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

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# LIST OF ABBREVIATIONS AND ACRONYMS

	1.1.2.2. Tetrochlans othere
1,1,2,2-PCA	1,1,2,2-Tetrachloroethane
ADEM	Alabama Department of Environmental Management
amsl	Above mean sea level
ARBCA	Alabama Risk-Based Corrective Action Guidance Manual
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	Quality Assurance Plan, Revision 1
RBTL	Risk-based Target Level
SAP	Installation-Wide Sampling and Analysis Plan
SFSP	Site-Specific Field Sampling Plan
Shaw	Shaw Environmental, Inc.
SI	Final Site Investigation Report
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
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#### **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 3138and 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

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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).

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#### 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<sup>TM</sup> 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), oxidationreduction 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 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 ( $\mu$ g/L). Ethylbenzene was detected in FTA-146-MW01 and FTA-146-MW02 at 0.44 J  $\mu$ g/L and 400  $\mu$ g/L, respectively. Toluene was detected in FTA-146-MW02 and FTA-146-MW09 at 210  $\mu$ g/L and 0.6 J  $\mu$ g/L, respectively. Total xylenes were detected at concentrations of 2.71 J  $\mu$ g/L, 2130  $\mu$ g/L, and 5.3  $\mu$ 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  $\mu$ 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  $\mu$ g/L, 1.8  $\mu$ g/L, 0.51 J  $\mu$ g/L, 0.68 J  $\mu$ g/L, and 32  $\mu$ 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, riskbased 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  $120 \mu g/L$  in 2002 (prior to UST removal) to  $14 \mu g/L$  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 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.

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#### 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.

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#### 6.0 **REFERENCES**

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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

				Depth to	Ground	тос	Groundwater	Well	Screen	Screen	
			Measurement	Water	Elevation	Elevation	Elevation	Depth	Length	Interval	
Station Name	Northing	Easting	Date	(ft BTOC)	(ft amsl) *	(ft amsl) *	(ft amsl)	(ft bgs)	(ft) *	(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

822.1

822.1

42

796.53

10

#### Notes:

CWM-514-MW13

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

668218.52

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

25.57

6/12/2006

Elevations references to the North American Vertical Datum of 1988.

1166362.25

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

32 - 42 2" ID Sch. 40 PVC

#### 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

			Ground	Top of		Depth to	
			Surface	Casing	Depth of	Water	Groundwater
		Measurement	Elevation	Elevation	Well	(feet	Elevation
Well Location	Well Type	Date	(feet)	(feet)	(BTOC)	BTOC)	(feet)
Motor Pool Area 310							
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 M</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 ParametersMotor Pool Area 3100, Parcels 24(7), 25(7), 73(7), 212(7), and 146(7)McClellan, Anniston, Alabama

Station Name	Analytical Suite
Residuum Monitoring Wells	
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
Bedrock Monitoring Wells	
FTA-146-MW09	BTEX by SW8260B
CWM-514-MW12	VOCs by SW8260B

#### Notes:

VOC = Volatile organic compound

BTEX = Benzene, tolune, 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.

- $\mathbf{CW} = \mathbf{Construction}$  Worker
- FD = Field duplicate
- GS = Groundskeeper
- $\mu g/L = micrograms \ per \ liter$

RBTL = Risk-Based Target Level (10<sup>-5</sup> 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:

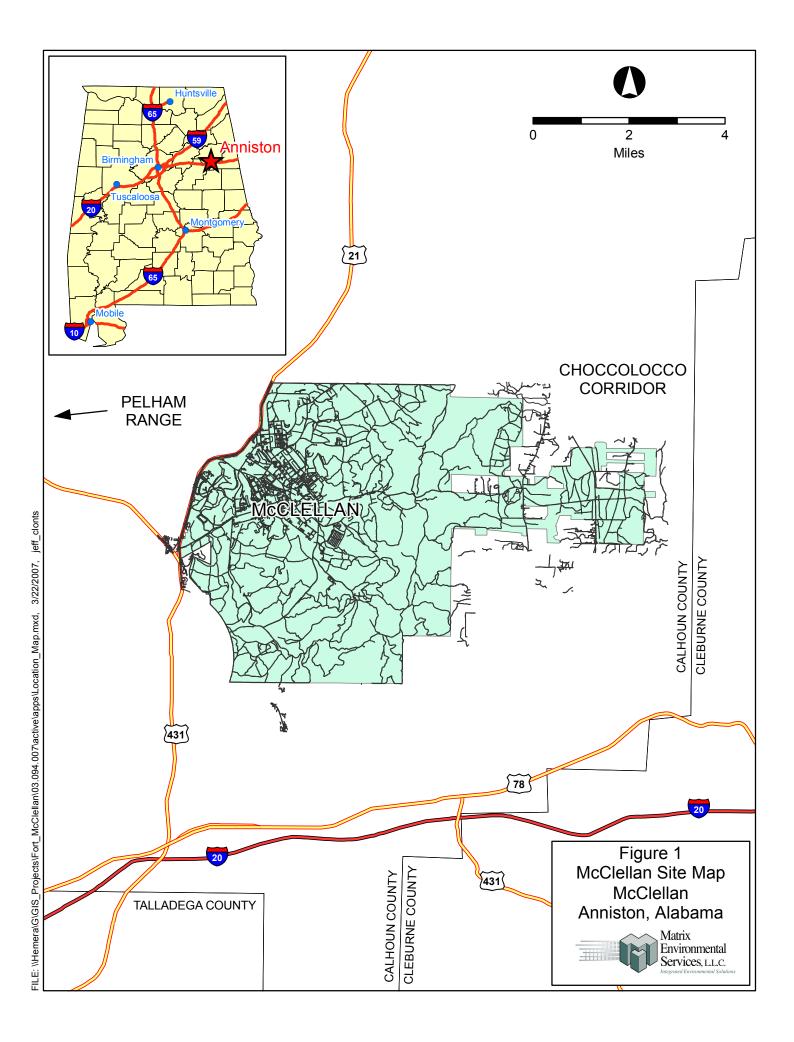
J = Estimated value. The analyte is positively identified and the concentration is less than the reporting limit but greater than the method detection limit.

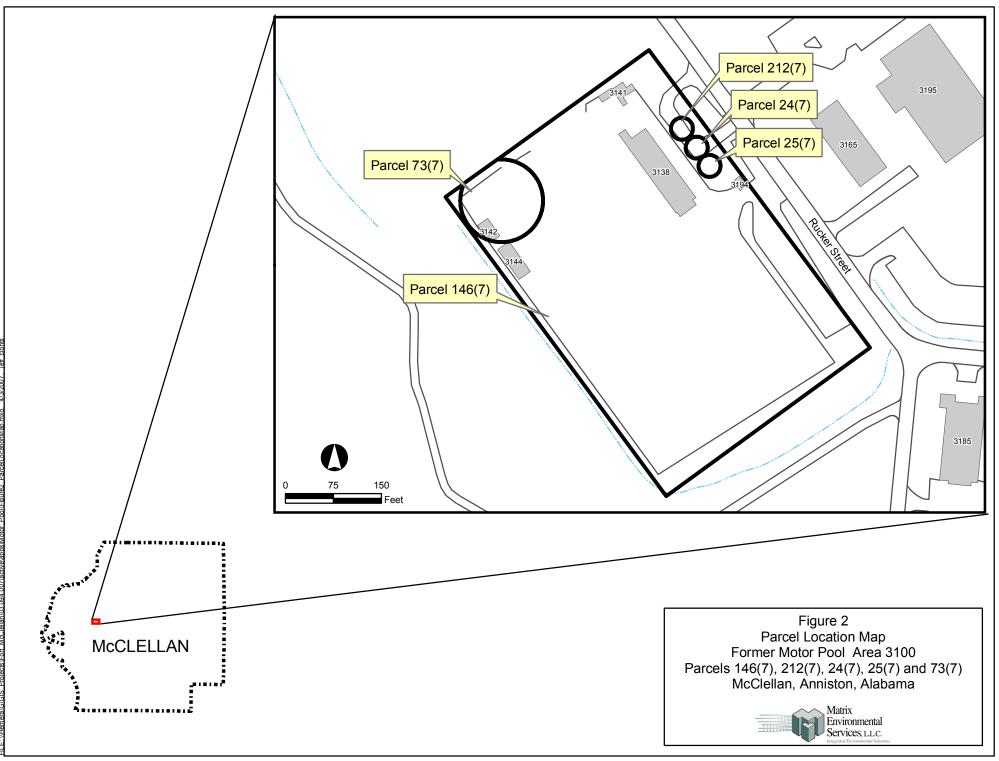
#### Value is greater than the RS RBTL.

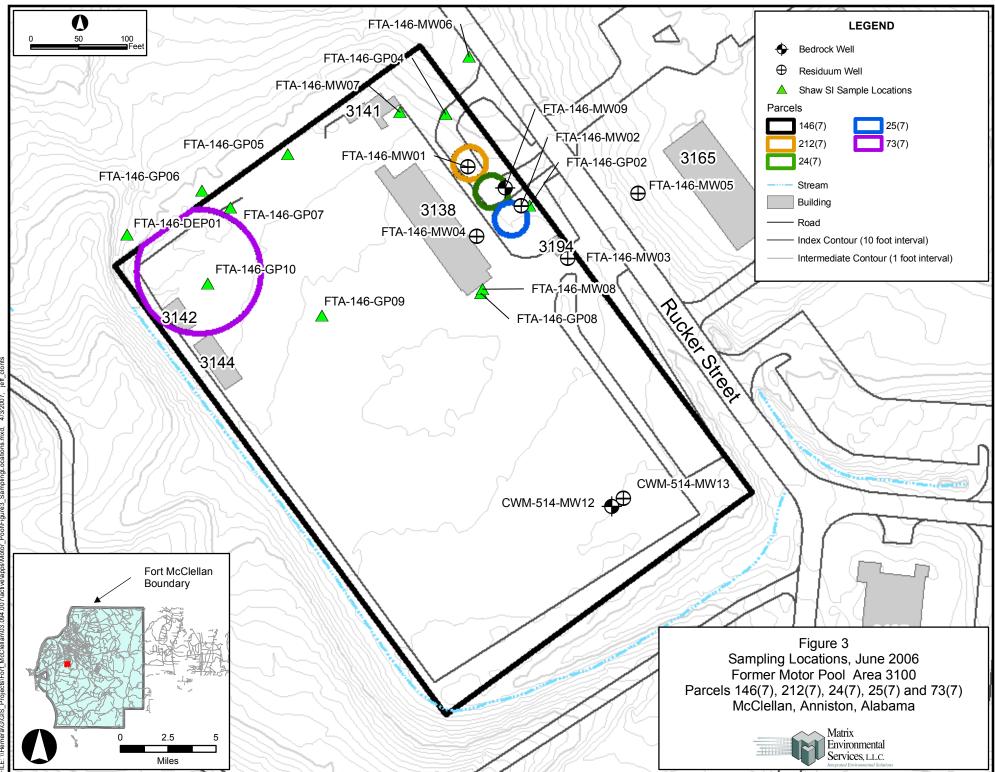
Value is greater than the GS RBTL.

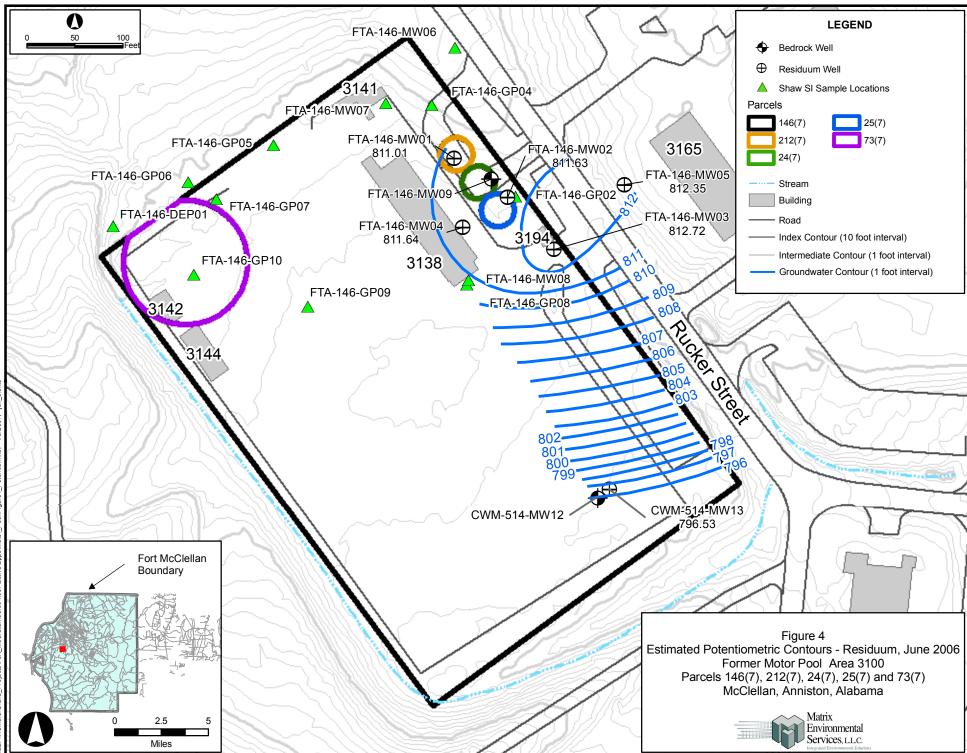
<sup>-- =</sup> not analyzed

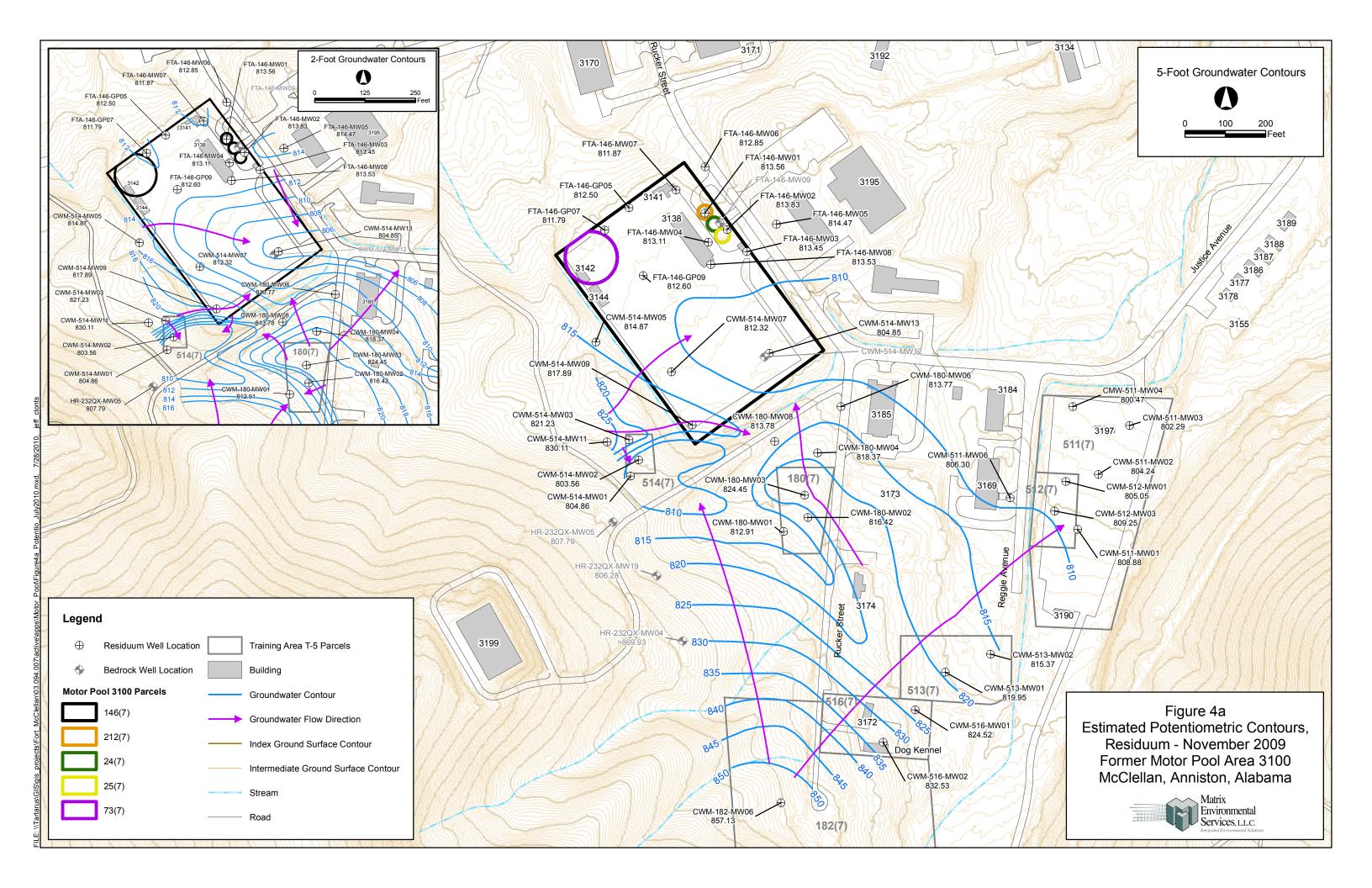
**FIGURES** 

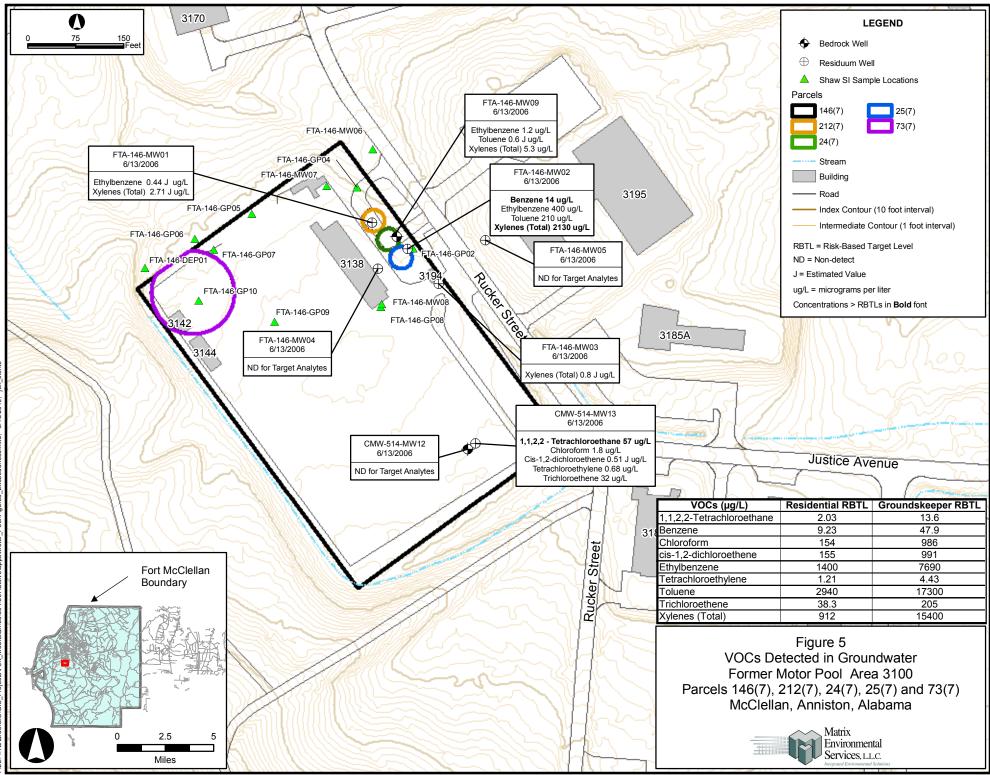












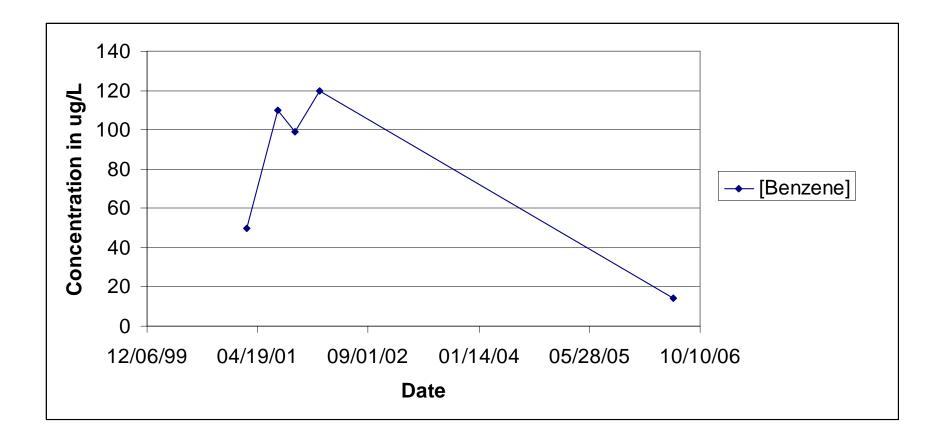




Figure 6: Benzene Concentrations in Residuum Well FTA-146-MW02 Motor Pool Area 3100 Parcels 24(7), 25(7), 73(7), 212(7), and 146(7) McClellan, Anniston, Alabama **APPENDICES** 

#### APPENDIX A GROUNDWATER ANALYTICAL RESULTS COLLECTED BY SHAW

# 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 Sample Number	ocation			FTA- CI	FTA-146-GP02 CP3002		FIA-146-GP05 CP3005	1005 1005		CP	CP3006			CP3009	_
Sample Date	Date			15-	15-Dec-98		17-D(	17-Dec-98		8-79	8-Jan-99		`	17-Dec-98	
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result Qu	Qual >BKG >SSSL	>SSSL	Result Qual	Qual >BKG >SSSL	SSSL	Result Qua	Qual >BKG >SSSL	>SSSL	Result C	Qual > BKG > SSSL	SSSS >
METALS									ŀ				00 101 0	-	
Altiminum	ma/L	ma/L   2.34E+00   1.56E+00	1.56E+00	7.70E-02 J			1.71E+00		-	1.04E+00			9.40E-02 J		_
Barium	l/Dm	1.27E-01		2.36E-02 J			1.40E-01 J	YES	YES	1.63E-01 J	YES	YES	1.50E-01 J	YES	YES
Cadmin	ma/L		_	QN			DN			ND			DN	_	
Cadrinan	I/Dum		_	2.04E+00 J			1.04E+01			6.92E+00			1.27E+01		
Calciuli	1/2m		-03				DN			QN			ND		
Cohalt	ma/l	0	9.39E-02	1.35E-02 J			QN			5.32E-02	YES		6.49E-02	YES	
Cobair	l/nm		6.26E-02	QN			QN			DN			QN		
ron ron	ma/l		-	3.36E+00		YES	3.81E+00		YES	5.77E+00		YES	6.33E+00		YES
Mannesium	ma/L	mg/L 2.13E+01	-				6.79E+00			8.37E+00			8.97E+00		-
Janganese	ma/l	5.81E-01	7.35E-02	7.20E-02			1.42E-01		YES	1.75E+00	YES	YES		YES	YES
Ancinv	ma/L		4.69E-04	5.40E-05 B			5.80E-05 B			5.70E-05 J			6.60E-05 B		
Vickel	ma/L		3.13E-02	3.50E-02 J		YES	DN			1.72E-02 J			1.94E-02 J	+	
Potassium	ma/L	7.20E+00	NA	DN			2.71E+00J			2.87E+00 B			1.32E+00		
Sodium	ma/L	1.48E+01	NA	1.30E+00 J			5.33E+00			4.94E+00 J			3.76E+00	1	-
hallium	mg/L		1.02E-04	4.50E-03 B	YES	YES	QN			QN			4.70E-03 B	YES	YES
/anadium	ma/L	2	1.10E-02	QN	_		QN			DN			QN	_	
anadam.	ma/L	1	4.69E-01	1.00E-01			1.51E-02 J			3.06E-02			3.96E-02	_	
VOLATILE ORGANIC COMPOUNDS	SUNDS														
.2.4-Trimethvlbenzene	mg/L	NA	6.00E-03				QN			QN					
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	8.			QN			QN					
Acetone	mg/L	AN	1.56E-01				1.60E-03 J			ON .					
Benzene	mg/L	NA	1.41E-03	3		YES	QN			NN	_				
Chloroform	mg/L	NA	1.15E-03	DN			QN			<b>UN</b>				+	
Ethylbenzene	mg/L	NA	1.40E-01	1.90E-04 J			QN			QN			NU NU		
Hexachlorobutadiene	mg/L	NA	8.40E-04	QN			QN			NN			5	n	
l oluene	mg/L	NA	2.59E-01	1.00E-04 J			DN			QN	_		NU	_	
SEMIVOLATILE ORGANIC COMPOUNDS	OMPOL	SON		1							-		1 200 100		_
Di a britul abthalata	/Dur	DNA I	1.48F-01	1.70E-03 J			3.70E-03JJ			- NN			r co-302.1		

