by the JPA in June 2005).

On August 22, 2008, the Circuit Court of Calhoun County issued an order dissolving the JPA and charging Calhoun County with “administering all funds and fiscal operations” and taking action concerning the development of McClellan. The order transferred the JPA’s responsibilities for the development and environmental remediation of McClellan to Calhoun County. Calhoun County has assumed these responsibilities as the MDA.

1.1 Purpose and Objectives

The purpose of this investigation was to perform an additional round of environmental sampling to evaluate the concentrations of volatile organic compounds (VOCs) at the Site. The objectives of the June 2006 investigation activities include the following:

- 1) Collect groundwater samples from six residuum monitoring wells and two bedrock monitoring wells at the Site and analyze for VOCs or benzene, toluene, ethylbenzene, and total xylenes (BTEX).
- 2) Evaluate the groundwater analytical data for concentrations of benzene to support evidence of contaminant degradation through natural attenuation.
- 3) Evaluate VOC concentrations for influence from Training Area T-5.
- 4) Based on results of the investigation, consider requesting a No Further Action (NFA) decision from ADEM.

Figure 1 shows a map of McClellan. The parcel locations are shown on Figure 2.

1.2 Report Organization

Section 2.0 of this report presents a summary of the background information associated with the Site including the parcel description and previous investigations. Section 3.0 presents a summary of the June 2006 sampling activities. Section 4.0 describes the results of the June 2006 sampling activities. Section 5.0 presents the conclusions and recommendations for the Site. Section 6.0 provides the references cited in this report. Tables and figures follow the text.

Additional supporting information is provided in Appendices included with this report, as follows:

Appendix A	Groundwater Analytical Results Collected by Shaw
Appendix B	Groundwater Sample Collection Logs, June 2006
Appendix C	Chains-of-Custody, June 2006
Appendix D	Validated Data Sheets, June 2006

2.0 BACKGROUND

The following section provides background information about the Site.

2.1 Parcel Description

The Site covers approximately 5.2 acres and is located on Rucker Street in the west-central portion of the Main Post. The Site is generally within a fenced area and includes the following structures and former underground storage tank (UST) sites (Figure 2):

- Building 3138 is located in the northern corner of the Site and was used for light vehicle maintenance (Shaw Environmental, Inc. [Shaw], 2005a).
- Parcel 73(7) located in the western corner of the Site included a baffle-type oil/water separator (OWS), known as “Facility 3143,” that was associated with the washrack initially built around 1969. The facility was rebuilt in 1991 with a settling basin and coalescing plate OWS that discharged to the sanitary sewer (Environmental Science & Engineering, Inc. [ESE], 1998). In addition, Building 3142 located on Parcel 73(7) was a washrack.
- Building 3144 is located next to Building 3142 in the western corner of the Site and was formerly a Tire Shop (Shaw, 2005a).
- A former vehicle grease rack (Structure 3145) is present along the northwestern border of Parcel 146(7).
- A former fuel pump island located southeast of Building 3138 was associated with Parcel 25(7). Parcel 25(7) contained a 10,000-gallon steel diesel UST that was removed in 1996. This UST was replaced with a 10,000-gallon fiberglass diesel UST that was removed in November 2002.
- Parcels 24(7) and 212(7) were also located immediately northeast of Building 3138. Parcel 24(7) contained a 2,000-gallon steel waste oil UST that was removed in 1994. This UST was replaced with a 2,500-gallon fiberglass waste oil UST that was removed in November 2002. Parcel 212(7) contained a 5,000-gallon steel heating oil UST that was removed in 1996. This UST replaced with a 3,000-gallon fiberglass heating oil UST that was removed in November 2002.
- Other small buildings and structures exist at the Site, including hazardous materials storage buildings formerly containing flammable materials and used batteries (Shaw, 2005a).

The majority of the Site is paved and the topography is generally flat with a surface elevation of approximately 815 feet above mean sea level (amsl). Surface drainage at the Site appears to follow the topography and flows to the northwest (Shaw, 2005a).

Boring logs from monitoring wells installed at the Site indicate residuum is composed of clay with varying amounts of silt and gravel and generally extends to a depth of approximately 20 to 25 feet below ground surface (bgs). Based on the drilling logs for the bedrock monitoring wells FTA-146-GP06 and FTA-146-MW09, bedrock consisted of a grayish black, moderately weathered, fissile shale with quartzite veins, and was encountered at varying depths from approximately 24 feet bgs at monitoring well FTA-146-GP06 to approximately 35 feet bgs at

monitoring well FTA-146-MW09. Groundwater at the Site was encountered at approximately 20 feet bgs with an estimated flow direction toward the northwest, corresponding with Site topography (Shaw, 2005a).

2.2 Previous Investigations

The following sections summarize previous activities conducted at the Site.

2.2.1 Environmental Baseline Study

Parcels 146(7), 212(7), 24(7), 25(7), and 73(7) were identified as areas to be investigated prior to property transfer. The parcels were classified as Category 7 parcels in the Final Environmental Baseline Survey (EBS) (ESE, 1998). The EBS was conducted in accordance with the Community Environmental Response Facilitation Act (CERFA) protocols (Public Law 102-426) and Department of Defense (DOD) policy regarding contamination assessment. Category 7 parcels are areas that have not been evaluated or that require further evaluation.

2.2.2 UST Removal and Replacement

As noted previously, in May 1994 a 2,000-gallon steel waste oil UST was excavated from the Site northeast of Building 3138 at Parcel 24(7). Soil samples were collected from the sidewalls and pipe trench. Elevated levels of total petroleum hydrocarbons from the bottom of the excavation area and pipe trench were encountered. Approximately two cubic yards of soil were removed. The tank was replaced by a 2,500-gallon fiberglass waste oil UST in the same location. This UST was later removed in November 2002.

A 10,000-gallon steel diesel UST, Parcel 25(7), was removed at Building 3138 in 1996 (ESE, 1998) and replaced with a 10,000-gallon fiberglass UST. This UST was later removed in November 2002.

A 5,000-gallon steel heating oil UST, Parcel 212(7), was removed in 1996 from the area northeast of Building 3138 and replaced by a 3,000-gallon double walled fiberglass UST. This UST was later removed in November 2002.

2.2.3 Site Investigation

Beginning in October 1998, Shaw conducted a three-phase Final Site Investigation Report (SI) at the Site (Shaw, 2005a) consisting of the following investigation efforts:

- Phase I – Installation of seven temporary monitoring wells and collection and analysis of soil and groundwater samples (installed December 1998 / January 1999, and identified as FTA-146-GP02 and FTA-146-GP05 through FTA-146-GP10). The Phase I groundwater analytical results are presented in Appendix A.
- Phase II – Installation of nine permanent monitoring wells and analysis of groundwater samples (installed February/March 2001, and identified as FTA-146-MW01 through

FTA-146-MW09). The Phase II groundwater analytical results are presented in Appendix A.

- Phase III – Two quarters of groundwater sampling of six monitoring wells to evaluate the potential migration and attenuation of BTEX in groundwater (samples collected October 2001 and January 2002 from FTA-146-MW01 through FTA-146-MW05 and FTA-146-MW09). The Phase III groundwater analytical results are presented in Appendix A.

Before completion of the three phases of the *SI*, Shaw removed the three fiberglass USTs from the Site in November 2002. USTs, piping, and impacted soils were removed for the 2500-gallon waste oil tank [Parcel 24(7)], the 3000-gallon heating oil tank [Parcel 212(7)], and a 10,000-gallon diesel tank [Parcel 25(7)]. Confirmation sampling of the UST excavations and excavated soil stockpile sampling was also conducted. These tanks were removed in accordance with ADEM *UST Closure Site Assessments, Guidance Manual, Section III*, dated November 1997.

Shaw conducted the *SI* to evaluate if chemical constituents are present at the Site and if these compounds are a result of Site activities conducted by the Army. Six surface soil samples, one depositional soil sample, 13 subsurface soil samples, and 29 groundwater samples were collected. Sixteen new monitoring wells were installed to provide Site-specific geological and hydrogeological information and sampled for groundwater.

Concentrations of metals, VOCs including BTEX, and semivolatile organic compounds were detected in Site media. These concentrations were subsequently compared to background screening values (BSVs) as appropriate, residential site-specific screening levels (SSSLs), and ecological screening values (ESVs). Metals results were also subjected to a statistical and geochemical evaluation to assess if the concentrations were Site-related.

Through the human health risk evaluation, only benzene in groundwater was considered a contaminant of concern (COC) at the Site. Benzene concentrations exceeded the residential SSSL in the four groundwater samples from well FTA-146-MW02 from February 2001 through January 2002. This monitoring well is located adjacent to the former UST at Parcel 25(7). Data from the last three rounds were collected prior to the removal of this UST. The affected area was considered localized at this particular sampling location. In addition, the source of the benzene was removed.

Ten metals and five VOCs exceeded BSVs and ESVs. Detected metals were considered naturally occurring except for cobalt and zinc at FTA-146-GP05 and zinc at FTA-146-DEP01. Similarly, several VOCs exceeded ESVs at FTA-146-GP10. Despite possible increased risk to ecological receptors living and feeding in the immediate vicinity of these “hot spots,” because the Site is covered in concrete and asphalt it does not provide ecological habitat.

Based on the results of the *SI*, Shaw indicated that the Site activities did impact the environment. Specifically, benzene was detected in groundwater at concentrations that may pose an unacceptable increased risk to human health. In addition, chlorinated VOCs at Training Area T-5 sites, adjacent to the Site, may be impacting the groundwater in the southern portion of Parcel 146(7). Therefore, Shaw recommended implementing land use controls to restrict groundwater use (Shaw, 2005a).

This page intentionally left blank.

3.0 SUMMARY OF JUNE 2006 SAMPLING ACTIVITIES

Work was performed in accordance with the *Installation-Wide Sampling and Analysis Plan* (SAP) (MES, 2004) and the *Site-Specific Field Sampling Plan* (SFSP) (MES, 2006). The SFSP was submitted to the ADEM in May 2006. Comments regarding the SFSP were subsequently received from the ADEM in correspondence dated October 5, 2006. Responses to the ADEM comments are provided herein.

Based on the objectives presented in the SFSP (MES, 2006), the following activities were performed during the June 2006 field investigation:

- Groundwater levels were measured in eight monitoring wells FTA-146-MW01 through FTA-146-MW05, FTA-146-MW09, CWM-514-MW12, and CWM-514-MW13.
- The groundwater samples from monitoring wells FTA-146-MW01, FTA-146-MW02, FTA-146-MW04, FTA-146-MW05 and FTA-146-MW09 were analyzed for BTEX constituents using Method SW8260B.
- The groundwater samples from monitoring wells FTA-146-MW03, CWM-514-MW12, and CWM-514-MW13 were analyzed for the full suite of VOCs using Method SW8260B.

These monitoring wells were selected for the June 2006 event for purposes of comparing concentrations of VOCs detected by Shaw during earlier rounds. Because the source of Site-related contamination, the USTs, was removed, sampling wells downgradient of the former source was not performed. The field activities are described in the following subsections.

3.1 Groundwater Levels

Groundwater levels were measured by MES prior to groundwater sampling in 8 monitoring wells on June 12, 2006, presented in Table 1. A Solinst™ water level indicator was used to measure to the nearest hundredth of a foot from the top of casing (north side) to the total depth of the groundwater surface. In addition to water levels, the condition of each well was recorded. A summary table of well construction and water level data is included in Table 1.

To obtain a better understanding of groundwater movement at the Site and to assess the potential influence of groundwater from the surrounding area on the Site groundwater, groundwater level measurements were collected from a total of 37 residuum monitoring wells at the Site and from the surrounding Training Area T-5 from November 11, 2009 to November 13, 2009. Groundwater level measurements are presented in Table 1a.

3.2 Groundwater Sampling

Groundwater samples were collected June 13, 2006 from eight existing monitoring wells using low-flow sampling (LFS) methods in accordance with methodology presented in the SFSP (MES, 2006). Figure 3 shows the sample locations for this event. LFS was performed using a submersible adjustable-rate bladder (Teflon) pump positioned in the well to remove water from

the screened interval. New polyethylene tubing, specifically manufactured and packaged for environmental sampling applications, was measured, cut, and dedicated for each well. Once the pump was positioned within the screened interval of the well, a water level indicator was lowered to the top of groundwater. The pump rate and water level indicator were continuously monitored, and the pump rate was adjusted as needed to cause little or no drawdown of the groundwater level in the well.

Groundwater parameters including pH, conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), total dissolved solids (TDS), and temperature were measured using a YSI Model 6820 Water Quality Meter inserted into a flow-through cell included as part of the sampling apparatus. The parameter values were measured and recorded until stabilized as described in the *SFSP* (MES, 2006). Appendix B, Groundwater Sampling Logs, summarizes the groundwater parameter values, pumping rate, water description, and volume of groundwater removed.

The submersible pump and all other non-dedicated sampling equipment were decontaminated prior to use in each well in accordance with *SFSP* methodology. Disposable (single use) or dedicated sampling equipment and supplies were used whenever possible, including tubing and string.

Groundwater samples were collected from the well pump tubing outlet after it was determined that the field screening data had stabilized. Samples were collected directly into laboratory-supplied sample bottles (with preservatives as appropriate). Sample containers were labeled, placed in a chilled cooler and shipped under chain-of-custody procedures to EMAX Laboratories, Inc. located in Torrance, California. Figure 3 shows the sampling locations. The station names and analytical parameters are summarized on Table 2. The chain-of-custody forms for the June 2006 investigation are included in Appendix C.

3.3 Data Quality Review

MES has reviewed the analytical data for the groundwater samples collected in June 2006. The data quality review was performed in accordance with the *SFSP* (MES, 2006) and *Quality Assurance Plan, Revision 1 (QAP)* (MES, 2005) to assess compliance with quality assurance objectives, and to assess hard copy and electronic deliverable consistency and integrity. Appendix D includes the validated analytical data collected during the June 2006 investigation.

4.0 RESULTS OF JUNE 2006 GROUNDWATER SAMPLING

The results of the June 2006 groundwater sampling activities are discussed in the following subsections.

4.1 Groundwater Levels

Groundwater elevations measured during the June 2006 groundwater sampling event are presented in Table 1. The six residuum monitoring wells, FTA-146-MW01 through FTA-146-MW05 and CWM-514-MW13, are completed at depths ranging from 35 feet to 44 feet bgs, and the two bedrock wells, FTA-146-MW09 and CWM-514-MW12, are completed at depths of 73 feet bgs and 105 feet bgs, respectively.

Figure 4 shows the June 2006 groundwater elevations and potentiometric surface contours for the residuum monitoring wells. The results indicate a northwest, west, and southeast groundwater flow from the former source area within the residuum. The June 2006 groundwater elevations for the two bedrock monitoring wells are shown in Table 1. Potentiometric contours were not prepared from the bedrock groundwater elevations, as only two data points were available.

Groundwater elevation measurements collected in November 2009 for the Site and surrounding Training T-5 area are presented in Table 1a. Figure 4a shows the November 2009 groundwater elevations and estimated potentiometric contours for the residuum groundwater at the Site and the surrounding Training Area T-5. Groundwater at the Site appears to be hydraulically connected to groundwater from the surrounding Training Area T-5 and on a broad scale, generally follows the surface topography. Locally, groundwater flow appears to be more complex, probably influenced by geologic structures such as shallow thrust faults, fracture systems, and karst formations.

Groundwater flow generally follows a northerly to north-easterly direction in the vicinity of Training Area T-5 Parcels 511(7), 513(7), 516(7), and 182(7), south of Motor Pool 3100. Immediately southeast of Motor Pool 3100 Parcel 146(7), localized mounding was observed in the vicinity of Training Area T-5 Parcel 180(7), where the groundwater demonstrates an outward radial flow to the north, west, and northeast. Immediately south of Motor Pool 3100 Parcel 146(7), a groundwater low is present between Training Area T-5 Parcels 514(7) and 180(7), where the groundwater demonstrates a localized inward radial flow from the west, northwest, and south. In the southern half of Motor Pool 3100 Parcel 146(7), the groundwater demonstrates a localized inward radial flow from the west, north, and south. In the northern portion of Motor Pool 3100, localized mounding was observed in the vicinity of Parcels 24(7), 25(7), and 212(7), where the groundwater demonstrates an outward radial flow to the northwest towards the northern corner of Parcel 146(7), and south-southeast towards the southeastern corner of Parcel 146(7).

Please note monitoring wells HR-232Q-X-MW04, HR-232Q-X-MW05, and HR-232Q-X-MW19 were originally classified as residuum wells by Shaw in the *Draft Remedial Investigation Report, Training Area T-5 Sites* (Shaw, 2005b). However, review of the lithology logs and well

construction diagrams showed that these three wells were screened within the bedrock zone. Therefore, these wells were not included in generating the estimated potentiometric groundwater contours for the residuum zone shown in Figure 4a.

Based on the November 2009 groundwater level data (Figure 4a), it appears that the residuum groundwater in the southeastern portion of the Site, in the vicinity of well CWM-514-MW13, may be impacted by groundwater in Training Area T-5. Please see Section 4.7 for further discussion concerning the impact of groundwater at Training Area T-5 on the groundwater at the Site.

4.2 Analytical Data and Data Quality Review

The analytical data for the June 2006 samples are provided in Appendix D. Groundwater samples collected from monitoring wells FTA-146-MW01, FTA-146-MW02, FTA-146-MW04, FTA-146-MW05 and FTA-146-MW09 were analyzed for BTEX constituents, and samples from monitoring wells FTA-146-MW03, CWM-514-MW12, and CWM-514-MW13 were analyzed for VOCs. MES reviewed the analytical data in accordance with the *SFSP* (MES, 2006) and *QAP* (MES, 2005). Based on the data quality review, the analytical data generated for this investigation were adequate to fulfill sampling objectives and were suitable for preparation of this letter.

4.3 Groundwater Field Parameter Results

Measurements of field screening parameters were used to indicate when groundwater quality had stabilized and sampling could begin. Field screening parameters included pH, conductivity, DO, ORP, TDS, and temperature. The field parameter and other sampling data were recorded on the Groundwater Sampling Logs included in Appendix B. A review of the field screening parameter results indicate that groundwater sampling was performed in accordance with the *SFSP* (MES, 2006).

4.4 Summary of June 2006 Groundwater Analytical Results

Groundwater samples were collected from eight monitoring wells during the June 2006 site investigation. The samples from five of the wells were analyzed for the presence of BTEX hydrocarbon constituents and the samples from three wells were analyzed for VOCs. The analytical results for constituents detected in the groundwater samples are presented in Table 3. Figure 5 shows the concentrations of detected VOCs.

BTEX samples were collected from FTA-146-MW01, FTA-146-MW02, FTA-146-MW04, FTA-146-MW05, and FTA-146-MW09. Benzene was detected in FTA-146-MW02 at 14 micrograms per liter ($\mu\text{g/L}$). Ethylbenzene was detected in FTA-146-MW01 and FTA-146-MW02 at 0.44 J $\mu\text{g/L}$ and 400 $\mu\text{g/L}$, respectively. Toluene was detected in FTA-146-MW02 and FTA-146-MW09 at 210 $\mu\text{g/L}$ and 0.6 J $\mu\text{g/L}$, respectively. Total xylenes were detected at concentrations of 2.71 J $\mu\text{g/L}$, 2130 $\mu\text{g/L}$, and 5.3 $\mu\text{g/L}$ in samples FTA-146-MW01, FTA-146-MW02, and FTA-146-MW09, respectively.

VOC samples were collected from FTA-146-MW03, CWM-514-MW12, and CWM-514-MW13. Total xylenes were detected in FTA-146-MW03 at 0.8 J $\mu\text{g/L}$. No target analytes were detected in the sample collected from CWM-514-MW12. Chlorinated VOCs 1,1,2,2-tetrachloroethane (1,1,2,2-PCA), chloroform, cis-1,2-dichloroethene, tetrachloroethylene (PCE), and trichloroethene (TCE) were detected in monitoring well CWM-514-MW13 at concentrations of 57 $\mu\text{g/L}$, 1.8 $\mu\text{g/L}$, 0.51 J $\mu\text{g/L}$, 0.68 J $\mu\text{g/L}$, and 32 $\mu\text{g/L}$, respectively.

4.5 Comparison of June 2006 Groundwater Analytical Results to SSSLs and RBTLs

To evaluate which analytes were constituents of potential concern (COPCs) for the Site, the VOC contaminants in the groundwater samples were compared to residential SSSLs, construction worker SSSLs, and groundskeeper SSSLs (IT Corporation [IT], 2000).

The SSSLs were revised by MES in response to updated toxicological properties provided in the *Alabama Risk-Based Corrective Action Guidance Manual (ARBCA)* (ADEM, 2008). The protocols outlined in the *Human Health and Ecological Screening Values and PAH Background Summary Report* (IT, 2000), which accounted for exposure scenarios and media combinations specific to McClellan, were used to calculate the revised SSSLs. The revised SSSLs were used for the evaluations in this report.

Of the ten VOCs detected at the Site, five VOCs were considered COPCs: 1,1,2,2-PCA, benzene, ethylbenzene, PCE, TCE, and total xylenes. Only two residuum monitoring wells, CWM-514-MW13 and FTA-146-MW02, had concentrations of the aforementioned VOCs above residential and groundskeeper SSSLs. 1,1,2,2-PCA also exceeded the construction worker SSSL at CWM-514-MW13. The analytical results for constituents detected in the groundwater samples are presented in Table 3. Figure 5 shows the concentrations of detected VOCs.

The SSSLs shown in Table 3 are medium- and receptor-specific concentrations calculated based on a 10^{-6} risk. However, the *ARBCA* allows a cumulative carcinogenic risk for remediation of 10^{-5} , and a noncarcinogenic cumulative hazard index of less than or equal to 1.0. Therefore, risk-based target levels (RBTLs) were calculated based on a 10^{-5} risk. Based on the proposed future land use of the Site (educational campus), the VOC concentrations detected in the groundwater samples were compared to the residential and groundskeeper RBTLs (Table 3). The groundskeeper exposure scenario is considered appropriate as groundwater at the Site will not be used as a drinking water source. Exposure to the resident was also evaluated to determine if the Site is suitable for unrestricted reuse. Because the groundskeeper RBTLs are more stringent than the construction worker RBTLs, and therefore, also protective for potential future construction workers onsite, and because none of the VOC concentrations in the groundwater exceeded the construction worker RBTLs, the construction worker RBTLs were not shown on Table 3.

Three VOCs, 1,1,2,2-PCA, benzene, and total xylenes, had concentrations that exceeded the residential or groundskeeper RBTLs (Table 3 and Figure 5). Benzene and total xylenes in groundwater from well FTA-146-MW02 exceeded the residential RBTL. The benzene and total xylenes concentrations are likely associated with releases from the former USTs (Section 2.2.3). However, since the removal of the USTs and impacted soil, the benzene concentrations have decreased from a high of 120 $\mu\text{g/L}$ in 2002 (prior to UST removal) to 14 $\mu\text{g/L}$ in June 2006

(after UST removal) and will likely continue to decrease (Section 4.6). Only 1,1,2,2-PCA in groundwater from well CWM-514-MW13 exceeded both the residential and groundskeeper RBTLs. However, the concentration of 1,1,2,2-PCA in well CWM-514-MW13 is not considered to be Site-related, but related to activities performed at Training Area T-5; see Section 4.7 for details regarding the impact of groundwater at Training Area T-5 on groundwater at the Site.

Because Site-related VOCs benzene and total xylenes did not exceed the groundskeeper RBTLs, they are not considered COCs at the Site. However, because benzene and total xylenes exceeded the residential RBTLs, and because 1,1,2,2-PCA (considered to be related to Training Area T-5 activities) exceeded the residential and groundskeeper RBTLs in groundwater on the Site, the MDA is requesting a NFA designation with land use controls (LUCs).

4.6 Degradation of Benzene

The analytical results for benzene were used to create concentration versus time plots to evaluate if contaminant degradation through natural attenuation is occurring. Monitoring well FTA-146-MW02 contains the highest concentrations of benzene detected; therefore Figure 6 shows the concentration versus time plot for this monitoring well. Historical results collected by Shaw were used with the June 2006 results to construct the Figure. Copies of the Shaw *SI* data tables have been included as Appendix A. As shown, concentrations of benzene have degraded over time to a concentration less than the groundskeeper RBTL and greater than the residential RBTL.

4.7 Impact of Training Area T-5 on the Groundwater at Motor Pool 3100

Groundwater from three monitoring wells, FTA-146-MW03, CWM-514-MW12, and CWM-514-MW13, was analyzed for the full suite of VOCs to evaluate the potential migration of contaminants from the Training Area T-5 Site. According to the *Draft Remedial Investigation Report for the Training Area T-5 Sites* conducted by Shaw (2005b), the primary COCs for the Training Area T-5 Site are 1,1,2,2-PCA, carbon tetrachloride, and TCE. The source of these chlorinated VOCs is believed to be decontamination procedures used in chemical warfare material (CWM) training activities.

Clustered monitoring wells CWM-514-MW12 and CWM-514-MW13 are located in the southeastern portion of the Site, where no known source areas of contamination are present. Monitoring well FTA-146-MW03 is located in the northeastern portion of the Site. Chlorinated VOCs were detected in residuum well CWM-514-MW13, no VOCs were detected in bedrock well CWM-514-MW12, and only total xylenes was detected at an estimated concentration in residuum well FTA-146-MW03 (Table 3).

The presence of Training Area T-5 COCs including 1,1,2,2-PCA and trichloroethene, in groundwater from residuum well CWM-514-MW13 at concentrations greater than the SSSLs (and greater than the RBTLs for 1,1,2,2-PCA) indicate the groundwater in the vicinity of well CWM-514-MW13 may be impacted by the groundwater at Training Area T-5. In addition, the groundwater flow at the Site and surrounding Training Area T-5 (shown in Figure 4a and described in Section 4.1) also indicate that the groundwater in the vicinity of well CWM-514-MW13 may be impacted by the groundwater at the Training Area T-5. The absence of

chlorinated volatiles in residuum well FTA-146-MW03 and the direction of groundwater flow from the northeastern portion of the Site toward the southeast portion (Figure 4a) indicate that the northern portion of the Site may not be impacted by the groundwater at Training Area T-5. In addition, the absence of VOCs in bedrock well CWM-514-MW12 indicate that only the residuum zone and not the bedrock zone in the southeastern portion of the Site may be affected by the groundwater in Training Area T-5.

This page intentionally left blank.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater samples were collected from six residuum monitoring wells and two bedrock monitoring wells at the Site in June 2006 and analyzed for VOCs or BTEX. Ten VOCs were detected in these samples. The VOC concentrations detected in the groundwater samples were compared to the residential and groundskeeper RBTLs based on the proposed future land use of the Site as an educational campus and to determine if the Site is suitable for unrestricted reuse. Benzene and total xylenes in groundwater from well FTA-146-MW02 exceeded the residential RBTL. The concentration of 1,1,2,2-PCA in groundwater from well CWM-514-MW13 exceeded both the residential and groundskeeper RBTLs.

Based on the November 2009 groundwater levels data, groundwater at the Site appears to be hydraulically connected to groundwater from the surrounding Training Area T-5. On a broad scale groundwater flow generally follows the surface topography, however, locally groundwater flow appears to be more complex, influenced by geologic structures such as shallow thrust faults, fracture systems, and karst formations. Based on groundwater flow (Figure 4a), it appears that the residuum groundwater in the southeastern portion of the Site, in the vicinity of well CWM-514-MW13, may be impacted by groundwater in the Training Area T-5 area.

The benzene and total xylenes concentrations in well FTA-146-MW02 are likely associated with releases from the former USTs, however, the benzene concentrations have decreased since the removal of the USTs and will most likely continue to decrease. Only the results for 1,1,2,2-PCA exceeded both the residential and groundskeeper RBTLs, however, the 1,1,2,2-PCA concentration in well CWM-514-MW13 is not considered to be Site-related, but related to activities performed at Training Area T-5.

Because Site-related VOCs benzene and total xylenes did not exceed the groundskeeper RBTLs, they are not considered COCs at the Site. However, because benzene and total xylenes exceeded the residential RBTLs, and because 1,1,2,2-PCA (considered to be related to Training Area T-5 activities) exceeded the residential and groundskeeper RBTLs in groundwater on the Site, the MDA requests a NFA with LUCs prohibiting groundwater use for potable water, irrigation, industrial, and agricultural applications at the Site. In addition, the MDA will incorporate appropriate Site wells into future sampling events conducted at the Training Area T-5 Sites for the delineation of nature and extent of contamination associated with Training Area T-5.

This page intentionally left blank.

6.0 REFERENCES

- Alabama Department of Environmental Management (ADEM). 2003. *In the Matter of: Anniston-Calhoun County Fort McClellan Development Joint Power Authority Facility*, Cleanup Agreement No. AL4 210 020 562. September 30
- ADEM. 1997. *UST Closure Site Assessments, Guidance Manual, Section III*. November.
- ADEM. 2005. *In the Matter of: Anniston-Calhoun County Fort McClellan Development Joint Power Authority Facility*, Cleanup Agreement No. AL4 210 020 562, Modification 1. November 8.
- ADEM. 2008. *Alabama Risk-Based Corrective Action Guidance Manual (ARBCA)*. April.
- ADEM. 2009. *In the Matter of: Anniston-Calhoun County Fort McClellan Development Joint Power Authority Facility*, Cleanup Agreement No. AL4 210 020 562, Modification 2. February 2.
- EDAW. 1997. *Fort McClellan Comprehensive Reuse Plan, Implementation Strategy*, prepared for the Fort McClellan Reuse and Redevelopment Authority of Alabama. November.
- Environmental Science & Engineering, Inc. 1998. *Final Environmental Baseline Survey, Fort McClellan, Alabama*, prepared for the U.S. Army Environmental Center, Aberdeen Proving Ground, Maryland. January.
- IT Corporation. 2000. *Human Health and Ecological Screening Values and PAH Background Summary Report*. July.
- Matrix Environmental Services, LLC (MES). 2004. *Draft Installation-Wide Sampling and Analysis Plan*. January.
- MES. 2005. *Quality Assurance Plan, Revision 1*. February.
- MES. 2006. *Site-Specific Field Sampling Plan, Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)*. May 10.
- Shaw Environmental, Inc. (Shaw). 2005a. *Final Site Investigation Report, Former Motor Pool Area 3100, Parcels 146(7), 212(7), 24(7), 25(7), and 73(7)*. February.
- Shaw. 2005b. *Draft Remedial Investigation Report, Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7), and 516(7)*. January.
- U.S. Department of the Army (Army). 2003. *Cooperative Agreement Award, Agreement No: DASW01-03-2-0001*. September.
- Army. 2005. *Cooperative Agreement Award, Agreement No: DASW01-03-2-0001, modification*

PO0002. September 30.

Army. 2007. *Cooperative Agreement Award, Agreement No: DASW01-03-2-0001*, modification
PO0003. June 29.

TABLES

Table 1: Monitoring Well Construction Summary and Groundwater Elevations, June 2006
Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama

Station Name	Northing	Easting	Measurement Date	Depth to Water (ft BTOC)	Ground Elevation (ft amsl) *	TOC Elevation (ft amsl) *	Groundwater Elevation (ft amsl)	Well Depth (ft bgs)	Screen Length (ft) *	Screen Interval (ft bgs) *	Well Material
FTA-146-MW01	1166706.89	668057.09	6/12/2006	10.72	822.07	821.73	811.01	35	15	18 - 33	2" ID Sch. 40 PVC
FTA-146-MW02	1166666.09	668112.75	6/12/2006	10.85	822.88	822.48	811.63	35.5	15	19 - 34	2" ID Sch. 40 PVC
FTA-146-MW03	1166611.61	668161.11	6/12/2006	9.92	822.89	822.64	812.72	41	15	24 - 39	2" ID Sch. 40 PVC
FTA-146-MW04	1166634.81	668066.24	6/12/2006	11.43	823.29	823.07	811.64	40	20	18 - 38	2" ID Sch. 40 PVC
FTA-146-MW05	1166679.48	668234.43	6/12/2006	13.7	826.29	826.05	812.35	44	15	25 - 40	2" ID Sch. 40 PVC
FTA-146-MW09	1166684.93	668096.00	6/12/2006	11.16	822.49	822.28	811.12	72.7	10	59 - 69	4" ID Sch. 80 PVC
CWM-514-MW12	1166352.69	668207.16	6/12/2006	27.51	822.2	821.91	794.4	105	10	95 - 105	2" ID Sch. 40 PVC
CWM-514-MW13	1166362.25	668218.52	6/12/2006	25.57	822.1	822.1	796.53	42	10	32 - 42	2" ID Sch. 40 PVC

Notes:

* Information adapted from *Draft Site Investigation Report*, Shaw Environmental, Inc, April 2003.

Horizontal coordinates referenced to the U.S. State Plane Coordinate System, Alabama East Zone, North American Datum of 1983.

Elevations references to the North American Vertical Datum of 1988.

2" ID Sch. 40 PVC = 2- inch inside diameter, Schedule 40, polyvinyl chloride

4" ID Sch. 80 PVC = 4- inch inside diameter, Schedule 80, polyvinyl chloride

amsl = above mean sea level

bgs = below ground surface

ft = feet

BTOC = Below top of casing

Table 1a: Groundwater Elevations - November 2009
Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama

Well Location	Well Type	Measurement Date	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Depth of Well (BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet)
<u>Motor Pool Area 3100 Monitoring Wells</u>							
FTA-146-GP05	Residuum	11/12/2009	820.95	822.16	38.72*	9.66*	812.50
FTA-146-GP07	Residuum	11/12/2009	821.22	823.74	31.95	11.95	811.79
FTA-146-GP09	Residuum	11/11/2009	823.35	824.45	39.55	11.85	812.60
FTA-146-MW01	Residuum	11/12/2009	822.07	821.73	33.95	8.17	813.56
FTA-146-MW02	Residuum	11/12/2009	822.88	822.48	22.8	8.65	813.83
FTA-146-MW03	Residuum	11/11/2009	822.89	822.64	38.33	9.19	813.45
FTA-146-MW04	Residuum	11/12/2009	823.29	823.07	39.55	9.96	813.11
FTA-146-MW05	Residuum	11/12/2009	826.29	826.05	43.11	11.58	814.47
FTA-146-MW06	Residuum	11/12/2009	817.49	817.30	29.5	4.45	812.85
FTA-146-MW07	Residuum	11/12/2009	821.62	821.07	33.1	9.2	811.87
FTA-146-MW08	Residuum	11/11/2009	823.47	823.16	34.1	9.63	813.53
<u>Training Area T-5 Monitoring Wells</u>							
CWM-180-MW01	Residuum	11/13/2009	834.12	836.23	52.5	23.32	812.91
CWM-180-MW02	Residuum	11/13/2009	831.06	833.09	43.31	16.67	816.42
CWM-180-MW03	Residuum	11/13/2009	828.17	830.30	39.2	5.85	824.45
CWM-180-MW04	Residuum	11/13/2009	824.05	826.08	27.18	7.71	818.37
CWM-180-MW06	Residuum	11/11/2009	817.90	817.79	35.41	4.02	813.77
CWM-180-MW08	Residuum	11/11/2009	824.70	827.22	52.22	13.44	813.78
CWM-182-MW06	Residuum	11/13/2009	860.94	862.91	41	5.78	857.13
CWM-511-MW01	Residuum	11/12/2009	810.73	810.49	24	1.61	808.88
CWM-511-MW02	Residuum	11/12/2009	807.96	807.59	19	3.35	804.24
CWM-511-MW03	Residuum	11/12/2009	805.20	804.90	13.28	2.61	802.29
CWM-511-MW04	Residuum	11/12/2009	806.10	805.92	27.72	5.45	800.47
CWM-511-MW06	Residuum	11/12/2009	812.60	812.40	35.68	6.1	806.30
CWM-512-MW01	Residuum	11/12/2009	809.06	808.78	22.1	3.73	805.05
CWM-512-MW03	Residuum	11/12/2009	810.59	810.40	24	1.15	809.25
CWM-513-MW01	Residuum	11/13/2009	820.65	822.60	34	2.65	819.95
CWM-513-MW02	Residuum	11/13/2009	817.15	819.35	31.8	3.98	815.37
CWM-514-MW01	Residuum	11/13/2009	846.83	848.87	63.01	44.01	804.86
CWM-514-MW02	Residuum	11/13/2009	839.32	841.32	70.76	37.76	803.56
CWM-514-MW03	Residuum	11/13/2009	837.86	839.85	59.6	18.62	821.23
CWM-514-MW05	Residuum	11/13/2009	827.27	829.48	33.24	14.61	814.87
CWM-514-MW07	Residuum	11/11/2009	823.00	822.88	29.22	10.56	812.32
CWM-514-MW09	Residuum	11/11/2009	821.50	821.30	49.27	3.41	817.89
CWM-514-MW11	Residuum	11/13/2009	839.45	841.90	38	11.79	830.11
CWM-514-MW13	Residuum	11/11/2009	822.1	822.1	41.15	17.25	804.85
CWM-516-MW01	Residuum	11/13/2009	827.05	829.14	31.95	4.62	824.52
CWM-516-MW02	Residuum	11/13/2009	838.04	839.88	36.08	7.35	832.53

Notes:

BTOC = Below top of casing

* Because the well casing above the ground surface was damaged, the water level was measured from the ground surface.

Table 2: Summary of Stations and Analytical Parameters
Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama

Station Name	Analytical Suite
<i>Residuum Monitoring Wells</i>	
FTA-146-MW01	BTEX by SW8260B
FTA-146-MW02	BTEX by SW8260B
FTA-146-MW03	VOCs by SW8260B
FTA-146-MW04	BTEX by SW8260B
FTA-146-MW05	BTEX by SW8260B
CWM-514-MW13	VOCs by SW8260B
<i>Bedrock Monitoring Wells</i>	
FTA-146-MW09	BTEX by SW8260B
CWM-514-MW12	VOCs by SW8260B

Notes:

VOC = Volatile organic compound

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

Table 3: Summary of Groundwater Detections Compared to SSSLs and RBTLs
Motor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama

VOCs (µg/L)	RS SSSL	GS SSSL	CW SSSL	RS RBTL	GS RBTL	CWM-514-MW12 6/13/2006	CWM-514-MW13 6/13/2006	FTA-146-MW01 6/13/2006	FTA-146-MW02 6/13/2006
1,1,2,2-Tetrachloroethane	0.203	1.36	34	2.03	13.6	< 1	57	--	--
1,1,2-Trichloroethane	0.72	5.02	126	7.2	50.2	< 1	< 1	--	--
Benzene	0.923	4.79	120	9.23	47.9	< 1	< 1	< 1	14
Chloroform	15.4	98.6	2470	154	986	< 1	1.8	--	--
Cis-1,2-Dichloroethene	15.5	99.1	2480	155	991	< 1	0.51 J	--	--
Ethylbenzene	140	769	19200	1400	7690	< 1	< 1	0.44 J	400
Tetrachloroethylene	0.121	0.443	11.1	1.21	4.43	< 1	0.68 J	--	--
Toluene	294	1730	43100	2940	17300	< 1	< 1	< 1	210
Trichloroethene	3.83	20.5	513	38.3	205	< 1	32	--	--
Xylenes (Total)	91.2	1540	38500	912	15400	< 3	< 3	2.71 J	2130

VOCs (µg/L)	RS SSSL	GS SSSL	CW SSSL	RS RBTL	GS RBTL	FTA-146-MW03 6/13/2006	FTA-146-MW04 6/13/2006	FTA-146-MW05 6/13/2006	FTA-146-MW09 6/13/2006
1,1,2,2-Tetrachloroethane	0.203	1.36	34	2.03	13.6	< 1	--	--	--
1,1,2-Trichloroethane	0.72	5.02	126	7.2	50.2	< 1	--	--	--
Benzene	0.923	4.79	120	9.23	47.9	< 1	< 1	< 1	< 1
Chloroform	15.4	98.6	2470	154	986	< 1	--	--	--
Cis-1,2-Dichloroethene	15.5	99.1	2480	155	991	< 1	--	--	--
Ethylbenzene	140	769	19200	1400	7690	< 1	< 1	< 1	1.2
Tetrachloroethylene	0.121	0.443	11.1	1.21	4.43	< 1	--	--	--
Toluene	294	1730	43100	2940	17300	< 1	< 1	< 1	0.6 J
Trichloroethene	3.83	20.5	513	38.3	205	< 1	--	--	--
Xylenes (Total)	91.2	1540	38500	912	15400	0.8 J	< 3	< 3	5.3

Notes:

< = The result was not detected at the concentration shown.

-- = not analyzed

CW = Construction Worker

FD = Field duplicate

GS = Groundskeeper

µg/L = micrograms per liter

RBTL = Risk-Based Target Level (10⁻⁵ Risk)

RS = Residential

SSSL = Site-specific screening level

VOCs = Volatile Organic Compounds

The Xylenes (Total) value is the sum of m,p-Xylene and o-Xylene detections.

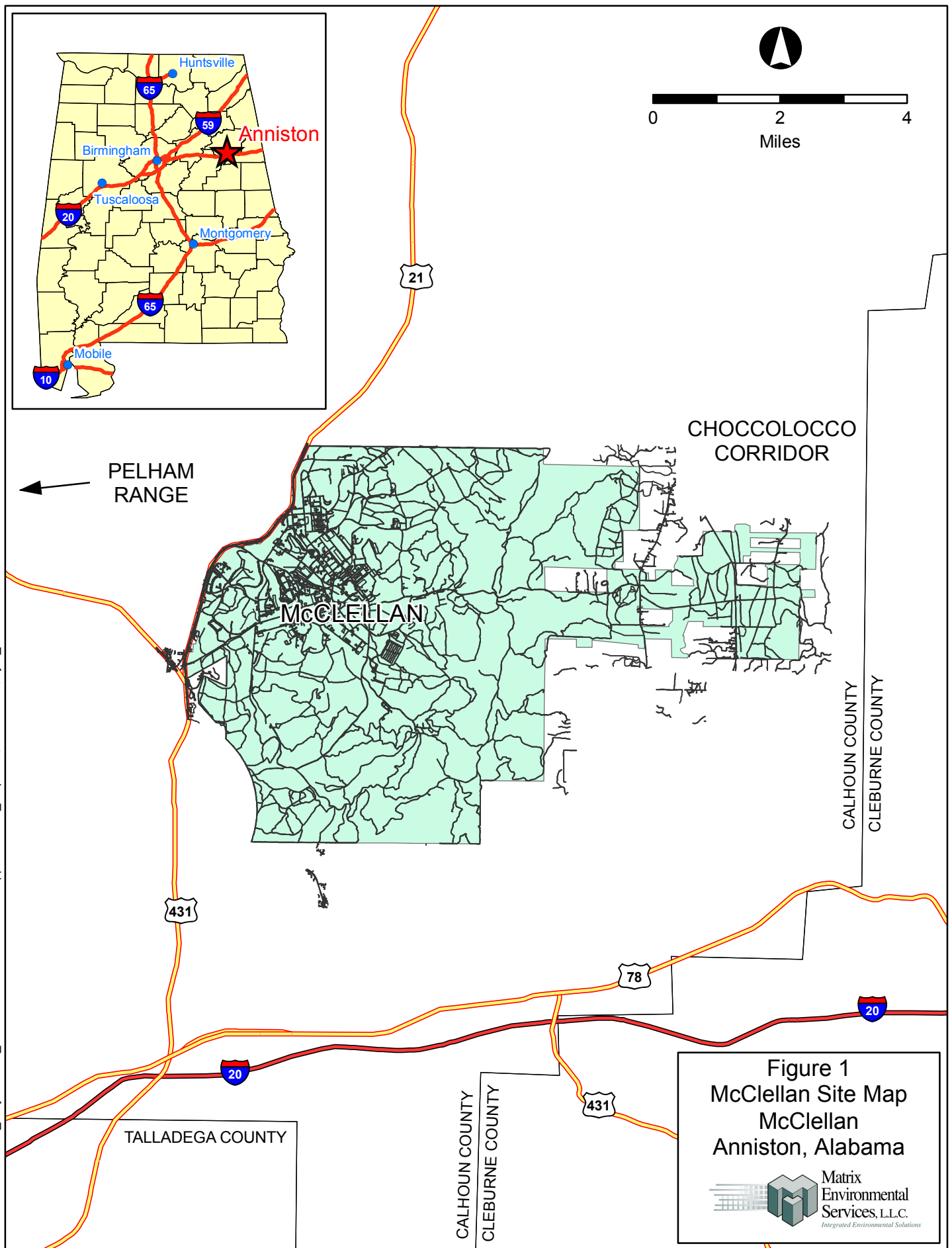
Lab Flag:

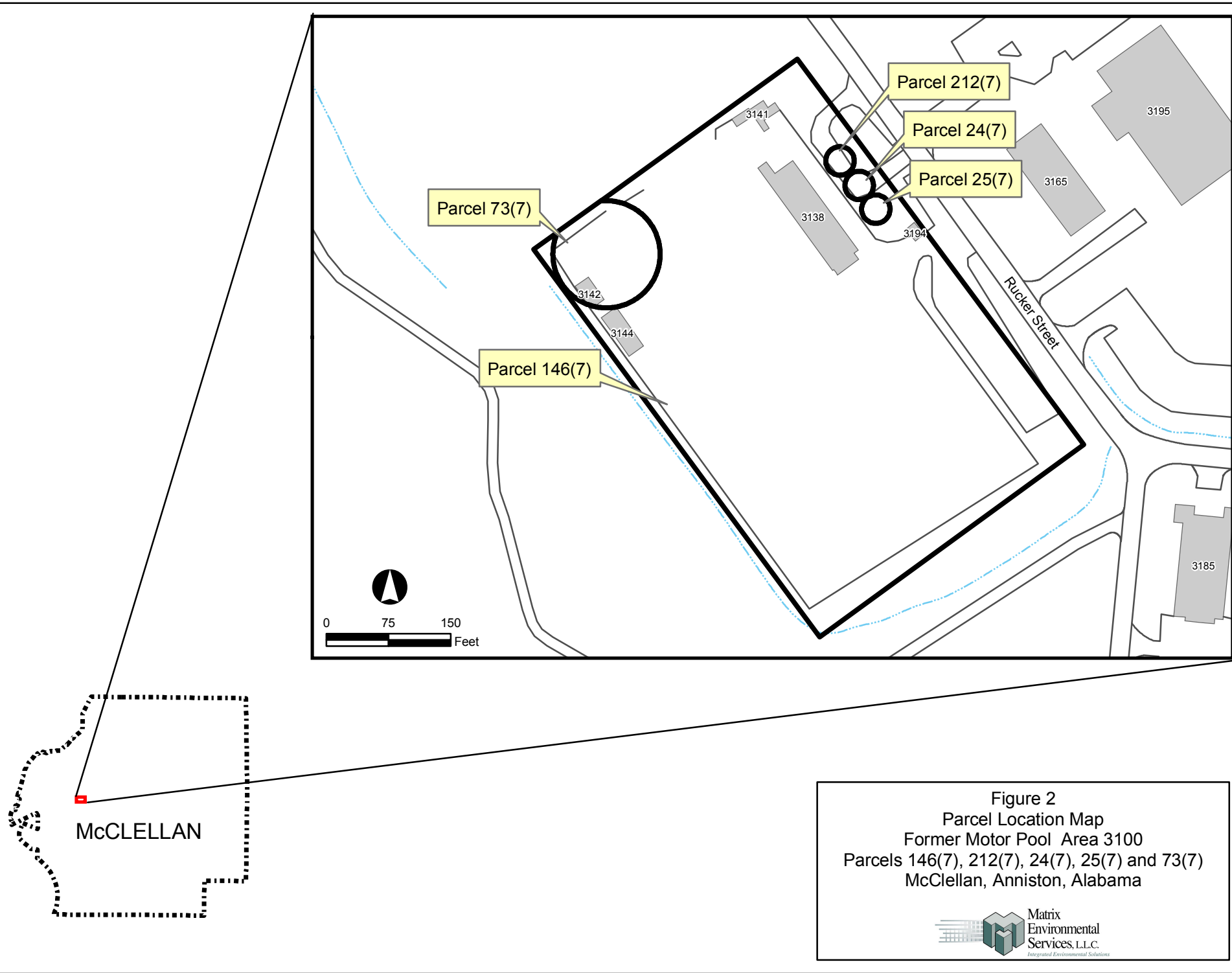
J = Estimated value. The analyte is positively identified and the concentration is less than the reporting limit but greater than the method detection limit.

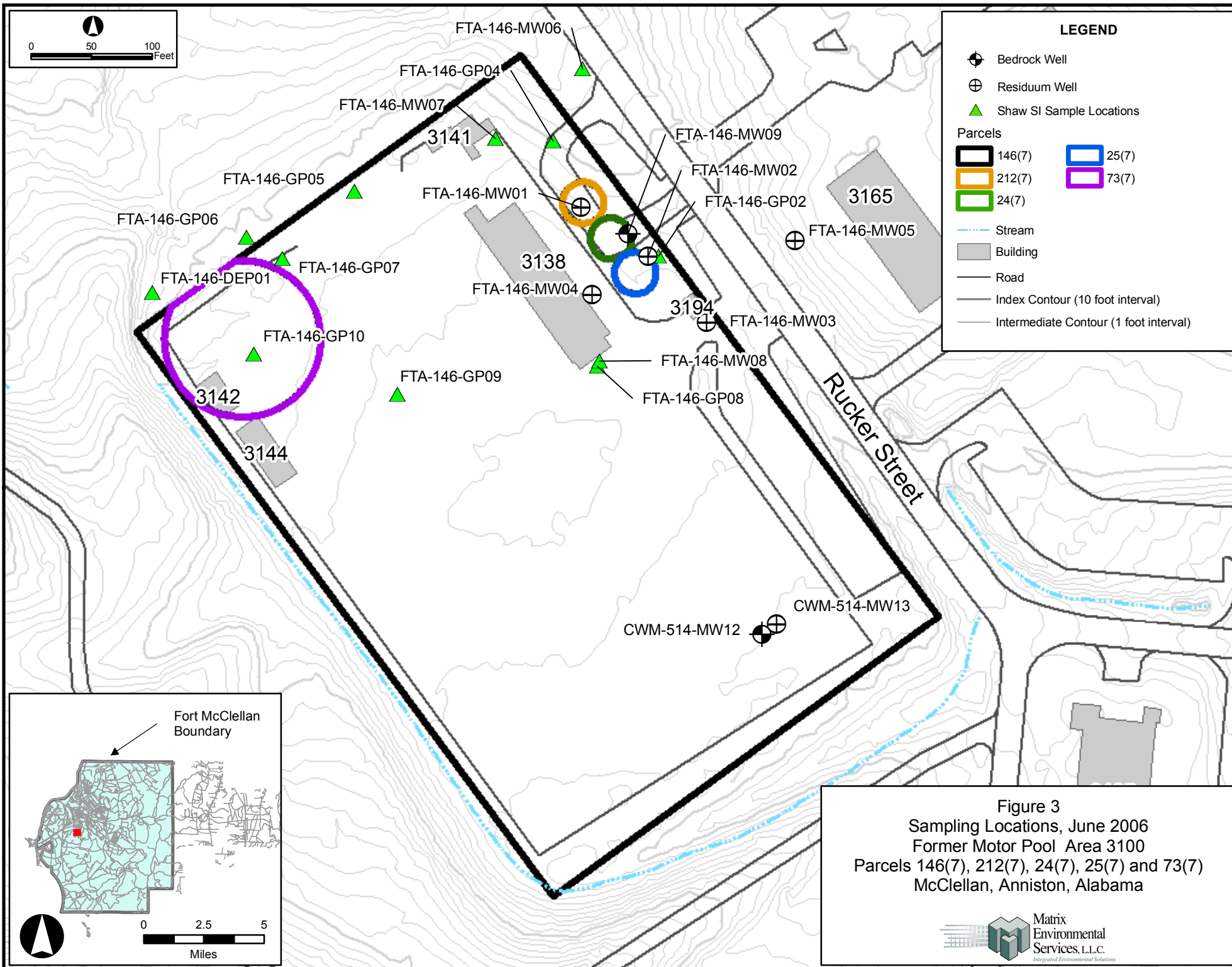
Value is greater than the RS RBTL.