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

## (Page 2 of 2)

	Sample L Sample I	Location	<b>c L</b>		Ε	FTA-146-GP08 CP3010	P08	ΕT.	FTA-146-GP09 CP3011	60	14	FTA-146-GP10 CP3012		
$\begin the large large$		e Date				16-Dec-9	8	-	6-Dec-98			16-Dec-98		
ALS           ALS           Inium         mg/L         2.34E+00         1.19E+00         1.12E+01         1.10E+00         1.12E+01         1.10E+00         1.12E+01         1.10E+00         1.12E+01         1.10E+01         5.17E+01         1.12E+01         ND         1.12E+01         1.12E+01         ND         1.12E+01         1.12E+01         ND         1.12E+01         1.12E+01         ND         1.12E+01         1.12E+01 <th <<="" colspa="2" td=""><td>Parameter</td><td>Units</td><td></td><td>SSSL<sup>b</sup></td><td></td><td>Qual &gt;B</td><td>SKG &gt;SS</td><td>Result</td><td>Qual &gt;B</td><td>KG &gt;SSSL</td><td>Result</td><td>Qual &gt;BKG</td><td>&gt;SSSL</td></th>	<td>Parameter</td> <td>Units</td> <td></td> <td>SSSL<sup>b</sup></td> <td></td> <td>Qual &gt;B</td> <td>SKG &gt;SS</td> <td>Result</td> <td>Qual &gt;B</td> <td>KG &gt;SSSL</td> <td>Result</td> <td>Qual &gt;BKG</td> <td>&gt;SSSL</td>	Parameter	Units		SSSL <sup>b</sup>		Qual >B	SKG >SS	Result	Qual >B	KG >SSSL	Result	Qual >BKG	>SSSL
$\begin matrix $	METALS													
	Aluminum	mg/L	_		1.19E+00			1.42E-01	-	_	1.05E+00			
nim         mg/l $2.51E-03$ $3.827\pm01$ ND         ND<	Barium	mg/L	_	1.10E-01	2.51E-02	- -		3.66E-02			1.26E-01		YES	
um         mg/l         5.65E+01         NA $3.57E+01$ NA $3.57E+01$ NA $3.57E+01$ NA $3.57E+01$ NB         ND	Cadmium	mg/L	_	7.82E-04	DN			5.30E-03			QN			
$ \begin{array}{                                    $	Calcium	mg/L		NA	3.57E+01			1.04E+01			7.77E-01	- -		
Ift         mg/L $2:34E-02$ $8:36E-02$ $4:70E-02$ $1:20E-02$	Chromium	mg/L		4.69E-03	5.00E-03	- -	YE				QN			
er         mg/L         2.55E-02         6.26E-02         4.70E-03         4.70E-03         4.80E-01         YES         5.24E-01         YES         3.61E+00         YES         YES         3.61E+00         YES         YES         YES         3.25E-02         YES	Cobalt	mg/L		9.39E-02	QN			2.19E-02			1.20E-02	- -		
	Copper	mg/L	_	6.26E-02	4.70E-03			QN			QN			
lesium         mg/l         2.13E+01         NA         2.61E+00         N         3.55E+00         N         7.23E+00         N           anese         mg/l         5.81E-01         7.35E-02         1.60E-01         YES         7.13E-02         7.13E-02         N           anese         mg/l         NA         3.160E-05         N         7.13E-02         N         7.13E-02         N           angle         NA         3.13E-02         ND         N         N         YES         7.13E-02         N           sium         mg/l         7.35E-03         ND         N         YES         7.13E-02         N           sium         mg/l         7.20E+00         NA         8.35E-01         YES         7.13E-02         N           sium         mg/l         1.48E+01         NA         8.43E-01         N         YES         N         N           nm         mg/l         1.48E+01         NA         8.43E-01         N         YES         N         N           nm         mg/l         1.48E+01         NA         8.43E-02         N         N         N         N         N           nm         mg/l         1.48E+01	Iron	mg/L		4.69E-01	1.84E+00		ΥE			YES	3.61E+00		YES	
anese         mg/L $S.81E-01$ $7.35E-02$ $1.60E-01$ $YES$ $7.13E-02$ $YES$ $7.13E-02$ $YES$ $7.13E-02$ $YES$ $7.13E-02$ $YES$ $7.20E-05$ $B$ $YES$ $7.20E-05$ $B$ $YES$ $7.20E-05$ $B$ $YES$ $7.20E-05$ $B$ $YES$ $Z.20E-01$ $YES$ $YES$ $Z.20E-02$ $J$ $YES$ $Z.20E-02$ $J$ $YES$ $Z.20E-02$ $J$ $YES$ $Z.20E-02$ $J$ $YES$ $YES$ $Z.20E-02$ $J$ $YES$ $Z$ $Z.20E-02$ $J$ $Z$	Magnesium	mg/L	_	NA	2.61E+00	-		3.55E+00			7.23E+00			
ury         mg/L         NA $4.69E-04$ $6.30E-05$ B $7.20E-05$ $1.04E-02$ $7.40E-03$ $1.55E+00$ $1.76E-02$ $7.40E-03$ $1.25E-03$ $1.25E-02$ $1.25E-02$ $1.25E-02$ <	Manganese	mg/L	_	7.35E-02	1.60E-01		YE	-		YES	7.13E-02	2.0%		
If         mg/L         NA         3.13E-02         ND         ND         YES         3.22E-02         J         YES         3.22E-02         J         ND         ND         ND         YES         3.22E-00         J         ND         ND         ND         ND         YES         YES         ND         YES         YES         ND	Mercury	mg/L	NA	4.69E-04	6.30E-05	8		7.80E-05	0		7.20E-05	В		
	Nickel	mg/L	NA	3.13E-02	QN			3.19E-02		YES	3.22E-02	٦ ר	YES	
Image         Image <t< td=""><td>Potassium</td><td>mg/L</td><td>7</td><td>NA</td><td>DN</td><td></td><td></td><td>1.55E+00</td><td></td><td></td><td>1.04E+00</td><td>۲ ۲</td><td></td></t<>	Potassium	mg/L	7	NA	DN			1.55E+00			1.04E+00	۲ ۲		
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Sodium	mg/L		NA	8.43E-01	ſ		1.50E+00			2.08E+00	-		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Thallium	mg/L	1.1	1.02E-04	DN			4.90E-03			5.00E-03			
mg/L         2.20E-01         4.69E-01         1.03E-02         1         3.59E-02         1           -Tilmethylbenzene         mg/L         NA         6.00E-03         ND         <	Vanadium	mg/L	· · ·	1.10E-02	7.40E-03	ſ		QN			QN			
POUNDS         ND         ND <th< td=""><td>Zinc</td><td>mg/L</td><td>_</td><td>4.69E-01</td><td>1.03E-02</td><td>ſ</td><td></td><td>3.59E-02</td><td></td><td></td><td>9.64E-02</td><td></td><td></td></th<>	Zinc	mg/L	_	4.69E-01	1.03E-02	ſ		3.59E-02			9.64E-02			
mg/L         NA         6.00E-03         ND	0	OUNDS												
mg/L         NA         5.84E-02         ND	1,2,4-Trimethylbenzene	mg/L		6.00E-03	DN			DN			QN			
mg/L         NA         1.56E-01         1.10E-03         J         1.90E-03         J         I           mg/L         NA         1.41E-03         ND         ND         ND         ND         ND           mg/L         NA         1.41E-03         ND         ND         ND         ND         ND           mg/L         NA         1.15E-03         1.40E-04         ND         ND         ND         ND           mg/L         NA         1.46E-04         ND         ND         ND         ND         ND           mg/L         NA         1.40E-04         ND         ND <td>4-Methyl-2-pentanone</td> <td>mg/L</td> <td></td> <td>5.84E-02</td> <td>ND</td> <td></td> <td></td> <td>DN</td> <td></td> <td></td> <td>QN</td> <td></td> <td></td>	4-Methyl-2-pentanone	mg/L		5.84E-02	ND			DN			QN			
mg/L         NA         1.41E-03         ND	Acetone	mg/L		1.56E-01	1.10E-03	_ ا		1.90E-03			DN			
mg/L         NA         1.15E-03         1.40E-04         ND	Benzene	mg/L	NA	1.41E-03	ND			ND			QN			
mg/L         NA         1.40E-01         ND	Chloroform	mg/L		1.15E-03	1.40E-04	В		DN	_		QN			
mg/L         NA         8.40E-04         ND	Ethylbenzene	mg/L		1.40E-01	DN			QN			QN			
mg/L         ND         N	Hexachlorobutadiene	mg/L		8.40E-04	QN			QN			QN			
COMPOUNDS  mg/L  NA   1.48E-01  3.00E-03 J     3.20E-03 J	Toluene	mg/L		2.59E-01	ND		_	QN			QN			
mg/L NA 1.48E-01  3.00E-03 J   3.20E-03 J   3.20E-03 J   1	U	OMPOL	SON											
	Di-n-butyl phthalate	mg/L		1.48E-01	3.00E-03			3.20E-03			4.00E-03	- r		

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

<sup>a</sup> 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. <sup>b</sup> 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.

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

FTA-146-MW05	CFP300/ 15-Feb-01	Result Qual >BKG >SSSL		- ON	QN	QN	QN
FTA-146-MW04	2-Mar-01	Result Qual >BKG >SSSL	-	UD UN	QN	DN	QN
FTA-146-MW03	1-Mar-01	Result Quai >BKG >SSSL Result Quai >BKG >SSSL Result Quai >BKG >SSSL		DN DN	QN	3.00E-04 J	QN
FTA-146-MW02	28-Feb-01	Result Qual >BKG >SSSL		5.00E-02   YES	1.70E-02	7.10E-03	3.80E-02
FTA-146-MW01	28-Feb-01	Result Qual >BKG >SSSL		1.10E-03	4.10E-04 J	9.70E-04 J	0 3.70E-04  J
		SSSL <sup>b</sup>		1.41E-03 1.10E-03	1.40E-01	2.59E-01	2.80E+00
ocation	Date	BKG <sup>a</sup>		NA	NA	NA	NA
Sample Location	Sample Date	Units		mg/L	mg/L	mg/L	mg/L
ů ů	>	Parameter	BTEX	Benzene	Ethylbenzene	Toluene	Xylene, Total

6	>SSSL					
FTA-146-MW09 CPP3011 1-Mar-01	Result Qual >BKG			DN	QN	GN
FTA-146-MW08 CPP3010 2-Mar-01	ual >BKG >SSSL F					
FTA C 2.	Result Q		DN	DN	QN	QN
FTA-146-MW07 CPP3009 2-Mar-01	ual > BKG > SSSL Result Qual > BKG > SSSL Result Qual > BKG > SSSL Result Qual > BKG > SSSL				- -	
FT/	Result (		QN	DN	3.40E-04	QN
FTA-146-MW06 CPP3008 28-Feb-01	Qual >BKG >SSSL					
FT	Result		QN	QN	QN	QN
	SSSL <sup>b</sup>		1.41E-03	1.40E-01	2.59E-01	2.80E+00
ation mber ate	BKG <sup>a</sup>		NA	NA	NA	NA
Sample Location Sample Number Sample Date	Units		mg/L	mg/L	mg/L	mg/L
Sa Sa Sa	Parameter	BTEX	Benzene	Ethylbenzene	Toluene	Xylene, Total

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

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

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.

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

(02 FT/	OCP3002 OCP3008 OCP3008	4-Oct-01 22-Jan-02	(G >SSSI Result
FTA-146-MW02	CPP3002K	17-Jul-01	Result Qual >BKG >S
FTA-146-MW01	OCP300/	22-Jan-02	Result Qual >BKG >SSSL
FIA-146-MW01		4-Oct-01	Result Qual >BKG >SSSL
			SSSL <sup>b</sup>
ation	Inut .	ate	BKG <sup>a</sup>
Sample Location	unu aidiii	sample Date	Units
Sar		'n	Parameter

Sa	Sample Location	ation		L	FTA-146-MW03	FTA-146-MW03	FTA-146-MW04	FTA-146-MW04
Sa	Sample Number	nber			OCP3003	OCP3009	OCP3004	OCP3010
	Sample Date	ate			5-Oct-01	24-Jan-02	16-Oct-01	25-Jan-02
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result	Qual >BKG >SSSL	Result Qual >BKG >SSSL	Result Qual >BKG >SSSL Result Qual >BKG >SSSL Result Qual >BKG >SSSL	Result
BTEX								
Benzene	mg/L	NA	1.41E-03	QN		D D D D D D D D D D D D D D D D D D D		
Ethylbenzene	mg/L	NA	1.40E-01	01 4.10E-04	J	QN	QN	DN DN
Toluene	mg/L	NA	2.59E-01	11 4.90E-04	8	QN	QN	
Xylene, Total	ma/L	NA	2.80E+00	+00 1.40E-03		GN		

Sar	Sample Location	ation		E	FTA-146-MW05	FTA-146-MW05	FTA-14	FTA-146-MW09	FTA-146-MW09	60
Sai	Sample Number	nber			OCP3005	OCP3011	OCP	OCP3006	OCP3012	
S	Sample Date	ate			10-Oct-01	24-Jan-02	11-0	11-Oct-01	23-Jan-02	
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result	Qual >BKG >SSSL	Result Qual >BKG >SSSL Result Qual >BKG >SSSL	Result Qual	Result Qual >BKG >SSSL	Result	SSS<
BTEX										
Benzene	mg/L	NA	1.41E-03	QN		- DN	DN		I DN	
Ethylbenzene	mg/L	NA	1.40E-01	DN		DN	QN		QN	
Toluene	mg/L	NA	2.59E-01	DN		QN	QN		QN	
Xvlene. Total	ma/L	NA	2.80E+00	QN		CIN	UN			

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

<sup>a</sup> 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. <sup>b</sup> Residential human health site-specific screening level (SSSL) as given in IT, 2000, *Final Human Health and* 

, July. Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama

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.

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### APPENDIX B GROUNDWATER SAMPLE COLLECTION LOGS, JUNE 2006

### Mar. 23. 2007 8:53AM MATRIX ENVIRONMENTAL SVCS. LLC

No. 3209 P. 2

	Matrix Environ	mental	1601 Bla	nvironmental S ike Street, Suite	e 200		Station Na	me/Sample ID FTA-14	6-MW01	
	Service		Denver, (303) 57	Colorado 8020 2-0200	2		Project	A BOOK AND A CONTRACT OF A	Project Number	
	integrated finder	ogenepus! Sulations	(303) 57				$\mathbb{N}$	icClellan - JPA	05.094.05	4.000
		GR	OUND	WATE	R SAM			3		
Groundwater Depth (	TOC)	Equipm	ent			Samp			Date	
10.72		Ba	iler				222	rant/Nerem	6/13/00	ø
Vell Depth (TOC)	WWW	feet					tion (Site		Begin Time	
			neck Valve				M 6.00	ool Area 3100	IO:ID Sample Depth (ft)	
35		feet G	rundfos			Labo	ratory	MAX	20	
Water Column Thick	ness :	Pe	ristaltic			Sam	ole Suite	MAX		
24.28	•		DI. J.J. D.				COC's			
Casing Diameter	¥	feet X	Bladder Pu	ımp	. a	Mete			Serial numbers	
		PI	D/FID		5 a 1	VSI	556 M	PS	M001	
2	. in	ches O	ther (descr	ibe)	N	e				
Casing Volume					11	Geo	tech Lo	w Flow	M001	
3-8848	1	and the second sec	ions (temp,	, weather, j	precíp)	-	nst 101		Screen Length (ft)	
1"=x0.04 2"=x0.16 4"=x0.			ercast	-, 70	<b>'S</b> ; •'	· Pre	bration calibrate	ed 6/12/06	15	
Well Elevation (TOC	1					110	Junorati		1~	
821.7	3			•						×
Groundwater Elevat	A 	feet	eter Stabili	ization	•	_				
		temp +/	asan o sam	5.5V) (B/52.5V)	-bidity +/- 10	% Pro	luct Öbs	erved (yes/no)	Depth to product	
811.0	1	feet cond +/	- 3% ORP	4/- 10mV	pH +/- 0.1 u	lt		no	NIA	
	Volume removed	Тетр	Cond	DQ	ORP	TREPORT				AND STOLEN
Time	(Ballou)	(°C)	(uV/sec)	(mg/L)	(mV)	(יידא)	Ĥq	Description (e.g. odor	r, clarity, color)	
10:10	init		000000	10 122 2						
		22.0	56	2.92	35.6	.038	5.54	reddish ba	zown, turb	id
10:15	0.5	22.0	56 53	2.92	35.6 54.0	.031	5.54	cleaning, 1	light turbi	dily
10:15					54.0 69.1	.031	5.54 5.67	cleaning, I	light turbi	dily
	0.5	21.42	53	0.90	54.0 69.1	.031	5.54 5.67	cleaning, I	light turbi	dily
10:20	0.5	21.42	53 50	0.90 0.51	54.0 69.1	.031	5.54 5.67	cleaning, I	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, 1	light turbi	dily
10:20	0.5 1.0 1.5 2.0	21.42 20.79 20.04	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I cleaning,	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I cleaning,	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I cleaning,	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I cleaning,	light turbi	dily
10:20 10:25 10:30	0.5 1.0 1.5 2.0	21.42 20.79 20.04 19.33	53 50 48 46	0.90 0.51 0.72 0.90	54.0 69.1 81.7 90.1	.031 .035 .034 .034	5.54 5.67	cleaning, I cleaning,	light turbi	dily
10:20 10:25 10:30 10:31	0.5 1.0 1.5 2.0 	21.42 20.09 20.09 19.33 01.60	53 50 48 46 ± 50	0.90 0.51 0.72- 0.90 m.pl	54.0 69.1 90.1 Duit	.031 .035 .034 .034	5.54	cleaning, I cleaning,	light turbi light turbi year lear Refi	dieleg dieleg
10:20 10:25 10:30 10:31	0.5	21.42 20.09 20.09 19.33 01.60	53 50 48 46 ± 50	0.90 0.51 0.72- 0.90 mpl	54.0 69.1 90.1 Duit	.031 .035 .034 .034	5.54 5.78 5.78 5.78	cleaning, cleaning, mostly c mostly c	light turbi light turbi year lear Refi	dily
10:20 10:25 10:30 10:31	0.5 1.0 1.5 2.0 	21.42 20.09 20.09 19.33 01.60	53 50 48 46 ± 50	0.90 0.51 0.72- 0.90 m.pl	54.0 69.1 90.1 Duit	.031 .035 .034 .034	5.54 5.78 5.78 5.78	cleaning, l cleaning, mostly c mostly c	light turbi light turbi year lear Refi	dieley dieley

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	Matrix Environr	nental	1601 B	Environmental lake Street, Suj	te 200	2	Station N	ame/Sample ID FTA-140	5-MW02		
	Services		(303) 5	, Colorado 802 72-0200	02		Project		Project	Number	
	Integraded Environ		× (303) 5	72-0202			N	AcClellan - JPA	05.0	94.054.000	
			ROUNI	WATE	ER SAN		Contraction of the local division of the loc	G			
Groundwater Depth	(TOC)	Equi	ipment			San	pler		Date		
10.85			Bailer			-		rant/Nerem	6/13	06	
Vell Depth (TOC)		feet	Check Val	Ve		1000	ation (Sit	e) ool Area 3100	Begin Time		
35.5			Cheek val	116			viotor P	001 Area 3100	09 Sample Dep		
		feet	Grundfos			Lai	2552.4 (C. 1 <b>3</b> 7)	EMAX		20.5	
Water Column Thic	kness.		Peristaltic			San	ple Suite		L		
24.65	890) 1	X	Bladder	Dump			COC's				
Casing Diameter	÷	feet		rump		Me	ters		Serial numb	pers	
2			PID/FID			YS	I 556 M	PS	M001		
-	iı	iches	Other (de	scribe)							
Casing Volume	1					Ge	otechLo	ow Flow	M001		
3.944	043 22	and the second se	ditions (ten	and the second se	and the second second		linst 101		la "	11. (7)	
"=x0.04 2"=x0.16 4"=x	ummin		verca	st, 70	25		ibration	ed 6/12/06	Screen Len 15	gth (ft)	
Well Elevation (TO						FI	canbiat				
822.											29
Groundwater Eleva	1	feet	Carl								
			ameter Stal		Furbidity +/-	10% Pro	duct Obs	erved (yes/no)	Depth to pr	oduct	
811.	.63		1+/-3% O					no			
						Se sand		1	on <u>a kan</u> a kana	<u> </u>	
Time	Volume removed (gallon)	Temp (°C)	Cond (uV/sec)	DQ (mg/L)	ORP (mV)	(NTU)	рң	Description (e.g. odor,	clarity, color)		
09:15	init	19.03	145	1.84	-217.1	.104	6.33	sover ador	<u>, greyie</u>	h, turtid	ŀ
09:20	0.5	18:53	M3	0.83	-236.1	.106	6.33	Server adar	, clann	9, greyis	h
09:25	1.0	18.30	141	0.42	-2539	.105	6.38	sewerodo	c. greyis	ih, light tu	bid
09:30	1.5	1827	139	0.41	-257.7	.104	6.40	clearing,s	light se	wer odor	
09:35	2.0	18.33	144	0.39	-21.0.3	.107	6.42	- mostly el	ear. slig	bt-sewer	bola
09:36	co	les-	- say			·					-
				B				Possible sli	aht s	naen.	
								appeared "			
				1				in bucke		7	1
		1		1						•	
	i ,										
Total Time (min.)	Total Volume Rem	oved	Well pump	ed dry (yes/	no)	Notes				Refill/Discharge	
~20	12.5	4 0 <sup>4</sup>		VO		COC#	2340			B/4	
QA/QC Samples						L		ignature Mss	<i>C</i> <b>A A</b>		1
N/A	ĩ							511550	en		