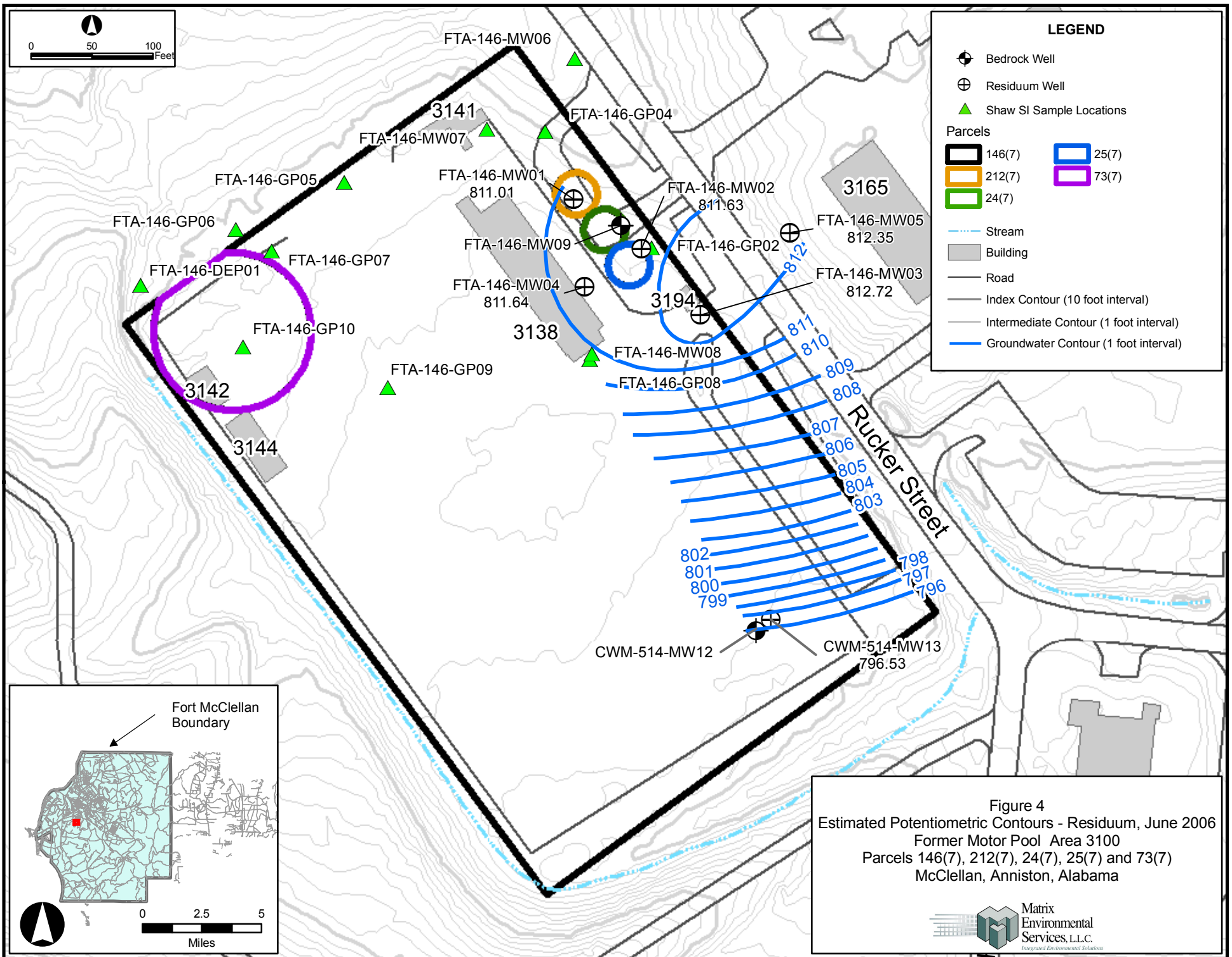
Value is greater than the GS RBTL.

FIGURES

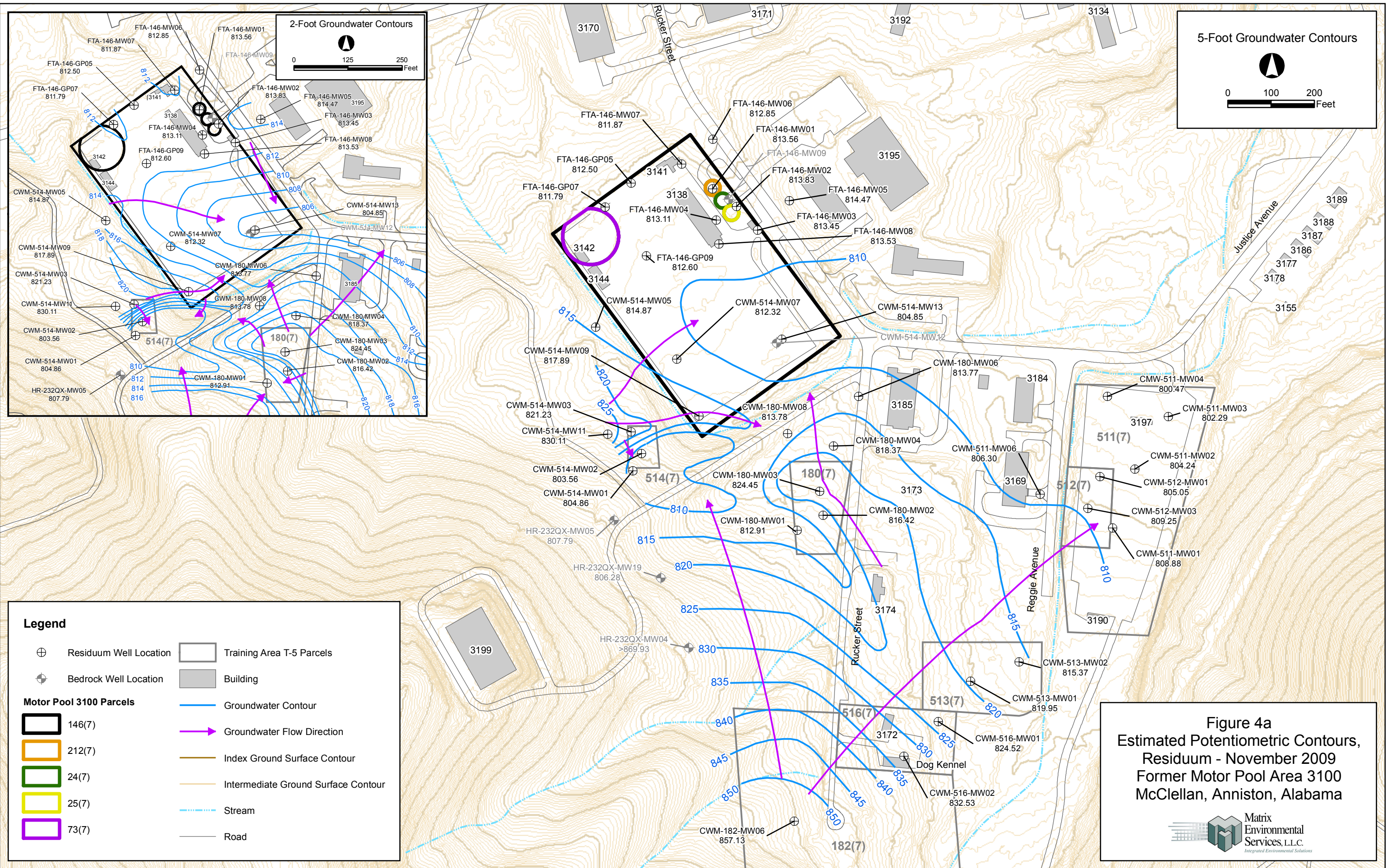


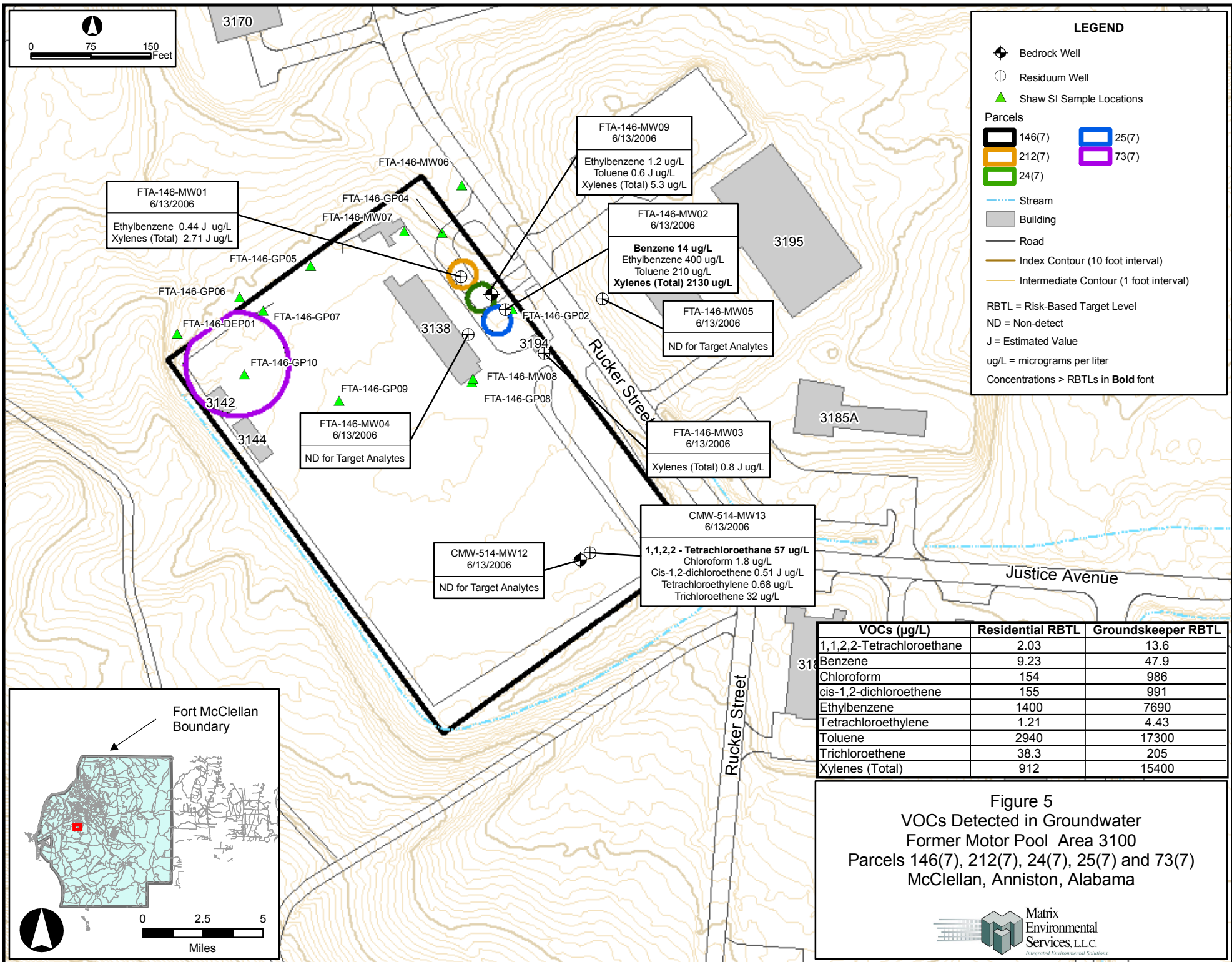


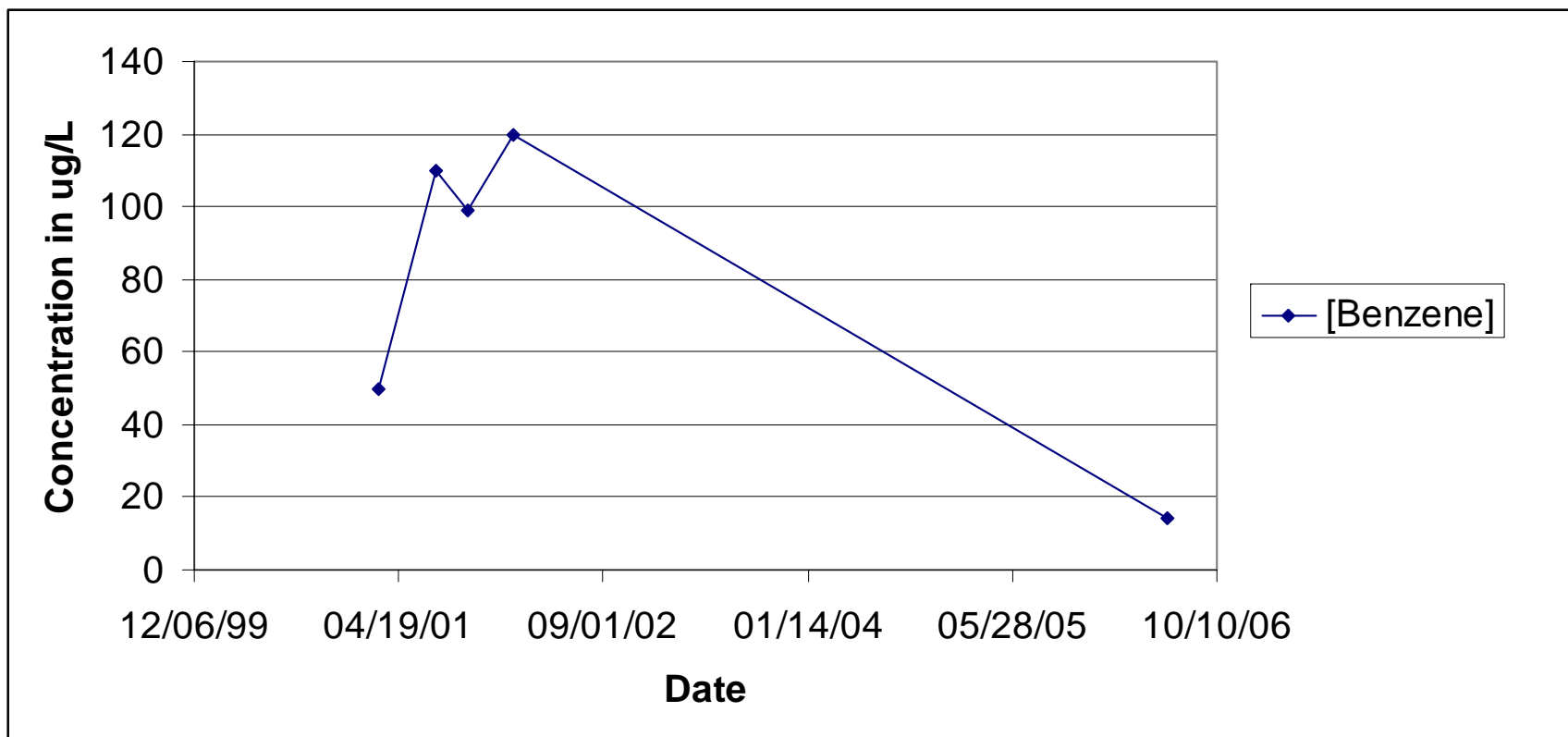




FILE: \\Tartarus\GIS\projects\Fort McClellan\03.094.007\activeapps\Motor Pool\Figure4a Potentio July2010.mxd, 7/28/2010, jef clonts







**Figure 6: Benzene Concentrations in
Residuum Well FTA-146-MW02
Motor Pool Area 3100
Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)
McClellan, Anniston, Alabama**

APPENDICES

APPENDIX A
GROUNDWATER ANALYTICAL RESULTS
COLLECTED BY SHAW

Table 5-3

Phase I Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

Sample Location		FTA-146-GP02				FTA-146-GP05				FTA-146-GP06				FTA-146-GP07			
Sample Number		CP3002				CP3005				CP3006				CP3009			
Sample Date		15-Dec-98				17-Dec-98				8-Jan-99				17-Dec-98			
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL		
METALS																	
Aluminum	mg/L	2.34E+00	1.56E+00	7.70E-02 J				1.71E+00		YES	1.04E+00			9.40E-02 J			
Barium	mg/L	1.27E-01	1.10E-01	2.36E-02 J				1.40E-01 J	YES	YES	1.63E-01 J	YES	YES	1.50E-01 J	YES		
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND			ND			ND			
Calcium	mg/L	5.65E+01	NA	2.04E+00 J				1.04E+01			6.92E+00			1.27E+01			
Chromium	mg/L	NA	4.69E-03	ND				ND			ND			ND			
Cobalt	mg/L	2.34E-02	9.39E-02	1.35E-02 J				ND			5.32E-02	YES		6.49E-02	YES		
Copper	mg/L	2.55E-02	6.26E-02	ND				ND			ND			ND			
Iron	mg/L	7.04E+00	4.69E-01	3.36E+00		YES		3.81E+00		YES	5.77E+00		YES	6.33E+00	YES		
Magnesium	mg/L	2.13E+01	NA	1.09E+01				6.79E+00			8.37E+00			8.97E+00			
Manganese	mg/L	5.81E-01	7.35E-02	7.20E-02				1.42E-01		YES	1.75E+00	YES	YES	1.73E+00	YES		
Mercury	mg/L	NA	4.69E-04	5.40E-05 B				5.80E-05 B			5.70E-05 J			6.60E-05 B			
Nickel	mg/L	NA	3.13E-02	3.50E-02 J		YES		ND			1.72E-02 J			1.94E-02 J			
Potassium	mg/L	7.20E+00	NA	ND				2.71E+00 J			2.87E+00 B			1.32E+00 J			
Sodium	mg/L	1.48E+01	NA	1.30E+00 J				5.33E+00			4.94E+00 J			3.76E+00 J			
Thallium	mg/L	1.46E-03	1.02E-04	4.50E-03 B	YES	YES		ND	ND		ND			4.70E-03 B	YES		
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND	ND		ND			ND			
Zinc	mg/L	2.20E-01	4.69E-01	1.00E-01				1.51E-02 J			3.06E-02			3.96E-02			
VOLATILE ORGANIC COMPOUNDS																	
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	2.50E-04 J				ND			ND			ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	8.80E-04 J				ND			ND			ND			
Acetone	mg/L	NA	1.56E-01	ND				1.60E-03 J			ND			ND			
Benzene	mg/L	NA	1.41E-03	2.80E-02		YES		ND			ND			ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND			ND			ND			
Ethylbenzene	mg/L	NA	1.40E-01	1.90E-04 J				ND			ND			ND			
Hexachlorobutadiene	mg/L	NA	8.40E-04	ND				ND			ND			1.50E-04 B			
Toluene	mg/L	NA	2.59E-01	1.00E-04 J				ND			ND			ND			
SEMIVOLATILE ORGANIC COMPOUNDS																	
Di-n-butyl phthalate	mg/L	NA	1.48E-01	1.70E-03 J				3.70E-03 J			ND			1.20E-03 J			

Table 5-3

Phase I Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

(Page 2 of 2)

Sample Location		FTA-146-GP08		FTA-146-GP09		FTA-146-GP10	
Sample Number		CP3010		CP3011		CP3012	
Sample Date		16-Dec-98		16-Dec-98		16-Dec-98	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual >BKG >SSSL	Result	Qual >BKG >SSSL
METALS							
Aluminum	mg/L	2.34E+00	1.56E+00	1.19E+00		1.42E-01 J	1.05E+00
Barium	mg/L	1.27E-01	1.10E-01	2.51E-02 J		3.66E-02 J	1.26E-01 J
Cadmium	mg/L	2.51E-03	7.82E-04	ND		5.30E-03 B	YES
Calcium	mg/L	5.65E+01	NA	3.57E+01		1.04E+01	7.77E-01 J
Chromium	mg/L	NA	4.69E-03	5.00E-03 J	YES	ND	ND
Cobalt	mg/L	2.34E-02	9.39E-02	ND		2.19E-02 J	1.20E-02 J
Copper	mg/L	2.55E-02	6.26E-02	4.70E-03 J		ND	ND
Iron	mg/L	7.04E+00	4.69E-01	1.84E+00	YES	5.24E-01	3.61E+00
Magnesium	mg/L	2.13E+01	NA	2.61E+00 J		3.55E+00 J	7.23E+00
Manganese	mg/L	5.81E-01	7.35E-02	1.60E-01	YES	1.79E-01	7.13E-02
Mercury	mg/L	NA	4.69E-04	6.30E-05 B		7.80E-05 B	7.20E-05 B
Nickel	mg/L	NA	3.13E-02	ND		3.19E-02 J	3.22E-02 J
Potassium	mg/L	7.20E+00	NA	ND		1.55E+00 J	1.04E+00 J
Sodium	mg/L	1.48E+01	NA	8.43E-01 J		1.50E+00 J	2.08E+00 J
Thallium	mg/L	1.46E-03	1.02E-04	ND		4.90E-03 B	YES
Vanadium	mg/L	1.70E-02	1.10E-02	7.40E-03 J		ND	5.00E-03 B
Zinc	mg/L	2.20E-01	4.69E-01	1.03E-02 J		3.59E-02	9.64E-02
VOLATILE ORGANIC COMPOUNDS							
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND		ND	ND
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND		ND	ND
Acetone	mg/L	NA	1.56E-01	1.10E-03 J		1.90E-03 J	ND
Benzene	mg/L	NA	1.41E-03	ND		ND	ND
Chloroform	mg/L	NA	1.15E-03	1.40E-04 B		ND	ND
Ethylbenzene	mg/L	NA	1.40E-01	ND		ND	ND
Hexachlorobutadiene	mg/L	NA	8.40E-04	ND		ND	ND
Toluene	mg/L	NA	2.59E-01	ND		ND	ND
SEMI-VOLATILE ORGANIC COMPOUNDS							
Di-n-butyl phthalate	mg/L	NA	1.48E-01	3.00E-03 J		3.20E-03 J	4.00E-03 J

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

^a BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.^b Residential human health site-specific screening level (SSSL) as given in 1T, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit.

J - Compound was positively identified; reported value is an estimated concentration.

mg/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.

Table 5-4

Phase II Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

Sample Location		FTA-146-MW01		FTA-146-MW02		FTA-146-MW03		FTA-146-MW04		FTA-146-MW05	
Sample Number		CPP3001		CPP3002		CPP3003		CPP3006		CPP3007	
Sample Date		28-Feb-01		28-Feb-01		1-Mar-01		2-Mar-01		15-Feb-01	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
BTEX											
Benzene	mg/L	NA	1.41E-03	1.10E-03		5.00E-02	YES	ND		ND	
Ethylbenzene	mg/L	NA	1.40E-01	4.10E-04	J	1.70E-02		ND		ND	
Toluene	mg/L	NA	2.59E-01	9.70E-04	J	7.10E-03		3.00E-04	J	ND	
Xylene, Total	mg/L	NA	2.80E+00	3.70E-04	J	3.80E-02		ND		ND	

Sample Location		FTA-146-MW06		FTA-146-MW07		FTA-146-MW08		FTA-146-MW09			
Sample Number		CPP3008		CPP3009		CPP3010		CPP3011			
Sample Date		28-Feb-01		2-Mar-01		2-Mar-01		1-Mar-01			
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
BTEX											
Benzene	mg/L	NA	1.41E-03	ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND			
Toluene	mg/L	NA	2.59E-01	ND		3.40E-04	J	ND			
Xylene, Total	mg/L	NA	2.80E+00	ND				ND			

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

^a BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

^b Residential human health site-specific screening level (SSSL) as given in IT, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

J - Compound was positively identified; reported value is an estimated concentration.

mg/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.

Table 5-5

Phase III Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

Sample Location		FTA-146-MW01		FTA-146-MW02		FTA-146-MW02		FTA-146-MW02	
Sample Number		OCP3001		OCP3007		OCP3002R		OCP3002	
Sample Date		4-Oct-01		22-Jan-02		17-Jul-01		4-Oct-01	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual
BTEX									
Benzene	mg/L	NA	1.41E-03	ND				1.10E-01	
Ethylbenzene	mg/L	NA	1.40E-01	ND				7.90E-02	
Toluene	mg/L	NA	2.59E-01	ND				5.00E-02	
Xylene, Total	mg/L	NA	2.80E+00	ND				1.70E-01	
								9.90E-02	YES
								8.70E-01	1.20E-01
								4.90E-02	4.80E-02
								1.50E-01	2.00E-01

Sample Location		FTA-146-MW03		FTA-146-MW04		FTA-146-MW04	
Sample Number		OCP3003		OCP3009		OCP3004	
Sample Date		5-Oct-01		24-Jan-02		16-Oct-01	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL
BTEX							
Benzene	mg/L	NA	1.41E-03	ND			
Ethylbenzene	mg/L	NA	1.40E-01	4.10E-04	J		
Toluene	mg/L	NA	2.59E-01	4.90E-04	B		
Xylene, Total	mg/L	NA	2.80E+00	1.40E-03	J		

Sample Location		FTA-146-MW05		FTA-146-MW09		FTA-146-MW09	
Sample Number		OCP3005		OCP3011		OCP3012	
Sample Date		10-Oct-01		24-Jan-02		23-Jan-02	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL
BTEX							
Benzene	mg/L	NA	1.41E-03	ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND			
Toluene	mg/L	NA	2.59E-01	ND			
Xylene, Total	mg/L	NA	2.80E+00	ND			

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

^a BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

^b Residential human health site-specific screening level (SSSL) as given in IT, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit.

J - Compound was positively identified; reported value is an estimated concentration.

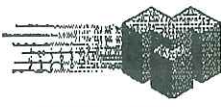
mg/L - Milligrams per liter.


NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.