### Mar. 23. 2007 8:53AM MATRIX ENVIRONMENTAL SVCS. LLC

No.3209 P.4

Matrix	mental	1601 Bla	ke Street, Suho	200	s	tation Na	·····	6-MW03
Service	S, L.L.C.	(303) 57	7-0200	2	I			Project Number 05,094,054,000
DURING LAU		82 (A		TD CAN				03.034.034.000
(TOC)			VV ALL	SALV		and the second se	G	Date
÷	Ba					Bondu		61306 Begin Time
	2770	ieck Valve				80 80	s	10:50
	0.	icen i ajia			1000	40 <u>2</u> 8 8 8		Sample Depth (ft)
	feet G	rundfos				Ē	EMAX	26
cness.	Pe	ristaltic			Samp	le Suite		
1	fort X	Bladder Þi	ump		see (	COC's		
					Mete	rs		Serial numbers
	PI	D/FID			YSI	556 M	PS	M001
in	iches 0	ther (descr	ibe)		Geo	tech Lo	w Flow	M001
÷.			107.00 · · · · · · ·					
ga					Calit	oration		Screen Length (ft)
0.65 6 <sup>1/</sup> mx1.47 B"=x1	10.4	evcasi	- 70	2.	Prec	alibrate	ed 61206	15
C)								
54	feet							
tion	The second se	eter Stabili	ization					
72		(1)( <del>*</del> ) = -(1)(-(1)()		entro de la composición de la composicinde la composición de la composición de la composición de la co	/0	luct Obs	Station -	Depth to product
-	feet coud */	- 576 OK	····	pri :/- 0-1 u			10	
Volume removed (gallon)	Тетр ( <sup>4</sup> С)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	<del>Turbidity</del> (NTU)	рН	Description (e.g. odor,	, clarity, color)
init	21.41	75	1.87	29.6	.052	6.49	raddish	brown, turbid, gen
0.5	20.46	70	0.75	27.1	.050	6.6	brownish,	heavy turbidity, sen
1.0	20.37	67	0.89	32.3	.048	6.52	cleaning, to	urbid, selver oda
1.5	20.39	66	0.87	337	. 047	6.52	cleaning.	slight sewer ada
1	20.38		0.88	35.2	.047	6.53	mostlycl	ear slight sever
······································	last	AAr						
8					-		Possible s	slight sheen,
							popeared	mercuny like
							in bucket	
×								
2 1		1					A Contraction of the second se	
Total Volume Re			Ded dry (yes)	1 'no)	Notes	0.44		Refil/Disch¤rg
Total Volume Re			ped dry (yes/	'no)	Notes COC#2		JN47	
	Environ Service Integrated Early (TOC) (TOC) kness in 20.65 6 <sup>th</sup> ex1.47 8 <sup>th</sup> ext C) 54 tion 72 Volume removed (gallon) init 0.5 1.0 1.5 2.0	Environmental Services, LL.C. (TOC) Equipm (TOC) Equipm (TOC) Equipm (TOC) Equipm (TOC) Equipm (C) (eet $-Gi(eet -Gi(eet -Gi(eet -Gi(eet -Gi(eet -Gi(eet -Gi(eet -Gi(eet -Gi(feet -Gi(feet -Gi(feet -Gi(Gi(Gi(Gi(Gi(Gi(Gi(Gi(Gi(Gi($	Initial       1601 Bia         Environmental       1601 Bia         Services, LLC.       (303) 57         (TOC)       Equipment         Bailer	Initial Services, LLC.       1601 Blake Streat, Suber Deriver, Colorado 8020 (303) 572-0200         Services, LLC.       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (303) 572-0200       (303) 572-0200         (100) 100       Equipment	Environmental Services, LL.C. Internet destinance dull Southers         Join State State, Same 200 Davise, Colorado 80202 (303) 572-0200 (303) 572-020 (303) 572-0200 (303) 572-0200 (303) 572-0200 (303) 572-0200 (303) 572-020 (303) 572-020 (304) 572 (305) 502 (305) 502 (30	Matrix Matrix Environmental Services IGN Black Strues, Sule 200 Durwer, Colorado 80202 (303) 572-0202 GROUNDWATER SAMPLING (TOC) Equipment Samp Bailer Local Check Valve M Grundfos feet Check Valve M Grundfos feet X_Bladder Pump Sec 0 Grundfos feet X_Bladder Pump Sec 0 Conditions (temp, weather, precip) Other (describe) Geo Conditions (temp, weather, precip) Other (describe) Geo Conditions (temp, weather, precip) Other (describe) Geo Conditions (temp, weather, precip) Other (describe) Geo Samp Mete PID/FID YSI Califi feet Temp Cond DO (mg/L) (mV) (NTU) init 21, 41 75 1.87 29.6 .052 O.5 2D.46 70 0.75 27.1 .0550 1.0 20.371 67 0.89 32.3 .048	Matrix         Matrix levite Evitoremental Services proves, Colorado 80202 (203) 572-0200         Project           Services, LLC.         (203) 572-020         M           GROUNDWATER SAMPLING LO         Sampler         Bondu           Bailer         Location (Site         Motor Presson           Grundfos         Check Valve         Motor Presson           Grundfos         Grundfos         Feet           Grundfos         Sample Suite         Sample Suite           Grundfos         Peristaltic         Sample Suite           feet         Quinting (temp, weather, precip)         Solinst 101           Gallons         Other (describe)         Geotech Lo           Good (time removed (target) A fight)         Product Obs         Preclaibration           feet         Parameter Stabilization         Product Obs         Product Obs           Volume removed         Temp (cond (uV/see) (mg/L) (mV) (mV) (VTU)         PH         PH           init         21, 41         75         1.877         29.4         .052           Volume removed         Temp (cond (uV/see) (mg/L) (mV) (mV) (VTU)         PH         PH         .0.5         .0.44         .0.57         .0.47         .0.52         .0.44         .0.55         .0.57         .0.57	Environmental       [60] Black Steet, Solide 200       F1A-14         Dewr, Coined 80202       [003] 972-020       McClellan - JPA         CROUNDWATER SAIMPLING LOG         CROUNDWATER SAIMPLING LOG         Bailer

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### Mar. 23. 2007 8:53AM MATRIX ENVIRONMENTAL SVCS. LLC

No. 3209 P. 5

		nmental	1601 E	Environmental Ilaka Street, Su 1. Culorado 802	ile 200				FTA-14	6-MW04	
	Service Integrated Env	CS, LL.C.	(303) 5	772-0200 772-0202				Project	AcClellan - JPA		Number 094.054.00
	and the second sec	G	ROUNI	WAT	ERSAT	MPT	IN			0.	Jy4.00
Groundwater Depth	(TOC)	Eguip			CAN OFAL		Sam	and a second second	<u> </u>	Date	
11.43		в	ailer					Bond	arant/Nerem	4/13	106
Well Depth (TOC)		feet					Loca	tion (Sit	e)	Begin Time	
		C	heck Valv	e					ool Area 3100	08:0	
40		feet G	Fundfos				Labo	oratory		Sample Dep	5 8
Water Column Thick	cness	P	eristaltic				Same	ple Suite	EMAX		20
28.57								pie suite COC's			
Casing Diameter	<del>,</del>	feet	Bladder P	ump			Mete			Serial num	Jers
2		P	ID/FID					556 M	PS	M001	
	<u>i</u> iı	nches 0	)thør (desc	ribe)							
Casing Volume			65	3					ow Flow	M001	
4.5712			ions (temp			_	and the second second	nst 101		-	11 /51
"=x0.04 2"≥x0.16 4"=x0			ercas	t,70	S			bration calibrat	ed 6/12/06	Screen Leng 20	grh (It)
Well Elevation (TOC							1100	-ontor al	- where the	20	
823.0	7	6.4									
Groundwater Elevat	ion .	feet	eter Stabil	ization							
811.6	4	temp +	-1" DO +	/- 10% Tu			Prod	luct Obs	erved (yes/no)	Depth to pr	oduct
		feet cond +/	- 3% ORP	° +/= 10mV	pH +/- 0.1 ι	TUTTE		-42-50	<u>no</u>		in-model defenses and the
Time	Volume removed (gallon)	Тетр . (°С)	Cond (uV/sec)	DØ (mg/L)	OR₽ (mV)	-Eurb (N7	idity		Description (e.g. odor,		
08:40	init	19.86	46	5.24	27.3	.0	33	5.98	mostly	leave.	
08:45	0.5	19.19	42	2.05	54.0	.0	31	5.64	mostly	char	
08:50	1.0	19.15	42	1.85	59.0	. 0:		5.65			
08:55	1.5	19.17	42	1.77	a second second			5.7			۰. د
09:00	2.0	19.20	43	1.68	522	1		5.72	mostly mostly	clone	-
09:01		collec			1						
- 1 - cm, 1		Les mere	~ 40	- mprop	au		-				
	÷										
	×			ļ						_	
0											
	3										
						-					
								ļ			
	1										
Fotal Time (min.) ~20	Total Volume Rei	moved	Well pump N	ed dry (yes/n Ø	10)	Notes CO(		342			ReЛII/Disch
QA/QC Samples								Si	gnature J.	1	

Mar. 23.	2007	8:54AM	MATRIX	ENVIRONMENTAL	SVCS.	LLC	No.	3209	Ρ.	6
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	Service	Imenta es, LL.C	I 1601 Depv C. (303)	X Environment Blake Street, S er, Colorado 86 572-0200 572-0202	uira 200			oject	and the second se	Froject Numb	per 054.000
			GROUN	DWAT	ER SA	MPI	ING				001.000
Groundwater Dept 13.7	h (TOC)	E	quipment				Sample	r	lurant/Nerem	Date 6/13/06	
Well Depth (TOC)		<u>feet</u>	Check Va	lve				tor ]	te) Pool Area 3100	Begin Time //. <sup>•</sup> 2.0	
Water Column Thie	ckness	feet	Grundfos Peristalti				Labora Sample	v	EMAX	Sample Depth (ft 29	)
30.3 Casing Diameter		feet	_X Bladder	Pump			see CC Meters			Q	
2 Casing Volume	а а.	inches	PID/FID Other (de	scribe)		l.	YSI 55		IPS ow Flow	Serial numbers M001	
4.848	e	- 11	onditions (ter				Solinst Calibra	10		M001 Screen Length (ft	
Well Elevation (TO 826, Groundwater Eleva	C) 05	feet	,						ed 6/12/06	15	, ,
812.	e e	tei	nrameter Stal mp +/- 1° DO nd +/- 3% OI	+/- 10%			Product	Obs	erved (yes/no) NO	Depth to product	
Time	Volume гещоved (gallon)	Тетр (°С)	Cond (uV/sec)	DO (mg/L)	OR₽ (mV)	Tarbh (NT)		oH	Description (e.g. odor, o	larity, color)	
11:20	init	21.0	1 47	1.59	68.3	.02	33 5.	96	dark brown	heaver ten	tidele &
11:25	0.5	20.41		0.66	89.9	.03	1 5.	10	blace thic	c. heavy for	tidity sew
_11:30 	1.0	20.3		0.64	111.1	.02	31 5.	48	Clearing, bra	wrich, so	ver oder
11:40	2.0	19.93	3 45	0.64	132	.03	25.	39	brownish clearing, lie	int brown	<u>sewer</u> od
11:41		coll	ect sa	mple	Suit	E.	+	-			
									Possible sh	like "in k	weket
							_	-			
otal Time (min.) $\sim 2.0$	Total Volume Remo ~2.5		Well pumper	d dry (yes/no	·	Notes COC#	2343			Refi	W/Discharge
A/QC Samples I/A					•			Sig	nature Alen	EIN	

Page \_\_\_\_\_ of \_\_\_\_

#### Mar. 23. 2007 8:54AM MATRIX ENVIRONMENTAL SVCS. LLC

No.3209 P.7

		onmental	160 Den	rix Envíronmen 1 Blake Street, Iver, Colorado 8	Suile 200			and the second se	6-MW09
4	Servi	ices, L.L.C.		3) 572-0200 3) 572-0202			Ргојес		Project Number
	-			An other states and		A diam'r a'		McClellan - JPA	05.094.054.000
Groundwater Dept	h (TOC)		FROUN	DWAI	ERSA	Contraction of the local division of the loc		DG	
II.16		1240				52	Bone	durant/Nerem	Date
		feet	Bailer			L	ocation (S		6/13/06 Begin Time
Well Depth (TOC)			Check Val	Ve				Pool Area 3100	09:40
72.7	1		Grundfos			Ls	aboratory		Sample Depth (ft)
Water Column Thi	ckness	feet	O. undibă					EMAX	62.7
61.54			Peristaltic			Sa	mple Suj	PARALLY DESCRIPTION	02.7
		feet X	_ Bladder ]	Pump		se	e COC's	1	
Casing Diameter	:					M	eters		Seríal numbers
4	4		PID/FID				SI 556 N	IDS	
Coring Value		inches	Other (describe)						M001
Casing Volume	23		92 1	2 <del>7</del> -5		G	eotech L	ow Flow	M001
40.001			itions (tem	p, weather,	precip)	So	olinst 10	1	
"=x0.04 2"=x0.16 4"=x		allons	eras		88 - 80 884 - 88	Ca	libration		Screen Length (ft)
Vell Elevation (TO		-x10.4				Pr	ecalibra	ted 6/12/06	10
822.2	2								
		feet							
Groundwater Eleva	tion		neter Stabi						
811.]	.2	and a	+/-1° DO+ +/-3% ORI	:/- 10% Tu P +/- 10mV	rbidity +/- 1	0% Pro	oduct Obs	served (yes/no)	Depth to product
				Alloyand Philosophics			110 magazine	no	
Time	Volume removed (gallon)	l Temp ("C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Turbidie (NTU)	P nH	Description (e.g. odor, e	
09:40	init	20.45	1/3	6.04	-171.2	.081	6.99	Vallouice to	oun, turbid
09:45	0.5	19.54	112	2.35	-180.5			Hallawich the	rown, turbid
09:50	1.0	19.10	108			070	1.01	gerowish or	COUN, TUPBIO
09:55	10-	1			1000 5	1017	6.81	acang, jigi	t yellow, turbi
	1.5	19.13	108	1.81	-159.0	.078	6.81	cleaning, light	at yellow, turbid
10:00	2.0	19.16	108	2.10	-149.0	.079	6.82	Light yerla	U. Some turbidu
10:01	Co	lect	Jam	hle.	inte				
					Me Co		· · ·		
	2								
	-								
			1000		-		1		
	1			-	1		1 1		
(a) Time (min.)	Page 1 We have 2							- 10 million	
(al Time (min.)	Total Volume Ren			ed dry (yes/no	o)	Notes			Refill/Discharge
	Total Volume Ren		Well pumpe		o)	Notes COC#2:		nature A	Refill/Dischorge

Page 1 of 1

#### Mar. 23. 2007 8:54AM MATRIX ENVIRONMENTAL SVCS. LLC

No. 3209 P. 8

		ronmental	1601 Denv	ix Environment Blake Street, S ver, Colorado 8	Suite 200				514-MW12
	Serv.	ices, LLC		) 572-0200 ) 572-0202			Projec		Project Number
		G	ROUN	DWAT	ERSAT	MPL	NGI	McClellan - JPA	05.094.054.000
Groundwater Dep	th (TOC)		oment	- TILLA			mpler		Date
27.51		feet	Bailer			L	Bon cation (S	durant/Nerem	6/13/06 Begin Time
Well Depth (TOC)	38		Check Valv	'e			2000	Pool Area 3100	07:40
105	3		Grundfos			La	boratory		Sample Depth (ft)
Water Column Thi	ickness	feet	Desilia Id					EMAX	95
77.49	9	'	Peristaltic				mple Sui		
Casing Diameter		feetX	_ Bladder F	'ump			e COC'	5	
		1	PID/FID				eters		Serial numbers
2		inches (	Other (desc	rihe		Y	SI 556 I	MPS	M001
Casing Volume	1		1 (0630			G	eotech I	.ow Flow	M001
12.3984			tions (temp	, weather,	precip)		olinst 10		
1''⇒10.04 2''=10.16 4''⇒		zallons =x10.4 OV	er ca si	£,70°		10000000	libration	1 (a) (b)	Screen Longth (ft)
Well Elevation (TO	and the second s			ant 200 (955)		Pr	ccambra	ted 6/12/06	10
821.	91	feet				í,			
Groundwater Eleva	ation		neter Stabil	ization					
794.	.4	temp →	-/- 1° DO +	/-10% Tu	rbidiry +/- 1(	% Pr	oduct Ob	served (yes/no)	Depth to product
		feet cond +	/- 3% ORP	' +/• 10mV	pH +/- 0.1 u	nit	million and the local states	no	NA
Time	Volume removed (gallon)	d Temp (°C)	Cond (uV/sec)	DO (ጥg/L)	ORP (mV)	Torbidit (NTU)	9 pH	Description (e.g. odor,	, clarity, color)
07:40	init	220	213	4.45	88.5		8.49		Kar
07:45	0.25	20.17	94	2.74	-32.2_	.06	2 7.28	turbid, r	Eddish brown
07:50	1.0	19.81	73	1.36	-95.1				ddish brown
07:55	2.0	19.77	76	1.84	-49.5	.055	6.43	cleaning	1 pampich
08:00	3.0	19.76	74	1.74	-41.7	.054	6.62	cleaning, Light -	home
08:01		Collec	t sa	mole	suit	r	ļ		
								я.	
	86 				5.0				
'otal Tima (m/n.)	Total Volume Rea	moved	Well pumpe	d dry (yes/n	0)	Notes	() AREI	He crimp in	He Refill/Discharge
~ 20	13.5		A	0	е С	COC#2	346	gnature Avr.	ing? 7/10

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Mar. 23. 2007 8:54AM MATRIX ENVIRONMENTAL SVCS. LLC

No.3209 P. 9

	N/mi		Science Proceedings				Station	Name/Sample ID	Party and	All and a second se
	Matrix Enviro	nmental	60	rix Environmen I Blake Street,	Suite 200		Station		-514-M	W13
	Servic	es, L.L.C.	(303	ver. Colorødo 8 5) 572-0200	80202		Project			Project Number
	Introgeneed Env	innimentni Sylwi		) 572-0202				McClellan - JP/		05.094.054.0
Groundwater Dept			ROUN	DWAT	ER SA		and the second se	)G		
Stoundwater Dept	n (10C)	Eq	ulpment			Sa	ampler		Date	
25.57	19 19		Bailer				Bone	lurant/Nerem	6	113/06
Well Depth (TOC)		feet	Cheak M	a lau		L	ocation (S		Begin	
42			_ Check V	alve				Pool Area 3100		08:10
		feet	Grundfo	S		L	aboratory		Samp	e Depth (ft)
Vater Column Thio	zkness		_ Peristalt	ic		5.		EMAX		32
16.43	11 13		( Di-da-	- D			imple Suit			
asing Diameter			Bladde	rrump			eters		Fanial	numbers
2		-	_ PID/FID				SI 556 N	105		
Casing Volume		Inches	_Other (d	escribe)			•		M00	
	12 )#					G	eotech L	ow Flow	M00	l
2.6288	а а		ditions (te				olinst 10	1		
'=x0.04 2''=x0.16 4''≥x0	***************************************		Verces	E, 70:	s .	Ca Dr	libration	ted 6/12/86		Length (ft)
Vell Elevation (TO	C)			•		11	ccalloid	ied grafee	10	
822	2.1	feet								
Froundwater Eleva	tion		ameter Sta	bilization						
796.	.53	tem	p+/-1° DC	D +/- 10%	Turbidity +/	- 10% Pr	oduct Obs	erved (ye5/no)	Depth	to product
		feet cond	1+/-3% O	PRP +/- 10m	V pH +/-0.	l voit		no		NGA
Time	Volume removed (gallon)	Temp (°C)	Cond (uV/şec)	DO (mg/L)	ORP (mV)	Terbian (NTU)	n H	Description (e.g. odor	, clarity, c	olor)
08:10	init	20.52	119	1.87	-48.7	.085	1.05	mostly cl mostly c	ear.	Light
08:15	0.25	20.5	· GA	8.29	-33.8	.048	6.93	MACHIN	14.010	
08:20	0.5	20.5	43	5.95	10.6	.031	1	mostly c	lar	
08:25	1.0	20.38	36	4.9	12.6	.026	6.37	mostly	Icah	,
08:30	1.5	20.45	37	5.34	12.5	.029	6.39	mostly a		
08:31 -	P	Alles				1_	1.	MUSFUL C	Lar	
		oller	E M	mpl	e ADI	F2				
			L							
	- 10 E									
2					<u>.</u>					
	•									and the second sec
	(									
tal Time (mln.)	Total Volume Romo	ved	Well pumpe		0)	Notes				Refill/Dicaba
~20	Total: Volume Romo	ved		rd dry (yes/n 10	0)	Notes COC#2	344			Refill/Disch:
	~2.0				0)			nature <b>P</b>	//	Refill/Disch 7/4

### APPENDIX C CHAINS-OF-CUSTODY, JUNE 2006

					06	FIIO		
			Chain	of Custody	COC#	: 2346		
McClellan Lab: EMAX	Site SMC	ode (circle): Grab(G), Com	posite (C		Station]	CWM-514-MW12 T <b>ype:</b> MW NS		
Sample Date: 6/13/06	ble Date: Sampling Technique (circle): Bailer(B) Bladder Pump(BP) Core(C) Task#: 05.094.054.000							
Contractor: Sampler Signa	MES ture(s):	Averen	EBL	Dt: TBN061306 Dt: EBN061306 Dt: MBN061306	sampleTop: 95.0	SampleBottom (Units):		
Time:	Label#:	Bottle, Preservative:		Method:				
08:01	1	1 3 x 40 mL VOA vial, HCl 8260 VOCs (no TICs)						
Blank, TB = T	rip Blank, VW = Mor	ative Sample, FD = Field Dup WQ = Water Quality, WS = S hitoring Well, BH = Bore Hole,	ource Wa	ater, SP = Seep				

White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)

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T= 3.6°0

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
SNETERN)	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

			Chair	n of Custody	ſ	COC#	: 2344	
McClellan	Si	e: Motor Pool	Area 3100			Station: CWM-514-MW13 StationType: MW		
Lab: EMA)	< SMC		de (circle): Grab(G)Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)				NS	
Sample Date	Sam Subr	mpling Technique (circle): Bailer(B) Bladder Pump(BP) Core(C) omersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand ger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)				Matrix: Ground Water Task#: 05.094.054.000 CoolerID:		
Contractor:	MES		TBL	ot: 78 M 06 1306	Sa	mpleTop:	SampleBottom (Units	
Sampler Sig	nature(s):	Averen		ot: EBHOGI 306 ot: MBMOGI 306	Ī	2.0	42.0 ft	
Time:	Label#:	Bottle, Preservative:		Method:				
08:3/	1	3 x 40 mL VOA vial, HC		OCs (no TICs)				
		ative Sample, FD = Field WQ = Water Quality, WS	• •	S = Matrix Spike, MSD = Mat ater. SP = Seeo	trix Sj	oike Duplica	ate, EB = Equipment	
	: MW = Mo			W Soil, SD = Sediment Point	t, SW	f = Surface	Water, SE = Seep,	
White Origin	nal COC (La	ib Copy) - Yellow COC (	Field Office)	- Pink COC (Data Managme	ent)			

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Herem	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:	<u> </u>	

McCiellan Lab: EMAX Sample Date	: Sam	ode (circle): Grab(G) Co	mposite (C), Discre J), Unknown(z) Bailer(B Bladder (EN), Hydropunch(H	te(D), Disturbed(S) Pump(BP) Core(C)	Station QCCode Matrix:	DUP067 Fype: MW : FD Ground Water 05.094.054.000
Contractor: Sampler Sign	MES ature(s):	WEREN	TBLot: TBA EBLot: CBA ABLot: MB		SampleTop: 32.0	SampleBottom (Units): 42.0
Time:	Label#:	Bottle, Preservative:	Meth			
08:31	1	3 x 40 mL VOA vial, HCI	8260 VOCs (no	ſiCs)		
Blank, TB = StationType: SS = Surface	Trip Blank, MW = Mor 9 Soil	ative Sample, FD = Field DL WQ = Water Quality, WS = itoring Well, BH = Bore Hol b Copy) - Yellow COC (Fie	Source Water, SP : e, DS = IDW Soil, S	= Seep D = Sediment Point	, SW = Surface	

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Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Auren	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 8930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

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	1	C	hain of Custody	COC#:	2341
McClellan	Site	e: Motor Pool Area 3		FTA-146-MW03	
Lab: EMAX	SMC	ode (circle): Grab(G) Compo Undiscrete (U), L	osite (C), Discrete(D), Disturbed(S)	), ), QCCode:	/pe: MW NS
Sample Date: 6/13/06	Subm	oling Technique (circle): Ba	lier(B) Bladder Pump(BP) Core(C), Hydropunch(HP), Spoon(SN), Ha		Ground Water 05.094.054.000
Contractor: N Sampler Signatur	1ES re(s):	tNorem	TBLOCTBN061306 EBLOCTBBN061306 ABLOT: NBM061306	SampleTop: S	SampleBottom (Units)
Time: La	abel#:	Bottle, Preservative:	Method:		
:	1	3 x 40 mL VOA vial, HCl 8	260 VOCs (no TICs)		
QCCode: NS = Ir	nvestiga	ative Sample, FD = Field Duplica	ate, MS = Matrix Spike, MSD = Ma rce Water, SP = Seep	trix Spike Duplicat	e, EB = Equipment

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Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature):
Relinquished by (Signature) :	Date/Time:	Received by (Signature):
Airbill Number:		