APPENDIX B
GROUNDWATER SAMPLE COLLECTION
LOGS, JUNE 2006

 Matrix Environmental Services, LLC. integrated environmental solutions		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID FTA-146-MW01				
		Project McClellan - JPA		Project Number 05.094.054.000				
GROUNDWATER SAMPLING LOG								
Groundwater Depth (TOC)	Equipment	Sampler	Date					
10.72 feet	<input type="checkbox"/> Bailer	Bondurant/Nerem	6/13/06					
Well Depth (TOC)	<input type="checkbox"/> Check Valve	Location (Site)	Begin Time					
35 feet	<input type="checkbox"/> Grundfos	Motor Pool Area 3100	10:10					
Water Column Thickness:	<input type="checkbox"/> Peristaltic	Laboratory	Sample Depth (ft)					
24.28 feet	<input checked="" type="checkbox"/> Bladder Pump	EMAX	20					
Casing Diameter	<input type="checkbox"/> PID/FID	Sample Suite						
2 inches	<input type="checkbox"/> Other (describe)	see COC's						
Casing Volume	Conditions (temp, weather, precip)	Meters	Serial numbers					
3.8848 gallons	overcast, 70's	YSI 556 MPS	M001					
1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Geotech Low Flow	M001					
Well Elevation (TOC)		Solinst 101	Calibration	Screen Length (ft)				
821.73 feet			Precalibrated 6/12/06	15				
Groundwater Elevation	Parameter Stabilization	Product Observed (yes/no)	Depth to product					
811.01 feet	temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	NO	N/A					
Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
10:10	init	22.0	56	2.92	35.6	.038	5.54	reddish brown, turbid
10:15	0.5	21.42	53	0.90	54.0	.031	5.54	clearing, light turbidity
10:20	1.0	20.79	50	0.51	69.1	.035	5.67	clearing, light turbidity
10:25	1.5	20.04	48	0.72	81.7	.034	5.78	mostly clear
10:30	2.0	19.33	46	0.90	90.1	.034	5.79	mostly clear
10:31	collect sample suite							
Total Time (min.)	Total Volume Removed	Well pumped dry (yes/no)	Notes		Refill/Discharge			
~20	~2.5	NO	COC#2339		12/4			
QA/QC Samples						Signature		
N/A						J. Nerem		


 Matrix Environmental Services, L.L.C. <i>Integrated Environmental Solutions</i>		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID FTA-146-MW02	
		Project McClellan - JPA		Project Number 05.094.054.000	

GROUNDWATER SAMPLING LOG					
Groundwater Depth (TOC)	Equipment	Sampler	Date		
10.85 feet	<input type="checkbox"/> Bailer	Bondurant/Nerem	6/13/06		
Well Depth (TOC)	<input type="checkbox"/> Check Valve	Location (Site)	Begin Time		
35.5 feet	<input type="checkbox"/> Grundfos	Motor Pool Area 3100	09:15		
Water Column Thickness	<input type="checkbox"/> Peristaltic	Laboratory	Sample Depth (ft)		
24.65 feet	<input checked="" type="checkbox"/> Bladder Pump	EMAX	20.5		
Casing Diameter	<input type="checkbox"/> PID/FID	Sample Suite			
2 inches	<input type="checkbox"/> Other (describe)	see COC's			
Casing Volume	Conditions (temp, weather, precip)	Meters	Serial numbers		
3.944 gallons	Overcast, 70's	YSI 556 MPS	M001		
1"=±0.04 2"=±0.16 4"=±0.65 6"=±1.47 8"=±10.4		Geotech Low Flow	M001		
Well Elevation (TOC)		Solinst 101	Calibration	Screen Length (ft)	
822.48 feet		Precalibrated 6/12/06	15		
Groundwater Elevation	Parameter Stabilization	Product Observed (yes/no)	Depth to product		
811.63 feet	temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	no			

Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
09:15	init	19.03	145	1.84	-217.1	.106	6.33	sewer odor, greyish, turbid
09:20	0.5	18.53	143	0.83	-236.1	.106	6.33	sewer odor, clearing, greyish
09:25	1.0	18.30	141	0.42	-253.9	.105	6.38	sewer odor, greyish, light turbidity
09:30	1.5	18.27	139	0.41	-257.7	.104	6.40	clearing, slight sewer odor
09:35	2.0	18.33	144	0.39	-260.3	.107	6.42	mostly clear, slight sewer odor
09:36	collect sample bottles							
								possible slight sheen, appeared "mercury like" in buckets
Total Time (min.)	Total Volume Removed	Well pumped dry (yes/no)		Notes		Refill/Discharge		
~20	~2.5	NO		COC#2340		10/4		
QA/QC Samples						Signature		
N/A						Nerem		

 Matrix Environmental Services, LLC. <i>Integrated Environmental Solutions</i>		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID FTA-146-MW03	
		Project McClellan - JPA		Project Number 05.094.054.000	
GROUNDWATER SAMPLING LOG					
Groundwater Depth (TOC)	Equipment	Sampler	Date		
9.92 feet	<input type="checkbox"/> Bailer	Bondurant/Nerem	6/13/06		
Well Depth (TOC)	<input type="checkbox"/> Check Valve	Location (Site)	Begin Time		
41 feet	<input type="checkbox"/> Grundfos	Motor Pool Area 3100	10:50		
Water Column Thickness	<input type="checkbox"/> Peristaltic	Laboratory	Sample Depth (ft)		
31.08 feet	<input checked="" type="checkbox"/> Bladder Pump	EMAX	26		
Casing Diameter	<input type="checkbox"/> PID/FID	Sample Suite			
2 inches	<input type="checkbox"/> Other (describe)	see COC's			
Casing Volume	Conditions (temp, weather, precip) overcast 70's	Meters	Serial numbers		
4.9728 gallons		YSI 556 MPS	M001		
1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Geotech Low Flow	M001		
Well Elevation (TOC)	Parameter Stabilization	Solinst 101	Screen Length (ft)		
822.64 feet	temp +/- 1° DO +/- 10% Turbidity +/- 10%	Calibration	15		
Groundwater Elevation	cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	Precalibrated 6/12/06	Depth to product		
812.72 feet		Product Observed (yes/no)	NO		

Time	Volume Removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
10:50	init	21.41	75	1.87	29.6	.052	6.49	reddish brown, turbid, slight sewer odor
10:55	0.5	20.46	70	0.75	27.1	.050	6.5	brownish, heavy turbidity, slight sewer odor
11:00	1.0	20.37	67	0.89	32.3	.048	6.52	clearing, turbid, slight sewer odor
11:05	1.5	20.39	66	0.87	33.7	.047	6.52	clearing, slight sewer odor
11:10	2.0	20.38	66	0.88	35.2	.047	6.53	mostly clear, slight sewer odor
11:11	collect sample suite							
								Possible slight sheen, appeared "mercury like" in bucket
Total Time (min.)	Total Volume Removed	Well pumped dry (yes/no)		Notes		Refill/Discharge		
~20	~2.5	NO		COC#2341				
QA/QC Samples						Signature		
MS/MSD COC#2348 (6) 40mL VOA						Nerem		

 Matrix Environmental Services, LLC. <i>Integrated Environmental Solutions</i>		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID FTA-146-MW04					
		Project McClellan - JPA		Project Number 05.094.054.000					
GROUNDWATER SAMPLING LOG									
Groundwater Depth (TOC) 11.43 feet		Equipment _____ Bailer _____ Check Valve _____ Grundfos _____ Peristaltic <input checked="" type="checkbox"/> Bladder Pump _____ PID/FID _____ Other (describe) Conditions (temp, weather, precip) Overcast, 70's		Sampler Bondurant/Nerem		Date 6/13/06			
Well Depth (TOC) 40 feet				Location (Site) Motor Pool Area 3100		Begin Time 08:40			
Water Column Thickness 28.57 feet				Laboratory EMAX		Sample Depth (ft) 20			
Casing Diameter 2 inches				Sample Suite see COC's		Meters YSI 556 MPS		Serial numbers M001	
Casing Volume 4.5712 gallons <small>1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4</small>				Solinst 101		Geotech Low Flow M001		Screen Length (ft) 20	
Well Elevation (TOC) 823.07 feet		Parameter Stabilization temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit		Calibration Precalibrated 6/12/06		Product Observed (yes/no) no		Depth to product	
Groundwater Elevation 811.64 feet									
Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)	
08:40	init	19.86	46	5.24	27.3	.033	5.98	mostly clear	
08:45	0.5	19.19	42	2.05	54.0	.031	5.64	mostly clear	
08:50	1.0	19.15	42	1.85	59.0	.031	5.65	mostly clear	
08:55	1.5	19.17	42	1.77	57.8	.031	5.7	mostly clear	
09:00	2.0	19.20	43	1.68	52.2	.031	5.72	mostly clear	
09:01	collect sample suite								
Total Time (min.)	Total Volume Removed	Well pumped dry (yes/no)		Notes		Refill/Discharge			
~20	~2.5	NO		COC#2342		12/4			
QA/QC Samples						Signature			
N/A						J. Nerem			



**Matrix
Environmental
Services, LLC.**
Integrated Environmental Solutions

Matrix Environmental Services
1601 Blake Street, Suite 200
Denver, Colorado 80202
(303) 572-0200
(303) 572-0202

Station Name/Sample ID

FTA-146-MW05

Project

McClellan - JPA

Project Number

05.094.054.000

GROUNDWATER SAMPLING LOG

Groundwater Depth (TOC) 13.7 feet	Equipment Bailer Check Valve Grundfos Peristaltic <input checked="" type="checkbox"/> Bladder Pump PID/FID Other (describe)	Sampler Bondurant/Nerem	Date 6/13/06
Well Depth (TOC) 44 feet		Location (Site) Motor Pool Area 3100	Begin Time 11:20
Water Column Thickness 30.3 feet		Laboratory EMAX	Sample Depth (ft) 29
Casing Diameter 2 inches		Sample Suite see COC's	
Casing Volume 4.848 gallons 1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Meters YSI 556 MPS Geotech Low Flow	Serial numbers M001 M001
Well Elevation (TOC) 826.05 feet		Calibration Precalibrated 6/12/06	
Groundwater Elevation 812.35 feet	Conditions (temp, weather, precip) overcast, 70's	Solinst 101	
	Parameter Stabilization temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	Product Observed (yes/no) NO	Depth to product

Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)	
11:20	init	21.07	47	1.59	68.3	.033	5.96	dark brown, heavy turbidity, sewer odor	
11:25	0.5	20.48	44	0.66	89.9	.031	5.70	black, thick, heavy turbidity, sewer odor	
11:30	1.0	20.38	44	0.64	111.1	.031	5.48	clearing, brownish, sewer odor	
11:35	1.5	20.03	44	0.67	124.0	.032	5.37	brownish, sewer odor	
11:40	2.0	19.93	45	0.64	132	.032	5.39	clearing, light brown, sewer odor	
11:41	—	collect sample suite							
								Possible sheen, appeared "mercury-like" in bucket	
Total Time (min.) ~20	Total Volume Removed ~2.5	Well pumped dry (yes/no) NO			Notes COC#2343				Refill/Discharge
QA/QC Samples N/A							Signature J. Green		



**Matrix
Environmental
Services, LLC.**
Integrated Environmental Solutions

Matrix Environmental Services
1601 Blake Street, Suite 200
Denver, Colorado 80202
(303) 572-0200
(303) 572-0202

Station Name/Sample ID

FTA-146-MW09

Project

McClellan - JPA

Project Number

05.094.054.000

GROUNDWATER SAMPLING LOG

Groundwater Depth (TOC) 11.16 feet	Equipment <input type="checkbox"/> Bailer <input type="checkbox"/> Check Valve <input type="checkbox"/> Grundfos <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Bladder Pump <input type="checkbox"/> PID/FID <input type="checkbox"/> Other (describe) Conditions (temp, weather, precip) <i>overcast, 70's</i>	Sampler Bondurant/Ncrem	Date 6/13/06
Well Depth (TOC) 72.7 feet		Location (Site) Motor Pool Area 3100	Begin Time 09:40
Water Column Thickness 61.54 feet		Laboratory EMAX	Sample Depth (ft) 62.7
Casing Diameter 4 inches		Sample Suite see COC's	
Casing Volume 40.001 gallons <small>1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4</small>		Meters YSI 556 MPS Geotech Low Flow	Serial numbers M001 M001
Well Elevation (TOC) 822.28 feet		Solinst 101 Calibration Precalibrated 6/12/06	Screen Length (ft) 10
Groundwater Elevation 811.12 feet	Parameter Stabilization temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	Product Observed (yes/no) no	Depth to product

Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
09:40	init	20.45	113	6.04	-171.2	.081	6.99	yellowish brown, turbid
09:45	0.5	19.54	112	2.35	-180.5	.082	6.89	yellowish brown, turbid
09:50	1.0	19.10	108	1.92	-165.5	.079	6.81	clearing, light yellow, turbid
09:55	1.5	19.13	108	1.81	-159.0	.078	6.81	clearing, light yellow, turbid
10:00	2.0	19.16	108	2.10	-149.0	.079	6.82	light yellow, some turbidity
10:01	— collect sample suite							

Page 1 of 1

Page 1 of 1

APPENDIX C
CHAINS-OF-CUSTODY, JUNE 2006

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2346	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: CWM-514-MW12	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B) <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop: 95.0	
Sampler Signature(s): <i>J. Neterm</i>		EBLot: EBN061306		SampleBottom (Units): 105.0 ft	
		ABLot: MBSM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
1 08:01	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

T = 3.6 °C

Relinquished by (Signature): <i>J. Neterm</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDER</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2344	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: CWM-514-MW13	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B) <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBMD061306		SampleTop: 32.0	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBMD061306		SampleBottom (Units): 42.0 fl	
		ABLot: MBMD061306			
Time:	Label#:	Bottle, Preservative:	Method:		
2 08:31	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: Motor Pool Area 3100		COC#: 2347	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: DUP067	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bailer(B)</u> <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: FD	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBM061306		32.0	42.0 ft
		ABLot: HBM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
3 08:31	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEx</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

COC#: 2341

McClellan Lab: EMAX	Site: Motor Pool Area 3100	Station: FTA-146-MW03 StationType: MW QCCode: NS	
Sample Date: 6/13/06	SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)	Matrix: Ground Water Task#: 05.094.054.000 CoolerID:	
Contractor: MES	Sampling Technique (circle): Bailer(B) <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)	TB Lot: <u>TBM061306</u> EB Lot: <u>EBM061306</u> ABL Lot: <u>NBM061306</u>	Sample Top: 26.0 Sample Bottom (Units): 41.0 ft
Sampler Signature(s): <i>JNorem</i>			
Time:	Label#:	Bottle, Preservative:	Method:
4 11:11	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>			

Relinquished by (Signature): <i>JNorem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEX</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2348	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW03	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bailer(B)</u> , <u>Bladder Pump(BP)</u> , <u>Core(C)</u> Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: MS/MSD	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: <u>TBM061306</u>		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>JNSTEM</i>		EBLot: <u>EBM061306</u>		26.0	41.04
		ABLot: <u>MBM061306</u>			
Time:	Label#:	Bottle, Preservative:	Method:		
11:11	1	6 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>JNSTEM</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDER</i>
Relinquished by (Signature):	Date/Time: 6/14/06 09:30	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature): <i>[Signature]</i>
Airbill Number:		

06F170

Chain of Custody

COC#: 2372

McClellan Lab: EMAX	Site: McClellan Field QC		Station: EB036	
	SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		StationType: WQ	
Sample Date: 6/13/06	Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		Matrix: Water	
			Task#:	
			CoolerID:	
Contractor: MES	TBLot: <u>TBM061306</u>	SampleTop:	SampleBottom (Units):	
Sampler Signature(s): <i>JNorem</i>	EBLot: <u>EBM061306</u>	<u>NA</u>	<u>NA</u>	
	ABLot: <u>MBM061306</u>			
Time:	Label#:	Bottle, Preservative:	Method:	
5 14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)	
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>				

Relinquished by (Signature): <i>JNorem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEx</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: McClellan Field QC		COC#: 2371	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: MATERIAL014	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Ladder Pump(B)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: WQ	
				QCCode: EB	
				Matrix: Water	
				Task#:	
				CoolerID:	
Contractor: MES		TBLot: TBMD061306		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>JN Wern</i>		EBLot: EBMD061306		NA	NA
		ABLot: ABMD061306			
Time:	Label#:	Bottle, Preservative:	Method:		
6 14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>JN Wern</i>	Date/Time: 6/13/06 16:00	Received by (Signature): FEDEX
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: McClellan Field QC		COC#: 2366	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: TB152	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: WQ	
				QCCode: TB	
				Matrix: Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop: NA	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBM061306		SampleBottom (Units): NA	
		ABLot: MBM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
7 15:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>Trip blank associated with Motor Pool Area 3100</p> <p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: Motor Pool Area 3100		COC#: 2342	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW04	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bladder Pump(BP)</u> Bailer(B), Core(C), Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>JNerem</i>		EBLot: EBM061306		20.0	40.0 ft
		ABLot: MBM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
09:01	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>JNerem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>Fedex</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2340	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW02	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop: 20.5	
Sampler Signature(s): <i>JNerem</i>		EBLot: EBND061306		SampleBottom (Units): 35.5 ft	
		ABLot: ABMD061306			
Time:	Label#:	Bottle, Preservative:	Method:		
9 09:36	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>JNerem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>Fedex</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2345	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW09	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bladder Pump(BP)</u> Bailer(B), Core(C), Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: <u>TBN061306</u>		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>[Signature]</i>		EBLot: <u>EBN061306</u>		62.7	72.7 ft
		ABLot: <u>ABN061306</u>			
Time:	Label#:	Bottle, Preservative:	Method:		
10:01	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time: 6/14/06 09:30	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature): <i>[Signature]</i>
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: Motor Pool Area 3100		COC#: 2339	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW01	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C), Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBMD061306		SampleTop:	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBMD061306		SampleBottom (Units):	
		ABLot: HBMD061306		20.0 35.0 ft	
Time:	Label#:	Bottle, Preservative:	Method:		
11 10:31	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
<i>[Signature]</i>	6/13/06 16:00	FedEx
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
	6/14/06 0930	<i>[Signature]</i>
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
		<i>[Signature]</i>
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2343	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW05	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bladder Pump(BP)</u> Bailer(B), Core(C), Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop: 29.0	
Sampler Signature(s): <i>[Signature]</i>		EBLot: TBM061306		SampleBottom (Units): 44.0 ft	
		ABLot: MBM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
12 11:41	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEx</i>
Relinquished by (Signature):	Date/Time: 6/14/06 930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

APPENDIX D
VALIDATED DATA SHEETS, JUNE 2006

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No.: 06F170 Date Extracted: 06/21/06 14:33
Sample ID: CWM-514-MW12 Date Analyzed: 06/21/06 14:33
Lab Samp ID: F170-01 Dilution Factor: 1
Lab File ID: RFQ606 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

Reportable
Results

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.3
1,1,2-2-TETRACHLOROETHANE	ND	1	0.3
1,1,2-TRICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHENE	ND	1	0.3
1,1-DICHLOROPROPENE	ND	1	0.3
1,2,3-TRICHLOROBENZENE	ND	1	0.3
1,2,3-TRICHLOROPROPANE	ND	1	0.3
1,2,4-TRICHLOROBENZENE	ND	1	0.3
1,2,4-TRIMETHYLBENZENE	ND	1	0.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROETHANE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DIBROMOETHANE	ND	1	0.3
1,3,5-TRIMETHYLBENZENE	ND	1	0.3
1,3-DICHLOROBENZENE	ND	1	0.3
1,3-DICHLOROPROPANE	ND	1	0.3
1,4-DICHLOROBENZENE	ND	1	0.3
2,2-DICHLOROPROPANE	ND	1	0.3
2-CHLOROTOLUENE	ND	1	0.3
4-CHLOROTOLUENE	ND	1	0.3
BENZENE	ND	1	0.3
BROMOBENZENE	ND	1	0.3
BROMOCHLOROMETHANE	ND	1	0.3
BROMODICHLOROMETHANE	ND	1	0.3
BROMOFORM	ND	1	0.3
BROMOMETHANE	ND	1	0.3
CARBON TETRACHLORIDE	ND	2	0.3
CHLOROBENZENE	ND	1	0.3
CHLOROETHANE	ND	2	0.3
CHLOROFORM	ND	1	0.3
CHLOROMETHANE	ND	2	0.3
CIS-1,2-DICHLOROETHENE	ND	1	0.3
CIS-1,3-DICHLOROPROPENE	ND	1	0.3
DIBROMOCHLOROMETHANE	ND	1	0.3
DIBROMOMETHANE	ND	1	0.3
DICHLORODIFLUOROMETHANE	ND	2	0.3
ETHYLBENZENE	ND	1	0.3
HEXACHLOROBUTADIENE	ND	1	0.3
ISOPROPYL BENZENE	ND	1	0.3
M, P-XYLENE	ND	2	0.3
METHYLENE CHLORIDE	ND	2	0.3
N-BUTYLBENZENE	ND	1	0.3
N-PROPYLBENZENE	ND	1	0.3
NAPHTHALENE	ND	2	0.3
O-XYLENE	ND	1	0.3
P-ISOPROPYLTOLUENE	ND	1	0.3
SEC-BUTYLBENZENE	ND	1	0.3
STYRENE	ND	1	0.3
TERT-BUTYLBENZENE	ND	1	0.3
TETRACHLOROETHYLENE	ND	1	0.3
TOLUENE	ND	1	0.3
TRANS-1,2-DICHLOROETHENE	ND	1	0.3
TRANS-1,3-DICHLOROPROPENE	ND	1	0.3
TRICHLOROETHENE	ND	1	0.3
TRICHLOROFLUOROMETHANE	ND	1	0.3
VINYL CHLORIDE	ND	1	0.3
ACETONE	ND	10	0.3
2-BUTANONE(MEK)	ND	10	0.3
MTBE	ND	1	0.3
2-HEXANONE	ND	10	0.3
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.3
CARBON DISULFIDE	ND	1	0.3
VINYL ACETATE	ND	2	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.3
ACRYLONITRILE	ND	10	0.3
IODOMETHANE	ND	2	0.3
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT	
1,2-DICHLOROETHANE-D4	103	63-132	
TOLUENE-D8	107	75-122	
4-BROMOFLUOROBENZENE	112	73-129	

RL: Reporting Limit

SR 7/19/06
QC'd 7/24/06 gmu
2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 16:24
Sample ID: CWM-514-MW13 Date Analyzed: 06/21/06 16:24
Lab Samp ID: F170-02 Dilution Factor: 1
Lab File ID: RFQ609 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
1,1,1-TRICHLOROETHANE	ND	1	2	Y
1,1,2,2-TETRACHLOROETHANE	59E JX	1	2	N
1,1,2-TRICHLOROETHANE	ND	1	2	Y
1,1-DICHLOROETHANE	ND	1	2	
1-DICHLOROETHENE	ND	1	2	
1-DICHLOROPROPENE	ND	1	2	
1,2,3-TRICHLOROBENZENE	ND	1	2	
1,2,3-TRICHLOROPROPANE	ND	1	2	
1,2,4-TRICHLOROBENZENE	ND	1	2	
1,2,4-TRIMETHYLBENZENE	ND	1	2	
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	2	
1,2-DICHLOROBENZENE	ND	1	2	
1,2-DICHLOROETHANE	ND	1	2	
1,2-DICHLOROPROPANE	ND	1	2	
1,2-DIBROMOETHANE	ND	1	2	
1,2,5-TRIMETHYLBENZENE	ND	1	2	
1,3-DICHLOROBENZENE	ND	1	2	
1,3-DICHLOROPROPANE	ND	1	2	
1,4-DICHLOROBENZENE	ND	1	2	
2,2-DICHLOROPROPANE	ND	1	2	
2-CHLOROTOLUENE	ND	1	2	
4-CHLOROTOLUENE	ND	1	2	
BENZENE	ND	1	2	
BROMOBENZENE	ND	1	2	
BROMOCHLOROMETHANE	ND	1	2	
BROMODICHLOROMETHANE	ND	1	2	
BROMOFORM	ND	1	2	
BROMOMETHANE	ND	1	2	
CARBON TETRACHLORIDE	ND	2	2	
CHLOROBENZENE	ND	1	2	
CHLOROETHANE	ND	1	2	
CHLOROFORM	1.8	1	2	
CHLOROMETHANE	ND	1	2	
CIS-1,2-DICHLOROETHENE	.51J	1	2	
CIS-1,3-DICHLOROPROPENE	ND	1	2	
DIBROMOCHLOROMETHANE	ND	1	2	
DIBROMOMETHANE	ND	1	2	
DICHLORODIFLUOROMETHANE	ND	2	2	
ETHYLBENZENE	ND	1	2	
HEXACHLOROBUTADIENE	ND	1	2	
ISOPROPYL BENZENE	ND	1	2	
M,P-XYLENE	ND	1	2	
METHYLENE CHLORIDE	ND	2	2	
N-BUTYLBENZENE	ND	1	2	
N-PROPYLBENZENE	ND	1	2	
NAPHTHALENE	ND	2	2	
O-XYLENE	ND	1	2	
P-ISOPROPYLTOLUENE	ND	1	2	
SEC-BUTYLBENZENE	ND	1	2	
STYRENE	ND	1	2	
TERT-BUTYLBENZENE	ND	1	2	
TETRACHLOROETHYLENE	.68J	1	2	
TOLUENE	ND	1	2	
TRANS-1,2-DICHLOROETHENE	ND	1	2	
TRANS-1,3-DICHLOROPROPENE	ND	1	2	
TRICHLOROETHENE	32	1	2	
TRICHLOROFLUOROMETHANE	ND	1	2	
VINYL CHLORIDE	ND	1	2	
ACETONE	ND	10	2	
2-BUTANONE(MEK)	ND	10	2	
MTBE	ND	10	2	
2-HEXANONE	ND	10	2	
4-METHYL-2-PENTANONE(MIBK)	ND	10	2	
CARBON DISULFIDE	ND	10	2	
VINYL ACETATE	ND	2	2	
1,1,2,2-TETRACHLOROETHANE	ND	1	2	
1,1,1,2-TETRACHLOROETHANE	ND	1	2	
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	2	
ACRYLONITRILE	ND	10	2	
IODOMETHANE	ND	2	2	
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT		
1,2-DICHLOROETHANE-D4	106	63-132		
TOLUENE-D8	107	75-122		
4-BROMOFLUOROBENZENE	111	73-129		