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			Chain	of Custody		5F170 : 2348
McClellan Lab: EMAX Sample Date: 6/13/06	Samp Subr Auger	ode (circle): Grab(G)Com Undiscrete (U)	nposite (C , Unknow Bailer(B), EN), Hydro Peristaltio	rn(z) Bladder Pump(BP), Sore(C) opunch(HP), Spoon(SN), Ha c Pump(PP), Grab(G)	Station QCCode Matrix: Task#: CoolerID	Ground Water 05.094.054.000 :
Contractor: M Sampler Signatur	ES re(s):	INETEM	EBL	DET <b>BHOG1306</b> DEEBHOG1306 DEEBHOG1306	SampleTop:	SampleBottom (Units): 41.044
Time: La	abel#:	Bottle, Preservative:		Method:		
11:11		6 x 40 mL VOA vial, HCl	8260 V	DCs (no TICs)		'
Blank, TB = Trip	Blank, \ ' = Mon	ative Sample, FD = Field Dupi WQ = Water Quality, WS = S itoring Well, BH = Bore Hole,	ource Wa	ater, SP = Seep		

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
INErEM	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 09(30	Received by (Signature) ;
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

McClellan Lab: EMAX Sample Date:	Samj Subr	e: McClellan Field ode (circle): Grab(G), Com Undiscrete (U), pling Technique (circle):	posite (C), Discrete(D), Disturbed(S, Unknown(z) Bailer(B) Bladder Pump(BP), Core(C N), Hydropunch(HP), Spoon(SN), Ha	Matrix: Water
Contractor: Sampler Sign	MES ature(s):	ANGREM	TBLot: <b>TBM061306</b> EBLot: <b>EBM061306</b> ABLot: <b>MBM061306</b>	SampleTop: SampleBottom (Uni NA- NA-
Time:	Labei#:	Bottle, Preservative:	Method:	
14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)	
Blank, TB = 1 StationType: SS = Surface	rip Blank, MW = Mor Soil	WQ = Water Quality, WS = So hitoring Well, BH = Bore Hole,	ource Water, SP = Seep	trix Spike Duplicate, EB = Equipment ht, SW = Surface Water, SE = Seep,

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
INerem	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

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McClellan Lab: EMA> Sample Date	s: Sam	ode (circle): Grab(G) Con Undiscrete (U) Dling Technique (circle): nersible Pump (SU), Encore(I	nposite (C), Discrete(D), Disturbe	ed(S), Station QCCod pre(C) Matrix: Task#:	n: MATERIAL014 nType: WQ le: EB Water
Contractor: Sampler Sigr	MES iature(s):	Werson	TBLot: 78/06/306 EBLot: 69/06/306 ABLot: 18/06/306	SampleTop NA	: SampleBottom (Units):
Time:	Label#:	Bottle, Preservative:	Method:		
14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		•
Blank, TB = StationType SS = Surfac	Trip Blank, MW = Mor e Soil	WQ = Water Quality, WS = S itoring Well, BH = Bore Hole	blicate, MS = Matrix Spike, MSD = Source Water, SP = Seep , DS = IDW Soil, SD = Sediment d Office) - Pink COC (Data Mana	Point, SW = Surfac	, , ,

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
INEram	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

ſ <u></u>			Chain	of Custody	COC#	
McClellan Lab: EMAX		Site:         McClelian Field QC           SMCode (circle):         Grab(G), Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)			Station: Station QCCode	Fype: WQ
Sample Date:	Sam Subn		Bailer(B)	Bladder Pump(BD), Core(C) opunch(HP), Spoon(SN), Har	Toek#•	Water 05.094.054.000
Contractor: Sampler Signa	MES iture(s):	faleren	EBLO	DE TBHOGIZOG DE BMOGIZOG DE MBMOGIZOG	SampleTop:	SampleBottom (Units):
Time:	Label#:	Bottle, Preservative:		Method:		
15:00	1	2 x 40 mL VOA vial, HCl	8260 VC	DCs (no TICs)		
Trip blank as	sociated	with Motor Pool Area 3100				
Blank, TB = T	rip Blank, VW = Mor	ative Sample, FD = Field Dup WQ = Water Quality, WS = S hitoring Well, BH = Bore Hole	Source Wa	iter, SP = Seep		
White Original	COC (La	b Copy) - Yellow COC (Field	d Office) -	Pink COC (Data Managme	nt)	

Relinquished by (Signature) :	Date/Time: 6/13/86 16:00	Received by (Signature) : FEDEX	
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :	
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :	
Airbill Number:			· · · · · · · · · · · · · · · · · · ·

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_			CI	nain	of Custody	<b>C</b>	COC#	2342
	McClellan Lab: EMAX Sample Date:	.ab: EMAX SMCode (circle): Grab(G) Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)			- Sta	Station: FTA-146-MW04 StationType: MW QCCode: NS Matrix: Ground Water		
	Sampling Technique (circle):         Bailer(B) Bladder Pump(BP) Core(C)           Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand           Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)				nd Tas	Task#:         05.094.054.000           CooleriD:		
- I	Contractor: Sampler Signa	MES ture(s):	HErem	EBL	ot: <b>FBN061306</b> ot: <b>FBN061306</b> ot: MBN061306	Sample 20.		SampleBottom (Units): 40.0 FL
	Time:	Label#:	Bottle, Preservative:		Method:			
	09:01	1	3 x 40 mL VOA vial, HCl 82	260 B	ΓΕΧ			
	Blank, TB = Ti StationType: N SS = Surface	rip Blank, /W = Mor Soil	ative Sample, FD = Field Duplica WQ = Water Quality, WS = Sour hitoring Well, BH = Bore Hole, DS b Copy) - Yellow COC (Field Off	ce Wa i = ID\	ater, SP = Seep W Soil, SD = Sediment Point	, SW = St		

Relinquished by (Signature)	Date/Time:	Received by (Signature) :
INerem	6/13/06 16:00	FEDEX
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Relinquished by (Signature) :	Date/Time:	Received by (Stanature)
Airbill Number:		

		C	Chain of Custody	COC	<i>⇒F 7 7 0</i> #: 2340
McClellan	McClellan Site: Motor Pool		3100		: FTA-146-MW02
Lab: EMAX	SMC		osite (C), Discrete(D), Disturbed(	S), QCCode	Type: MW n: NS
Sample Date:	Sam	Undiscrete (U), Unknown(z) Sampling Technique (circle): Bailer(B) Bladder Pump(BP) Core(C) Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)			Ground Water 05.094.054.000 D:
Contractor: Sampler Signa	MES	INerem	TBLot: 784061306 EBLot: 784061306 ABLot: 484061306	SampleTop:	
Time:	Label#:	Bottle, Preservative:	Method:		
09:36	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
Blank, TB = T	rip Blank, VW = Mor	WQ = Water Quality, WS = Sor	ate, MS = Matrix Spike, MSD = M urce Water, SP = Seep S = IDW Soil, SD = Sediment Poi		

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Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

McClellan Lab: EMAX	Site	e: Motor Pool Area	osite (C), Discrete(D), Disturbed(S),	COC#: 2345 Station: FTA-146-MW09 StationType: MW QCCode: NS
Sample Date:	Subr		ailer(B) Bladder Pump(BP) Core(C) I), Hydropunch(HP), Spoon(SN), Hand eristaltic Pump(PP), Grab(G)	Matrix: Ground Water Task#: 05.094.054.000 CoolerID:
Contractor: Sampler Signa	MES ture(s):	filerem)		SampleTop: SampleBottom (Units o2.7 72.7 FL
Time:	Label#:	Bottle, Preservative:	Method:	
10:01	1	3 x 40 mL VOA vial, HCl	8260 BTEX	
QCCode: NS	rip Blank,	ative Sample, FD = Field Duplic WQ = Water Quality, WS = So	cate, MS = Matrix Spike, MSD = Matrix	

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
FNETEM	6/13/06 16:00	FEDEX
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Relinquished by (Signature) :	Date/Time:	Received by (Signature)
Airbill Number:		

			Chain of Custody		FIIO	
			Chain of Custody	COC#	: 2339	
McCiellan	Sit	e: Motor Pool Are	a 3100		FTA-146-MW01	
Lab: EMAX	SMC	ode (circle): Gfab(G), Con Undiscrete (U)	nposite (C), Discrete(D), Disturbed(S), , Unknown(z)	QCCode	: NS	
Sample Date	Sam Subn	nersible Pump (SU), Encore(E	Bailer(B) Bladder Pump(BP) Core(C) EN), Hydropunch(HP), Spoon(SN), Har Peristaltic Pump(PP), Grab(G)	er(B) Bladder Pump(BP) Core(C) Hydropunch(HP), Spoon(SN), Hand Coolor/D:		
Contractor: Sampler Sign	MES ature(s):	Weren	TBLot: 784061306 EBLot: 784061306 ABLot: 784061306	SampleTop: 20.0	SampleBottom (Units): 35.0 ft	
Time:	Label#:	Bottle, Preservative:	Method:	·	<u> </u>	
10:31	1	3 x 40 mL VOA vial, HCl	8260 BTEX			
Blank, TB =	Trip Blank, MW = Mor	WQ = Water Quality, WS = S	olicate, MS = Matrix Spike, MSD = Matr Source Water, SP = Seep , DS = IDW Soil, SD = Sediment Point			

White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)

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Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
FNErem	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
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Airbill Number:	L	

	<u>II</u>	C	Chain of Custody	COC	<i>b F T T O</i> #: 2343	
McClellan Lab: EMAX	SMC	te: Motor Pool Area Code (circle): Grab(G), Comp Undiscrete (U), I	osite (C), Discrete(D), Disturbed(S)	1	: FTA-146-MW05 <b>Type:</b> MW :: NS	
Sample Date:	> Sam Subr Auge	pling Technique (circle): Ba	ailer(B) Bladder Pump(BP) Core(C)	nd Task#:	Matrix: Ground Water	
Contractor: Sampler Signa	MES ature(s):	Herem	TBLot: TBM 041306 EBLot: EBM061306 ABLot: MBM061306	sampleTop: 29.0	SampleBottom (Units): 44.0 ft	
Time:	Labei#:	Bottle, Preservative:	Method:			
<u>  :41</u>	1	3 x 40 mL VOA vial, HCl 8	260 BTEX			
StationType: N SS = Surface	/W = Mon Soil	itoring Well, BH = Bore Hole, DS	ate, MS = Matrix Spike, MSD = Matr rce Water, SP = Seep S = IDW Soil, SD = Sediment Point, ffice) - Pink COC (Data Managmen	SW = Surface	tte, EB = Equipment Water, SE = Seep,	

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Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
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Relinquished by (Signature) :	Date/Time:	Received by (Signature):
Airbill Number:		

APPENDIX D VALIDATED DATA SHEETS, JUNE 2006

	ÓB/8260B ANICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SERV Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: CWM-514-MW12 Lab Samp ID: F170-01 Lab File ID: RFQ606 Ext Btch ID: V005F50 Calib. Ref.: RFQ286	% MO1:	Collected: Received: Extracted: Analyzed: ion Factor: sture	06/14/06 06/21/06 14:33 06/21/06 14:33 1 WATER NA	
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL	Reportable Results
1.1.1.TRICHLOROETHANE 1.2.7TRICHLOROETHANE 1.2.7TRICHLOROETHANE 1.1.DICHLOROETHANE 1.1.DICHLOROPTHANE 2.3.TRICHLOROBENZENE 2.3.TRICHLOROBENZENE 2.3.TRICHLOROBENZENE 2.4.TRICHLOROBENZENE 1.2.4.TRICHLOROBENZENE 1.2.0ICHLOROETANE 1.2.DICHLOROPTOPANE 1.2.DICHLOROPTOPANE 1.2.DICHLOROPROPANE 1.2.DICHLOROPROPANE 1.2.DICHLOROPROPANE 1.3.DICHLOROBENZENE 1.3.DICHLOROBENZENE 2.2.DICHLOROPROPANE 1.3.DICHLOROBENZENE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROBENZENE 2.2.DICHLOROBENZENE 2.2.DICHLOROPROPANE 2.2.DICHLOROBENZENE 2.2.DICHLOROPROPANE 2.2.DICHLOROBENZENE 2.2.DICHLOROBENZENE 2.2.DICHLOROBENZENE 2.2.DICHLOROBENZENE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 2.2.DICHLOROPROPANE 3.5.TIMETHANE BROMOGENAME BROMOGENAME BROMOGENAME BROMOGENAME BROMOGENAME BROMOGENAME BROMOGENAME BROMOGENAME BROMOGENAME BROMOMETHANE DIGHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROBENZENE CHLOROETHANE DIGHLORODIFLUOROETHANE DIBROMOMETHANE DIGHLORODIFLUOROMETHANE DIBROMOMETHANE DIGHLORODIFLUOROMETHANE DIBROMOMETHANE DIGHLORODIFLUOROMETHANE DIGHLORODIFL			ระ จะกับการการการการการการการการการการการการการก	Y
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	8 RECOVERY 103 107 112	QC LIMIT 63-132 75-122 73-129		A

RL: Reporting Limit

SR -119/06 QC'd 7/24/06 gm

	D308/82608 RGANICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SEF Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: CWM-514-MW13 Lab Samp ID: F170-02 Lab File ID: RFQ609 Ext Btch ID: V005F50 Calib. Ref. RFQ286	RVICES Date Date Date Date Dilut Matri % Moti	Collected: Réceived: Extracted: Analyzed: ion Factor: X sture	06/13/06 06/14/06 06/21/06 16:24 06/21/06 16:24 1 WATER NA NA NA	
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/l)	
1, 1, 1 - TRICHLOROETHANE 1, 1, 2, 2-TETRACHLOROETHANE 1, 1, 2-TRICHLOROETHANE 1, 1, 2-TRICHLOROETHANE 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	ND 59E J	x 1	23	Y N
1.1.2.2.1 IKACHLURDE HANE         1.1.0 ICHLOROETHANE         1.1.0 ICHLOROETHANE         1.1.0 ICHLOROETHANE         1.2.3.7 RICHLOROPROPENE         1.2.3.7 RICHLOROPROPENE         1.2.3.7 RICHLOROPROPENE         1.2.3.7 RICHLOROPROPENE         1.2.3.7 RICHLOROPROPANE         1.2.4.7 RIMETHYLBENZENE         1.2.4.7 RIMETHYLBENZENE         1.2.1 IRKOMOSTANE         1.2.2.0 ICHLOROPROPANE         1.2.2.0 ICHLOROPROPANE         1.2.2.0 ICHLOROPROPANE         1.2.2.0 ICHLOROPROPANE         1.2.2.0 ICHLOROPROPANE         1.2.0 ICHLOROPROPANE         1.2.0 ICHLOROPROPANE         1.2.0 ICHLOROPROPANE         1.2.0 ICHLOROBENZENE         1.3.5.7 RIMETHYLBENZENE         2.2.0 ICHLOROPROPANE         3.5.0 ICHLOROPROPANE         3.6.0 ICHLOROPROPENE         CA		x 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛	
TŘAŇS-1,4-DICHLORÖ-2-BÜTĚNE ACRYLONITRILE I ODOMETHANE		10	5	
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8	% RECOVERY	QC LIMIT	.,	•
TOLUENE-D8 4-BROMOFLUOROBENZENE	106 107 111	63-132 75-122 73-129		

RL: Reporting Limit

SR -119/06

SW 5030B Volatile organ		S		
Client : MATRIX ENVIRONMENTAL SERVIC Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: CWM-514-MW13DL Lab Samp ID: F170-02T Lab File ID: RFQ715 Ext Btch ID: V005F58 Calib. Ref.: RFQ286	% Mon Instr	sture	06/13/06 06/14/06 06/24/06 11:17 06/24/06 11:17 06/24/06 11:17 04TER NA T-005	
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
1,1,1-TRICHLOROETHANE 1,1,2,2-TETRACHLOROETHANE 1,1,2-TRICHLOROETHANE	ND 57 ND	5	1.5	N Y
1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROPROPENE 1,2,3-TRICHLOROBENZENE 1,2,3-TRICHLOROBENZENE 1,2,4-TRICHLOROBENZENE 1,2,4-TRICHLOROBENZENE 1,2-DIBROMO-3-CHLOROPROPANE 1,2-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,2-DICHLOROPROPANE 1,2-DICHLOROPROPANE 1,3-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 2,2-DICHLOROPROPANE 1,4-DICHLOROBENZENE 2,2-DICHLOROPROPANE 1,4-DICHLOROPROPANE 2,2-DICHLOROPROPANE 1,4-DICHLOROPROPANE 2,2-DICHLOROPROPANE 2,2-DICHLOROPROPANE 2,2-DICHLOROPROPANE		2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5 1 1 5 1 1	
4 - CHLOROTOLUENE BENZENE BROMOGENZENE BROMOGENLOROMETHANE BROMODFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBETHANE CHLOROFORM CHLOROFORM CHLOROFORM CHLOROMETHANE CIS-1,2-DICHLOROPETHENE CIS-1,2-DICHLOROPETHENE DIBROMOCHLOROMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE HEXACHLOROBUTADIENE HEXACHLOROBUTADIENE N-PRUPYL BENZENE METHYLENE CHLORIDE N-PBUTYLENE METHYLENE N-PROPYLBENZENE N-PROPYLBENZENE NAPHTHALENE	ND	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE TETRACHLOROETHYLENE TOLUENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPTHENE TRANS-1,2-DICHLOROPTHENE TRICHLOROFLUOROMETHANE VINYL CHLORIDE ACETONE 2-BUTANONE(MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE(MIBK) CARBON DISULFIDE VINYL ACETATE 12TRICHLORO122TRIFLUOROETHANE 1,1,2-TETRACHLOROETHANE 1,1,2-TETRACHLOROETHANE TRANS-1,4-DICHLORO-2-BUTENE ACCYLONITRILE IODOMETHANE	ND ND ND ND ND ND ND ND ND ND ND ND ND N	15555555555555555555555555555555555555	111111111111122 22212 3.225 225 225 225 225 225 225 225 225 225	

RL: Reporting Limit

SR 7/19/06

	308/82608 GANICS BY GC/MS	-		
Client : MATRIX ENVIRONMENTAL SER Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: DUP067 Lab Samp ID: F170-03 Lab File ID: RFQ610 Ext Btch ID: V005F50 Calib. Ref.: RFQ286	VICES Date Date Date Date Dilut Matri % Moj Instr	Collected: Received: Extracted: Analyzed: ion Factor: X sture !ment ID	06/14/06 06/21/06 17:01 06/21/06 17:01 1 WATER NA NA T-005	
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
1, 1 - TRICHLOROETHANE 1, 2, 2 - TETRACHLOROETHANE 1, 2 - TRICHLOROETHANE 1, - DICHLOROETHANE 1, - DICHLOROETHANE 1, - DICHLOROETHANE 1, - DICHLOROPENE 1, 2, 3 - TRICHLOROBENZENE 1, 2, 4 - TRINETHYLBENZENE 1, 2, 4 - TRINETHYLBENZENE 1, 2, 4 - TRINETHYLBENZENE 1, 2, 0 ICHLOROBENZENE 1, 2, 0 ICHLOROBENZENE 1, 2, 0 ICHLOROBENZENE 1, 2, 0 ICHLOROBENZENE 1, 2, 0 ICHLOROPANE 1, 2, 0 ICHLOROPANE 1, 2, 0 ICHLOROPROPANE 1, 2, 0 ICHLOROBENZENE 1, 3, 5 - TRIMETHYLBENZENE 1, 3, 5 - TRIMETHYLBENZENE 1, 3, 5 - TRIMETHYLBENZENE 1, 3, 5 - TRIMETHYLBENZENE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROBENZENE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROBENZENE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROBENZENE 2, 2, 0 ICHLOROBENZENE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROBENZENE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROBENZENE 2, 2, 0 ICHLOROPROPANE 2, 2, 0 ICHLOROBENZENE 3, 0 ICHLOROMETHANE BROMOBENZENE BROMOBENZENE BROMOBENZENE CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROBENZENE DIBROMOMETHANE CIS - 1, 3-0 ICHLOROPENE DIBROMOMETHANE CIS - 1, 3-0 ICHLOROPENE DIBROMOMETHANE CHLORODI FLUOROMETHANE DICHLORODI FLUOROMETHANE ETHYLBENZENE M, P-XYLENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYL BENZENE N-PROPYL BENZENE N-PROPYL DEUZENE N-PROPYL DEUZENE N-PROPYL DEUZENE N-PROPYL TOLUENE SEC - BUTYLBENZENE STYRENE TERT - BUTYLBENZENE STYRE		J X 1	ง ราย ราย ราย ราย ราย ราย ราย ราย ราย ราย	Y N
TETRACHLOROETHYLENE TOLUENE TRANS-1,2-DICHLOROETHENE TRANS-1,3-DICHLOROPROPENE TRICHLOROETHENE TRICHLOROFLUDROMETHANE VINYL CHLORIDE ACETONE 2-BUTANONE(MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE(MIBK) CARBON DISULFIDE VINYL ACETATE 112TRICHLORO122TRIFLUOROETHANE 1,1,2-TETRACHLOROETHANE 1,2-TETRACHLOROETHANE 1,2-TETRACHLOROETHANE 10DOMETHANE		10 10 12 1 2 1 2 10 2		
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	101 106 113	QC LIMIT 63-132 75-122 73-129	.,	ч

SR 7/19/06 - Ju g Jub

VOLATILE ORGA	DB/8260B NNICS BY GC/MS	
Client : MATRIX ENVIRONMENTAL SERVI Project : MCCLELLAN, AL Batch No. : O6/170 Sample ID: DUP067DL Lab Samp ID: F170-03T Lab File ID: RFQ716 Ext Btch ID: V005F58 Calib. Ref.: RFQ286	ICES Date Collected: 06/13/06 Date Received: 06/14/06 Date Extracted: 06/24/06 11:54 Date Analyzed: 06/24/06 11:54 Dilution Factor: 5 Matrix : WATER % Moisture : NA Instrument ID : T-005	
PARAMETERS	RESULTS RL MDL (ug/L) (ug/L) (ug/L)	
1, 1, 1-TRICHLOROETHANE 1, 1, 2, 2-TEIRACHLOROETHANE	ND 5 1 53 5 1.5 ND 5 1	N _Y
1,1 - DICHLOROETHANE 1,1 - DICHLOROETHANE 1,1 - DICHLOROETHANE 1,2 - JICHLOROETHANE 1,2 - TRICHLOROBENZENE 1,2 - TRICHLOROBENZENE 1,2 - 4 - TRICHLOROBENZENE 1,2 - 4 - TRICHLOROBENZENE 1,2 - DICHLOROETHANE 1,2 - DICHLOROETHANE 1,2 - DICHLOROETHANE 1,2 - DICHLOROETHANE 1,2 - DICHLOROETHANE 1,3 - JICHLOROETHANE 1,3 - JICHLOROBENZENE 1,3 - DICHLOROBENZENE 1,3 - DICHLOROBENZENE 1,3 - DICHLOROBENZENE 1,4 - DICHLOROBENZENE 1,4 - DICHLOROBENZENE	ND ND ND ND ND ND ND ND ND ND ND ND ND N	N
2:2-DICHLOROPROPANE 2:CHLOROTOLUENE 4-CHLOROTOLUENE BROMOBENZENE BROMOCHLOROMETHANE BROMODICHLOROMETHANE BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROBENZENE CHLOROBENA CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROMETHANE CIS-1,2-DICHLOROPROPENE DIBROMOCHLOROMETHANE	ND UTC 2 ND 5 ND 5 ND 5 ND 5 ND 5 ND 5 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 5 ND 10 ND 5 ND 10 ND 10 ND 5 ND 10 ND 10 ND 5 ND 10 ND 10 ND 5 ND 10 ND 55 ND 10 ND 10 ND 55 ND 10 ND	
DIBROMOMEINANE DICHLORCDIFLUOROMETHANE ETHYLBENZENE HEXACHLOROBUTADIENE ISOPROPYL BENZENE M.P-XYLENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE	ND ND ND ND ND ND ND ND ND ND ND ND ND N	
NAPHTHALENE O-XYLENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE STYRENE TERT-BUTYLBENZENE TERT-BUTYLBENZENE TERACHLOROETHYLENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPROPENE TRICHLOROFLUOROMETHANE VINYL CHLORIDE ACETONE 2-BUTANONE (MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE (MIBK) CARBON DISULFIDE VINYL ACETATE 1,2-TETRACHLOROETHANE 1,2-TETRACHLOROETHANE TRANS-1,4-DICHLORO-2-BUTENE ACRYLONITRILE	ND ND ND ND ND ND ND ND ND ND	
SURROGATE PARAMETERS 1.2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY QC LIMIT 104 63-132 106 75-122 110 73-129	