RL: Reporting Limit

SR 7/19/06

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/24/06 11:17
Sample ID: CWM-514-MW13DL Date Analyzed: 06/24/06 11:17
Lab Samp ID: F170-02T Dilution Factor: 5
Lab File ID: RFQ715 Matrix : WATER
Ext. Btch ID: V005F58 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1
1,1,2,2-TETRACHLOROETHANE	57	5	1.5
1,1,2-TRICHLOROETHANE	ND	5	1
1,1-DICHLOROETHANE	ND	5	1
1,1-DICHLOROETHENE	ND	5	1
1,1-DICHLOROPROPENE	ND	5	1
1,2,3-TRICHLOROBENZENE	ND	5	1
1,2,3-TRICHLOROPROPANE	ND	5	2.5
1,2,4-TRICHLOROBENZENE	ND	5	1
1,2,4-TRIMETHYLBENZENE	ND	5	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	10	5
1,2-DICHLOROBENZENE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPANE	ND	5	1
1,2-DIBROMOETHANE	ND	5	1
1,3,5-TRIMETHYLBENZENE	ND	5	1
1,3-DICHLOROBENZENE	ND	5	1
1,3-DICHLOROPROPANE	ND	5	1
1,4-DICHLOROBENZENE	ND	5	1
2,2-DICHLOROPROPANE	ND	5	1
2-CHLOROTOLUENE	ND	5	1
4-CHLOROTOLUENE	ND	5	1
BENZENE	ND	5	1
BROMOBENZENE	ND	5	1
BROMOCHLOROMETHANE	ND	5	1
BROMODICHLOROMETHANE	ND	5	1
BROMOFORM	ND	5	1.5
BROMOMETHANE	ND	10	1
CARBON TETRACHLORIDE	ND	10	1
CHLOROBENZENE	ND	10	1
CHLOROETHANE	ND	10	1
CHLOROFORM	1.8J	10	2.5
CHLOROMETHANE	ND	10	1
CIS-1,2-DICHLOROETHENE	ND	10	1
CIS-1,3-DICHLOROPROPENE	ND	10	1
DIBROMOCHLOROMETHANE	ND	10	1
DIBROMOMETHANE	ND	10	1
DICHLORODIFLUOROMETHANE	ND	10	2.5
ETHYLBENZENE	ND	10	1
HEXACHLOROBUTADIENE	ND	10	1
ISOPROPYL BENZENE	ND	10	1
M,P-XYLENE	ND	10	2.5
METHYLENE CHLORIDE	ND	10	1
N-BUTYLBENZENE	ND	10	1
N-PROPYLBENZENE	ND	10	1
NAPHTHALENE	ND	10	2.5
O-XYLENE	ND	10	1
P-ISOPROPYLTOLUENE	ND	10	1
SEC-BUTYLBENZENE	ND	10	1
STYRENE	ND	10	1
TERT-BUTYLBENZENE	ND	10	1
TETRACHLOROETHYLENE	ND	10	1
TOLUENE	ND	10	1
TRANS-1,2-DICHLOROETHENE	ND	10	1
TRANS-1,3-DICHLOROPROPENE	ND	10	1
TRICHLOROETHENE	29	10	1
TRICHLOROFLUOROMETHANE	ND	10	1
VINYL CHLORIDE	ND	10	1
ACETONE	ND	50	25
2-BUTANONE(MEK)	ND	50	25
MTBE	ND	50	1
2-HEXANONE	ND	50	25
4-METHYL-2-PENTANONE(MIBK)	ND	50	25
CARBON DISULFIDE	ND	5	1
VINYL ACETATE	ND	10	3.5
1,1,1,2,2,2-HEPTACHLORO-1,1,2,2,2-PENTACHLOROETHANE	ND	5	1
1,1,1,2-TETRACHLOROETHANE	ND	5	1
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	1
ACRYLONITRILE	ND	50	25
IODOMETHANE	ND	10	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	63-132
TOLUENE-D8	106	75-122
4-BROMOFLUOROBENZENE	111	73-129

RL: Reporting Limit

SR 7/19/06
Jm

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 17:01
Sample ID: DUP067 Date Analyzed: 06/21/06 17:01
Lab Samp ID: F170-03 Dilution Factor: 1
Lab File ID: RFQ610 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	2
1,1,2,2-TETRACHLOROETHANE	57E	3X	1
1,1,2-TRICHLOROETHANE	.42J		1
1,1-DICHLOROETHANE	ND		1
1,1-DICHLOROETHENE	ND		1
1,1-DICHLOROPROPENE	ND		1
1,2,3-TRICHLOROBENZENE	ND		1
1,2,3-TRICHLOROPROPANE	ND		1
1,2,4-TRICHLOROBENZENE	ND		1
1,2,4-TRIMETHYLBENZENE	ND		1
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	1
1,2-DICHLOROBENZENE	ND		1
1,2-DICHLOROETHANE	ND		1
1,2-DICHLOROPROPANE	ND		1
1,2-DIBROMOETHANE	ND		1
1,3,5-TRIMETHYLBENZENE	ND		1
1,3-DICHLOROBENZENE	ND		1
1,3-DICHLOROPROPANE	ND		1
1,4-DICHLOROBENZENE	ND		1
2,2-DICHLOROPROPANE	ND	UJC	1
2-CHLOROTOLUENE	ND		1
4-CHLOROTOLUENE	ND		1
BENZENE	ND		1
BROMOBENZENE	ND		1
BROMOCHLOROMETHANE	ND		1
BROMODICHLOROMETHANE	ND		1
BROMOFORM	ND		1
BROMOMETHANE	ND	2	1
CARBON TETRACHLORIDE	ND		1
CHLOROBENZENE	ND		1
CHLOROETHANE	ND		1
CHLOROFORM	1.8	2	1
CHLOROMETHANE	ND	2	1
CIS-1,2-DICHLOROETHENE	.46J		1
CIS-1,3-DICHLOROPROPENE	ND		1
DIBROMOCHLOROMETHANE	ND		1
DIBROMOMETHANE	ND		1
DICHLORODIFLUOROMETHANE	ND	2	1
ETHYLBENZENE	ND		1
HEXACHLOROBUTADIENE	ND		1
ISOPROPYL BENZENE	ND		1
M,P-XYLENE	ND		1
METHYLENE CHLORIDE	ND	2	1
N-BUTYLBENZENE	ND		1
N-PROPYLBENZENE	ND		1
NAPHTHALENE	ND		1
O-XYLENE	ND		1
P-ISOPROPYLTOLUENE	ND		1
SEC-BUTYLBENZENE	ND		1
STYRENE	ND		1
TERT-BUTYLBENZENE	ND		1
TETRACHLOROETHYLENE	.5J		1
TOLUENE	ND		1
TRANS-1,2-DICHLOROETHENE	ND		1
TRANS-1,3-DICHLOROPROPENE	ND		1
TRICHLOROETHENE	28		1
TRICHLOROFLUOROMETHANE	ND		1
VINYL CHLORIDE	ND		1
ACETONE	ND	10	1
2-BUTANONE(MEK)	ND	10	1
MTBE	ND	1	1
2-HEXANONE	ND	10	1
4-METHYL-2-PENTANONE(MIBK)	ND	10	1
CARBON DISULFIDE	ND	1	1
VINYL ACETATE	ND	2	1
1,1,2,2-TETRACHLOROETHANE	ND	1	1
1,1,1,2-TETRACHLOROETHANE	ND	2	1
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	1
ACRYLONITRILE	ND	10	1
IODOMETHANE	ND	2	1

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	63-132
TOLUENE-D8	106	75-123
4-BROMOFLUOROBENZENE	113	73-129

RL: Reporting Limit

SR 7/19/06

gme

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/24/06 11:54
Sample ID: DU0067DL Date Analyzed: 06/24/06 11:54
Lab Samp ID: F170-03T Dilution Factor: 5
Lab File ID: RFQ716 Matrix : WATER
Ext Btch ID: V005F58 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1
1,1,2,2-TETRACHLOROETHANE	53	5	1.5
1,1,2-TRICHLOROETHANE	ND	5	1
1,1-DICHLOROETHANE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPENE	ND	5	1
1,2,3-TRICHLOROBENZENE	ND	5	1
1,2,3-TRICHLOROPROPANE	ND	5	2.5
1,2,4-TRICHLOROBENZENE	ND	5	1
1,2,4-TRIMETHYLBENZENE	ND	5	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	10	5
1,2-DICHLOROBENZENE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPANE	ND	5	1
1,2-DIBROMOETHANE	ND	5	1
1,2,5-TRIMETHYLBENZENE	ND	5	1
1,2,5-DICHLOROBENZENE	ND	5	1
1,2,5-DICHLOROPROPANE	ND	5	1
1,2,5-DICHLOROBENZENE	ND	5	1
1,2,5-DICHLOROPROPANE	ND	5	1
2-CHLOROTOLUENE	ND	5	1
4-CHLOROTOLUENE	ND	5	1
BENZENE	ND	5	1
BROMOBENZENE	ND	5	1
BROMOCHLOROMETHANE	ND	5	1
BROMODICHLOROMETHANE	ND	5	1
BROMOFORM	ND	5	1.5
BROMOMETHANE	ND	5	1.5
CARBON TETRACHLORIDE	ND	10	1
CHLOROBENZENE	ND	10	1
CHLOROETHANE	ND	10	1
CHLOROFORM	1.8J	10	2.5
CHLOROMETHANE	ND	10	2.5
CIS-1,2-DICHLOROETHENE	ND	10	1
CIS-1,3-DICHLOROPROPENE	ND	10	1
DIBROMOCHLOROMETHANE	ND	10	1
DIBROMOMETHANE	ND	10	1
DICHLORODIFLUOROMETHANE	ND	10	2.5
ETHYLBENZENE	ND	10	1
HEXACHLOROBUTADIENE	ND	10	1
ISOPROPYL BENZENE	ND	10	1
M, P-XYLENE	ND	10	2.5
METHYLENE CHLORIDE	ND	10	2.5
N-BUTYLBENZENE	ND	10	1
N-PROPYLBENZENE	ND	10	1
NAPHTHALENE	ND	10	2.5
O-XYLENE	ND	10	2.5
P-ISOPROPYLTOLUENE	ND	10	1
SEC-BUTYLBENZENE	ND	10	1
STYRENE	ND	10	1
TERT-BUTYLBENZENE	ND	10	1
TETRACHLOROETHYLENE	ND	10	1
TOLUENE	ND	10	1
TRANS-1,2-DICHLOROETHENE	ND	10	1
TRANS-1,3-DICHLOROPROPENE	ND	10	1
TRICHLOROETHENE	32	10	1
TRICHLOROFLUOROMETHANE	ND	10	1
VINYL CHLORIDE	ND	10	1
ACETONE	ND	5	25
2-BUTANONE(MEK)	ND	5	25
MTBE	ND	5	25
2-HEXANONE	ND	5	25
4-METHYL-2-PENTANONE(MIBK)	ND	5	25
CARBON DISULFIDE	ND	5	25
VINYL ACETATE	ND	10	3.5
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,1,2-TETRACHLOROETHANE	ND	5	1
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	5
ACRYLONITRILE	ND	50	25
IODOMETHANE	ND	10	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	63-132
TOLUENE-D8	106	75-122
4-BROMOFLUOROBENZENE	110	73-129

RL: Reporting Limit

SR 7/19/06

gmu

SW 50308/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 15:10
Sample ID: FTA-146-MW03 Date Analyzed: 06/21/06 15:10
Lab Samp ID: F170-04 Dilution Factor: 1
Lab File ID: RFQ607 Matrix: WATER
Ext Btch ID: V005F50 % Moisture: NA
Calib. Ref.: RFQ286 Instrument ID: T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.0000
1,1,2,2-TETRACHLOROETHANE	ND	1	0.0000
1,1,2-TRICHLOROETHANE	ND	1	0.0000
1,1-DICHLOROETHANE	ND	1	0.0000
1,1-DICHLOROETHENE	ND	1	0.0000
1,1-DICHLOROPROPENE	ND	1	0.0000
1,2,3-TRICHLOROBENZENE	ND	1	0.0000
1,2,3-TRICHLOROPROPANE	ND	1	0.0000
1,2,4-TRICHLOROBENZENE	ND	1	0.0000
1,2,4-TRIMETHYLBENZENE	ND	1	0.0000
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.0000
1,2-DICHLOROBENZENE	ND	1	0.0000
1,2-DICHLOROETHANE	ND	1	0.0000
1,2-DICHLOROPROPANE	ND	1	0.0000
1,2-DIBROMOETHANE	ND	1	0.0000
1,3,5-TRIMETHYLBENZENE	ND	1	0.0000
1,3-DICHLOROBENZENE	ND	1	0.0000
1,3-DICHLOROPROPANE	ND	1	0.0000
1,4-DICHLOROBENZENE	ND	1	0.0000
2,2-DICHLOROPROPANE	ND	1	0.0000
2-CHLOROTOLUENE	ND	1	0.0000
4-CHLOROTOLUENE	ND	1	0.0000
BENZENE	ND	1	0.0000
BROMOBENZENE	ND	1	0.0000
BROMOCHLOROMETHANE	ND	1	0.0000
BROMODICHLOROMETHANE	ND	1	0.0000
BROMOFORM	ND	1	0.0000
BROMOMETHANE	ND	2	0.0000
CARBON TETRACHLORIDE	ND	1	0.0000
CHLOROBENZENE	ND	1	0.0000
CHLOROETHANE	ND	2	0.0000
CHLOROFORM	ND	1	0.0000
CHLOROMETHANE	ND	2	0.0000
CIS-1,2-DICHLOROETHENE	ND	1	0.0000
CIS-1,3-DICHLOROPROPENE	ND	1	0.0000
DIBROMOCHLOROMETHANE	ND	1	0.0000
DIBROMOMETHANE	ND	1	0.0000
DICHLORODIFLUOROMETHANE	ND	2	0.0000
ETHYLBENZENE	ND	1	0.0000
HEXACHLOROBUTADIENE	ND	1	0.0000
ISOPROPYL BENZENE	ND	1	0.0000
M, P-XYLENE	ND	2	0.0000
METHYLENE CHLORIDE	ND	2	0.0000
N-BUTYLBENZENE	ND	1	0.0000
N-PROPYLBENZENE	ND	1	0.0000
NAPHTHALENE	ND	2	0.0000
O-XYLENE	ND	1	0.0000
P-ISOPROPYLTOLUENE	ND	1	0.0000
SEC-BUTYLBENZENE	ND	1	0.0000
STYRENE	ND	1	0.0000
TERT-BUTYLBENZENE	ND	1	0.0000
TETRACHLOROETHYLENE	ND	1	0.0000
TOLUENE	ND	1	0.0000
TRANS-1,2-DICHLOROETHENE	ND	1	0.0000
TRANS-1,3-DICHLOROPROPENE	ND	1	0.0000
TRICHLOROETHENE	ND	1	0.0000
TRICHLOROFLUOROMETHANE	ND	1	0.0000
VINYL CHLORIDE	ND	1	0.0000
ACETONE	ND	10	0.0000
2-BUTANONE(MEK)	ND	10	0.0000
MTBE	ND	1	0.0000
2-HEXANONE	ND	10	0.0000
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.0000
CARBON DISULFIDE	ND	1	0.0000
VINYL ACETATE	ND	2	0.0000
1,1,2,2-TETRACHLOROETHANE	ND	1	0.0000
1,1,1,2-TETRACHLOROETHANE	ND	1	0.0000
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	0.0000
ACRYLONITRILE	ND	2	0.0000
IODOMETHANE	ND	2	0.0000

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	63-132
TOLUENE-D8	108	75-125
4-BROMOFLUOROBENZENE	109	73-129

RL: Reporting Limit

SR 7/19/06

gm

2222

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No.: 06F170 Date Extracted: 06/21/06 13:19
Sample ID: EB036 Date Analyzed: 06/21/06 13:19
Lab Samp ID: F170-05 Dilution Factor: 1
Lab File ID: RFQ604 Matrix : WATER
Ext. Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.2
1,1,2,2-TETRACHLOROETHANE	ND	1	0.2
1,1,2-TRICHLOROETHANE	ND	1	0.2
1,1,2-DICHLOROETHANE	ND	1	0.2
1,1-DICHLOROETHENE	ND	1	0.2
1,1-DICHLOROPROPENE	ND	1	0.2
1,2,3-TRICHLOROBENZENE	ND	1	0.2
1,2,3-TRICHLOROPROPANE	ND	1	0.2
1,2,4-TRICHLOROBENZENE	ND	1	0.2
1,2,4-TRIMETHYLBENZENE	ND	1	0.2
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.2
1,2-DICHLOROBENZENE	ND	1	0.2
1,2-DICHLOROETHANE	ND	1	0.2
1,2-DICHLOROPROPANE	ND	1	0.2
1,2-DIBROMOETHANE	ND	1	0.2
1,3,5-TRIMETHYLBENZENE	ND	1	0.2
1,3-DICHLOROBENZENE	ND	1	0.2
1,3-DICHLOROPROPANE	ND	1	0.2
1,4-DICHLOROBENZENE	ND	1	0.2
2,2-DICHLOROPROPANE	ND	1	0.2
2-CHLOROTOLUENE	ND	1	0.2
4-CHLOROTOLUENE	ND	1	0.2
BENZENE	ND	1	0.2
BROMOBENZENE	ND	1	0.2
BROMOCHLOROMETHANE	ND	1	0.2
BROMODICHLOROMETHANE	ND	1	0.2
BROMOFORM	ND	1	0.2
BROMOMETHANE	ND	1	0.2
CARBON TETRACHLORIDE	ND	1	0.2
CHLOROBENZENE	ND	1	0.2
CHLOROETHANE	ND	1	0.2
CHLOROFORM	ND	1	0.2
CHLOROMETHANE	ND	1	0.2
CIS-1,2-DICHLOROETHENE	ND	1	0.2
CIS-1,3-DICHLOROPROPENE	ND	1	0.2
DIBROMOCHLOROMETHANE	ND	1	0.2
DIBROMOMETHANE	ND	1	0.2
DICHLORODIFLUOROMETHANE	ND	2	0.2
ETHYLBENZENE	ND	1	0.2
HEXACHLOROBUTADIENE	ND	1	0.2
ISOPROPYL BENZENE	ND	1	0.2
M, P-XYLENE	ND	1	0.2
METHYLENE CHLORIDE	ND	1	0.2
N-BUTYLBENZENE	ND	1	0.2
N-PROPYLBENZENE	ND	1	0.2
NAPHTHALENE	ND	1	0.2
O-XYLENE	ND	1	0.2
P-ISOPROPYL TOLUENE	ND	1	0.2
SEC-BUTYLBENZENE	ND	1	0.2
STYRENE	ND	1	0.2
TERT-BUTYLBENZENE	ND	1	0.2
TETRACHLOROETHYLENE	ND	1	0.2
TOLUENE	ND	1	0.2
TRANS-1,2-DICHLOROETHENE	ND	1	0.2
TRANS-1,3-DICHLOROPROPENE	ND	1	0.2
TRICHLOROETHENE	ND	1	0.2
TRICHLOROFLUOROMETHANE	ND	1	0.2
VINYL CHLORIDE	ND	1	0.2
ACETONE	ND	10	0.2
2-BUTANONE(MEK)	ND	10	0.2
MTBE	ND	1	0.2
2-HEXANONE	ND	10	0.2
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.2
CARBON DISULFIDE	ND	1	0.2
VINYL ACETATE	ND	2	0.2
1,1,1,2,2,2-HEPTACHLOROETHANE	ND	1	0.2
1,1,1,2-TETRACHLOROETHANE	ND	1	0.2
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.2
ACRYLONITRILE	ND	10	0.2
IODOMETHANE	ND	2	0.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	63-132
TOLUENE-D8	108	73-126
4-BROMOFLUOROBENZENE	109	73-129

RL: Reporting Limit

SR 7/19/06
Jm

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 15:47
Sample ID: MATERIAL014 Date Analyzed: 06/21/06 15:47
Lab Samp ID: F170-06 Dilution Factor: 1
Lab File ID: RFQ608 Matrix: WATER
Ext Btch ID: V005F50 % Moisture: NA
Calib. Ref.: RFQ286 Instrument ID: T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.3
1,1,2-2-TETRACHLOROETHANE	ND	1	0.3
1,1,2-TRICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHENE	ND	1	0.3
1,1-DICHLOROPROPENE	ND	1	0.3
1,2,3-TRICHLOROBENZENE	ND	1	0.3
1,2,3-TRICHLOROPROPANE	ND	1	0.3
1,2,4-TRICHLOROBENZENE	ND	1	0.3
1,2,4-TRIMETHYLBENZENE	ND	1	0.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROETHANE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DIBROMOETHANE	ND	1	0.3
1,3,5-TRIMETHYLBENZENE	ND	1	0.3
1,3-DICHLOROBENZENE	ND	1	0.3
1,3-DICHLOROPROPANE	ND	1	0.3
1,4-DICHLOROBENZENE	ND	1	0.3
2,2-DICHLOROPROPANE	ND	1	0.3
2-CHLOROTOLUENE	ND	1	0.3
4-CHLOROTOLUENE	ND	1	0.3
BENZENE	ND	1	0.3
BROMOBENZENE	ND	1	0.3
BROMOCHLOROMETHANE	ND	1	0.3
BROMODICHLOROMETHANE	ND	1	0.3
BROMOFORM	ND	1	0.3
BROMOMETHANE	ND	2	0.3
CARBON TETRACHLORIDE	ND	1	0.3
CHLOROBENZENE	ND	1	0.3
CHLOROETHANE	ND	2	0.3
CHLOROFORM	ND	1	0.3
CHLOROMETHANE	ND	2	0.3
CIS-1,2-DICHLOROETHENE	ND	1	0.3
CIS-1,3-DICHLOROPROPENE	ND	1	0.3
DIBROMOCHLOROMETHANE	ND	1	0.3
DIBROMOMETHANE	ND	1	0.3
DICHLORODIFLUOROMETHANE	ND	2	0.3
ETHYLBENZENE	ND	1	0.3
HEXACHLOROBUTADIENE	ND	1	0.3
ISOPROPYL BENZENE	ND	1	0.3
M, P-XYLENE	ND	2	0.3
METHYLENE CHLORIDE	ND	1	0.3
N-BUTYLBENZENE	ND	1	0.3
N-PROPYLBENZENE	ND	1	0.3
NAPHTHALENE	ND	1	0.3
O-XYLENE	ND	1	0.3
P-ISOPROPYLTOLUENE	ND	1	0.3
SEC-BUTYLBENZENE	ND	1	0.3
STYRENE	ND	1	0.3
TERT-BUTYLBENZENE	ND	1	0.3
TETRACHLOROETHYLENE	ND	1	0.3
TOLUENE	ND	1	0.3
TRANS-1,2-DICHLOROETHENE	ND	1	0.3
TRANS-1,3-DICHLOROPROPENE	ND	1	0.3
TRICHLOROETHENE	ND	1	0.3
TRICHLOROFLUOROMETHANE	ND	1	0.3
VINYL CHLORIDE	ND	1	0.3
ACETONE	ND	10	0.3
2-BUTANONE(MEK)	ND	10	0.3
MTBE	ND	1	0.3
2-HEXANONE	ND	10	0.3
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.3
CARBON DISULFIDE	ND	1	0.3
VINYL ACETATE	ND	2	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,1,2-TETRACHLOROETHANE	ND	1	0.3
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.3
ACRYLONITRILE	ND	10	0.3
IODOMETHANE	ND	2	0.3

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	63-132
TOLUENE-D8	108	75-122
4-BROMOFLUOROBENZENE	109	73-129

RL: Reporting Limit

SR 7/19/06
yju

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 13:56
Sample ID: TB152 Date Analyzed: 06/21/06 13:56
Lab Samp ID: F170-07 Dilution Factor: 1
Lab File ID: RFQ605 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,2-TRICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHENE	ND	1	0.3
1,1-DICHLOROPROPENE	ND	1	0.3
1,2,3-TRICHLOROBENZENE	ND	1	0.3
1,2,3-TRICHLOROPROPANE	ND	1	0.3
1,2,4-TRICHLOROBENZENE	ND	1	0.3
1,2,4-TRIMETHYLBENZENE	ND	1	0.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROETHANE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DIBROMOETHANE	ND	1	0.3
1,2,5-TRIMETHYLBENZENE	ND	1	0.3
1,3-DICHLOROBENZENE	ND	1	0.3
1,3-DICHLOROPROPANE	ND	1	0.3
1,4-DICHLOROBENZENE	ND	1	0.3
1,2,2-DICHLOROPROPANE	ND	1	0.3
2-CHLOROTOLUENE	ND	1	0.3
4-CHLOROTOLUENE	ND	1	0.3
BENZENE	ND	1	0.3
BROMOBENZENE	ND	1	0.3
BROMOCHLOROMETHANE	ND	1	0.3
BROMODICHLOROMETHANE	ND	1	0.3
BROMOFORM	ND	1	0.3
BROMOMETHANE	ND	1	0.3
CARBON TETRACHLORIDE	ND	2	0.3
CHLOROBENZENE	ND	1	0.3
CHLOROETHANE	ND	2	0.3
CHLOROFORM	ND	1	0.3
CHLOROMETHANE	ND	2	0.3
CIS-1,2-DICHLOROETHENE	ND	1	0.3
CIS-1,3-DICHLOROPROPENE	ND	1	0.3
DIBROMOCHLOROMETHANE	ND	1	0.3
DIBROMOMETHANE	ND	1	0.3
DICHLORODIFLUOROMETHANE	ND	2	0.3
ETHYLBENZENE	ND	1	0.3
HEXACHLOROBUTADIENE	ND	1	0.3
ISOPROPYL BENZENE	ND	1	0.3
M, P-XYLENE	ND	2	0.3
METHYLENE CHLORIDE	ND	2	0.3
N-BUTYLBENZENE	ND	1	0.3
N-PROPYLBENZENE	ND	1	0.3
NAPHTHALENE	ND	2	0.3
O-XYLENE	ND	1	0.3
P-ISOPROPYLTOLUENE	ND	1	0.3
SEC-BUTYLBENZENE	ND	1	0.3
STYRENE	ND	1	0.3
TERT-BUTYLBENZENE	ND	1	0.3
TETRACHLOROETHYLENE	ND	1	0.3
TOLUENE	ND	1	0.3
TRANS-1,2-DICHLOROETHENE	ND	1	0.3
TRANS-1,3-DICHLOROPROPENE	ND	1	0.3
TRICHLOROETHENE	ND	1	0.3
TRICHLOROFLUOROMETHANE	ND	1	0.3
VINYL CHLORIDE	ND	1	0.3
ACETONE	ND	10	0.3
2-BUTANONE(MEK)	ND	10	0.3
MTBE	ND	10	0.3
2-HEXANONE	ND	10	0.3
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.3
CARBON DISULFIDE	ND	1	0.3
VINYL ACETATE	ND	2	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,1,2-TETRACHLOROETHANE	ND	1	0.3
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.3
ACRYLONITRILE	ND	10	0.3
IODOMETHANE	ND	2	0.3
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT	
1,2-DICHLOROETHANE-D4	102	63-132	
TOLUENE-D8	106	75-122	
4-BROMOFLUOROBENZENE	109	73-129	

RL: Reporting Limit

SR 7/19/06

[Signature]

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project     : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.   : 06F170                        Date Extracted: 06/23/06 07:18
Sample ID   : FTA-146-MW04                  Date Analyzed: 06/23/06 07:18
Lab Samp ID : F170-08                       Dilution Factor: 1
Lab File ID : RFQ670                        Matrix : WATER
Ext Btch ID : V005F55                       % Moisture : NA
Calib. Ref. : RFQ286                       Instrument ID : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	ND	1	.2
M,P-XYLENE	ND	2	.2
O-XYLENE	ND	1	.2
TOLUENE	ND	1	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	63-132
TOLUENE-D8	108	75-122
4-BROMOFLUOROBENZENE	110	73-129

RL: Reporting Limit

SR 7/19/06

gaw

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project     : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.   : 06F170                        Date Extracted: 06/23/06 09:46
Sample ID   : FTA-146-MW02                  Date Analyzed: 06/23/06 09:46
Lab Samp ID : F170-09                       Dilution Factor: 5
Lab File ID : RFQ674                        Matrix          : WATER
Ext Btch ID : V005F55                       % Moisture      : NA
Calib. Ref. : RFQ286                        Instrument ID   : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
BENZENE	14	5	1	Y
ETHYLBENZENE	340E JX	5	1	N
M,P-XYLENE	650E JX	10	2.5	N
O-XYLENE	610E JX	5	1	N
TOLUENE	210	5	1	Y

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	112	63-132
TOLUENE-D8	109	75-122
4-BROMOFLUOROBENZENE	108	73-129

RL: Reporting Limit

SR 7/19/06



SW 50308/82608
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project     : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.   : 06F170                        Date Extracted: 06/24/06 10:40
Sample ID   : FTA-146-MW02DL                Date Analyzed: 06/24/06 10:40
Lab Samp ID : F170-09T                      Dilution Factor: 50
Lab File ID : RFQ714                        Matrix : WATER
Ext Btch ID : V005F58                       % Moisture : NA
Calib. Ref. : RFQ286                       Instrument ID : T-005
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
BENZENE	17J	50	10	N
ETHYLBENZENE	400	50	10	Y
M,P-XYLENE	1400	100	25	Y
O-XYLENE	730	50	10	Y
TOLUENE	230	50	10	N

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	63-132
TOLUENE-D8	107	75-122
4-BROMOFLUOROBENZENE	104	73-129

RL: Reporting Limit

SR 7/19/06

[Signature]

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project     : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.   : 06F170                        Date Extracted: 06/23/06 07:55
Sample ID   : FTA-146-MW09                  Date Analyzed: 06/23/06 07:55
Lab Samp ID : F170-10                       Dilution Factor: 1
Lab File ID : RFQ671                        Matrix: WATER
Ext Btch ID : V005F55                       % Moisture: NA
Calib. Ref. : RFQ286                       Instrument ID: T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	1.2	1	.2
M,P-XYLENE	3.6	2	.5
O-XYLENE	1.7	1	.2
TOLUENE	.6J	1	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	63-132
TOLUENE-D8	101	75-122
4-BROMOFLUOROBENZENE	108	73-129

RL: Reporting Limit

SR 7/19/06

[Signature]

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES
Project     : MCCLELLAN, AL
Batch No.   : 06F170
Sample ID   : FTA-146-MW01
Lab Samp ID : F170-11
Lab File ID : RFQ672
Ext Btch ID : V005F55
Calib. Ref. : RFQ286
Date Collected: 06/13/06
Date Received: 06/14/06
Date Extracted: 06/23/06 08:32
Date Analyzed: 06/23/06 08:32
Dilution Factor: 1
Matrix      : WATER
% Moisture  : NA
Instrument ID : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	.44J	1	.2
M,P-XYLENE	.2J	2	.5
O-XYLENE	.71J	1	.2
TOLUENE	ND	1	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	63-132
TOLUENE-DB	108	75-122
4-BROMOFLUOROBENZENE	105	73-129