SR 7/19/06 V 

Client : MATRIX ENVIRONMENTAL SERVI Project : MCCLELLAN, AL Batch No. : O6F170 Sample ID: FTA-146-MW03 Lab Samp ID: FT70-04 Lab File ID: RF0607 Ext Btch ID: V005F50 Calib. Ref.: RF0286	CES Date Date Date Date Date Dilu Matr Inst	Collected: Received: Extracted: Analyzed: ition factor: ix isture rument ID	06/21/06 15:10 06/21/06 15:10 100/21/06 15:10 WATER NA T-005
PARAMETERS 1, 1, 1-TRICHLOROETHANE 1, 1, 2, 2-TETRACHLOROETHANE 1, 1, 2, 2-TETRACHLOROETHANE 1, 1, 2, 2-TETRACHLOROETHANE 1, 1-DICHLOROETHANE 1, 1-DICHLOROETHANE 1, 2, 3-TRICHLOROENZENE 1, 2, 3-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2, 01CHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 4-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-DICHLOROBENZENE BROMOGELOZOMETHANE BROMOMETHANE CARBON TETRACHLORIDE CHLOROFORM BROMOMETHANE CHLOROFORM CHLOROFTHANE CHLOROFORM CHLOROMETHANE CIS - 1, 2-DICHLOROPENE DIBROMOCHOROMETHANE	RESULTS (Ug/L) ND ND ND ND ND ND ND ND ND ND ND ND ND	ug/L)	Moli เมาร์ เกิดเป็น เมาร์ เกิดเป็น เมาร์ เนาร์ เนาร
D I BROMOMETHANE D I CHLOROD I FLUOROMETHANE ETHYLBENZENE HEXACHLOROBUTADIENE ISOPROPYL BENZENE M.P-YYLENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE N-PROPYLBENZENE N-PROPYLBENZENE STYRENE TISOPROPYLTOLUENE SEC-BUTYLBENZENE STYRENE TETRACHLOROETHYLENE TOLUENE TRANS-1, 2-DICHLOROETHENE TRANS-1, 2-DICHLOROETHENE TRICHLOROFLUOROMETHANE VINYL CHLORIDE ACETONE 2-BUTANONE(MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANOŇE(MIBK) CARBON DISULFIDE YINYL ACETATE 1, 2-TETRACHLOROETHANE 1, 1, 2-TETRACHLOROETHANE 1, 1, 2-TETRACHLOROETHANE 1, 2-DICHLOROFLOROETHANE 3000000000000000000000000000000000000	ND ND ND ND ND ND ND ND ND ND ND ND ND N		

SR 7/19/06 

VOLATILE ORGAN	ICS BY GC/MS		
Client : MATRIX ENVIRONMENTAL SERVIC Project : MCCLELLAN, AL Batch No. : O6F170 Sample ID: EB036 Lab Samp ID: F170-05 Lab File ID: RF0604 Ext Btch ID: V005F50 Calib. Ref.: RF0286	Matrix % Mois Instru	Collected: Received: Extracted: Analyzed: on Factor: ture ment ID :	06/13/06 06/14/06 06/21/06 13:19 06/21/06 13:19 10 06/21/06 13:19 12 06/21/06 13:19 12 17 005
PARAMETERS	RESULTS (ug/L)	(ug/L)	MDL (ug/L)
1 1 1 TRICHLOROETHANE 1 2 Z TETRACHLOROETHANE 1 2 TRICHLOROETHANE 1 DICHLOROETHANE 1 DICHLOROFTHANE 2 TRICHLOROBENZENE 2 TRICHLOROBENZENE 2 TRICHLOROBENZENE 2 TRICHLOROBENZENE 2 DICHLOROETHANE 2 DICHLOROETHANE 2 DICHLOROETHANE 2 DICHLOROETHANE 2 DICHLOROPROPANE 2 DICHLOROPROPANE 3 DICHLOROPROPENE 3 DICHLOROPROPENE 3 DICHLOROPROPENE 3 DISOMOMETHANE 3 DICHLOROPROPENE 3 DICHLOROPROPENE 3 DICHLOROPTIFUNC 4 DAYLENE 4 DAYLENE		2	งหันกับการเราะจากระบบ
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	8 RECOVERY 99 108 109	QC LIMIT 63-132 75-122 73-129	

SR 7/19/06 

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

VOLATILE ORGANIC	5 81 66/145		
Client : MATRIX ENVIRONMENTAL SERVICES Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: MATERIAL014 Lab Samp ID: F170-06 Lab File ID: RF0608 Ext Btch ID: V005F50 Calib. Ref.: RF0286	Dilut Matrii % Mois Instri	ion Factor: x sture ument ID	06/13/06 06/14/06 06/21/06 15:47 06/21/06 15:47 15:47 WATER NA T-005
PARAMETERS 1, 1, 1-TRICHLOROETHANE 1, 1, 2, 2-TETRACHLOROETHANE 1, 1, 2, 7RICHLOROETHANE 1, 1-DICHLOROETHANE 1, 1-DICHLOROETHANE 1, 1-DICHLOROETHENE 1, 2, 3-TRICHLOROBENZENE 1, 2, 3-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHANE 1, 2-DICHLOROPTANE 1, 2-DICHLOROPTANE 1, 2-DICHLOROPTANE 1, 2-DICHLOROPTANE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE	RESULTS (ug/L) ND ND ND ND ND ND ND ND ND ND ND ND ND	RL (ug/L)	MDL (ug/L)
1,3-DICHLOROPROPANE 1,4-DICHLOROPROPANE 2,2-DICHLOROPROPANE 2,2-DICHLOROPROPANE 2,2-DICHLOROPROPANE 2,2-DICHLOROPROPANE 2,2-DICHLOROPROPANE BENDMOBTULUENE BENDMOENTULOROMETHANE BROMOBCHLOROMETHANE BROMOMETHANE CALOROFRA BROMOMETHANE CHLOROFENANE CHLOROFENANE CHLOROFENANE CHLOROPETHANE CHLOROPETHANE CIS-1,2-DICHLOROPENE DIBROMOCHLOROPENE DIBROMOCHLOROMETHANE		JC 1 1 2 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	งพัฒนากันขึ้น เราะ เกิดเราะ เกิดเป็นขึ้น เป็นขึ้น เป็นขึ้น เป็นขึ้น เป็นขึ้น เป็นขึ้น เป็นขึ้น เป็นขึ้น เป็นขึ้
DIBROMOMETHANE DICHLORODIFLUOROMETHANE ETHYLBENZENE HEXACHLOROBUTADIENE ISOPROPYL BENZENE M, P-XYLENE MÉTHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE NAPHTHALENE O-XYLENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE STYRENE TERT-BUTYLBENZENE TERT-BUTYLBENZENE TERT-BUTYLBENZENE TERTACHLOROETHYLENE			45.22251 2245.222222
TRANS-1,2-DICHLOROETHENE TRANS-1,3-DICHLOROPROPENE TRICHLOROETHENE TRICHLOROFLUOROMETHANE VINYL CHLORIDE ACETONE 2-BUTANONE(MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE(MIBK) CARBON DISULFIDE VINYL ACETATE 12TRICHLORO122TRIFLUOROETHANE 1,1,1,2-TETRACHLOROETHANE TRANS-1,4-DICHLORO-2-BUTENE ACRYLONITRILE IODOMETHANE		1 10 10 10 10 10 10 10 10 10 10 10 10 10	· · · · · · · · · · · · · · · · · · ·
SURROGATE PARAMETERS % 1, 2-DICHLOROETHANE-D4 TÓLUENE-D8 4-BROMOFLUOROBENZENE	102 108 109	QC LIMI 63-132 75-122 73-129	T -

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

RL: Reporting Limit

SR 7/19/06 

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SW 503 VOLATILE ORG	08/82608 ANICS BY GC/	/MS	
Client : MATRIX ENVIRONMENTAL SERV Project : MCCLELLAN, AL Batch No. : O6F170 Sample ID: TB152 Lab Samp ID: F170-07 Lab File ID: RF0605 Ext Btch ID: V005F50 Calib. Ref.: RF0286	ICES Dat Dat Dat Dil Mat % M Ins	te Received: te Extracted:	06/13/06 06/14/06 06/21/06 13:56 06/21/06 13:56 06/21/06 13:56 14 WATER NA T-005
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE 1,2,2-TETRACHLOROETHANE 1,2,2-TETRACHLOROETHANE 1,2-TRICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROFROPENE 2,3-TRICHLOROBENZENE 2,3-TRICHLOROBENZENE 1,2,3-TRICHLOROBENZENE 1,2,4-TRICHLOROBENZENE 1,2-DICHLOROFANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROFROPANE 1,2-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,3-DICHLOROPENZENE 1,4-DICHLOROPENZENE 1,2-DICHLOROPENZENE		UJC	
2'2-DICHLOROPEOPANE 2'CHLOROTOLUENE BENZENE BROMOBENZENE BROMODENZENE BROMOMETHANE BROMOMETHANE BROMOMETHANE BROMOMETHANE CARBON TETRACHLORIDE CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROMETHANE CIS-1,2-DICHLOROPENE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROPENE DIBROMOCHLOROMETHANE DIBROMOCHLOROPENE DICHLORODIFLUOROMETHANE DICHLORODIFLUOROMETHANE HEXACHLOROBUTADIENE ISOPROPYL BENZENE M P-XYLENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE NAPHTHALENE O-XYLENE TERT-BUTYLBENZENE STYRENE TERT-BUTYLBENZENE TERT-BUTYLBENZENE TRANS-1, 2-DICHLOROPTHENE TRANS-1, 2-DICHLOROPTHENE TRANS-1, 2-DICHLOROPTHENE TRANS-1, 2-DICHLOROPTHENE TRANS-1, 2-DICHLOROPTHENE TRICHLOROFLUGROMETHANE VINYL CHLORIDE 2-BUTANONE(MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE(MIBK) CARBON DISULFIDE INFORMENTINE INFORM	20000000000000000000000000000000000000		้านาณ้านั้นเป็นเป็นเป็นเป็นเป็นเป็นเป็นเป็นเป็นเป็
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 102 106 109	QC LIMIT 63-132 75-122 73-129	

SR 7/19/06 

SI VOLATILE	V 5030B/8260B E ORGANICS BY GC/MS		
Client : MATRIX ENVIRONMENTAL Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: FTA-146-MW04 Lab Samp ID: FTA-146-MW04 Lab File ID: RFQ670 Ext Btch ID: V005F55 Calib. Ref.: RFQ286	Matrix % Mois	Collected: 06 Received: 06 Extracted: 06 Analyzed: 06 on Factor: 1 Ure : NA ment ID : T-	TER
PARAMETERS BENZENE	RESULTS (ug/L) ND	(ug/L) 1	MDL (ug/L) .2 7
ETHYLBENZENE M.P-XYLENE O'XYLENE TOLUENE	ND ND ND ND	1 2 1 1	201502
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 100 108 110	QC LIMIT 63-132 75-122 73-129	
RL: Reporting Limit			

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#### SW 50308/82608 VOLATILE ORGANICS BY GC/MS

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Client : MATRIX ENVIRONMENTAL SERVIC	ES Date	Collected:	06/13/06	
Project : MCCLELLAN, AL		Received:		
Batch No. : 06F170	Date	Extracted:	06/23/06 09:46	
Sample ID: FTA-146-MW02	Date	Analyzed:	06/23/06 09:46	
ab Samp ID: F170-09	Dilu	tion Factor:	5	
ab File ID: RFQ674	Matr	ix :	WATER	
Ext Btch ID: VO05F55	% Mo	isture :	NA	
Calib. Ref.: RFQ286	Inst	rument ID :	ĩ -005	
·	***********		88232222222222	
	RESULTS	RL	MDL	
PARAMETERS			42	
ARAMETERS	(09/1/	(ug/L)	(ug/L)	
ENZENE	14	5	1	Y
THYLBENZENE		JX Š	1	Ň
I.P-XYLENE		JX 10	2.5	N
-XYLENE	610E	JX 5	1	N
OLUENE	210	5	1	Y
URROGATE PARAMETERS	% RECOVERY	QC LIMI	r	
, 2-DICHLOROETHANE-D4	112	63-132		
OLUENE-D8	109	75-122		
- BROMOFLUOROBENZENE	108	73-129		

RL: Reporting Limit

SR 7/19/06

SW 5 Volatile O	0308/82608 RGANICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SEI Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: FTA-146-MW02DL Lab Samp ID: FTA-146-MW02DL Lab File ID: RFQ714 Ext Btch ID: V005F58 Calib. Ref.: RFQ286	6 1015	Collected: 06/ Received: 06/ Extracted: 06/ Analyzed: 06/ on Factor: 50 : WAT iture : NA ment ID : T-0		
PARAMETERS BENZENE ETHYLBENZENE M.P-XYLENE O-XYLENE TOLUENE	RESULTS (ug/L) 17J 400 1400 730 230	(ug/L) 50 50 100 50 50	MDL (ug/L) 10 25 10 10	N N N
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUCROBENZENE	% RECOVERY 102 107 104	QC LIMIT 63-132 75-122 73-129		

SR 7/19/06

SV VOLATILE	/ 5030B/8260B ORGANICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: FTA-146-MW09 Lab Samp ID: F170-10 Lab File ID: RFQ671 Ext Btch ID: V005F55 Calib. Ref.: RFQ286	SERVICES Date C Date Date Dilutic Matrix % Moist Instrum	Collected: 06/ Received: 06/ Analyzed: 06/ Analyzed: 06/ On Factor: 1 :ure : NA nent ID : T-C	ËR	
PARAMETERS BENZENE ETHYLBENZENE M.P-XYLENE O'XYLENE TOLUENE	RESULTS (Ug/L) 1.2 3.6 1.7 .6J	RL (ug/L) 1 2	MDL (ug/L) -2 -5 -2	7 J
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE RL: Reporting Limit	% RECOVERY 104 101 108	QC LIMIT 63-132 75-122 73-129		

Reporting Limit

SK 7/19/06 Vaia

SW 5030 VOLATILE ORGA	DB/8260B NICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SERVI Project : MCCLELLAN, AL Batch No. : D6F170 Sample ID: FTA-146-MW01 Lab Samp ID: F170-11 Lab File ID: RFQ672 Ext Btch ID: V005F55 Calib. Ref.: RFQ286	CES Date Date Date Dituti Matrix % Mois Instru	ture : N	6/13/06 6/14/06 6/23/06 08:32 6/23/06 08:32 ATER A -005	
PARAMETERS BENZENE ETHYLBENZENE M.P-XYLENE O-XYLENE TOLVENE	RESULTS (ug/L) ND .44J 2J .71J ND	RL (ug/L) 1 2 1 1	MDL (ug/L) 	¥ ↓
SURROGATE PARAMETERS 1.2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 103 108 105	QC LIMIT 63-132 75-122 73-129		

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SR 7/19/06 1952 T

#### SW 50308/82608 VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SE Project : MCCLELLAN, AL Batch No. : O6F170 Sample ID: F1A-146-MW05 Lab Samp ID: F170-12 Lab File ID: RFQ673 Ext Btch ID: V005F55 Calib. Ref.: RFQ286	RVICES Date C Date Date Date Dilutic Matrix % Moist Instrum	ollected: 06/ Received: 06/ Xtracted: 06/ Analyzed: 06/ m Factor: 1 WAT ure NA hent ID T-0	EK	
PARAMETERS BENZENE ETHYLBENZENE M,P-XYLENE O'XYLENE TOLUENE	RESULTS (ug/L) ND ND ND ND ND ND ND	RL (ug/L) 1 2 1 1	MDL (ug/L) .2	7
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 102 107 103	QC LIMIT 63-132 75-122 73-129		

RL: Reporting Limit

JR 7/19/06 2818

**APPENDICES** 

#### APPENDIX A GROUNDWATER ANALYTICAL RESULTS COLLECTED BY SHAW

# 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 Sample Samp	Sample Location Sample Number Sample Date			Ŀ	FTA-146-GP02 CP3002 15-Dec-98	02	H,	FTA-146-GP05 CP3005 17-Dec-98		FTA-14 CP3 8-Ja	FTA-146-GP06 CP3006 8-Jan-99		1 1 1 1	FIA-146-GPU/ CP3009 17-Dec-98	
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result	Qual >BKG >SSSL	G >SSSL	Result	Qual >BKG >SSSL	>SSSL	Result Qua	Qual >BKG >SSSL	>SSSL	Result Q	Qual >BKG >SSSL	>SSSL
METALS											Ī	Ī	1 100 101 0		
Aluminum	ma/L	2.34E+00	1.56E+00	7.70E-02	۲ ا		1.71E+00		_	1.04E+00			9.40E-02 J		0.1.1
Barium	_	1.27E-01	1.10E-01	2.36E-02	۲ ۲		1.40E-01	J   YES	YES	1.63E-01 J	YES	YES	1.50E-01 J	YES	YES
Cadmium	_	2.51E-03	1	QN			QN			DN			ND		
Calcium	-	5.65E+01	-	2.04E+00	- r		1.04E+01			6.92E+00			1.27E+01		
Chromitum	_	NA	4.69E-03	QN			ND			QN			QN		
Cobalt	mg/L	02	9.39E-02	1.35E-02	۲ ا		ND			5.32E-02	YES		6.49E-02	YES	
Conner	ma/L	2.55E-02	2.55E-02 6.26E-02	QN			DN			DN			QN		
2	-	7.04E+00	4.69E-01	3.36E+00		YES	3.81E+00		YES	5.77E+00		YES	6.33E+00		YES
Magnesium		2.13E+01	NA	1.09E+01			6.79E+00		1	8.37E+00			8.97E+00	01.7	CLV.
Vanganese	mg/L	5.81E-01	7.35E-02	7.20E-02			1.42E-01		YES	1.75E+00	YES	YES	1./3E+00	YES	Υ ΕΩ
Mercurv	mg/L	NA	4.69E-04	5.40E-05 B	В		5.80E-05 B	В		5.70E-05 J			6.60E-05 B		
Vickel	mg/L	NA	3.13E-02	3.50E-02	l l	YES	ND			1.72E-02 J			1.94E-02 J		
Potassium	mg/L	7.20E+00	NA	DN			2.71E+00	P		2.87E+00 B			1.32E+00 J		
Sodium	mg/L	1.48E+01	NA	1.30E+00	, ,	-	5.33E+00			4.94E+00 J			3.76E+00 J	1	0
hallium	mg/L	1.46E-03	1.02E-04	4.50E-03	B YES	S YES	QN			QN			4.70E-03 B	YES	YES
/anadium	mg/L	1.70E-02	1.10E-02	DN			ND			QN			QN		
	mg/L	2.20E-01	15	1.00E-01			1.51E-02	L L		3.06E-02	_		3.96E-02		
VOLATILE ORGANIC COMPOUNDS	SOUNDS												4	-	
.2.4-Trimethylbenzene	mg/L	NA	6.00E-03	2.50E-04 J	P.		QN			NN					
4-Methyl-2-pentanone	mg/L	NA	-	8.80E-04	P		QN			ON CI					
Acetone	mg/L	NA	1.56E-01	QN			1.60E-03	2		NN					
Benzene	mg/L	NA	1.41E-03	2.80E-02		YES	QN			NN					
Chloroform	mg/L	NA	1.15E-03	QN			QN			NN					
Ethylbenzene	mg/L	NA	1.40E-01	1.90E-04			QN			QN			UN .		
Hexachlorobutadiene	mg/L	NA	8.40E-04	ND			QN		-	NN	-		1.50E-04 B		
oluene	mg/L	NA	2.59E-01	1.00E-04	I DI	1	QN			ND			ND		
SEMIVOLATILE ORGANIC COMPOUNDS	COMPOU	SONI					00 101 0	-					1 202 021	-	
D: - build abthalato	1 mm	VIV	1 48F-01	1 70F-03L			3.70E-031J	2		ND			1.2UE-U3J		

a)

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

# (Page 2 of 2)

Sample Sampl	Sample Number Sample Date			FIA-146-GPU8 CP3010 16-Dec-98	10 10 -98	F1A-14 CP: 16-D	F1A-146-GP09 CP3011 16-Dec-98			F1A-146-GP10 CP3012 16-Dec-98	
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result Qual	Qual >BKG >SSSL	Result	Qual >BKG >SSSL	SSSL	Result	Qual >BKG >SSSI	>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	۲ ا	YES
Cadmium	mg/L	2.51E-03	7.82E-04	QN		5.30E-03 B	YES	YES	QN		
Calcium	mg/L	5.65E+01	NA	3.57E+01		1.04E+01			7.77E-01	-	
Chromium	mg/L	NA	4.69E-03	5.00E-03 J	YES	QN			ND		
Cobalt	mg/L	2.34E-02	9.39E-02	QN		2.19E-02 J			1.20E-02		
Copper	mg/L	2.55E-02	6.26E-02	4.70E-03 J		QN			QN		
Iron	T/bm	7.04E+00	4.69E-01	1.84E+00	YES	5.24E-01		YES 3	3.61E+00		YES
Magnesium	mg/L	2.13E+01	NA	2.61E+00 J		3.55E+00 J		2	7.23E+00		
Manganese	T/Bm	5.81E-01	7.35E-02	1.60E-01	YES	1.79E-01		YES -	7.13E-02		
Mercury	mg/L	NA	4.69E-04	6.30E-05 B		7.80E-05 B			7.20E-05 B	В	
Nickel	T/Bm	NA	3.13E-02	QN		3.19E-02 J		YES :	3.22E-02 J		YES
Potassium	mg/L	7.20E+00	NA	QN		1.55E+00 J		-	1.04E+00 J		
Sodium	mg/L	1.48E+01	NA	8.43E-01 J		1.50E+00 J		2	2.08E+00		
Thallium	mg/L	1.46E-03	1.02E-04	DN		4.90E-03 B	YES	YES (	5.00E-03 B	B YES	YES
Vanadium	T/gm	-	1.10E-02	7.40E-03 J		QN			QN		
Zinc		2.20E-01	4.69E-01	1.03E-02 J		3.59E-02			9.64E-02		
VOLATILE ORGANIC COM	PO										
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	QN		QN			QN		
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	QN		QN	1		QN		
Acetone	mg/L	NA	1.56E-01	1.10E-03 J		1.90E-03 J			QN		
Benzene	T/gm	NA	1.41E-03	QN		QN		1	DN		
Chloroform	mg/L	NA	1.15E-03	1.40E-04 B		QN			QN		
Ethylbenzene	mg/L	NA	1.40E-01	QN		QN			ND		
Hexachlorobutadiene	mg/L	NA	8.40E-04	QN		QN			QN		
Toluene	mg/L	NA	2.59E-01	ND		QN			ND		
SEMIVOLATILE ORGANIC	COMPOUNDS	SON									
Di-n-butyl phthalate	mg/L	NA	1.48E-01	1.48E-01 3.00E-03 J		3.20E-03 J		7	4.00E-03 J		

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

<sup>a</sup> 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 McCleilan, Alabama*, July. <sup>b</sup> 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.