RL: Reporting Limit

SR 7/19/06

ju

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

```

=====
Client   : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project  : MCCLELLAN, AL                  Date Received: 06/14/06
Batch No.: 06F170                         Date Extracted: 06/23/06 09:09
Sample ID: FTA-146-MW05                   Date Analyzed: 06/23/06 09:09
Lab Samp ID: F170-12                      Dilution Factor: 1
Lab File ID: RFQ673                       Matrix : WATER
Ext Btch ID: V005F55                      % Moisture : NA
Calib. Ref.: RFQ286                       Instrument ID : T-005
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	0.2
ETHYLBENZENE	ND	1	0.2
M,P-XYLENE	ND	2	0.2
O-XYLENE	ND	1	0.2
TOLUENE	ND	1	0.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	63-132
TOLUENE-D8	107	75-122
4-BROMOFLUOROBENZENE	103	73-129

RL: Reporting Limit

SR 7/19/06

[Signature]

2016

APPENDICES

APPENDIX A
GROUNDWATER ANALYTICAL RESULTS
COLLECTED BY SHAW

Table 5-3

Phase I Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

Sample Location		FTA-146-GP02		FTA-146-GP05		FTA-146-GP06		FTA-146-GP07	
Sample Number		CP3002		CP3005		CP3006		CP3009	
Sample Date		15-Dec-98		17-Dec-98		8-Jan-99		17-Dec-98	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual
METALS									
Aluminum	mg/L	2.34E+00	1.56E+00	7.70E-02 J		1.71E+00		1.04E+00	
Barium	mg/L	1.27E-01	1.10E-01	2.36E-02 J		1.40E-01 J		1.63E-01 J	
Cadmium	mg/L	2.51E-03	7.82E-04	ND		ND		ND	
Calcium	mg/L	5.65E+01	NA	2.04E+00 J		1.04E+01		6.92E+00	
Chromium	mg/L	NA	4.69E-03	ND		ND		ND	
Cobalt	mg/L	2.34E-02	9.39E-02	1.35E-02 J		ND		5.32E-02	
Copper	mg/L	2.55E-02	6.26E-02	ND		ND		ND	
Iron	mg/L	7.04E+00	4.69E-01	3.36E+00	YES	3.81E+00		5.77E+00	YES
Magnesium	mg/L	2.13E+01	NA	1.09E+01		6.79E+00		8.37E+00	
Manganese	mg/L	5.81E-01	7.35E-02	7.20E-02		1.42E-01		1.75E+00	YES
Mercury	mg/L	NA	4.69E-04	5.40E-05 B		5.80E-05 B		5.70E-05 J	
Nickel	mg/L	NA	3.13E-02	3.50E-02 J	YES	ND		1.72E-02 J	
Potassium	mg/L	7.20E+00	NA	ND		2.71E+00 J		2.87E+00 B	
Sodium	mg/L	1.48E+01	NA	1.30E+00 J		5.33E+00		4.94E+00 J	
Thallium	mg/L	1.48E-03	1.02E-04	4.50E-03 B	YES	ND		3.76E+00 J	YES
Vanadium	mg/L	1.70E-02	1.10E-02	ND		ND		4.70E-03 B	
Zinc	mg/L	2.20E-01	4.69E-01	1.00E-01		1.51E-02 J		3.96E-02	
VOLATILE ORGANIC COMPOUNDS									
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	2.50E-04 J		ND		ND	
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	8.80E-04 J		ND		ND	
Acetone	mg/L	NA	1.56E-01	ND		1.60E-03 J		ND	
Benzene	mg/L	NA	1.41E-03	2.80E-02	YES	ND		ND	
Chloroform	mg/L	NA	1.15E-03	ND		ND		ND	
Ethylbenzene	mg/L	NA	1.40E-01	1.90E-04 J		ND		ND	
Hexachlorobutadiene	mg/L	NA	8.40E-04	ND		ND		1.50E-04 B	
Toluene	mg/L	NA	2.59E-01	1.00E-04 J		ND		ND	
SEMI-VOLATILE ORGANIC COMPOUNDS									
Di-n-butyl phthalate	mg/L	NA	1.48E-01	1.70E-03 J		3.70E-03 J		ND	
								1.20E-03 J	

Table 5-3

Phase I Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

(Page 2 of 2)

Sample Location		FTA-146-GP08		FTA-146-GP09		FTA-146-GP10	
Sample Number		CP3010		CP3011		CP3012	
Sample Date		16-Dec-98		16-Dec-98		16-Dec-98	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL
METALS							
Aluminum	mg/L	2.34E+00	1.56E+00	1.19E+00		1.42E-01 J	1.05E+00
Barium	mg/L	1.27E-01	1.10E-01	2.51E-02 J		3.66E-02 J	1.26E-01 J
Cadmium	mg/L	2.51E-03	7.82E-04	ND		5.30E-03 B	YES
Calcium	mg/L	5.65E+01	NA	3.57E+01		1.04E+01	7.77E-01 J
Chromium	mg/L	NA	4.69E-03	5.00E-03 J	YES	ND	ND
Cobalt	mg/L	2.34E-02	9.39E-02	ND		2.19E-02 J	1.20E-02 J
Copper	mg/L	2.55E-02	6.26E-02	4.70E-03 J		ND	ND
Iron	mg/L	7.04E+00	4.69E-01	1.84E+00	YES	5.24E-01	3.61E+00
Magnesium	mg/L	2.13E+01	NA	2.61E+00 J		3.55E+00 J	7.23E+00
Manganese	mg/L	5.81E-01	7.35E-02	1.60E-01	YES	1.79E-01	7.13E-02
Mercury	mg/L	NA	4.69E-04	6.30E-05 B		7.80E-05 B	7.20E-05 B
Nickel	mg/L	NA	3.13E-02	ND		3.19E-02 J	3.22E-02 J
Potassium	mg/L	7.20E+00	NA	ND		1.55E+00 J	1.04E+00 J
Sodium	mg/L	1.48E+01	NA	8.43E-01 J		1.50E+00 J	2.08E+00 J
Thallium	mg/L	1.46E-03	1.02E-04	ND		4.90E-03 B	YES
Vanadium	mg/L	1.70E-02	1.10E-02	7.40E-03 J		ND	5.00E-03 B
Zinc	mg/L	2.20E-01	4.69E-01	1.03E-02 J		3.59E-02	9.64E-02
VOLATILE ORGANIC COMPOUNDS							
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND		ND	ND
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND		ND	ND
Acetone	mg/L	NA	1.56E-01	1.10E-03 J		1.90E-03 J	ND
Benzene	mg/L	NA	1.41E-03	ND		ND	ND
Chloroform	mg/L	NA	1.15E-03	1.40E-04 B		ND	ND
Ethylbenzene	mg/L	NA	1.40E-01	ND		ND	ND
Hexachlorobutadiene	mg/L	NA	8.40E-04	ND		ND	ND
Toluene	mg/L	NA	2.59E-01	ND		ND	ND
SEMI-VOLATILE ORGANIC COMPOUNDS							
Di-n-butyl phthalate	mg/L	NA	1.48E-01	3.00E-03 J		3.20E-03 J	4.00E-03 J

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

^a BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.^b Residential human health site-specific screening level (SSSL) as given in 1T, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit.

J - Compound was positively identified; reported value is an estimated concentration.

mg/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.

Table 5-4

Phase II Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

Sample Location		FTA-146-MW01		FTA-146-MW02		FTA-146-MW03		FTA-146-MW04		FTA-146-MW05	
Sample Number		CPP3001		CPP3002		CPP3003		CPP3006		CPP3007	
Sample Date		28-Feb-01		28-Feb-01		1-Mar-01		2-Mar-01		15-Feb-01	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
BTEX											
Benzene	mg/L	NA	1.41E-03	1.10E-03		5.00E-02	YES	ND		ND	
Ethylbenzene	mg/L	NA	1.40E-01	4.10E-04	J	1.70E-02		ND		ND	
Toluene	mg/L	NA	2.59E-01	9.70E-04	J	7.10E-03		3.00E-04	J	ND	
Xylene, Total	mg/L	NA	2.80E+00	3.70E-04	J	3.80E-02		ND		ND	

Sample Location		FTA-146-MW06		FTA-146-MW07		FTA-146-MW08		FTA-146-MW09			
Sample Number		CPP3008		CPP3009		CPP3010		CPP3011			
Sample Date		28-Feb-01		2-Mar-01		2-Mar-01		1-Mar-01			
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
BTEX											
Benzene	mg/L	NA	1.41E-03	ND		ND		ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND		ND		ND			
Toluene	mg/L	NA	2.59E-01	ND		3.40E-04	J	ND		ND	
Xylene, Total	mg/L	NA	2.80E+00	ND		ND		ND		ND	

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

^a BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

^b Residential human health site-specific screening level (SSSL) as given in IT, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July. J - Compound was positively identified; reported value is an estimated concentration.

mg/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.

Table 5-5

Phase III Groundwater Analytical Results
Former Motor Pool Area 3100, Parcels 146(7), 24(7), 25(7), and 212(7)
Fort McClellan, Calhoun County, Alabama

Sample Location		FTA-146-MW01		FTA-146-MW02		FTA-146-MW02		FTA-146-MW02	
Sample Number		OCP3001		OCP3007		OCP3002R		OCP3002	
Sample Date		4-Oct-01		22-Jan-02		17-Jul-01		4-Oct-01	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual
BTEX									
Benzene	mg/L	NA	1.41E-03	ND				1.10E-01	YES
Ethylbenzene	mg/L	NA	1.40E-01	ND				7.90E-02	8.70E-02
Toluene	mg/L	NA	2.59E-01	ND				5.00E-02	4.90E-02
Xylene, Total	mg/L	NA	2.80E+00	ND				1.70E-01	1.50E-01
									2.00E-01
									YES
									1.20E-01
									1.20E-01
									4.80E-02
									2.00E-01

Sample Location		FTA-146-MW03		FTA-146-MW04		FTA-146-MW04		FTA-146-MW04	
Sample Number		OCP3003		OCP3009		OCP3004		OCP3010	
Sample Date		5-Oct-01		24-Jan-02		16-Oct-01		25-Jan-02	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual
BTEX									
Benzene	mg/L	NA	1.41E-03	ND				ND	
Ethylbenzene	mg/L	NA	1.40E-01	4.10E-04	J			ND	
Toluene	mg/L	NA	2.59E-01	4.90E-04	B			ND	
Xylene, Total	mg/L	NA	2.80E+00	1.40E-03	J			ND	

Sample Location		FTA-146-MW05		FTA-146-MW05		FTA-146-MW09		FTA-146-MW09	
Sample Number		OCP3005		OCP3011		OCP3006		OCP3012	
Sample Date		10-Oct-01		24-Jan-02		11-Oct-01		23-Jan-02	
Parameter	Units	BKG ^a	SSSL ^b	Result	Qual	>BKG	>SSSL	Result	Qual
BTEX									
Benzene	mg/L	NA	1.41E-03	ND				ND	
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND	
Toluene	mg/L	NA	2.59E-01	ND				ND	
Xylene, Total	mg/L	NA	2.80E+00	ND				ND	

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

^a BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

^b Residential human health site-specific screening level (SSSL) as given in IT, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit.

J - Compound was positively identified; reported value is an estimated concentration.

mg/L - Milligrams per liter.


NA - Not available.


ND - Not detected.


Qual - Data validation qualifier.

APPENDIX B
GROUNDWATER SAMPLE COLLECTION
LOGS, JUNE 2006

Page 1 of 1

 Matrix Environmental Services, L.L.C. <i>Integrated Environmental Solutions</i>		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID FTA-146-MW02																																																																																																																																	
		Project McClellan - JPA		Project Number 05.094.054.000																																																																																																																																	
GROUNDWATER SAMPLING LOG																																																																																																																																					
Groundwater Depth (TOC) <div style="text-align: center;">10.85</div> <div style="text-align: right;">feet</div>		Equipment <input type="checkbox"/> Bailer <input type="checkbox"/> Check Valve <input type="checkbox"/> Grundfos <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Bladder Pump <input type="checkbox"/> PID/FID <input type="checkbox"/> Other (describe)		Sampler <div style="text-align: center;">Bondurant/Nerem</div>		Date <div style="text-align: center;">6/13/06</div>																																																																																																																															
Well Depth (TOC) <div style="text-align: center;">35.5</div> <div style="text-align: right;">feet</div>				Location (Site) <div style="text-align: center;">Motor Pool Area 3100</div>		Begin Time <div style="text-align: center;">09:15</div>																																																																																																																															
Water Column Thickness <div style="text-align: center;">24.65</div> <div style="text-align: right;">feet</div>				Laboratory <div style="text-align: center;">EMAX</div>		Sample Depth (ft) <div style="text-align: center;">20.5</div>																																																																																																																															
Casing Diameter <div style="text-align: center;">2</div> <div style="text-align: right;">inches</div>				Sample Suite see COC's		Meters YSI 556 MPS Geotech Low Flow		Serial numbers M001 M001																																																																																																																													
Casing Volume <div style="text-align: center;">3.944</div> <div style="text-align: right;">gallons</div> <div style="font-size: small;">1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4</div>				Conditions (temp, weather, precip) <div style="text-align: center;">overcast, 70's</div>		Solinst 101 Calibration Precalibrated 6/12/06		Screen Length (ft) <div style="text-align: center;">15</div>																																																																																																																													
Well Elevation (TOC) <div style="text-align: center;">822.48</div> <div style="text-align: right;">feet</div>		Groundwater Elevation <div style="text-align: center;">811.63</div> <div style="text-align: right;">feet</div>		Parameter Stabilization temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit		Product Observed (yes/no) <div style="text-align: center;">no</div>		Depth to product																																																																																																																													
<table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Time</th> <th>Volume removed (gallon)</th> <th>Temp (°C)</th> <th>Cond (uV/sec)</th> <th>DO (mg/L)</th> <th>ORP (mV)</th> <th>Turbidity (NTU)</th> <th>pH</th> <th>Description (e.g. odor, clarity, color)</th> </tr> </thead> <tbody> <tr> <td>09:15</td> <td>init</td> <td>19.03</td> <td>145</td> <td>1.84</td> <td>-217.1</td> <td>.106</td> <td>6.33</td> <td>sewer odor, greyish, turbid</td> </tr> <tr> <td>09:20</td> <td>0.5</td> <td>18.53</td> <td>143</td> <td>0.83</td> <td>-236.1</td> <td>.106</td> <td>6.33</td> <td>sewer odor, clearing, greyish</td> </tr> <tr> <td>09:25</td> <td>1.0</td> <td>18.30</td> <td>141</td> <td>0.42</td> <td>-253.9</td> <td>.105</td> <td>6.38</td> <td>sewer odor, greyish, light turbidity</td> </tr> <tr> <td>09:30</td> <td>1.5</td> <td>18.27</td> <td>139</td> <td>0.41</td> <td>-257.7</td> <td>.104</td> <td>6.40</td> <td>clearing, slight sewer odor</td> </tr> <tr> <td>09:35</td> <td>2.0</td> <td>18.33</td> <td>144</td> <td>0.39</td> <td>-260.3</td> <td>.107</td> <td>6.42</td> <td>mostly clear, slight sewer odor</td> </tr> <tr> <td>09:36</td> <td colspan="8">collect sample bottles</td> </tr> <tr> <td colspan="8"></td> <td rowspan="5">possible slight sheen, appeared "mercury like" in buckets</td> </tr> <tr><td colspan="8"></td></tr> <tr><td colspan="8"></td></tr> <tr><td colspan="8"></td></tr> <tr><td colspan="8"></td></tr> <tr> <td colspan="2">Total Time (min.) ~20</td> <td colspan="2">Total Volume Removed ~2.5</td> <td colspan="2">Well pumped dry (yes/no) NO</td> <td colspan="2">Notes COC#2340</td> <td colspan="2">Refill/Discharge 10/4</td> </tr> <tr> <td colspan="6">QA/QC Samples N/A</td> <td colspan="4">Signature <i>J. Nerem</i></td> </tr> </tbody> </table>										Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)	09:15	init	19.03	145	1.84	-217.1	.106	6.33	sewer odor, greyish, turbid	09:20	0.5	18.53	143	0.83	-236.1	.106	6.33	sewer odor, clearing, greyish	09:25	1.0	18.30	141	0.42	-253.9	.105	6.38	sewer odor, greyish, light turbidity	09:30	1.5	18.27	139	0.41	-257.7	.104	6.40	clearing, slight sewer odor	09:35	2.0	18.33	144	0.39	-260.3	.107	6.42	mostly clear, slight sewer odor	09:36	collect sample bottles																possible slight sheen, appeared "mercury like" in buckets																																	Total Time (min.) ~20		Total Volume Removed ~2.5		Well pumped dry (yes/no) NO		Notes COC#2340		Refill/Discharge 10/4		QA/QC Samples N/A						Signature <i>J. Nerem</i>			
Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)																																																																																																																													
09:15	init	19.03	145	1.84	-217.1	.106	6.33	sewer odor, greyish, turbid																																																																																																																													
09:20	0.5	18.53	143	0.83	-236.1	.106	6.33	sewer odor, clearing, greyish																																																																																																																													
09:25	1.0	18.30	141	0.42	-253.9	.105	6.38	sewer odor, greyish, light turbidity																																																																																																																													
09:30	1.5	18.27	139	0.41	-257.7	.104	6.40	clearing, slight sewer odor																																																																																																																													
09:35	2.0	18.33	144	0.39	-260.3	.107	6.42	mostly clear, slight sewer odor																																																																																																																													
09:36	collect sample bottles																																																																																																																																				
								possible slight sheen, appeared "mercury like" in buckets																																																																																																																													
Total Time (min.) ~20		Total Volume Removed ~2.5		Well pumped dry (yes/no) NO		Notes COC#2340		Refill/Discharge 10/4																																																																																																																													
QA/QC Samples N/A						Signature <i>J. Nerem</i>																																																																																																																															

 Matrix Environmental Services, LLC. <i>Intelligent Environmental Solutions</i>		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID FTA-146-MW03					
		Project McClellan - JPA		Project Number 05.094.054.000					
GROUNDWATER SAMPLING LOG									
Groundwater Depth (TOC)	Equipment	Sampler	Date						
9.92 feet	<input type="checkbox"/> Bailer	Bondurant/Nerem	6/13/06						
Well Depth (TOC)	<input type="checkbox"/> Check Valve	Location (Site)	Begin Time						
41 feet	<input type="checkbox"/> Grundfos	Motor Pool Area 3100	10:50						
Water Column Thickness	<input type="checkbox"/> Peristaltic	Laboratory	Sample Depth (ft)						
31.08 feet	<input checked="" type="checkbox"/> Bladder Pump	EMAX	26						
Casing Diameter	<input type="checkbox"/> PID/FID	Sample Suite		see COC's					
2 inches	<input type="checkbox"/> Other (describe)	Meters	Serial numbers						
Casing Volume	Conditions (temp, weather, precip)	YSI 556 MPS	M001						
4.9728 gallons	overcast 70's	Geotech Low Flow	M001						
1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Solinst 101	Screen Length (ft)						
Well Elevation (TOC)	Parameter Stabilization	Calibration	Precalibrated 6/12/06						
822.64 feet	temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	Product Observed (yes/no)	Depth to product						
Groundwater Elevation		NO							
812.72 feet									
Time	Volume Removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)	
10:50	init	21.41	75	1.87	29.6	.052	6.49	reddish brown, turbid, slight sewer odor	
10:55	0.5	20.46	70	0.75	27.1	.050	6.5	brownish, heavy turbidity, slight sewer odor	
11:00	1.0	20.37	67	0.89	32.3	.048	6.52	clearing, turbid, slight sewer odor	
11:05	1.5	20.39	66	0.87	33.7	.047	6.52	clearing, slight sewer odor	
11:10	2.0	20.38	66	0.88	35.2	.047	6.53	mostly clear, slight sewer odor	
11:11	collect sample suite								
								Possible slight sheen, appeared "mercury like" in bucket	
Total Time (min.)	Total Volume Removed	Well pumped dry (yes/no)		Notes		Refill/Discharge			
~20	~2.5	NO		COC#2341					
QA/QC Samples						Signature			
MS/MSD COC#2348 (6) 40mL VOA						Nerem			

 Matrix Environmental Services, LLC. <i>Integrated Environmental Solutions</i>		Matrix Environmental Services 1601 Blake Street, Suite 200 Denver, Colorado 80202 (303) 572-0200 (303) 572-0202		Station Name/Sample ID	
				FTA-146-MW04	
Project		Project Number			
McClellan - JPA		05.094.054.000			
GROUNDWATER SAMPLING LOG					
Groundwater Depth (TOC)	Equipment	Sampler	Date		
11.43 feet	<input type="checkbox"/> Bailer	Bondurant/Nerem	4/13/06		
Well Depth (TOC)	<input type="checkbox"/> Check Valve	Location (Site)	Begin Time		
40 feet	<input type="checkbox"/> Grundfos	Motor Pool Area 3100	08:40		
Water Column Thickness	<input type="checkbox"/> Peristaltic	Laboratory	Sample Depth (ft)		
28.57 feet	<input checked="" type="checkbox"/> Bladder Pump	EMAX	20		
Casing Diameter	<input type="checkbox"/> PID/FID	Sample Suite			
2 inches	<input type="checkbox"/> Other (describe)	see COC's			
Casing Volume	Conditions (temp, weather, precip)	Meters	Serial numbers		
4.5712 gallons	overcast, 70's	YSI 556 MPS	M001		
1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Geotech Low Flow	M001		
Well Elevation (TOC)	Parameter Stabilization	Solinst 101	Calibration	Screen Length (ft)	
823.07 feet	temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	Precalibrated	6/12/06	20	
Groundwater Elevation		Product Observed (yes/no)	Depth to product		
811.64 feet		NO			

Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
08:40	init	19.86	46	5.24	27.3	.033	5.98	mostly clear
08:45	0.5	19.19	42	2.05	54.0	.031	5.64	mostly clear
08:50	1.0	19.15	42	1.85	59.0	.031	5.65	mostly clear
08:55	1.5	19.17	42	1.77	57.8	.031	5.7	mostly clear
09:00	2.0	19.20	43	1.68	57.2	.031	5.72	mostly clear
09:01	collect sample suite							
Total Time (min.)	Total Volume Removed	Well pumped dry (yes/no)	Notes		Refill/Discharge			
~20	~2.5	NO	COC#2342		12/4			
QA/QC Samples					Signature			
N/A					J. Nerem			



**Matrix
Environmental
Services, LLC.**
Integrated Environmental Solutions

Matrix Environmental Services
1601 Blake Street, Suite 200
Denver, Colorado 80202
(303) 572-0200
(303) 572-0202

Station Name/Sample ID

FTA-146-MW05

Project

McClellan - JPA

Project Number

05.094.054.000

GROUNDWATER SAMPLING LOG

Groundwater Depth (TOC) 13.7 feet	Equipment <input type="checkbox"/> Bailer <input type="checkbox"/> Check Valve <input type="checkbox"/> Grundfos <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/> Bladder Pump <input type="checkbox"/> PID/FID <input type="checkbox"/> Other (describe) Conditions (temp, weather, precip) <i>overcast, 70's</i>	Sampler Bondurant/Nerem	Date 6/13/06
Well Depth (TOC) 44 feet		Location (Site) Motor Pool Area 3100	Begin Time 11:20
Water Column Thickness 30.3 feet		Laboratory EMAX	Sample Depth (ft) 29
Casing Diameter 2 inches		Sample Suite see COC's	
Casing Volume 4.848 gallons 1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Meters YSI 556 MPS Geotech Low Flow	Serial numbers M001 M001
Well Elevation (TOC) 826.05 feet		Solinst 101 Calibration Precalibrated 6/12/06	Screen Length (ft) 15
Groundwater Elevation 812.35 feet	Parameter Stabilization temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit	Product Observed (yes/no) NO	Depth to product

Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
11:20	init	21.07	47	1.59	68.3	.033	5.96	dark brown, heavy turbidity, <i>sewer odor</i>
11:25	0.5	20.48	44	0.66	89.9	.031	5.70	black, thick, heavy turbidity, <i>sewer odor</i>
11:30	1.0	20.38	44	0.64	111.1	.031	5.48	clearing, brownish, <i>sewer odor</i>
11:35	1.5	20.03	44	0.67	124.0	.032	5.37	brownish, <i>sewer odor</i>
11:40	2.0	19.93	45	0.64	132	.032	5.39	clearing, light brown, <i>sewer odor</i>
11:41	—	collect sample suite						
								Possible sheen, appeared "mercury-like" in bucket
Total Time (min.) ~20	Total Volume Removed ~2.5	Well pumped dry (yes/no) NO			Notes COC#2343			Refill/Discharge
QA/QC Samples N/A							Signature <i>L. Green</i>	



**Matrix
Environmental
Services, LLC.**
Integrated Environmental Solutions

Matrix Environmental Services
1601 Blake Street, Suite 200
Denver, Colorado 80202
(303) 572-0200
(303) 572-0202

Station Name/Sample ID

FTA-146-MW09

Project

McClellan - JPA

Project Number

05.094.054.000

GROUNDWATER SAMPLING LOG

Groundwater Depth (TOC) 11.16 feet	Equipment Bailer Check Valve Grundfos Peristaltic <input checked="" type="checkbox"/> Bladder Pump PID/FID Other (describe)	Sampler Bondurant/Ncrem	Date 6/13/06
Well Depth (TOC) 72.7 feet		Location (Site) Motor Pool Area 3100	Begin Time 09:40
Water Column Thickness 61.54 feet		Laboratory EMAX	Sample Depth (ft) 62.7
Casing Diameter 4 inches		Sample Suite see COC's	
Casing Volume 40.001 gallons 1"=x0.04 2"=x0.16 4"=x0.65 6"=x1.47 8"=x10.4		Meters YSI 556 MPS Geotech Low Flow	Serial numbers M001 M001
Well Elevation (TOC) 822.28 feet		Solinst 101	
Groundwater Elevation 811.12 feet	Conditions (temp, weather, precip) overcast, 70's	Calibration Precalibrated 6/12/06	Screen Length (ft) 10
Parameter Stabilization temp +/- 1° DO +/- 10% Turbidity +/- 10% cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit		Product Observed (yes/no) no	Depth to product

Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	pH	Description (e.g. odor, clarity, color)
09:40	init	20.45	113	6.04	-171.2	.081	6.99	yellowish brown, turbid
09:45	0.5	19.54	112	2.35	-180.5	.082	6.89	yellowish brown, turbid
09:50	1.0	19.10	108	1.92	-165.5	.079	6.81	clearing, light yellow, turbid
09:55	1.5	19.13	108	1.81	-159.0	.078	6.81	clearing, light yellow, turbid
10:00	2.0	19.16	108	2.10	-149.0	.079	6.82	light yellow, some turbidity
10:01	— collect sample suite							
				</				

Page 1 of 1

Page 1 of 1

APPENDIX C
CHAINS-OF-CUSTODY, JUNE 2006

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2346	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: CWM-514-MW12	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B) <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop: 95.0	
Sampler Signature(s): <i>J. Neterm</i>		EBLot: EBN061306		SampleBottom (Units): 105.0 ft	
		ABLot: MBM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
1 08:01	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

T = 3.6 °C

Relinquished by (Signature): <i>J. Neterm</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDER</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2344	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: CWM-514-MW13	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bladder Pump(BP)</u> Bailer(B), Core(C), Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBMD061306		SampleTop: 32.0	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBMD061306		SampleBottom (Units): 42.0 fl	
		ABLot: MBMD061306			
Time:	Label#:	Bottle, Preservative:	Method:		
2 08:31	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature): <i>[Signature]</i>
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: Motor Pool Area 3100		COC#: 2347	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: DUP067	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bailer(B)</u> <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: FD	
Contractor: MES		TBLot: TBM061306		Matrix: Ground Water	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBM061306		Task#: 05.094.054.000	
		ABLot: MBM061306		CoolerID:	
		SampleTop: 32.0		SampleBottom (Units): 42.0 ft	
Time:	Label#:	Bottle, Preservative:	Method:		
3 08:31	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEx</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan Lab: EMAX		Site: Motor Pool Area 3100		COC#: 2341	
Sample Date: 6/13/06		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW03 StationType: MW QCCode: NS	
		Sampling Technique (circle): Bailer(B) <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		Matrix: Ground Water Task#: 05.094.054.000 CoolerID:	
Contractor: MES Sampler Signature(s): <i>JNorem</i>		TB Lot: <i>TBM061306</i> EB Lot: <i>EBM061306</i> AB Lot: <i>HBM061306</i>	Sample Top: 26.0	Sample Bottom (Units): 41.0 ft	
Time:	Label#:	Bottle, Preservative:	Method:		
4 11:11	1	3 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <i>JNorem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEX</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

COC#: 2348

McClellan Lab: EMAX	Site: Motor Pool Area 3100		Station: FTA-146-MW03 StationType: MW QCCode: MS/MSD	
Sample Date: 6/13/06	SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Matrix: Ground Water Task#: 05.094.054.000 CoolerID:	
Contractor: MES Sampler Signature(s): <i>JNeterm</i>		TBLot: <u>TBM061306</u> EBLot: <u>EBM061306</u> ABLot: <u>HBM061306</u>	SampleTop: 26.0	SampleBottom (Units): 41.0 ft
Time:	Label#:	Bottle, Preservative:	Method:	
4 11:11	1	6 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)	
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>				

Relinquished by (Signature): <i>JNeterm</i>	Date/Time: 6/13/06 16:00	Received by (Signature): FEDEX
Relinquished by (Signature):	Date/Time: 6/14/06 09:30	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

06F170

Chain of Custody

COC#: 2372

McClellan Lab: EMAX	Site: McClellan Field QC		Station: EB036	
	SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		StationType: WQ	
Sample Date: 6/13/06	Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		QCCode: EB	
			Matrix: Water	
			Task#:	
			CoolerID:	
Contractor: MES	TBLot: <u>TBM061306</u>	SampleTop:	SampleBottom (Units):	
Sampler Signature(s): <i>JNorem</i>	EBLot: <u>EBM061306</u>	<u>NA</u>	<u>NA</u>	
	ABLot: <u>MBM061306</u>			
Time:	Label#:	Bottle, Preservative:	Method:	
5 14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)	
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>				

Relinquished by (Signature): <i>JNorem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEx</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: McClellan Field QC		COC#: 2371	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: MATERIAL014	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Ladder Pump(B)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: WQ	
				QCCode: EB	
				Matrix: Water	
				Task#:	
				CoolerID:	
Contractor: MES		TBLot: <u>TBM061306</u>		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>JN...</i>		EBLot: <u>EBM061306</u>		<i>NA</i>	<i>NA</i>
		ABLot: <u>ABM061306</u>			
Time:	Label#:	Bottle, Preservative:	Method:		
6 14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>JN...</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FEDEX</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: McClellan Field QC		COC#: 2366	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: TB152	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: WQ	
				QCCode: TB	
				Matrix: Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop: NA	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBM061306		SampleBottom (Units): NA	
		ABLot: MBM061306			
Time:	Label#:	Bottle, Preservative:	Method:		
7 15:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
<p>Trip blank associated with Motor Pool Area 3100</p> <p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: Motor Pool Area 3100		COC#: 2342	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW04	
Sample Date: 6/13/06		Sampling Technique (circle): <u>Bladder Pump(BP)</u> Bailer(B), Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
Contractor: MES		TBLot: <u>TBM061306</u>		Matrix: Ground Water	
Sampler Signature(s): <u>JNerem</u>		EBLot: <u>EBM061306</u>		Task#: 05.094.054.000	
		ABLot: <u>MBM061306</u>		CoolerID:	
SampleTop: 20.0		SampleBottom (Units): 40.0 ft			
Time:	Label#:	Bottle, Preservative:	Method:		
09:01	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <u>JNerem</u>	Date/Time: <u>6/13/06 16:00</u>	Received by (Signature): <u>Fedex</u>
Relinquished by (Signature):	Date/Time: <u>6/14/06 0930</u>	Received by (Signature): <u>[Signature]</u>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2340	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW02	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBM061306		SampleTop:	
Sampler Signature(s): <i>JNerem</i>		EBLot: EBND061306		SampleBottom (Units):	
		ABLot: HBND061306		20.5	
				35.5 ft	
Time:	Label#:	Bottle, Preservative:	Method:		
9 09:36	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <i>JNerem</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>Fedex</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

Chain of Custody

06F170

McClellan		Site: Motor Pool Area 3100		COC#: 2345	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW09	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B) <u>Bladder Pump(BP)</u> Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: <u>TBN061306</u>		SampleTop:	SampleBottom (Units):
Sampler Signature(s): <i>[Signature]</i>		EBLot: <u>EBN061306</u>		62.7	72.7 ft
		ABLot: <u>MBN061306</u>			
Time:	Label#:	Bottle, Preservative:	Method:		
10:01	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Management)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time: 6/14/06 09:30	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature): <i>[Signature]</i>
Airbill Number:		

06F170

Chain of Custody

McClellan		Site: Motor Pool Area 3100		COC#: 2339	
Lab: EMAX		SMCode (circle): <u>Grab(G)</u> , Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW01	
Sample Date: 6/13/06		Sampling Technique (circle): Bailer(B), <u>Bladder Pump(BP)</u> , Core(C), Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		StationType: MW	
				QCCode: NS	
				Matrix: Ground Water	
				Task#: 05.094.054.000	
				CoolerID:	
Contractor: MES		TBLot: TBMD061306		SampleTop: 20.0	
Sampler Signature(s): <i>[Signature]</i>		EBLot: EBMD061306		SampleBottom (Units): 35.0 ft	
		ABLot: HBMD061306			
Time:	Label#:	Bottle, Preservative:	Method:		
11 10:31	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep</p> <p>StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): Fedex
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature): <i>[Signature]</i>
Airbill Number:		

Chain of Custody

06F170

McClellan Lab: EMAX		Site: Motor Pool Area 3100		COC#: 2343	
Sample Date: 6/13/06		SMCode (circle): <u>Grab(G)</u> Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)		Station: FTA-146-MW05 StationType: MW QCCode: NS	
Contractor: MES		Sampling Technique (circle): <u>Bladder Pump(BP)</u> Bailer(B), Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)		Matrix: Ground Water Task#: 05.094.054.000 CoolerID:	
Sampler Signature(s): <i>[Signature]</i>		TBLot: <u>TBM061306</u> EBLot: <u>TBM061306</u> ABLot: <u>TBM061306</u>		SampleTop: 29.0 SampleBottom (Units): 44.0 ft	
Time:	Label#:	Bottle, Preservative:	Method:		
12 11:41	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
<p>QCCode: NS = Investigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix Spike Duplicate, EB = Equipment Blank, TB = Trip Blank, WQ = Water Quality, WS = Source Water, SP = Seep StationType: MW = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point, SW = Surface Water, SE = Seep, SS = Surface Soil</p> <p>White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)</p>					

Relinquished by (Signature): <i>[Signature]</i>	Date/Time: 6/13/06 16:00	Received by (Signature): <i>FedEx</i>
Relinquished by (Signature):	Date/Time: 6/14/06 0930	Received by (Signature): <i>[Signature]</i>
Relinquished by (Signature):	Date/Time:	Received by (Signature):
Airbill Number:		

APPENDIX D
VALIDATED DATA SHEETS, JUNE 2006

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 14:33
Sample ID: CWM-514-MW12 Date Analyzed: 06/21/06 14:33
Lab Samp ID: F170-01 Dilution Factor: 1
Lab File ID: RF0606 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RF0286 Instrument ID : T-005

Reportable
Results

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,2-TRICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHENE	ND	1	0.3
1,1-DICHLOROPROPENE	ND	1	0.3
1,2,3-TRICHLOROBENZENE	ND	1	0.3
1,2,3-TRICHLOROPROPANE	ND	1	0.3
1,2,4-TRICHLOROBENZENE	ND	1	0.3
1,2,4-TRIMETHYLBENZENE	ND	1	0.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROETHANE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DIBROMOETHANE	ND	1	0.3
1,3,5-TRIMETHYLBENZENE	ND	1	0.3
1,3-DICHLOROBENZENE	ND	1	0.3
1,3-DICHLOROPROPANE	ND	1	0.3
1,4-DICHLOROBENZENE	ND	1	0.3
1,4-DICHLOROPROPANE	ND	1	0.3
2-CHLOROTOLUENE	ND	1	0.3
4-CHLOROTOLUENE	ND	1	0.3
BENZENE	ND	1	0.3
BROMOBENZENE	ND	1	0.3
BROMOCHLOROMETHANE	ND	1	0.3
BROMODICHLOROMETHANE	ND	1	0.3
BROMOFORM	ND	1	0.3
BROMOMETHANE	ND	1	0.3
CARBON TETRACHLORIDE	ND	2	0.3
CHLOROBENZENE	ND	1	0.3
CHLOROETHANE	ND	2	0.3
CHLOROFORM	ND	1	0.3
CHLOROMETHANE	ND	2	0.3
CIS-1,2-DICHLOROETHENE	ND	1	0.3
CIS-1,3-DICHLOROPROPENE	ND	1	0.3
DIBROMOCHLOROMETHANE	ND	1	0.3
DIBROMOMETHANE	ND	1	0.3
DICHLORODIFLUOROMETHANE	ND	2	0.3
ETHYLBENZENE	ND	1	0.3
HEXACHLOROBUTADIENE	ND	1	0.3
ISOPROPYL BENZENE	ND	1	0.3
M, P-XYLENE	ND	2	0.3
METHYLENE CHLORIDE	ND	2	0.3
N-BUTYLBENZENE	ND	1	0.3
N-PROPYLBENZENE	ND	1	0.3
NAPHTHALENE	ND	2	0.3
O-XYLENE	ND	2	0.3
P-ISOPROPYLTOLUENE	ND	1	0.3
SEC-BUTYLBENZENE	ND	1	0.3
STYRENE	ND	1	0.3
TERT-BUTYLBENZENE	ND	1	0.3
TETRACHLOROETHYLENE	ND	1	0.3
TOLUENE	ND	1	0.3
TRANS-1,2-DICHLOROETHENE	ND	1	0.3
TRANS-1,3-DICHLOROPROPENE	ND	1	0.3
TRICHLOROETHENE	ND	1	0.3
TRICHLOROFLUOROMETHANE	ND	1	0.3
VINYL CHLORIDE	ND	1	0.3
ACETONE	ND	10	0.3
2-BUTANONE(MEK)	ND	10	0.3
MTBE	ND	1	0.3
2-HEXANONE	ND	10	0.3
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.3
CARBON DISULFIDE	ND	1	0.3
VINYL ACETATE	ND	2	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.3
ACRYLONITRILE	ND	10	0.3
IODOMETHANE	ND	2	0.3
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT	
1,2-DICHLOROETHANE-D4	103	63-132	
TOLUENE-D8	107	75-122	
4-BROMOFLUOROBENZENE	112	73-129	

RL: Reporting Limit

SR 7/19/06
QC'd 7/24/06 gmu
2004

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 16:24
Sample ID: CWM-514-MW13 Date Analyzed: 06/21/06 16:24
Lab Samp ID: F170-02 Dilution Factor: 1
Lab File ID: RFQ609 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
1,1,1-TRICHLOROETHANE	ND	1	2	Y
1,1,2,2-TETRACHLOROETHANE	59E JX			N
1,1,2-TRICHLOROETHANE	ND			Y
1,1-DICHLOROETHANE	ND			
1,1-DICHLOROETHENE	ND			
1,1-DICHLOROPROPENE	ND			
1,2,3-TRICHLOROBENZENE	ND			
1,2,3-TRICHLOROPROPANE	ND			
1,2,4-TRICHLOROBENZENE	ND			
1,2,4-TRIMETHYLBENZENE	ND			
1,2-DIBROMO-3-CHLOROPROPANE	ND	2		
1,2-DICHLOROBENZENE	ND			
1,2-DICHLOROETHANE	ND			
1,2-DICHLOROPROPANE	ND			
1,2-DIBROMOETHANE	ND			
1,3,5-TRIMETHYLBENZENE	ND			
1,3-DICHLOROBENZENE	ND			
1,3-DICHLOROPROPANE	ND			
1,4-DICHLOROBENZENE	ND			
2,2-DICHLOROPROPANE	ND	UJC		
2-CHLOROTOLUENE	ND			
4-CHLOROTOLUENE	ND			
BENZENE	ND			
BROMOBENZENE	ND			
BROMOCHLOROMETHANE	ND			
BROMODICHLOROMETHANE	ND			
BROMOFORM	ND			
BROMOMETHANE	ND			
CARBON TETRACHLORIDE	ND	2		
CHLOROBENZENE	ND			
CHLOROETHANE	ND	2		
CHLOROFORM	1.8			
CHLOROMETHANE	ND	2		
CIS-1,2-DICHLOROETHENE	51J			
CIS-1,3-DICHLOROPROPENE	ND			
DIBROMOCHLOROMETHANE	ND			
DIBROMOMETHANE	ND			
DICHLORODIFLUOROMETHANE	ND	2		
ETHYLBENZENE	ND			
HEXACHLOROBUTADIENE	ND	1		
ISOPROPYL BENZENE	ND			
M,P-XYLENE	ND	2		
METHYLENE CHLORIDE	ND			
N-BUTYLBENZENE	ND	2		
N-PROPYLBENZENE	ND			
NAPHTHALENE	ND	2		
O-XYLENE	ND			
P-ISOPROPYLTOLUENE	ND			
SEC-BUTYLBENZENE	ND			
STYRENE	ND			
TERT-BUTYLBENZENE	ND			
TETRACHLOROETHYLENE	68J			
TOLUENE	ND			
TRANS-1,2-DICHLOROETHENE	ND			
TRANS-1,3-DICHLOROPROPENE	ND			
TRICHLOROETHENE	32			
TRICHLOROFLUOROMETHANE	ND			
VINYL CHLORIDE	ND			
ACETONE	ND	10		
2-BUTANONE(MEK)	ND	10		
MTBE	ND	10		
2-HEXANONE	ND	10		
4-METHYL-2-PENTANONE(MIBK)	ND	10		
CARBON DISULFIDE	ND	10		
VINYL ACETATE	ND	2		
1,1,2,2-TETRACHLOROETHANE	ND			
1,1,1,2-TETRACHLOROETHANE	ND			
TRANS-1,4-DICHLORO-2-BUTENE	ND	2		
ACRYLONITRILE	ND	10		
IODOMETHANE	ND	2		
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT		
1,2-DICHLOROETHANE-D4	106	63-132		
TOLUENE-D8	107	75-122		
4-BROMOFLUOROBENZENE	111	73-129		

RL: Reporting Limit

SR 7/19/06

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/24/06 11:17
Sample ID: CWM-514-MW13DL Date Analyzed: 06/24/06 11:17
Lab Samp ID: F170-021 Dilution Factor: 5
Lab File ID: RFQ715 Matrix : WATER
Ext. Btch ID: V005F58 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1
1,1,2,2-TETRACHLOROETHANE	57	5	1.5
1,1,2-TRICHLOROETHANE	ND	5	1
1,1-DICHLOROETHANE	ND	5	1
1,1-DICHLOROETHENE	ND	5	1
1,1-DICHLOROPROPENE	ND	5	1
1,2,3-TRICHLOROBENZENE	ND	5	1
1,2,3-TRICHLOROPROPANE	ND	5	2.5
1,2,4-TRICHLOROBENZENE	ND	5	1
1,2,4-TRIMETHYLBENZENE	ND	5	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	10	5
1,3-DICHLOROBENZENE	ND	5	1
1,3-DICHLOROETHANE	ND	5	1
1,3-DICHLOROPROPANE	ND	5	1
1,3-DIBROMOETHANE	ND	5	1
1,3,5-TRIMETHYLBENZENE	ND	5	1
1,3-DICHLOROBENZENE	ND	5	1
1,3-DICHLOROPROPANE	ND	5	1
1,4-DICHLOROBENZENE	ND	5	1
2,2-DICHLOROPROPANE	ND	5	1
2-CHLOROTOLUENE	ND	5	1
4-CHLOROTOLUENE	ND	5	1
BENZENE	ND	5	1
BROMOBENZENE	ND	5	1
BROMOCHLOROMETHANE	ND	5	1
BROMODICHLOROMETHANE	ND	5	1
BROMOFORM	ND	5	1.5
BROMOMETHANE	ND	10	1
CARBON TETRACHLORIDE	ND	10	1
CHLOROBENZENE	ND	5	1
CHLOROETHANE	ND	5	1
CHLOROFORM	1.8J	5	2.5
CHLOROMETHANE	ND	5	1
CIS-1,2-DICHLOROETHENE	ND	5	1
CIS-1,3-DICHLOROPROPENE	ND	5	1
DIBROMOCHLOROMETHANE	ND	5	1
DIBROMOMETHANE	ND	5	1
DICHLORODIFLUOROMETHANE	ND	10	2.5
ETHYLBENZENE	ND	5	1
HEXACHLOROBUTADIENE	ND	5	1
ISOPROPYL BENZENE	ND	5	1
M,P-XYLENE	ND	10	2.5
METHYLENE CHLORIDE	ND	10	1
N-BUTYLBENZENE	ND	5	1
N-PROPYLBENZENE	ND	5	1
NAPHTHALENE	ND	5	2.5
O-XYLENE	ND	5	1
P-ISOPROPYLTOLUENE	ND	5	1
SEC-BUTYLBENZENE	ND	5	1
STYRENE	ND	5	1
TERT-BUTYLBENZENE	ND	5	1
TETRACHLOROETHYLENE	ND	5	1
TOLUENE	ND	5	1
TRANS-1,2-DICHLOROETHENE	ND	5	1
TRANS-1,3-DICHLOROPROPENE	ND	5	1
TRICHLOROETHENE	29	5	1
TRICHLOROFLUOROMETHANE	ND	5	1
VINYL CHLORIDE	ND	5	1
ACETONE	ND	5	2.5
2-BUTANONE(MEK)	ND	50	2.5
MTBE	ND	5	1
2-HEXANONE	ND	50	2.5
4-METHYL-2-PENTANONE(MIBK)	ND	50	2.5
CARBON DISULFIDE	ND	5	1
VINYL ACETATE	ND	10	3.5
1,1,1,2,2,2-HEXACHLOROETHANE	ND	5	1
1,1,1,2-TETRACHLOROETHANE	ND	5	1
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	5
ACRYLONITRILE	ND	50	2.5
IODOMETHANE	ND	10	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	63-132
TOLUENE-D8	106	75-122
4-BROMOFLUOROBENZENE	111	73-129

RL: Reporting Limit

SR 7/19/06
Jm

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 17:01
Sample ID: DUP067 Date Analyzed: 06/21/06 17:01
Lab Samp ID: F170-03 Dilution Factor: 1
Lab File ID: RFQ610 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	2
1,1,2,2-TETRACHLOROETHANE	57E JX	1	3
1,1,2-TRICHLOROETHANE	42J	1	2
1,1-DICHLOROETHANE	ND	1	1
1,1-DICHLOROETHENE	ND	1	1
1,1-DICHLOROPROPENE	ND	1	1
1,2,3-TRICHLOROBENZENE	ND	1	1
1,2,3-TRICHLOROPROPANE	ND	1	1
1,2,4-TRICHLOROBENZENE	ND	1	1
1,2,4-TRIMETHYLBENZENE	ND	1	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	1
1,2-DICHLOROBENZENE	ND	1	1
1,2-DICHLOROETHANE	ND	1	1
1,2-DICHLOROPROPANE	ND	1	1
1,2-DIBROMOETHANE	ND	1	1
1,3,5-TRIMETHYLBENZENE	ND	1	1
1,3-DICHLOROBENZENE	ND	1	1
1,3-DICHLOROPROPANE	ND	1	1
1,4-DICHLOROBENZENE	ND	1	1
2,2-DICHLOROPROPANE	ND JTC	1	1
2-CHLOROTOLUENE	ND	1	1
4-CHLOROTOLUENE	ND	1	1
BENZENE	ND	1	1
BROMOBENZENE	ND	1	1
BROMOCHLOROMETHANE	ND	1	1
BROMODICHLOROMETHANE	ND	1	1
BROMOFORM	ND	1	1
BROMOMETHANE	ND	2	1
CARBON TETRACHLORIDE	ND	2	1
CHLOROBENZENE	ND	1	1
CHLOROETHANE	ND	1	1
CHLOROFORM	1.8	2	1
CHLOROMETHANE	ND	2	1
CIS-1,2-DICHLOROETHENE	46J	2	1
CIS-1,3-DICHLOROPROPENE	ND	1	1
DIBROMOCHLOROMETHANE	ND	1	1
DIBROMOMETHANE	ND	1	1
DICHLORODIFLUOROMETHANE	ND	2	1
ETHYLBENZENE	ND	1	1
HEXACHLOROBUTADIENE	ND	1	1
ISOPROPYL BENZENE	ND	1	1
M,P-XYLENE	ND	2	1
METHYLENE CHLORIDE	ND	2	1
N-BUTYLBENZENE	ND	1	1
N-PROPYLBENZENE	ND	1	1
NAPHTHALENE	ND	2	1
O-XYLENE	ND	1	1
P-ISOPROPYLTOLUENE	ND	1	1
SEC-BUTYLBENZENE	ND	1	1
STYRENE	ND	1	1
TERT-BUTYLBENZENE	ND	1	1
TETRACHLOROETHYLENE	5J	1	1
TOLUENE	ND	1	1
TRANS-1,2-DICHLOROETHENE	ND	1	1
TRANS-1,3-DICHLOROPROPENE	ND	1	1
TRICHLOROETHENE	28	1	1
TRICHLOROFLUOROMETHANE	ND	1	1
VINYL CHLORIDE	ND	1	1
ACETONE	ND	10	1
2-BUTANONE(MEK)	ND	10	1
MTBE	ND	1	1
2-HEXANONE	ND	10	1
4-METHYL-2-PENTANONE(MIBK)	ND	10	1
CARBON DISULFIDE	ND	1	1
VINYL ACETATE	ND	2	1
1,1,2,2-TETRACHLOROETHANE	ND	1	1
1,1,1,2-TETRACHLOROETHANE	ND	2	1
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	1
ACRYLONITRILE	ND	2	1
IODOMETHANE	ND	2	1
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT	
1,2-DICHLOROETHANE-D4	101	63-132	
TOLUENE-D8	106	75-122	
4-BROMOFLUOROBENZENE	113	73-129	

RL: Reporting Limit

SR 7/19/06

gme

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/24/06 11:54
Sample ID: DU067DL Date Analyzed: 06/24/06 11:54
Lab Samp ID: F170-03T Dilution Factor: 5
Lab File ID: RFQ716 Matrix : WATER
Ext Btch ID: V005F58 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	1
1,1,2,2-TETRACHLOROETHANE	53	5	1.5
1,1,2-TRICHLOROETHANE	ND	5	1
1,1-DICHLOROETHANE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPENE	ND	5	1
1,2,3-TRICHLOROBENZENE	ND	5	1
1,2,3-TRICHLOROPROPANE	ND	5	2.5
1,2,4-TRICHLOROBENZENE	ND	5	1
1,2,4-TRIMETHYLBENZENE	ND	5	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	10	5
1,2-DICHLOROBENZENE	ND	5	1
1,2-DICHLOROETHANE	ND	5	1
1,2-DICHLOROPROPANE	ND	5	1
1,2-DIBROMOETHANE	ND	5	1
1,2,5-TRIMETHYLBENZENE	ND	5	1
1,2-DICHLOROBENZENE	ND	5	1
1,3-DICHLOROPROPANE	ND	5	1
1,4-DICHLOROBENZENE	ND	5	1
2,2-DICHLOROPROPANE	ND	5	1
2-CHLOROTOLUENE	ND	5	1
4-CHLOROTOLUENE	ND	5	1
BENZENE	ND	5	1
BROMOBENZENE	ND	5	1
BROMOCHLOROMETHANE	ND	5	1
BROMODICHLOROMETHANE	ND	5	1
BROMOFORM	ND	5	1.5
BROMOMETHANE	ND	5	1
CARBON TETRACHLORIDE	ND	10	1
CHLOROBENZENE	ND	5	1
CHLOROETHANE	ND	10	1
CHLOROFORM	1.8J	5	2.5
CHLOROMETHANE	ND	5	1
CIS-1,2-DICHLOROETHENE	ND	5	1
CIS-1,3-DICHLOROPROPENE	ND	5	1
DIBROMOCHLOROMETHANE	ND	5	1
DIBROMOMETHANE	ND	5	1
DICHLORODIFLUOROMETHANE	ND	5	2.5
ETHYLBENZENE	ND	5	1
HEXACHLOROBUTADIENE	ND	5	1
ISOPROPYL BENZENE	ND	5	1
M, P-XYLENE	ND	10	2.5
METHYLENE CHLORIDE	ND	10	5
N-BUTYLBENZENE	ND	10	1
N-PROPYLBENZENE	ND	10	1
NAPHTHALENE	ND	10	2.5
O-XYLENE	ND	10	1
P-ISOPROPYLTOLUENE	ND	5	1
SEC-BUTYLBENZENE	ND	5	1
STYRENE	ND	5	1
TERT-BUTYLBENZENE	ND	5	1
TETRACHLOROETHYLENE	ND	5	1
TOLUENE	ND	5	1
TRANS-1,2-DICHLOROETHENE	ND	5	1
TRANS-1,3-DICHLOROPROPENE	ND	5	1
TRICHLOROETHENE	32	5	1
TRICHLOROFLUOROMETHANE	ND	5	1
VINYL CHLORIDE	ND	5	1
ACETONE	ND	5	25
2-BUTANONE(MEK)	ND	500	25
MTBE	ND	500	25
2-HEXANONE	ND	500	25
4-METHYL-2-PENTANONE(MIBK)	ND	500	25
CARBON DISULFIDE	ND	500	1
VINYL ACETATE	ND	10	3.5
1,1,2,2-TETRACHLOROETHANE	ND	5	1
1,1,1,2-TETRACHLOROETHANE	ND	5	1
TRANS-1,4-DICHLORO-2-BUTENE	ND	10	5
ACRYLONITRILE	ND	50	25
IODOMETHANE	ND	10	2.5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	63-132
TOLUENE-D8	106	75-122
4-BROMOFLUOROBENZENE	110	73-129

RL: Reporting Limit

SR 7/19/06

gmu

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 15:10
Sample ID: FTA-146-MW03 Date Analyzed: 06/21/06 15:10
Lab Samp ID: F170-04 Dilution Factor: 1
Lab File ID: RFQ607 Matrix: WATER
Ext Btch ID: V005F50 % Moisture: NA
Calib. Ref.: RFQ286 Instrument ID: T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,2-TRICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHENE	ND	1	0.3
1,1-DICHLOROPROPENE	ND	1	0.3
1,2,3-TRICHLOROBENZENE	ND	1	0.3
1,2,3-TRICHLOROPROPANE	ND	1	0.3
1,2,4-TRICHLOROBENZENE	ND	1	0.3
1,2,4-TRIMETHYLBENZENE	ND	1	0.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROETHANE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DIBROMOETHANE	ND	1	0.3
1,3,5-TRIMETHYLBENZENE	ND	1	0.3
1,3-DICHLOROBENZENE	ND	1	0.3
1,3-DICHLOROPROPANE	ND	1	0.3
1,4-DICHLOROBENZENE	ND	1	0.3
2,2-DICHLOROPROPANE	ND	1	0.3
2-CHLOROTOLUENE	ND	1	0.3
4-CHLOROTOLUENE	ND	1	0.3
BENZENE	ND	1	0.3
BROMOBENZENE	ND	1	0.3
BROMOCHLOROMETHANE	ND	1	0.3
BROMODICHLOROMETHANE	ND	1	0.3
BROMOFORM	ND	1	0.3
BROMOMETHANE	ND	2	0.3
CARBON TETRACHLORIDE	ND	1	0.3
CHLOROBENZENE	ND	1	0.3
CHLOROETHANE	ND	2	0.3
CHLOROFORM	ND	1	0.3
CHLOROMETHANE	ND	2	0.3
CIS-1,2-DICHLOROETHENE	ND	1	0.3
CIS-1,3-DICHLOROPROPENE	ND	1	0.3
DIBROMOCHLOROMETHANE	ND	1	0.3
DIBROMOMETHANE	ND	1	0.3
DICHLORODIFLUOROMETHANE	ND	2	0.3
ETHYLBENZENE	ND	1	0.3
HEXACHLOROBUTADIENE	ND	1	0.3
ISOPROPYL BENZENE	ND	1	0.3
M, P-XYLENE	ND	2	0.3
METHYLENE CHLORIDE	ND	2	0.3
N-BUTYLBENZENE	ND	1	0.3
N-PROPYLBENZENE	ND	1	0.3
NAPHTHALENE	ND	2	0.3
O-XYLENE	ND	1	0.3
P-ISOPROPYLTOLUENE	ND	1	0.3
SEC-BUTYLBENZENE	ND	1	0.3
STYRENE	ND	1	0.3
TERT-BUTYLBENZENE	ND	1	0.3
TETRACHLOROETHYLENE	ND	1	0.3
TOLUENE	ND	1	0.3
TRANS-1,2-DICHLOROETHENE	ND	1	0.3
TRANS-1,3-DICHLOROPROPENE	ND	1	0.3
TRICHLOROETHENE	ND	1	0.3
TRICHLOROFLUOROMETHANE	ND	1	0.3
VINYL CHLORIDE	ND	1	0.3
ACETONE	ND	10	0.3
2-BUTANONE(MEK)	ND	10	0.3
MTBE	ND	1	0.3
2-HEXANONE	ND	10	0.3
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.3
CARBON DISULFIDE	ND	1	0.3
VINYL ACETATE	ND	2	0.3
1,1,2-TRICHLORO-1,2,2,2-TETRAFLUOROETHANE	ND	1	0.3
1,1,1,2-TETRACHLOROETHANE	ND	1	0.3
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.3
ACRYLONITRILE	ND	10	0.3
IODOMETHANE	ND	2	0.3

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	63-132
TOLUENE-D8	108	75-125
4-BROMOFLUOROBENZENE	109	73-129

RL: Reporting Limit

SR 7/19/06

gm

2222

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 13:19
Sample ID: EB036 Date Analyzed: 06/21/06 13:19
Lab Samp ID: F170-05 Dilution Factor: 1
Lab File ID: RFQ604 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.03
1,1,2,2-TETRACHLOROETHANE	ND	1	0.03
1,1,2-TRICHLOROETHANE	ND	1	0.03
1,1,2-TRICHLOROETHANE	ND	1	0.03
1,1-DICHLOROETHANE	ND	1	0.03
1,1-DICHLOROETHENE	ND	1	0.03
1,1-DICHLOROPROPENE	ND	1	0.03
1,2,3-TRICHLOROBENZENE	ND	1	0.03
1,2,3-TRICHLOROPROPANE	ND	1	0.03
1,2,4-TRICHLOROBENZENE	ND	1	0.03
1,2,4-TRIMETHYLBENZENE	ND	1	0.03
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.03
1,2-DICHLOROBENZENE	ND	1	0.03
1,2-DICHLOROETHANE	ND	1	0.03
1,2-DICHLOROPROPANE	ND	1	0.03
1,2-DIBROMOETHANE	ND	1	0.03
1,2,5-TRIMETHYLBENZENE	ND	1	0.03
1,3-DICHLOROBENZENE	ND	1	0.03
1,3-DICHLOROPROPANE	ND	1	0.03
1,4-DICHLOROBENZENE	ND	1	0.03
2,2-DICHLOROPROPANE	ND	1	0.03
2-CHLOROTOLUENE	ND	1	0.03
4-CHLOROTOLUENE	ND	1	0.03
BENZENE	ND	1	0.03
BROMOBENZENE	ND	1	0.03
BROMOCHLOROMETHANE	ND	1	0.03
BROMODICHLOROMETHANE	ND	1	0.03
BROMOFORM	ND	1	0.03
BROMOMETHANE	ND	1	0.03
CARBON TETRACHLORIDE	ND	1	0.03
CHLOROBENZENE	ND	1	0.03
CHLOROETHANE	ND	1	0.03
CHLOROFORM	ND	1	0.03
CHLOROMETHANE	ND	1	0.03
CIS-1,2-DICHLOROETHENE	ND	1	0.03
CIS-1,3-DICHLOROPROPENE	ND	1	0.03
DIBROMOCHLOROMETHANE	ND	1	0.03
DIBROMOMETHANE	ND	1	0.03
DICHLORODIFLUOROMETHANE	ND	2	0.03
ETHYLBENZENE	ND	1	0.03
HEXACHLOROBUTADIENE	ND	1	0.03
ISOPROPYL BENZENE	ND	1	0.03
M,P-XYLENE	ND	1	0.03
METHYLENE CHLORIDE	ND	1	0.03
N-BUTYLBENZENE	ND	1	0.03
N-PROPYLBENZENE	ND	1	0.03
NAPHTHALENE	ND	1	0.03
O-XYLENE	ND	1	0.03
P-ISOPROPYL TOLUENE	ND	1	0.03
SEC-BUTYLBENZENE	ND	1	0.03
STYRENE	ND	1	0.03
TERT-BUTYLBENZENE	ND	1	0.03
TETRACHLOROETHYLENE	ND	1	0.03
TOLUENE	ND	1	0.03
TRANS-1,2-DICHLOROETHENE	ND	1	0.03
TRANS-1,3-DICHLOROPROPENE	ND	1	0.03
TRICHLOROETHENE	ND	1	0.03
TRICHLOROFLUOROMETHANE	ND	1	0.03
VINYL CHLORIDE	ND	1	0.03
ACETONE	ND	10	0.03
2-BUTANONE(MEK)	ND	10	0.03
MTBE	ND	1	0.03
2-HEXANONE	ND	10	0.03
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.03
CARBON DISULFIDE	ND	1	0.03
VINYL ACETATE	ND	2	0.03
1,1,2,2-TETRACHLOROETHANE	ND	1	0.03
1,1,1,2-TETRACHLOROETHANE	ND	1	0.03
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.03
ACRYLONITRILE	ND	10	0.03
IODOMETHANE	ND	2	0.03

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	63-132
TOLUENE-D8	108	73-126
4-BROMOFLUOROBENZENE	109	73-129

RL: Reporting Limit

SR 7/19/06
Jm

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 15:47
Sample ID: MATERIAL014 Date Analyzed: 06/21/06 15:47
Lab Samp ID: F170-06 Dilution Factor: 1
Lab File ID: RFQ608 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.005
1,1,2,2-TETRACHLOROETHANE	ND	1	0.005
1,1,2-TRICHLOROETHANE	ND	1	0.005
1,1-DICHLOROETHANE	ND	1	0.005
1,1-DICHLOROETHENE	ND	1	0.005
1,1-DICHLOROPROPENE	ND	1	0.005
1,2,3-TRICHLOROBENZENE	ND	1	0.005
1,2,3-TRICHLOROPROPANE	ND	1	0.005
1,2,4-TRICHLOROBENZENE	ND	1	0.005
1,2,4-TRIMETHYLBENZENE	ND	1	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.005
1,2-DICHLOROBENZENE	ND	1	0.005
1,2-DICHLOROETHANE	ND	1	0.005
1,2-DICHLOROPROPANE	ND	1	0.005
1,2-DIBROMOETHANE	ND	1	0.005
1,3,5-TRIMETHYLBENZENE	ND	1	0.005
1,3-DICHLOROBENZENE	ND	1	0.005
1,3-DICHLOROPROPANE	ND	1	0.005
1,4-DICHLOROBENZENE	ND	1	0.005
2,2-DICHLOROPROPANE	ND	1	0.005
2-CHLOROTOLUENE	ND	1	0.005
4-CHLOROTOLUENE	ND	1	0.005
BENZENE	ND	1	0.005
BROMOBENZENE	ND	1	0.005
BROMOCHLOROMETHANE	ND	1	0.005
BROMODICHLOROMETHANE	ND	1	0.005
BROMOFORM	ND	1	0.005
BROMOMETHANE	ND	2	0.005
CARBON TETRACHLORIDE	ND	1	0.005
CHLOROBENZENE	ND	1	0.005
CHLOROETHANE	ND	2	0.005
CHLOROFORM	ND	1	0.005
CHLOROMETHANE	ND	2	0.005
CIS-1,2-DICHLOROETHENE	ND	1	0.005
CIS-1,3-DICHLOROPROPENE	ND	1	0.005
DIBROMOCHLOROMETHANE	ND	1	0.005
DIBROMOMETHANE	ND	1	0.005
DICHLORODIFLUOROMETHANE	ND	2	0.005
ETHYLBENZENE	ND	1	0.005
HEXACHLOROBUTADIENE	ND	1	0.005
ISOPROPYL BENZENE	ND	1	0.005
M, P-XYLENE	ND	2	0.005
METHYLENE CHLORIDE	ND	1	0.005
N-BUTYLBENZENE	ND	1	0.005
N-PROPYLBENZENE	ND	1	0.005
NAPHTHALENE	ND	1	0.005
O-XYLENE	ND	1	0.005
P-ISOPROPYLTOLUENE	ND	1	0.005
SEC-BUTYLBENZENE	ND	1	0.005
STYRENE	ND	1	0.005
TERT-BUTYLBENZENE	ND	1	0.005
TETRACHLOROETHYLENE	ND	1	0.005
TOLUENE	ND	1	0.005
TRANS-1,2-DICHLOROETHENE	ND	1	0.005
TRANS-1,3-DICHLOROPROPENE	ND	1	0.005
TRICHLOROETHENE	ND	1	0.005
TRICHLOROFLUOROMETHANE	ND	1	0.005
VINYL CHLORIDE	ND	1	0.005
ACETONE	ND	10	0.005
2-BUTANONE (MEK)	ND	10	0.005
MTBE	ND	1	0.005
2-HEXANONE	ND	10	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	10	0.005
CARBON DISULFIDE	ND	1	0.005
VINYL ACETATE	ND	2	0.005
1,1,2,2-TETRACHLOROETHANE	ND	1	0.005
1,1,1,2-TETRACHLOROETHANE	ND	1	0.005
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.005
ACRYLONITRILE	ND	10	0.005
IODOMETHANE	ND	2	0.005

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	63-132
TOLUENE-D8	108	75-122
4-BROMOFLUOROBENZENE	109	73-129

RL: Reporting Limit

SR 7/19/06
yfw

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/21/06 13:56
Sample ID: TB152 Date Analyzed: 06/21/06 13:56
Lab Samp ID: F170-07 Dilution Factor: 1
Lab File ID: RFQ605 Matrix : WATER
Ext Btch ID: V005F50 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	1	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,2-TRICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHANE	ND	1	0.3
1,1-DICHLOROETHENE	ND	1	0.3
1,1-DICHLOROPROPENE	ND	1	0.3
1,2,3-TRICHLOROBENZENE	ND	1	0.3
1,2,3-TRICHLOROPROPANE	ND	1	0.3
1,2,4-TRICHLOROBENZENE	ND	1	0.3
1,2,4-TRIMETHYLBENZENE	ND	1	0.3
1,2-DIBROMO-3-CHLOROPROPANE	ND	2	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROETHANE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DIBROMOETHANE	ND	1	0.3
1,2,5-TRIMETHYLBENZENE	ND	1	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
1,2-DICHLOROBENZENE	ND	1	0.3
1,2-DICHLOROPROPANE	ND	1	0.3
2,2-DICHLOROPROPANE	ND	1	0.3
2-CHLOROTOLUENE	ND	1	0.3
4-CHLOROTOLUENE	ND	1	0.3
BENZENE	ND	1	0.3
BROMOBENZENE	ND	1	0.3
BROMOCHLOROMETHANE	ND	1	0.3
BROMODICHLOROMETHANE	ND	1	0.3
BROMOFORM	ND	1	0.3
BROMOMETHANE	ND	1	0.3
CARBON TETRACHLORIDE	ND	2	0.3
CHLOROBENZENE	ND	1	0.3
CHLOROETHANE	ND	2	0.3
CHLOROFORM	ND	1	0.3
CHLOROMETHANE	ND	2	0.3
CIS-1,2-DICHLOROETHENE	ND	1	0.3
CIS-1,3-DICHLOROPROPENE	ND	1	0.3
DIBROMOCHLOROMETHANE	ND	1	0.3
DIBROMOMETHANE	ND	1	0.3
DICHLORODIFLUOROMETHANE	ND	2	0.3
ETHYLBENZENE	ND	1	0.3
HEXACHLOROBUTADIENE	ND	1	0.3
ISOPROPYL BENZENE	ND	1	0.3
M, P-XYLENE	ND	2	0.3
METHYLENE CHLORIDE	ND	2	0.3
N-BUTYLBENZENE	ND	1	0.3
N-PROPYLBENZENE	ND	1	0.3
NAPHTHALENE	ND	2	0.3
O-XYLENE	ND	1	0.3
P-ISOPROPYLTOLUENE	ND	1	0.3
SEC-BUTYLBENZENE	ND	1	0.3
STYRENE	ND	1	0.3
TERT-BUTYLBENZENE	ND	1	0.3
TETRACHLOROETHYLENE	ND	1	0.3
TOLUENE	ND	1	0.3
TRANS-1,2-DICHLOROETHENE	ND	1	0.3
TRANS-1,3-DICHLOROPROPENE	ND	1	0.3
TRICHLOROETHANE	ND	1	0.3
TRICHLOROFLUOROMETHANE	ND	1	0.3
VINYL CHLORIDE	ND	1	0.3
ACETONE	ND	10	0.3
2-BUTANONE(MEK)	ND	10	0.3
MTBE	ND	10	0.3
2-HEXANONE	ND	10	0.3
4-METHYL-2-PENTANONE(MIBK)	ND	10	0.3
CARBON DISULFIDE	ND	10	0.3
VINYL ACETATE	ND	2	0.3
1,1,2,2-TETRACHLOROETHANE	ND	1	0.3
1,1,1,2-TETRACHLOROETHANE	ND	1	0.3
TRANS-1,4-DICHLORO-2-BUTENE	ND	2	0.3
ACRYLONITRILE	ND	10	0.3
IODOMETHANE	ND	2	0.3
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT	
1,2-DICHLOROETHANE-D4	102	63-133	
TOLUENE-D8	106	75-122	
4-BROMOFLUOROBENZENE	109	73-129	

RL: Reporting Limit

SR 7/19/06

[Signature]

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

```

=====
Client   : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project  : MCCLELLAN, AL                  Date Received: 06/14/06
Batch No.: 06F170                         Date Extracted: 06/23/06 07:18
Sample ID: FTA-146-MW04                   Date Analyzed: 06/23/06 07:18
Lab Samp ID: F170-08                      Dilution Factor: 1
Lab File ID: RFQ670                       Matrix: WATER
Ext Btch ID: V005F55                      % Moisture: NA
Calib. Ref.: RFQ286                      Instrument ID: T-OD5
=====

```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	ND	1	.2
M,P-XYLENE	ND	2	.5
O-XYLENE	ND	1	.2
TOLUENE	ND	1	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	100	63-132
TOLUENE-D8	108	75-122
4-BROMOFLUOROBENZENE	110	73-129

RL: Reporting Limit

SR 7/19/06

gaw

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

```

=====
Client       : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project      : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.    : 06F170                       Date Extracted: 06/23/06 09:46
Sample ID    : FTA-146-MW02                 Date Analyzed: 06/23/06 09:46
Lab Samp ID  : F170-09                     Dilution Factor: 5
Lab File ID  : RFQ674                      Matrix          : WATER
Ext Btch ID  : V005F55                     % Moisture      : NA
Calib. Ref.  : RFQ286                      Instrument ID   : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
BENZENE	14	5	1	Y
ETHYLBENZENE	340E JX	5	1	N
M,P-XYLENE	650E JX	10	2.5	N
O-XYLENE	610E JX	5	1	N
TOLUENE	210	5	1	Y

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	112	63-132
TOLUENE-D8	109	75-122
4-BROMOFLUOROBENZENE	108	73-129

RL: Reporting Limit

SR 7/19/06



SW 50308/82608
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project     : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.   : 06F170                        Date Extracted: 06/24/06 10:40
Sample ID   : FTA-146-MW02DL                Date Analyzed: 06/24/06 10:40
Lab Samp ID : F170-09T                      Dilution Factor: 50
Lab File ID : RFQ714                        Matrix : WATER
Ext Btch ID : V005F58                       % Moisture : NA
Calib. Ref. : RFQ286                       Instrument ID : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
BENZENE	17J	50	10	N
ETHYLBENZENE	400	50	10	Y
M,P-XYLENE	1400	100	25	Y
O-XYLENE	730	50	10	Y
TOLUENE	230	50	10	N

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	63-132
TOLUENE-D8	107	75-122
4-BROMOFLUOROBENZENE	104	73-129

RL: Reporting Limit

SR 7/19/06

[Signature]

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

=====
Client : MATRIX ENVIRONMENTAL SERVICES Date Collected: 06/13/06
Project : MCCLELLAN, AL Date Received: 06/14/06
Batch No. : 06F170 Date Extracted: 06/23/06 07:55
Sample ID: FTA-146-MW09 Date Analyzed: 06/23/06 07:55
Lab Samp ID: F170-10 Dilution Factor: 1
Lab File ID: RFQ671 Matrix : WATER
Ext Btch ID: V005F55 % Moisture : NA
Calib. Ref.: RFQ286 Instrument ID : T-005
=====

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	1.2	1	.2
M,P-XYLENE	3.6	2	.5
O-XYLENE	1.7	1	.3
TOLUENE	.6J	1	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	63-132
TOLUENE-D8	101	75-122
4-BROMOFLUOROBENZENE	108	73-129

RL: Reporting Limit

SR 7/19/06

John

SW 50308/8260B
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES
Project     : MCCLELLAN, AL
Batch No.   : 06F170
Sample ID   : FTA-146-MW01
Lab Samp ID : F170-11
Lab File ID : RFQ672
Ext Btch ID : V005F55
Calib. Ref.: RFQ286
Date Collected: 06/13/06
Date Received: 06/14/06
Date Extracted: 06/23/06 08:32
Date Analyzed: 06/23/06 08:32
Dilution Factor: 1
Matrix      : WATER
% Moisture  : NA
Instrument ID : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	.44J	1	.2
M,P-XYLENE	.2J	2	.5
O-XYLENE	.71J	1	.2
TOLUENE	ND	1	.2

Y
↓

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	103	63-132
TOLUENE-DB	108	75-122
4-BROMOFLUOROBENZENE	105	73-129

RL: Reporting Limit

SR 7/19/06

ju

SW 50308/82608
VOLATILE ORGANICS BY GC/MS

```

=====
Client      : MATRIX ENVIRONMENTAL SERVICES   Date Collected: 06/13/06
Project     : MCCLELLAN, AL                 Date Received: 06/14/06
Batch No.   : 06F170                       Date Extracted: 06/23/06 09:09
Sample ID   : FTA-146-MW05                 Date Analyzed: 06/23/06 09:09
Lab Samp ID : F170-12                     Dilution Factor: 1
Lab File ID : RFQ673                     Matrix : WATER
Ext Btch ID : V005F55                     % Moisture : NA
Calib. Ref. : RFQ286                     Instrument ID : T-005
=====
  
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
BENZENE	ND	1	.2
ETHYLBENZENE	ND	1	.2
M,P-XYLENE	ND	2	.2
O-XYLENE	ND	1	.2
TOLUENE	ND	1	.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	102	63-132
TOLUENE-D8	107	75-122
4-BROMOFLUOROBENZENE	103	73-129

RL: Reporting Limit

SR 7/19/06

[Signature]

2016