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

FTA-146-MW05 CPP3007 15-Feb-01	>BKG >SSSI					
FTA-14 CPP 15-F4	Result Qual		QN	QN	QN	UN
FTA-146-MW04 CPP3006 2-Mar-01	Result Qual >BKG >SSSL Result Qual >BKG >SSSL Result Qual >BKG >SSSL Result Qual >BKG >SSSL Result Qual >BKG	-	ND I UN	DN	QN	
FTA-146-MW03 CPP3003 1-Mar-01	Qual >BKG >SSSL F				, ,	
F	Result		QN	DN	3.00E-04	UN
FTA-146-MW02 CPP3002 28-Feb-01	It Qual >BKG >SSSL		02   YES	02		101
	1.1.1		5.00E-02	1.70E-02	7.10E-03	3 80F-03
FTA-146-MW01 CPP3001 28-Feb-01	Result Qual >BKG >SSSL		1.41E-03 [1.10E-03]	4.10E-04 J	9.70E-04 J	2 80F+00 3 70F-04 I
	SSSL <sup>b</sup>		1.41E-03	1.40E-01	2.59E-01	2 80F+00
ation nber ate	BKG <sup>a</sup>		NA	NA	NA	NA
Sample Location Sample Number Sample Date	Units		mg/L	mg/L	mg/L	I/Dm
Sar Saı S	Parameter	BTEX	Benzene	Ethylbenzene	Toluene	Xvlene Total

ŝ	Sample Location Sample Number	ocation		Ξ.	CPP3008	96	FT	TA-146-MW07 CPP3009	<u>ц</u>	FTA-146-MW08 CPP3010	FTA-146-MW09 CPP3011
	sample pare	are			10-091-07			I.O-JEMI-Z		Z-IMar-U1	LO-JEM-L
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result	Qual >BKC	SSSSL	Result	Qual >BKG >SSSL	Result	Qual >BKG >SSSL	Qual>BKG>SSSL Result Qual>BKG>SSSL Result Qual>BKG>SSSL Result Qual>BKG>SSSL
Benzene	mg/L	NA	1.41E-03	ND			QN		QN		
Ethylbenzene	mg/L	NA	1.40E-01	ND			ND		QN		DN
l'oluene	mg/L	NA	2.59E-01	QN			3.40E-04	۲ ۲	QN		ND
vlene. Total	ma/l	NA	2 80F+00	GN			UN		UN		

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

<sup>a</sup> 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.
<sup>b</sup> 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.

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

02	2 4661	1000	YES		T	
FTA-146-MW02 OCP3008 22-Jan-02	Result Qual > RKG > SSSI	in a linna				
L.	Recult		1 20F-0	1 20F-0	4 R0F-02	2.00E-0
5	1555<	1000	YES 11 20F-01			
FTA-146-MW02 OCP3002 4-Oct-01	Qual >BKG					
Ш	Result		YES 9.90E-02	8.70E-02	4.90E-02	1.50E-01
2	>SSSL		YES			
FTA-146-MW02 CPP3002R 17-Jul-01	Qual >BKG					
E	Result		1.10E-01	7.90E-02	5.00E-02	1.70E-01
-MW01 007 1-02	BKG >SSSL					
FTA-146-MW01 OCP3007 22-Jan-02	SSSL Result Qual > BKG > SSSL Result Qual > BKG > SSSL Result Qual > BKG > SSSI		- ON	QN	QN	DN DN
	>SSSL F					
FTA-146-MW01 OCP3001 4-Oct-01	Result Qual >BKG >S					
FT/	Result (		QN	DN	QN	ND
	SSSL		1.41E-03	1.40E-01	2.59E-01	2.80E+00
tion Iber te	BKG <sup>a</sup>		NA	NA	NA	NA
Sample Locatiol Sample Numbel Sample Date	Units		mg/L	mg/L	mg/L	mg/L
Sar Sar S	Parameter	BTEX	Benzene	Ethylbenzene	Toluene	Xylene, Total

N N	Sample Location Sample Number Sample Date	ation mber ate		E	7A-146-MW OCP3003 5-Oct-01	A-146-MW03 OCP3003 5-Oct-01	FTA-146-MW03 OCP3009 24-Jan-02		FTA-146-MW04 OCP3004 16-Oct-01	ù.	-TA-146-MW04 OCP3010 25-Jan-02
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result	Qual	>BKG >SSSL	Result Qual>BKG>SSSL Result Qual>SKG>SSSL Result Qual>SKG>SSS R	SSL Resul	It Qual>BKG>SSSI	Result	Oual>BKG>SSS
BTEX											
Benzene	mg/L	NA	1.41E-03	QN			DN ND	QN		QN	
Ethylbenzene	mg/L	NA	1.40E-01	4.10E-04	ſ		QN	QN		QN	
Toluene	mg/L	NA	2.59E-01	4.90E-04	8		QN	QN		QN	
Xvlene, Total	ma/L	NA	2.80E+00	.80E+00 1.40E-03	2		- CN	CIN		CN	

Sa	Sample Location Sample Number	ation		E	FTA-146-MW05 OCP3005	FTA-146-MW05 OCP3011	FTA C	TA-146-MW09	FTA-146-MW09
0	Sample Date	ate			10-Oct-01	24-Jan-02		11-Oct-01	23-Jan-02
Parameter	Units	BKG <sup>a</sup>	SSSL <sup>b</sup>	Result	Qual >BKG >SSSL	Result Qual>BKG>SSSL Result Qual>BKG>SSSL Result Qual>BKG>SSSL	Result C	Qual >BKG >SSSL	Result Qual >BKG >SSSI
BTEX									
senzene	mg/L	NA	1.41E-03	QN		- ON	QN		UN UN
cthylbenzene	mg/L	NA	1.40E-01	ND		QN	QN		GN
oluene	mg/L	NA	2.59E-01	QN		DN	QN		GN
(ylene, Total	ma/L	NA	2.80E+00	QN		DN	UN		

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

<sup>a</sup> 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. <sup>6</sup> 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.

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#### APPENDIX B GROUNDWATER SAMPLE COLLECTION LOGS, JUNE 2006

No. 3209 P. 2

	Matrix Environ	mental	1601 Bla	nvironmental S Jee Street, Suite Colorado 8020	e 200			me/Sample 1D FTA-1	46-MW01
	Service		(303) 57 (303) 57	2-0200	2		Project N	icClellan - JPA	Project Number 05.094.054.
		GR	OUND	WATE	R SAM	PLIN	GLO	G	
roundwater Depth	(TOC)	Equipm				Sam			Date
10.72							Bondu	rant/Nerem	6/13/06
10.72		feet Ba	iler			Loca	tion (Site	à)	Begin Time
/ell Depth (TOC)		CI	neck Valve			N	lotor Po	ool Area 3100	10:10
35		C	rundfos			Labo	ratory		Sample Depth (ft)
ater Column Thick		feet	unutos				E	EMAX	20
	cness :	Pe	eristaltic			Sam	ple Suite		
24.28	-	feet X	Bladder Pu	mp		see	COC's		
asing Diameter	-					Met	ers		Serial numbers
2		PI	D/FID			YSI	556 M	PS	M001
	. in	chesO	ther (descr	ibe)				w Flow	M001
asing Volume	÷							ow Flow	141001
3-8848			ions (temp,				inst 101 bration	iii	Screen Length (ft)
'=x0.04 2''=x0.16 4''=x0		lions No	ercast	-, 70	'S	. Dro	oration calibration	ed 6/12/0	6 15
Vell Elevation (TOC		10.4			- 10	TIC	vanutal		
821.7									
a este ta	1	feet			•	_			
Groundwater Eleva	tion	10 CO 10 22	eter Stabili		rbidity +/- 10	Pro	duct Öbs	erved (yes/no)	Depth to product
811.0	)1		- 3% ORP		pH.+/- 0.1 u			no	NIA
		- Weiner and State				Tax to the West	W		
						and a state of the state of the		Contraction of the second second second second	
Time	Voluine removed (gallon)	Тетр (°С)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Tachony (NTU)	pĤ	Description (e.g. od	lor, clarity, color)
Time					1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	(שדש)			lor, clarity, color) Rown, turbi
	(gallon)	(°C)	(uV/sec)	(mg/L)	(mV)	(שדש)	5.54	reddish b	
10:10	(gallon) init	(c) 22.0	(uV/sec) <b>56</b>	(mg/L) <b>2.92</b>	(mV) 35.6 54.0 69.1	(UTU) .038 .031 .035	5.54	cleaning,	Rown, turbid light turbid
10:10	(gallon) init	(C) 22.0 21.42	(uV/sec) 56 53	(mg/L) 2.92 0.90 0.51	(mV) 35.6 54.0 69.1	(UTU) .038 .031 .035	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20	(g=llon) init 0.5 1.0	(C) 22.0 21.42 20.79	(uV/sec) 56 53 50	(mg/L) 2.92 0.90 0.51	(mV) 35.6 54.0 69.1	(UTU) .038 .031 .035	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04 19.33	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25 10:30	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25 10:30	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04 19.33	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25 10:30	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04 19.33	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25 10:30	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04 19.33	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25 10:30	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04 19.33	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:15 10:20 10:25 10:30	(g=110n) init 0.5 1.0 1.5 2.0	(0) 22.0 21.42 20.79 20.04 19.33	(UV/sec) 56 53 50 48 46	(mg/L) 2.92 0.90 0.51 0.72 0.90	(1117) 35.6 54.0 69.1 81.7 90.1	(NTU) .036 .031 .035 .034 .034	5.54	cleaning,	Rown, turbid light turbid
10:10 10:20 10:20 10:25 10:30 10:31	(g=110n) init 0.5 1.0 1.5 2.0 	(°C) 22.0 21.42 20.79 20.04 19.33 Olloc	(uV/sec) 56 53 50 48 46 46 ± 50	(mg/L) 2.92 0.90 0.51 0.72 0.90 mpl	(1177) 35.6 54.0 69.1 81.7 90.1 Suit	(NTU) .038 .031 .035 .034 .034 .034	5.54	cleaning,	Refill
10:10 10:20 10:20 10:25 10:30 10:31	(gallon) init 0.5 1.0 1.5 2.0	(°C) 22.0 21.42 20.79 20.04 19.33 Olloc	(uV/sec) 56 53 50 48 46 46 ± 50	(mg/L) 2.92 0.90 0.51 0.72 0.90 mpl	(1177) 35.6 54.0 69.1 81.7 90.1 Suit	(NTU) .038 .031 .035 .034 .034	5.54 5.54 5.78 5.78 5.79	cleaning, cleaning, cleaning mostly mostly	Rown, turbid light turbid , light turbid clear clear
10:10 10:20 10:20 10:25 10:30 10:31	(g=110n) init 0.5 1.0 1.5 2.0 	(°C) 22.0 21.42 20.79 20.04 19.33 Olloc	(uV/sec) 56 53 50 48 46 46 ± 50	(mg/L) 2.92 0.90 0.51 0.72 0.90 mpl	(1177) 35.6 54.0 69.1 81.7 90.1 Suit	(NTU) .038 .031 .035 .034 .034 .034	5.54 5.54 5.78 5.78 5.79	reddish b Cleaning, Cleaning mostly mostly	Refill

	Matrix Environr	nental	1601 Bl	Environmental : ake Street, Suji	te 200	05	Station N	ame/Sample ID FTA-140	6-MW02
-	Services		Denver, (303) 57	Colorado 8020 2-0200	02	1	Project		Project Number
	Integended Environ	mental Solutions	(303) 57	2-0202			N	AcClellan - JPA	05.094.054.000
		GR	ROUND	WATE	ER SAN	<b>IPLIN</b>	GLO	G	
roundwater Depth	(TOC)	Equip	oment			Samp	oler		Date
10.85			Bailer				Bondu	rant/Nerem	61306
(-U.D		feet					tion (Site		Begin Time
ell Depth (TOC)			Check Val	ve		N	lotor P	ool Area 3100	09:15
35.5		feet	Grundfos			Labo	ratory		Sample Depth (ft)
ater Column Thic	kness.		Peristaltic			-		EMAX	20.5
24.65		-	renstant				ple Suite		
	*	feet X	_Bladder I	Pump			COC's		
ising Diameter			PID/FID			Mete	rs		Serial numbers
2						YSI	556 M	PS	M001
asing Volume	in in	iches	Other (des	cribe)		Geo	tech Lo	ow Flow	M001
		_					nst 101	10 A	2.40.942.21
3.944	23	and a start of the start of the	litions (tem		100 C		nst 101 bration		Screen Length (ft)
=x0.04 2"=x0.16 4"=x0	annanni at-t-t	······································	vercas	»() ((	12			ed 6/12/06	15
ell Elevation (TO	C)								
822.	48								
roundwater Eleva	tion	feet	meter Stab	illzation	-	_			
811.					Furbidity +/-	10% Prod	luct Obs	erved (yes/no)	Depth to product
611.	03	feet cond	+/- 3% OF	2P 4/- 10mV	pH +/- 0.1	unit		no	
	Volume removed					a si an			
Time		Tenan	Cond	DO	ORP	The state of the s			
T title	(gallon)	Temp (°C)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	(NTU)	рң	Description (e.g. odor,	clarity, color)
09:15			(uV/sec)		10 10 10 10 10 10 10 10 10 10 10 10 10 1	(NTU)			
	(gallon)	(°C)	(uV/sec)	(mg/L)	(mV) -217.1	(NTU)	6.33	saver ador	, greyish, tart
09:15	(gallon) init	(c) 19.03	(uV/sec) 145 143	(mg/L) 1.84 0.83	(mv) -217.1 -236.1	(NTU) .106	6.33 6.33	Saver ador Sever ador	, greyish, turt
09:20	init	(0) 19.63 1853	(UV/Sec) 145 143 143	(mg/L) 1.84 0.43 0.42	(mV) -217.1 -236.1 -253.9	(NTU) .104 .106 .105	6.33 6.33 6.38	Saver odor Sewer odor Sewer odor	, greyish, turt , clearing, grey c. greyish, light
09:20 09:25	(gallon) init 0.5 1.0	(°) 19.63 18:53 18:30	(UV/see) 145 143 141 139	(mg/L) <u>1.84</u> <u>0.83</u> <u>0.42</u> <u>0.41</u>	(mv) -217.1 -236.1 -2539 -257.7	(NTU) .106 .106 .105 .104	6.33 6.33 6.38 6.40	Saver odor Sewer odor Sewer odor Clearing, S	, greyish, turt , clearing, grey c. greyish, light light sewer od
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40	Saver odor Sewer odor Sewer odor Clearing, S	, greyish, turt , clearing, grey c. greyish, light
09:20 09:20 09:25 09:30	(gallon) init 0.5 1.0 1.5 2.0	(5) 19.03 1853 18:30 18:27	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40	Sover ador Sever ador Sever ador Clearing, S - mostly cl	, greyish, tart , clearing, grey , greyish, light light sewer ad ear. slight sewer
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli	, greyish, turt , clearing, grey c. greyish, light light sewer od ear. slight sewer ght sheen,
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli	, greyish, tart , clearing, grey , greyish, light light sewer ad ear. slight sewer
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli Appeared "	, greyish, turt , clearing, grey c. greyish, light light sewer od ear. slight sewer opt sheen, mereury like "
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli	, greyish, turt , clearing, grey c. greyish, light light sewer od ear. slight sewer opt sheen, mereury like "
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli Appeared "	, greyish, turt , clearing, grey c. greyish, light light sewer od ear. slight sewer opt sheen, mereury like "
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli Appeared "	, greyish, turt , clearing, grey c. greyish, light light sewer od ear. slight sewer opt sheen, mereury like "
09:20 09:20 09:25 09:30 09:35	(gallon) init 0.5 1.0 1.5 2.0	(°) 19.03 18:53 18:30 18:27 18:33	(UV/see) 145 143 141 139 144	(mg/L) 1.84 0.83 0.42 0.41 0.39	(mv) -217.1 -236.1 -253.9 -257.7 -260.3	(NTU) .104 .106 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli Appeared "	, greyish, turt , clearing, grey c. greyish, light light sewer od ear. slight sewer opt sheen, mereury like "
09:20 09:20 09:25 09:30 09:36	(gallon) init 0.5 1.0 1.5 2.0	(G) 19.03 18:53 18:30 18:33 18:33 18:33	(uV/sec) 145 143 141 139 144 - Sax Well pump	(mg/L) 1.84 0.83 0.42 0.41 0.39 Aple od dry (yes/	(mv) -217.1 -236.1 -2539 -257.7 -260.3	(NTU) .104 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli Appeared "	, greyish, turt , clearing, grey , greyish, light light sever od ear. slight sever ght sheen, mereuny like to
09:20 09:25 09:25 09:30 09:35 09:36	(gallon) init 0.5 1.0 1.5 2.0	(G) 19.03 18:53 18:30 18:33 18:33 18:33	(uV/sec) 145 143 141 139 144 - Sax Well pump	(mg/L) 1.84 0.83 0.42 0.41 0.39 Aple	(mv) -217.1 -236.1 -2539 -257.7 -260.3	(NTU) .104 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	sover ador sever ador sever ador clearing.s - mostly cl Possible shi appeared " in bucket	, greyish, turt , clearing, grey , greyish, light light sever od ear. slight sever ght sheen, mereuny like " to Renil/Disch
09:20 09:20 09:25 09:30 09:36	(gallon) init 0.5 1.0 1.5 2.0	(G) 19.03 18:53 18:30 18:33 18:33 18:33	(uV/sec) 145 143 141 139 144 - Sax Well pump	(mg/L) 1.84 0.83 0.42 0.41 0.39 Aple od dry (yes/	(mv) -217.1 -236.1 -2539 -257.7 -260.3	(NTU) .104 .105 .104 .107	6.33 6.33 6.38 6.40 6.42	Sover ador Sever ador Sever ador Clearing, S - Mostly Cl Possible sli Appeared "	, greyish, turt , clearing, grey , greyish, light light sever od ear. slight sever ght sheen, mereuny like " to Renil/Disch

No. 3209 P. 4

Image: Service State         Descriptions State         Project         Project <th< th=""><th></th><th>Matrix</th><th></th><th></th><th>vironmental S ce Street, Subo</th><th></th><th>S</th><th>Station Na</th><th>me/Sample ID FTA-14</th><th>46-MW03</th><th></th></th<>		Matrix			vironmental S ce Street, Subo		S	Station Na	me/Sample ID FTA-14	46-MW03	
Internal lower of low				Donver, C	Colorado 8020		Ī	Project			Number
Foundwater Depth (TOC)         Equipment         Bailer         Bondurant/Nerom         Date 100           9.92         Bailer         Check Valve         Bondurant/Nerom         Bondurant/Nerom         Bondurant/Nerom           41         Check Valve         Check Valve         Bondurant/Nerom         Bondurant/Nerom         Bondurant/Nerom           41         Check Valve         Check Valve         Bondurant/Nerom         Bondurant/Nerom         Bondurant/Nerom           31.08         Cereation         Grundfes         Defratory         Sample Dupth (ft)           2         incher         Peristalic         Sample Solte         Sec COC's           2         incher         PID/FID         Other (describe)         Geotech Low Flow         Mool           4.9728         Conditions (nump, weather, precip)         Other (describe)         Solinst 101         Calibration           4.9728         Ealori         Other (describe)         Solinst 101         Calibration         Screen Length (ft)           4.9728         Ealori         Other (describe)         Solinst 101         Calibration         Screen Length (ft)           4.9772         Feet         Conditions (nump, weather, precip)         Product Observed (yealno)         Doth to product           812.72	- A A A A A A A A A A A A A A A A A A A	Dervice	nnventúl Somtemo	(303) 572	2-0202					05.	094.054.000
9.92     Bailer     Bailer     Bonduraut/Nerem     Gl 13 [0]_       9.92     Geet     Bailer     Bailer       41     Geet Valve     Begin Time       41     Gründfei     Begin Time       31.08     Feet     Check Valve       31.08     K     Bailer       31.09     Bailer     Check Valve       Conditions (temp, wenther, precip)     Other (describe)       Geotech Low Flow     Mool       Stant 1 "= Kother     Bo		1			WATI	ER SAN	TT III III III IIII		G	10	
3.92       Bailer       Laction (Site)       Begin Time         /ell Depth (TOC)       Check Valve       Motor Pool Area 3100       IC*SO         41       Grundføs       Pariselitic       Sample Dupth (R)         // All Depth (R)       Grundføs       Pariselitic       Sample Dupth (R)         // All Depth (R)       Grundføs       Pariselitic       Sample Suite       Sample Dupth (R)         // All Depth (R)       Pariselitic       Sample Suite	roundwater Depth	(TOC)	Equipmo	ent			Samp				In
eff Depth (TOC)       Check Valve       Motor Pool Area 3100       L3:50         41       Gründføs       Sample Depth (ft)       Sample Depth (ft)       26         31.08       reet       Peristalitic       Sample Suite       26         31.08       reet       Pit/FID       State COC's       Motors       Serial numbers         2       Pit/FID       Other (describe)       Geotech Low Flow       Mool 1       Geotech Low Flow       Soinst 101         4.9728       gallows       Conditions (remp, weather, precip)       Soinst 101       Scient Plow       Soinst 101         812.72       feet       Parameter Stabilization       reem 7.1 DO*: 100* 10%       Product Oberved (yea/no)       Dapth to product         812.72       feet       Parameter Stabilization       reed 1.4 Oberved (yea/no)       Dapth to product         10:50       init       21.41       75       1.87       24.4       .052       4.49       readiabilization         10:550       init       21.41<	9.92	2	C	iler				1-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2			inner
41       Grundføs       Sample Depth (R)         /ater Column Thickness       Peristallic       Sample Selite       Sample Depth (R)         31.08       fee       X_Bladder Pump       Sec COC's         2       inches       Other (describe)       Sec COC's         2       inches       Other (describe)       Geotech Low Flow       Mool         4.9728       gallons       Other (describe)       Solinst 101       Sereen Length (R)         4.9728       gallons       Outer (describe)       Solinst 101       Sereen Length (R)         15       Outer (describe)       Solinst 101       Sereen Length (R)       Sereen Length (R)         822.64       feet       Feet       Solinst 101       Sereen Length (R)       Sereen Length (R)         812.72       feet       Temp *1* D 0 + 10%       Turbidity + 10%       Product Observed (ves/no)       Depth to product         10:55       O.5       20.416       70       O.75       27.1       OSO       Sereen J. Shiphet       Shiphet         11:00       1.0       20.37       67       0.52       0.44       0.52       6.5       hrough thidity, clear, Slight Sereen       Shiphet         11:00       1.0       20.37       67       0.52	ell Depth (TOC)			eck Valva			1.	1	· · · · · · · · · · · · · · · · · · ·	1.1.1	
Image: Construction of the second o			Cn	eck valve			1.00	1.1.1.1.1.1	OUT Alea 5100		
Jate Column Thickness       Peristalic       Sample Suite         31.08       feet       X_Blader Pump       Sec COC's         2       inches       Other (describe)       Maters       Serial numbers         2       inches       Other (describe)       Geotech Low Flow       Mool         4.9728       gallours       Other (describe)       Solinst 101       Geotech Low Flow       Mool         4.9728       gallours       Outliers (temp, weather, precip)       Solinst 101       Calibration       Solinst 101         500mdwater Elevation       Temp +1* DO +1* 10%       Turbidity +1.10%       Solinst 101       Solinst 101         812.72       feet       conditions (temp, weather, precip)       Solinst 101       Solinst 101       Solinst 101         10*       Solinst 50m       Solinst 101       Solinst 101       Solinst 101       Solinst 101         11*       Time Value removed       Temp (r)* (offeet one (ego.)       ORP +1* JIMP       Pff       Description (eg. oder, clarity, color)         10:SS       0.5       20.440       70       0.75       27.1       050       6.5       brouwnich, heavy hurbidity, 5.5         10:SS       0.5       20.37       6.7       0.87       32.3       044       6.52	41		feet Gr	ndlos					EMAX		
Image: Second processing planeter       2       Second processing planeter         2       Inchas       Other (describe)         4.9728       PID/FID       Solinst 101         4.9728       Conditions (temp, weather, precip)       Solinst 101         4.9728       Pilorsing Volume       Solinst 101         4.9728       Conditions (temp, weather, precip)       Solinst 101         Solinst 101       Solinst 101         Solinst 101       Streen Leagth (ft)         ************************************	ater Column Thic	kness.	Pe	ristaltic			Sam				
asing Diameter       PID/FID       Noters       Serial pumbers         2       inches       Other (describe)       Other (describe)       Motors       Serial pumbers         4.9728       gallons       Other (describe)       Other (describe)       Solinst 101       Screen Length (ft)         *=50.64       *=50.64       *=50.64       feet       Other (describe)       Solinst 101         *=50.64       *=50.64       feet       Other (describe)       Solinst 101       Screen Length (ft)         *=50.64       *=50.64       feet       Parameter Stabilization       Frequencies       Screen Length (ft)         *20.64       feet       Parameter Stabilization       Frequencies       Screen Length (ft)       13         *20.64       feet       Parameter Stabilization       Frequencies       Temp +1' DO +10% Turbidity +1.19%       Product Observed (yes/no)       Depth to product         812.72       feet       cond +5.3% ORP +4.30mV PH +4.31mU       Parameter Stabilization       Frequencies/no       Poth to product         Time       Values removed       Temp f(C)       Cond       DO       ORP       ************************************	31.08		C X P	Unddor Pu	mn		see	COC's			
2       Inches       Other (describe)       VSI 556 MPS       M001         4.9728       Other (describe)       Geotech Low Flow       M001         4.9728       Conditions (temp, weather, precip)       OuerCast       To:s       Scient 101         0.9728       Conditions (temp, weather, precip)       OuerCast       To:s       Scient 101         0.9728       Conditions (temp, weather, precip)       OuerCast       To:s       Scient 101         0.9728       Conditions (temp, veather, precip)       OuerCast       To:s       Scient 101         0.9728       Conditions (temp, veather, precip)       OuerCast       To:s       Scient 101         0.9729       Conditions (temp, veather, precip)       OuerCast       To:s       Scient 101         0.9729       Conditions (temp, veather, precip)       OuerCast       To:s       Scient 101         0.9720       B12.72       feet       Parameter Stabilization temp r/-1" DO + 10% Turbidity r/-10%       Product Observed (yes/no)       Depth to product         10       Scient 2.001       Tomp Cond (we/ree)       DO       ORP       Purbitity PH + 0.1 unit       Product Observed (yes/no)       Do + 10% Cond (we/ree)       Scient 2.001         10:55       O.5       20.446       70       0.75       27.1	asing Diameter	3	<u>teet</u> _^_1	Mannel 1 m	mþ		Mete	rs		Serial num	bers
Inches         Other (describe)         Geotech Low Flow         M001           4:3728         galloms         Conditions (temp, weather, precip)         Solinst 101         Solinst 101           ************************************			PI	D/FID			YSI	556 M	PS	M001	
Asing volume         4.9728       gallons         estad 1°=04.65 6°=1.47 0°=01.04         Vell Elevation (TOC)       B22.64         812.72       feet         Time       Volume removed         Yeam       Temp         (c)       (c)         (c)       (c)         (c)       (c)         812.72       feet         Time       Volume removed         Yeam       Temp         (c)       (c)         (c)		in	ches Of	ther (descri	ibe)					M001	
Part of the second of the sec										1.7001	
Image: Second strength of the second	4.9728		lawa				Calil	bration	100 C	Screen Ler	igth (ft)
Vell Elevation (TOC) 822.64         feet           Sroundwater Elevation 812.72         Parameter Stabilization temp 1,1" DO +1.10% Turbidity +/.10% feet         Product Observed (yes/no) nO         Depth to product           Time         Volume removed (gation)         Temp (C)         Cond (wYsee)         DO (mg/L)         ORP (mg/L)         Product Observed (yes/no) nO         Depth to product           Time         Volume removed (gation)         Temp (C)         Cond (wYsee)         DO (mg/L)         ORP (mg/L)         Protokity +/.0% (NTU)         pH         Description (e.g. odor, clarify, color)           IO:SD         init         21.41         75         1.877         29.42         .052         6.449         readdish brawn, turbid, si brownich, heavy turbidity, se (with classical second second in to 2.0         20.371         67         0.75         27.1         .050         6.5         brownich, heavy turbidity, se (with classical second second second	'=x0.04 2''=x0.16 4''=x		AND AND	eveast	- 70	2.	Pred	calibrat	ed 6/12/06	A CARD CONDERVOY	×
Free         Parameter Stabilization         Product Observed (yes/no)         Depth to product           812.72         feet         0.04/10% Turbidity +/-10%         Product Observed (yes/no)         Depth to product           Time         Volume removed         Temp t/-1' DO+/-10% Turbidity +/-10%         Product Observed (yes/no)         Depth to product           Time         Volume removed         Temp (C)         Cond         DO         ORP         Porthitty         PH         Description (e.g. odor, clarity, color)           ID:SD         init         21.41         75         1.87         29.4         .052-6449         readdish brown, turbidily, color)           ID:SD         init         21.41         75         1.87         29.4         .052-6449         readdish brown, turbidily, color)           ID:SD         init         21.41         75         1.87         29.4         .052-6449         readdish brown, turbidily, color)           ID:SD         0.5         20.416         70         0.75         27.1         .050         6.5         brownich, heavy turbidily, color)         SI           IN:00         1.0         20.37         67         0.87         33.7         .047         .52         Clearing, Slight Seclor         Si           IN:			-								
Parameter Stabilization         Parameter Stabilization         Product Observed (yes/no)         Depth to product           812.72         temp +/-1'         DO +/-10%         Turbidity +/-10%         Product Observed (yes/no)         Depth to product           Time         Volume removed         Temp (C)         Cond (mV(see)         DO (mgL)         ORP         Partbidity (VTU)         pH         Description (e.g. odor, clarity, color)           10:550         init         21.41         75         1.87         29.4         .052         6.49         r=dolich         brown hurbidity, color)           10:550         init         21.41         75         1.87         29.4         .052         6.49         r=dolich         brown hurbidity, color)           10:550         0.5         20.416         70         0.75         27.1         .050         6.5         brown charbidity, color)         510/mt         510/	822.0	64	6								
Start Pin 1 Douby Fill From Fill Douby pill Description (e.g. oddr., clarity, color)         Time       Volume removed (galon)       Temp (C)       Cond (uV/see)       DO       ORP       Partbitty (NTU)       pill       Description (e.g. oddr., clarity, color)         [D:50       init       21.41       75       1.87       29.4       .052       4.49       redolich brawn, teurbid, S         [D:55       0.5       20.416       70       0.75       27.1       .050       6.5       brownich, heavy teurbidily, se         [N:00       1.0       20.371       67       0.89       32.3       .048       6.52       clearing, turbid, setwer or         [N:05       1.5       20.39       660       0.87       33.7       .047       6.53       mostly clear, slight setwer or         [N:10       2.0       20.38       660       0.886       35.2       .047       6.53       mostly clear, slight setwer or         [N:10       2.0       20.38       660       0.886       35.2       .047       6.53       mostly clear, slight setwer or         [N:10       2.0       20.38       660       0.886       35.2       .047       6.53       mostly clear, slight	Foundwater Eleva	tion		ter Stabili	zation						
Time         Volume removed         Temp (C)         Cond (uV/see)         DO (mg/L)         ORP (my)         Perturbitivy (NTU)         pH         Description (e.g. odor, clarity, color)           10:50         init         21.41         75         1.87         29.4         .052         6.49         redolich brawn, twrbid, S           10:55         0.5         20.46         70         0.75         27.1         .050         6.5         brownich, heavy turbidily, se           10:55         0.5         20.46         70         0.75         27.1         .050         6.5         brownich, heavy turbidily, se           11:00         1.0         20.37         67         0.89         32.3         .048         6.52         cleaning, turbid, se wer od           11:05         1.5         20.39         66         0.87         33.7         .047         6.53         mostly clear, slight secut           11:10         2.0         20.38         66         0.88         35.2         .047         6.53         mostly clear, slight secut           11:11         -         -         -         -         -         -         -         -           11:11         -         -         -         -         <											
Time       (c)       (uV/xee)       (mg/L)       (mV)       (NTU)       pH       Description (e.g. oddr, clarity, coord)         10:50       init       21.41       75       1.87       29.6       .052       6.49       redolich brown, turbid, S         10:55       0.5       20.46       70       0.75       27.1       .050       6.5       brownich, heavy turbidily, se         11:00       1.0       20.37       67       0.89       32.3       .048       6.52       clearing, turbid, selver od         11:05       1.5       20.39       66       0.87       33.7       .047       6.52       clearing, slight sever od         11:10       2.0       20.38       140       0.88       35.2       .047       6.53       mostly elear, slight sever od         11:10       2.0       20.38       140       0.88       35.2       .047       6.53       mostly elear, slight sever od         11:11       Colleart       2.0       20.38       140       0.88       35.2       .047       6.53       mostly elear, slight sever         11:11       Colleart       2.0       2.0       2.0       2.0       2.0       2.0       2.0       2.0       2.0       2.0 <th></th> <th></th> <th>temp +/-</th> <th></th> <th></th> <th></th> <th></th> <th>luct Obs</th> <th></th> <th>Depth to p</th> <th>roduct</th>			temp +/-					luct Obs		Depth to p	roduct
10:55       0.5       20.46       70       0.75       27.1       .050       6.5       brownich, heavy turbidity, set in the stight of			temp +/-					luct Obs		Depth to p	roduct
11:00       1.0       20.371       67       0.89       32.3       048       6.52 cleaning, turbid, Getwer or         11:05       1.5       20.39       66       0.87       33.7       047       6.52 cleaning, slight sewer or         11:05       1.5       20.39       66       0.87       33.7       047       6.52 cleaning, slight sewer or         11:10       2.0       20.38       160       0.88       35.2       047       6.53 mostly clear, slight sewer or         11:11       -       colleast sample sever       0.88       35.2       047       6.53 mostly clear, slight sever         11:11       -       colleast sample sever       9       9       9       9         11:11       -       colleast sample sever       9       9       9       9         11:11       -       -       -       -       9       9       9       9         11:11       -       -       -       -       -       9 <t< td=""><td>812.</td><td>72 Volume removed</td><td>feet coud */-</td><td>3% ORP Cond</td><td>+/- 10mV DO</td><td>pH +/- 0.1 u ORP</td><td>nit Tarbidity</td><td></td><td>no</td><td></td><td></td></t<>	812.	72 Volume removed	feet coud */-	3% ORP Cond	+/- 10mV DO	pH +/- 0.1 u ORP	nit Tarbidity		no		
N:05       1.5       20.39       640       0.87       33.7       047       6.52       Cleaning, Slight source addition and the source additional anditional anditional and the source additional anditic	812.* Time	72 Volume removed (gallon)	temp +/- feet coud +/- Temp (°C)	Cond (uV/sec)	+/- 10mV DO (mg/L)	pH +/- 0.1 u ORP (mV)	Turbidity (NTU)	рН	Description (e.g. odor	r, clarity, color)	
N:05       1.5       20.39       640       0.87       33.7       047       6.52       Cleaning, Slight scuer od mostly clear, slight scuer         N:10       2.0       20.38       100       0.888       35.2       047       6.53       mostly clear, slight scuer       0         N:10       2.0       20.38       100       0.888       35.2       047       6.53       mostly clear, slight scuer       0         N:11	812.' Time LD:50	72 Volume removed (gallon) init	temp +/- coud +/- Temp (°C) <b>21. 41</b>	Cond (uV/s8c) 75	+/- 10mV DO (mg/L) <b>1.8-7</b>	ORP (mV) <b>29.</b>	nit Turbidity (NTU)	рн 6.49	no Description (e.g. odo readolish	r, clarity, color	turbid, g
II:II     Collect Sample Auits       Possible Slight Sheen,       Possible Slight Sheen,       appeared "mercuny like"       in bucket	812.' Time 10:50	72 Volume removed (gallon) init 0.5	temp +/- coud +/- Temp (°C) 21.41 20.46	23% ORP Cond (uV/sec) 75 70	DO (mg/L) <b>1.87</b> <b>0.75</b>	ORP (mV) 29.6 27.1	nit <del>Purbidity</del> (NTU) , DS2 .050	<sub>рн</sub> 6.49 6.5	no Description (e.g. odor radolich brownich,	r, clarity, color	turbid, g
II:II     Collect: Sample Auits       Possible Slight sheen,       Possible Slight sheen,       appeared "mercuny like"       in trucket	812." Time 10:50 10:55 11:00	72 Volume removed (gallon) init 0.5 1.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37	Cond (uV/sec) 75 70 67	DO (mg/L) 1.87 0.75 0.89	ORP (mV) 29.6 27.1 32.3	nit Purbidity (NTU) .052 .050 .048	рн 6.5 6.57	Description (e.g. odo redalish brownish, cleaning, 4	beary to	turbid, si sin rbidity, se slight scher oo
Possible Slight sheen,       Image: Sheen she	812." Time 10:50 10:55 11:00 11:05	72 Volume removed (gallon) init 0.5 1.0 1.5	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39	Cond (uV/sec) 75 70 67	DO (mg/L) 1.87 0.75 0.89	ORP (mV) 29.6 27.1 32.3	nit Purbidity (NTU) .052 .050 .048	рн 6.5 6.57	Description (e.g. odo redalish brownish, cleaning, 4	beary to	turbid, si sin rbidity, se slight scher oo
Total Time (min.) Total Volume Removed Well pumped dry (yes/no) Notes Refill/Disch	812." Time 10:50 10:55 11:00 11:05 11:10	72 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	Description (e.g. odo redalish brownish, cleaning, 4	beary to	turbid, si sin rbidity, se slight scher oo
Total Time (min.)     Total Volume Removed     Well pumped dry (yes/no)     Notes     Refill/Disch	812." Time 10:50 10:55 11:00 11:05 11:10	72 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odos redalish brownish, brownish, cleaning, cleaning, mostly c	, clarity, color) brawn heavy te wrbid, slight lear, sli	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
Total Time (min.) Total Volume Removed Well pumped dry (yes/no) Notes Refill/Disch	812." Time 10:50 10:55 11:00 11:05 11:10	72 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odos redalish brownish, brownish, cleaning, cleaning, mostly c	, clarity, color) brawn heavy te wrbid, slight lear, sli	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
Total Time (min.) Total Volume Removed Well pumped dry (yes/no) Notes Refill/Disch	812." Time 10:50 10:55 11:00 11:05 11:10	72 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odos redalish brownish, brownish, cleaning, cleaning, mostly c	, clarity, color) brawn heavy te wrbid, slight lear, sli	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
The find of the state of the st	812." Time 10:50 10:55 11:00 11:05 11:05	72 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odor reddish brownish, cleaning, t cleaning,	braun beavy to urbid, slight Slight "mercu	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
The find of the state of the st	812." Time 10:50 10:55 11:00 11:05 11:05	72 Volutine removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odor reddish brownish, cleaning, t cleaning,	braun beavy to urbid, slight Slight "mercu	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
The fine fine is a start of the	812." Time 10:50 10:55 11:00 11:05 11:05	72 Volutine removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odor reddish brownish, cleaning, t cleaning,	braun beavy to urbid, slight Slight "mercu	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
The fight and the state of the	812." Time 10:50 10:55 11:00 11:05 11:05	72 Volutine removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odor reddish brownish, cleaning, t cleaning,	braun beavy to urbid, slight Slight "mercu	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
	812." Time 10:50 10:55 11:00 11:05 11:05	72 Volute removed (gallon) init 0.5 1.0 1.5 2.0	temp +/- coud +/- Temp (°C) 21.41 20.46 20.37 20.39 20.38	Cond (uV/see) 75 70 67 67 69	DO (mg/L) 1.87 0.75 0.89 0.81 0.88	ORP (mV) 29.6 27.1 32.3 33.7 35.2	nit Purbidity (NTU) .050 .050 .048 .047 .047	рн 6.5 6.57	no Description (e.g. odor reddish brownish, cleaning, t cleaning,	braun beavy to urbid, slight Slight "mercu	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo
v20         v2.5         NO         COC#2341           QA/QC Samples         Signature         Signature           MS/MSD COC#2348 (6) 40mL VOA         Signature         Signature	812." Time 10:50 10:55 11:00 11:05 11:10 11:11	72 Volume removed (gallon) init 0.5 1.0 1.5 2.0 	tenp +/- coud +/- icert 20.46 20.37 20.39 20.38 20.38	Cond (uV/sec) 75 70 67 66 67 66 60 60 60 60 60 60 60 60 60 60 60 60	+/- 10mV DO (mg/L) 1.87 0.75 0.87 0.87 0.87 0.87 0.88	PH +/- 0.1 u ORP (mV) 29.6 27.1 32.3 33.7 35.2 AUILS	nit Parbidity (NTU) . 052 .050 .047 .047 .047 .047 .047 .047	pH 6.6 6.57 6.57 6.53	no Description (e.g. odor reddish brownish, cleaning, t cleaning,	braun beavy to urbid, slight Slight "mercu	turbid, se Slight Slight Sciver oo Sciver oo Sciver oo Sciver oo

No. 3209 P. 5

			-						
	:								
09:01		Collec	te Ja	mple	Suc	2			
09:00	2.0	19.20			522		5.N	mostly	clear
08:55		19.17	42			1	5.7	mostly	cleak.
T.	1.5	19.15	42		59.0		5.65	mostly	
08:50	1.0	19.19	42	2.05	54.0	.031	5.64		
08:40	0.5	19.86	46	5.24	27.3		5.98	mostly	lear.
	Volume removed (gallon) init	. (°C)	Cond (uV/sec)			(NTU)	рН	Description (e.g. odor,	
811.		feet cond +	r/- 1° DO + -/- 3% ORF	· +/- 10mV	pH +/- 0.1 u			orved (yes/no) 110	Depth to product
823.1 Groundwater Eleve		feet Paran	neter Stabil	ization					
Woll Elevation (TO							WILLIAM	- alimon	20
"=x0.04 2"≅x0.16 4"=>		allons OV	rercao	t,70	'S		Ibration calibrate	d 6/12/06	Screen Length (ft) 20
4.5712			itions (temp	, weather,	precip)	- 60	linst 101		
Casing Volume	1	nches(	Othør (desc	ribe)			otech Lo		M001
2		1	PID/FID			Met	l 556 M	PS	Serial numbers M001
28.57		feet X	Bladder P	ump			COC's		A
Water Column Thio	ckness		Peristaltic			San	nple Suite		20
40		feet	Grundfos			Lab	oratory	EMAX	Sample Depth (ft)
Vell Depth (TOC)			Check Valv	8				ool Area 3100	08:40
11.43		feet 1	Bailer			Loc	Bondu	rant/Nerem	4/13/06 Begin Time
roundwater Dept	h (TOC)	Equip	ment			San	pler		Date
		G	ROUNI		ERSAN	MPLIN		IcClellan - JPA	05.094.054.000
	Internated Fac	CS. L.L.C.	(303) 5	, Colorado 802 72-0200 72-0202	:02		Project	FTA-14	Project Number

No. 3209 P. 6

Total Volume Remo ~2.5	ved		10		Notes COC#23		gnature A	Refill/Discharge
Total Volume Ramo	ved							be descent t
		N/all m	d dry (yes/n		21-4			
	-							
		-						
							<u>"merang-</u>	11 KE "in bucket
	-						rossing sh	een appared
	and the second	400	yar	LAUVIL	-	-	Parcill 1	
	collo				-		Land, M	and Diolon , Sulle
2.0	19.93	45	0.64	132	.032	5.39	cleaning 1	aht Armin . Same
1.5	20.03	44	0.61	124.0	.032	5.31	brownish	suver odoe
1.0						5.48	Cleaning, br	which, sower or
	1							k, heavy turbidity,
AC		10000	-	1				
init	2100	47				601	dall here	4 1
Volume removed (gallon)	Тетр (°С)	Cond (uV/sec)	DO (mg/L)	ORP (mV)	Tarbidity (NTU)	рН	Description (e.g. odor,	clarity, color)
	feet con	u +/- 5% O	KF 7/- 10m	v pH +/- 0.	1 unit		no	
12.35	tem	p +/- 1° DC	) +/- 10%		1	duct Obs	served (yes/no)	Depth to product
evation	_	ameter Stal	bilization		_			
26.05	Foot			2				
TOC)					Pre	calibra	ted 4/12/06	15
		overca	56, 70	0:5	Cali	ibration	and tale to	Screen Length (ft)
18							1	
6		~~~~ (de			Ge	otech L	ow Flow	M001
	inches	Other (de	escribe)		YS	I 556 N	<b>MPS</b>	M001
		_ PID/FID					-	Serial numbers
	feet_?	K Bladder	r Pump		6			
3						1		
Chickness	- ALUL	Paristali					EMAX	29
	feet	Grundfor	s		Lab	oratory		Sample Depth (ft)
		_ Check Vi	alve			Motor	Pool Area 3100	11:20
	feet				Loc			Begin Time
7							hurant/Nerem	6/13/06
epth (TOC)				LICK SA		-	<u>UG</u>	Date
		ROUN	DWAT	TED CA	MIDT T			05.094.054.000
Service Integrated Basi	ES, LLC,							Project Number
Enviror						_		46-MW05
Matrix						Station	and the start of the start of the	
	Environ Service Internet Law Pepth (TOC) 7 C) Thickness 3 S C) Environ Environ C) Environ Environ Environ C) Environ Envi	Environmental Services, L.L.C. Interinental Sciences, L.C. Interinental Sciences, L.C.C. Interinental Sciences, L.C.C. Interin	Environmental Services, LLC. (a)         1601 Dep.           Services, LLC. (a)         (a)           (a)         (a)           (a)	Idia International Services, LLC. Tenegringed Baringenmental Subsects, Deriver, Colorado 8 (303) 572-0202GROUNDWATGROUNDWATGROUNDWATEquipment7feet7feet7feetC)Equipment7feetC)Equipment7feet8Peristaltic3feetNicknessPeristaltic3feetNicknessPeristaltic3feet8Sallons7feet8Sallons7feet8Sallons7feet8Sallons7feet8Sallons7feet9Other (describe)8Sallons7feet9Parameter Stabilization12.35feet9Cond12.35feet9O.590.590.590.590.590.61.020.3%90.64	Environmental Services, L.L.C. Interfeted Basicananerdal Sublicions         1601 Blake Street, Suita 200 Depret, Colorado 80202 (303) 572-0202           GROUNDWATTER SA           epth (TOC)         Equipment           7         feet           7         feet           Check Valve         Grundfos           Thickness         Peristaltic           3         feet           9         Other (describe)           8         gallons           100 H/2         Other (describe)           8         gallons           12.35         feet           Volume removed (gallon)         Temp (C)         Conditions (temp, weather, precip)           0         Velrce & C, 70:5           12.35         feet         Dother (loss)           12.35         feet         Ond H/- 3% ORP +/- 10mV pH +/- 0.           Volume removed (gallon)         Temp (C)         Cond (uV/sec)         DO (mg/L)         ORP (mV)           1.0         20.38         44         0.66         89.99           1.0         20.03         44         0.601         124.0           2.0         19.73         45         0.64         13.2	Environmental Services, LLC. meterdet Beisenmentell Mutaken         1601 Binks Street, Suite 200 Dawer, Colorado 80202 (303) 572-2000 (303) 572-2000 (303) 572-2000           Concernet Beisenmentell Mutaken         Equipment         Sar           7         feet         Equipment         Sar           7         feet         Grundfos         Lat           7         feet         Grundfos         Lat           7         feet         Other (describe)         Sar           8         gellons         Peristattic         Sar           8         gellons         Peristattic         Sar           9         Didder Pump         Met         Pro           9         PiD/FID         Ys         Other (describe)         Ge           88         gellons         Conditions (temp, weather, precip)         Sol           0         Pro         Pro         Pro           26.05         Feet         Cond (uV/sec)         DO         ORP         Parthapp           Volume removed (gallon)         Temp         Cond (uV/sec)         O         Pro         Pro           12.35         Feet         Cond (uV/sec)         DO         ORP         Parthapp           Volume removed (gallon)         Temp	Environmental Services, L.L.C. Internet distance endit students         1601 Blas Street, Sup 200 Derver, Cobrado 80202 (303) 572-0202         Project           GROUNDWATER SAMPLING LO Construction distance (303) 572-0202           GROUNDWATER SAMPLING LO Construction distance (303) 572-0202           GROUNDWATER SAMPLING LO Conditions (term (303) 572-0202           Concek Valve         Motor Motor           Concek Valve         Motor Motor           Conditions (term, weather, precip)           Solinst 10 Conditions (term, weather, precip)           Solinst 10 Conditions (term, weather, precip)           Other (describe)           Parameter Stabilization tem p+1 1° DO +5 10% Turbidity +/- 10% (cold +-3% ORP +/- 10mV pH +/- 0.1 unit)           Volume removed (gallon)         Cond         DO ORP         Prototing Product Obs Cond +/- 3% ORP +/- 10mV pH +/- 0.1 unit)           Volume removed (gallon)         Cond         DO ORP         Prototing Product Obs           Volume removed (gallon)         Cond         DO ORP         Prototing Prototing           Volume removed (gallon)         Cond         DO ORP         Prototing Prototing	Environmental Scrvices, LLC.         160: Blak street, subta 200 (30) \$72-2002         FTA-1           Project         McClellan - JPA           epth (TOC)         Equipment         Sampler           7         feet         Sampler           7         feet         Check Valve           8         Check Valve         Motor Pool Area 3100           1checks         gender Substand         FMAX           9         feet         Check Valve         Motor Pool Area 3100           1checks         Grundfos         EMAX           9         feet         X_Bladder Pump         see COC's           1checks         Other (describe)         Geotech Low Flow           8         gullons         Verces 64, 70's         Projuct Observed (yes/no)           12.35         feet         Parameter Stabilization         Feet (mg/1, 2/04, 70's)           12.35         feet         Conditions (temp, veather, precip)         Solinst 101           12.35         feet         Other (describe)         Froduct Observed (yes/no)           12.35         feet         Mather Stabilization         Feet Stabilization           12.35         feet         Conditions (temp, veather, 10w, Pi +/e.1 unit         DO           10.0

No. 3209 P. 7

		onmental	160	rix Environmen 1 Blake Street, 1 ver, Colorado 8	Suile 200				46-MW09	
- Mahara Andrew A	Servi	Ces, L.L.C.	(305	) 572-0200 ) 572-0202			Project		Project Numbe	r
								McClellan - JPA	05.094.05	54.00
Groundwater Dept	(TOC)	6	ROUN	DWAT	ER SA	MPLI	NG LC	)G		
or of and matter Deb		Edni	pment			Sa	mpler		Date	
11.16	р. С.		Bailer				Bon	durant/Nerem	6/13/06	
Well Depth (TOC)		feet				Lo	cation (S	ite)	Begin Time	
			Check Val	Ve			Motor	Pool Area 3100	09:40	
72.7		feet	Grundfos			La	boratory		Sample Depth (ft)	-
Water Column Thi	ickness		D			12-		EMAX	62.7	
61.54			Peristaltic			Sai	mple Suj(	te		-
	-	feet X_	_Bladder 1	Pump		see	e COC's			
Casing Diameter			PID/FID		-	Me	ters		Serial numbers	
4	0		I ID'I'ID			YS	SI 556 N	<b>APS</b>	M001	
Casing Volume		inches	Other (des	cribe)		- C.				
	- 6					Ge	otecn L	ow Flow	M001	
40.001	1	allone	itions (tem			and the second se	linst 10	1		
"=x0.04 2"=x0.16 4"=)	x0.65 6'≔x1.47 8"∈	x10.4	erces	E, 70:	's		ibration		Screen Length (ft)	
Vell Elevation (TO						Pre	calibra	ted 6/12/06	10	
822.2	28							;		
The second se		feet	7							
Foundwater Lievs	ntion									
Groundwater Eleva		Paran temp -			-hidle. +1 11	Pro	duct Ob	around (man/an-)	D	
811.	12	feet cond +	+/- 1° DO + -/- 3% ORI	-/- 10% Tu	rbidity +/- 10 pH +/- 0.1 v	0% Pro mit	duct Obs	served (yes/no)	Depth to product	_
	12	feet cond +	H-1° DO+ H-3% ORI	-/- 10% Tu ? +/- 10mV	pH +/- 0.1 v	nit 189 <u>5 a Kordi</u>		no	Depth to product	
811. Time	2 Volume removed (gallon)	feet cond +	+/- 1° DO + -/- 3% ORI	-/- 10% Tu P +/- 10m∨	pH +/- 0.1 v	mit		no		
811. Time <u>O9:40</u>	12 Volume removed (gsllon) init	temp - coud + Temp ("C)	+/- 1° DO + -/- 3% ORI Cond (uV/şec)	-/- 10% Tu P +/- 10mV	pH +/- 0.1 v ORP	nit Turb(d)ity (NTU)	рĦ	NO Description (e.g. odor,	clarity, color)	
811. Time	2 Volume removed (gallon)	feet remp Temp ("C)	+/- 1° DO + -/- 3% ORI Cond (uV/şec)	-/- 10% Tu 2 +/- 10mV DO (mg/L) 6.04	PH +/- 0.1 v ORP (mV)	mit Turb(dity (NTU) 408/	рн <b>6.99</b>	no Description (e.g. odor, <b>Yelloursin br</b>	clarity, color)	1
811. Time <u>09:46</u> 09:45	12 Volume removed (gallon) init	temp - coud + Temp (°C) 20.45 19.54	t/-1° DO + -/-3% ORI Cond (uV/sec) 1/3 1/2	10% Tu + 10mV DO (mg/L) <b>6.04</b> <b>2.35</b>	PH +/- 0.1 v ORP (mV) -/11.2.	-Turb(dity (NTU) 4081 .082	рн 6.99 6.89	no Description (e.g. odor, <u>Yellowish bi</u>	clarity, color) Dun, turbic	l id
811. Time 09:40 09:45 09:50	12 Volume removed (gallon) init 0.5 1.0	temp - coud + Temp (°C) 20.45 19.54 19.10	4/- 1° DO + -/- 3% ORI Cond (uV/sec) 1/3 1/2 1/8	- 10% Tu +/- 10mV DO (mg/L) 2.35 1.92	PH +/- 0.1 v ORP (mV) -/71.2. -/80.5 -/165.5	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. Time <u>09:46</u> 09:45	12 Volume removed (gallon) init	temp - coud + Temp (°C) 20.45 19.54	t/-1° DO + -/-3% ORI Cond (uV/sec) 1/3 1/2	- 10% Tu +/- 10mV DO (mg/L) 2.35 1.92	PH +/- 0.1 v ORP (mV) -/71.2. -/80.5 -/165.5	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. Time 09:40 09:45 09:50	Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + renp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 6.04 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. Time 09:40 09:45 09:55	Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic	1 id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp feet Temp (°C) <b>20.45</b> 19.57 19.57 19.10	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	l id
811. The <u>09:46</u> <u>09:45</u> <u>09:55</u> <u>10:00</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp coud + Temp (°C) 20.45 19.54 19.10 19.10 19.16	<ul> <li>4/-1° DO +</li> <li>4/-3% ORI</li> <li>Cond (uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>1/08</li> <li>1/08</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171. 2. -180.5 -166 5 -166 5 -169.0 -149.0	.082	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	1 id
811. Time <u>09:415</u> <u>09:55</u> <u>10:00</u> <u>10:01</u> (al Time (min.)	Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp - coud + Temp (°C) 20.45 19.57 19.10 19.10 19.16 10.13	<ul> <li>4/-1° DO +</li> <li>Cond</li> <li>(uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> </ul>	- 10% Tu +- 10mV DO (mg/L) 2.35 1.92 1.81 2.10	PH ++- 0.1 v ORP (mV) -171.2. -180.5 -165.5 -159.0 -149.0	nit Turbidity (NTU) .081 .082 .079 .078 .079	рн 6.99 6.89 6.81	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	ciarity, color)	l id bid bid
811. Time <u>09:415</u> <u>09:55</u> <u>10:00</u> <u>10:01</u>	12 Volume removed (gallon) init 0.5 1.0 1.5 2.0	temp - coud + Temp (°C) 20.45 19.57 19.10 19.10 19.16 10.13	<ul> <li>4/-1° DO +</li> <li>Cond</li> <li>(uV/sec)</li> <li>1/3</li> <li>1/2</li> <li>1/8</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> <li>108</li> </ul>	- 10% Tu +-/- 10mV DO (mg/L) 6.04 2.35 1.92 1.81 2.10 0.1e	PH ++ 0.1 v ORP (mV) -171.2. -180.5 -166 5 -166 5 -159.0 -149.0 UI EE	.082	рн 6.89 6.89 6.81 6.82	Description (e.g. odor, Vellouish bi Vellouish bi Clearing, lig	clarity, color) Dun, turbic Coun, turbic Coun, turbi	l id bid bid

No. 3209 P. 8

		ronmental	1601 Denv	ix Environment Blake Street. 1 Ver. Colorado 8	Suite 200				514-MW12
The second se	Servi Integrated	Ces, LLC	(303)	) 572-0200 ) 572-0202			Project	McClellan - JPA	Project Number 05.094.054.000
		G	ROUN	DWAT	ER SA	MPLIN			
Groundwater Dej	oth (TOC)	Equip	ment				npler		Date
27.5	1 :	feet	Bailer			Loo	Bond ation (Si	lurant/Nerem	4/13/06
Well Depth (TOC	)		Check Valv	'e				Pool Area 3100	Begin Time
105			Grundfos				oratory	1001 Alea 5100	07:40 Sample Depth (ft)
Water Column Th	nickness	jeet						EMAX	95
77.49	)	1	Peristaltic			Sam	ple Suit	e	
		feet X	Bladder P	'ump		see	COC's		9
Casing Diameter		I	ID/FID			Met	ers		Serial numbers
2						YS	I 556 N	IPS	M001
Casing Volume	1	inches C	Other (desc	ribe)		Geo	otech L	ow Flow	M001
12.398	34	Condi	tions (temp	, weather	precin)	Sol	inst 10	1	
">0.04 2ll0.14		Allons	erast			Call	bration		Screen Longth (ft)
"=x0.04 2"=x0.16 4" Well Elevation (T)		210.4		, ,0		Pre	calibrat	ed 6/12/06	10
821									
Froundwater Elev		feet				-			
794	1		eter Stabil /- 1° DO +		rhidio +/ 1	Proc	luct Obs	erved (yes/no)	Depth to product
194	+.4	feet cond +	- 3% ORP	+/• 10mV	pH +/- 0.1 u	nit		no	NA
	Volume removed	1 Тепр	Cond	DO	ORP		1		
Time	(gallon)	(°C)	(uV/sec)	(mg/L)	(mV)	(NTU)	рН	Description (e.g. odor,	clarity, color)
07:40	init	22.0	213	4.45	88.5	.202	8.49	mostly c	Kar .
07:45	0.25	20.17	94	2.74	-32.2_	.062	7.28	turbid, r	eddish brown
07:50	1.0	19.81	73	1.36	-95.1	,053	6.77	tartid . r	ddish brown
07:55	2.0	19.77	76	1.84	-49.5	.055	6.63	cleaning.	BRANNish
08:00	3.0	19.76	74	1.74	-41.7	.054	6.62	cleaning, Light	homentes
08:01		Collec	t sa	mole	suit				
							-	а. -	
	- 5								
								_	
	<b>—</b>								
							-		
otal Tima (mln.) ~ 20	Total Volume Ren 1-3.5	moved	Well pumpe	d dry (yes/n	0)	Notes COC#23	<b>0<i>09518</i></b> 46	le crimp in cas Insture IN 27.	the Refill/placharg
A/QC Samples								P.I.	11100 1

No. 3209 P. 9

		mmental	1601	Environmen Blake Street, Stree	Suite 200				514-MV	V13
	Servic	es, LLC	(303)	\$72-0200	10202		Proje	ct	P	roject Number
	- margenren [a)	ilententni Saluto		572-0202		_		McClellan - JPA		05.094.054.00
Groundwater De	oth (TOC)			DWAT	ER SA	MPLI	INGL	OG		
		Equ	Ilpment			S	ampler		Date	1 1
25.5	7		Bailer					idurant/Nerem	61	13/06
Well Depth (TOC	c) .	feet	Ch h. W	dia.		Ĺ	ocation (		Begin '	Time
42			Check Va	alve		12	Motor	Pool Area 3100		08:10
		feet	Grundfor	S		L	aborator		Sample	Depth (ft)
Water Column Th	hickness		Peristalti	•				EMAX		32
16.4	3 .		_ r er (start)	c		IS.	ample Su	ite		
Casing Diameter		feet X	Bladden	Pump	3	S	ee COC	5		
			PID/FID			M	leters		Serial	numbers
2						Y	SI 556	MPS	M001	
Casing Volume		Inches	Other (de	escribe)		G	eotech	Low Flow	M001	
2.628	18		11.1						TATOUT	
2.020			ditions (ter				olinst 10 alibration		10	V and Zan
	=x0.65 6"=x1.47 8"=x10	0.4	verces	=, 103	\$	P	recalibr	ated 6/12/06	Screen 10	Length (ft)
Well Elevation (T	OC)			'						
82	22.1	feet								
Groundwater Elev	vation		meter Stal	bilization						
79	6.53	temp	+/- 1° DO	+/- 10%	Turbidity +/	- 10% Pi	oduct Ol	oserved (yes/no)	Depth t	o product
		feet cond	+/- 3% 01	RP +/- 10m	V pH +/- 0.	l voit		no		NIA
Time	Volume removed			ľ	A CARLES AND		17 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (		and the second second second	
11000	(gallon)	Temp (°C)	Cond (uV/şec)	DO (mg/L)	ORP (mV)	TETINAL (NTU)	- DH	Description (e.g. odor,		A CONTRACTOR OF
08:10	<ul> <li>International states and states and states</li> </ul>		(uV/şec)			(NTU)	PH		, clarity, co	lor)
	(gallon)	(°C)	(uV/şec)	(mg/L)	(mV)	(NTU)	5 1.05		, clarity, co	lor)
08:10	(gallon) init	(°C) 20.52	(UV/§EC)	(mg/L) 7.87	(mV) -48.7	(NTU)	5 7.05 3 6.93		, clarity, co	lor)
08:10	(gallon) init 0.25	(°C) 20.57 20.5	(UV/\$EC)	(mg/L) 7.87 8.29	(mV) -48.7 -33.8	(NTU) .085 .046	5 2.05 3 6.93 1 6.56	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbiolity
08:10 08:15 08:20	(gallon) init 0.25 0.5 1-0 1.5	(°) 20.57 20.5 20.5 20.5 20.38 20.45	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	(NTU) .085 .046 .031 .031	5 7.05 5 6.93	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbidity
08:10 08:15 08:20 08:25	(gallon) init 0.25 0.5 1-0 1.5	(°) 20.57 20.5 20.5 20.5 20.38 20.45	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	.089 .044 .031 .031 .024	5 2.05 6.93 6.35 6.35	mostly cl mostly cl mostly c mostly c	claricy, co eae, lear	lor) Ught turbiolity
08:10 08:15 08:20 08:25 08:30	(gallon) init 0.25 0.5 1-0 1.5	(°C) 20.572 20.57 20.55 20.55 20.358	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	.089 .044 .031 .031 .024	5 2.05 6.93 6.35 6.35	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbiolity
08:10 08:15 08:20 08:25 08:30	(gallon) init 0.25 0.5 1-0 1.5	(°) 20.57 20.5 20.5 20.5 20.38 20.45	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	.089 .044 .031 .031 .024	5 2.05 6.93 6.35 6.35	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbidity
08:10 08:15 08:20 08:25 08:30	(gallon) init 0.25 0.5 1-0 1.5	(°) 20.57 20.5 20.5 20.5 20.38 20.45	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	.089 .044 .031 .031 .024	5 2.05 6.93 6.35 6.35	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbiolity
08:10 08:15 08:20 08:25 08:30	(gallon) init 0.25 0.5 1-0 1.5	(°) 20.57 20.5 20.5 20.5 20.38 20.45	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	.089 .044 .031 .031 .024	5 2.05 6.93 6.35 6.35	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbidity
08:10 08:15 08:20 08:25 08:30	(gallon) init 0.25 0.5 1-0 1.5	(°) 20.57 20.5 20.5 20.5 20.38 20.45	(UV/SEC) 119 19 19 19 19 13 19 36 37	(mg/L) 7.87 8.29 5.95 4.9 5.34	(mV) -48.7 -33.8 10.4 12.4 12.5	.089 .044 .031 .031 .024	5 2.05 6.93 6.35 6.35	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbidity
08:10 08:15 08:20 08:25 08:30 08:31	(gallon) init 0.25 0.5 1-0 1.5 	(°C) 20.572 20.55 20.55 20.38 20.45 011et	(UV/SEC) 119 43 36 37 4 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 37 30 37 30 37 37 30 37 37 37 37 37 37 37 37 37 37	(mg/L) 7.87 8.29 5.95 4.9 5.34 5.34	(mV) -48.7 -33.8 10.6 12.6 12.5 , AUI	(NTU) .085 .044 .031 .024 .025 .224 .025 .224	5 2.05 8 6.93 1 6.55 9 6.3 8 6.3 1 1 1 1 1 1 1 1 1 1 1 1 1	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbidity
08:10 08:15 08:20 08:25 08:30 08:31	(gallon) init 0.25 0.5 1.0 1.5 	(°C) 20.572 20.55 20.55 20.38 20.45 011et	(UV/SEC) 119 43 36 37 4 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 4 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 30 37 37 30 37 30 37 37 30 37 37 37 37 37 37 37 37 37 37	(mg/L) 7.87 8.29 5.95 4.9 5.34 5.34	(mV) -48.7 -33.8 10.6 12.6 12.5 , AUI	(NTU) .085 .044 .031 .024 .025 .224	PH 5 2.05 8 6.93 1 6.55 9 6.3 8 6.3 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	mostly cli mostly cli mostly c	claricy, co eae, lear	lor) Ught turbiolity

#### APPENDIX C CHAINS-OF-CUSTODY, JUNE 2006

					06	F110		
		C	hain	of Custody	COC#	: 2346		
McClellan Lab: EMAX	Sit		), Discrete(D), Disturbed(S),	Station	CWM-514-MW12 Type: MW			
Sample Date: 6/13/06	Sam Subn	SMCode (circle):       Grab(G), Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)       GCCode:       NS         Sampling Technique (circle):       Bailer(B) Bladder Pump(BP) Core(C)       Matrix:       Ground Water         Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spcon(SN), Hand       Task#:       05.094.054.000         Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)       CoolerID:						
Contractor: Sampler Signa	MES iture(s):	INeren	EBL	ot: <b>TBN061306</b> ot: EBN061306 ot: MBN061306	SampleTop:	SampleBottom (Units):		
Time:	Label#:	Bottle, Preservative:		Method:				
08:01	1	3 x 40 mL VOA vial, HCl	3260 V	OCs (no TICs)		· · ·		
Blank, TB = T	rip Blank, MW = Mor	ative Sample, FD = Field Duplic WQ = Water Quality, WS = So itoring Well, BH = Bore Hole, D	urce Wa	ater, SP = Seep				

White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)

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Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
SNETERN)	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

			Chain of Custody		06F170 DC#: 2344		
McClellan	Sit	e: Motor Pool Are	a 3100		ion:CWM-514-MW13 ionType:MW		
Lab: EMAX	SMC		nposite (C), Discrete(D), Disturbed(S) , Unknown(z)	1	ode: NS ix: Ground Water		
Sample Date	Sam Subr	nersible Pump (SU), Encore(E	Undiscrete (U), Unknown(z) ing Technique (circle): Bailer(B) Bladder Pump(BP) Core(C) ersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)				
Contractor:	MES	<u> </u>	TBLot: 78 M06 1306	SampleTo			
Sampler Sign	ature(s):	Averen	EBLot: EBHOLI 300 ABLot: MBMOLI 300	32.0	0 42.0 ft		
Time:	Label#:	Bottle, Preservative:	Method:				
08:31	1	3 x 40 mL VOA vial, HCI	8260 VOCs (no TICs)		,		
QCCode: NS	S = Investia	ative Sample. FD ≃ Field Dup	vlicate, MS = Matrix Spike, MSD = Mat	rix Soike Du	uplicate, EB = Equipment		
Blank, TB ≕	Trip Blank, MW = Mor	WQ = Water Quality, WS = S					
White Origin	al COC (La	b Conv) - Yellow COC (Field	d Office) - Pink COC (Data Managme	ent)			

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Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
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Airbill Number:	•···	

			Chain	of Custody	COC	
McClellan Lab: EMAX	Site SMC	e: Motor Pool Are ode (circle): Grab(G) Com Undiscrete (U)	nposite (C		Ctatio	ו: DUP067 ס <b>דידע איז איז איז איז איז זין די</b> דע איז איז דע איז איז דע איז איז איז איז דע איז איז איז איז איז איז איז איז א דע איז
Sample Date: 6/13/04	Subr		Bailer(B <b>C</b> EN), Hydro	Bladder Pump(BP)Core(Copunch(HP), Spoon(SN), Ha		05.094.054.000
Contractor: Sampler Signal	MES ture(s):	Herem	EBLo	DE TOMOGISOG DE EBN 06/306 DE MBM 06/306	SampleTop: 32.0	SampleBottom (Units): 42.0 ft
Time:	Label#:	Bottle, Preservative:		Method:		
08:31	1	3 x 40 mL VOA vial, HCl	8260 VC	DCs (no TICs)		
Blank, TB = Tr StationType: M SS = Surface \$	ip Blank, ' 1W = Mon Soil	ative Sample, FD = Field Dup WQ = Water Quality, WS = S itoring Well, BH = Bore Hole, p Copy) - Yellow COC (Field	iource Wa , DS = IDV	ıter, SP = Seep V Soil, SD = Sediment Poin	t, SW = Surfac	

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Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Aurem	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

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McClellan Lab: EMAX Sample Date: 6/13/06	Samp Subm	e: Motor Pool Area 3 ode (circle): Grab(G) Compo Undiscrete (U), U bling Technique (circle): Bai	site (C), Discrete(D), Disturbed(S), nknown(z) ier(B) Bladder Pump(BP) Core(C) , Hydropunch(HP), Spoon(SN), Har ristaltic Pump(PP), Grab(G)	COC# Station: Station QCCode: Matrix:	FTA-146-MW03 Type: MW : NS Ground Water 05.094.054.000
Contractor: M Sampler Signatu	MES Ire(s):	tNorem	TBLOETBN061306 EBLOT EBM061306 ABLOT HBM061306	SampleTop:	SampleBottom (Units): 41. O. FL
Tìme: L	.abel#:	Bottle, Preservative:	Method:		
:	1	3 x 40 mL VOA vial, HCl 82	260 VOCs (no TICs)		
Blank, TB = Trip StationType: MV SS = Surface Sc	) Blank, \ V = Moni pil	WQ = Water Quality, WS = Sour itoring Well, BH = Bore Hole, DS	te, MS = Matrix Spike, MSD = Matri ce Water, SP = Seep S = IDW Soil, SD = Sediment Point fice) - Pink COC (Data Managme)	, SW = Surface	

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	6/14/06 0930	m
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Airbill Number:		

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			Chain	of Custody	<i>00</i> coc#	5F170 : 2348
McCiellan Lab: EMAX Sample Date: 6/13/06	Samp Subr Auge	ode (circle): Grab(G)Com Undiscrete (U),	posite (C , Unknow Bailer(B), N), Hydro Peristaltic	m(z) Bladder Pump(BP), Sore(C) opunch(HP), Spoon(SN), Ha c Pump(PP), Grab(G)	Station QCCode Matrix:	Ground Water 05.094.054.000
Contractor: M Sampler Signatu	1ES re(s):	INETEM	EBL	DET <b>BHOG 1306</b> DEE <b>BHOG 1306</b> DEEBHOG 1306	SampleTop:	SampleBottom (Units): 41.044
Time:	abel#:	Bottle, Preservative:		Method:		
:	1	6 x 40 mL VOA viai, HCi	8260 VC	DCs (no TICs)		
Blank, TB = Trip	Blank, \ / == Mon	ative Sample, FD = Field Dupl WQ = Water Quality, WS = So itoring Well, BH ≂ Bore Hole,	ource Wa	ater, SP = Seep		

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Airbill Number:		

McClellan Lab: EMAX Sample Date:	Samj Subr	ode (circle): Grab(G), Com Undiscrete (U) pling Technique (circle): nersible Pump (SU), Encore(E	posite (C), Discrete(D), Disturbed(S),	Matrix: Task#:	
Contractor: Sampler Sign:	MES ature(s):	ANErem)	TBLot: <b>TBM061306</b> EBLot: <b>EBM061306</b> ABLot: <b>MBM061306</b>	SampleTop: S	ampleBottom (Units):
Time:	Labei#:	Bottle, Preservative:	Method:		
14:00	1	2 x 40 mL VOA vial, HCl	8260 VOCs (no TICs)		
Blank, TB ≂ <b>T</b>	"rip Blank, MW = Мог	WQ = Water Quality, WS = S	licate, MS = Matrix Spike, MSD = Matr ource Water, SP = Seep DS = IDW Soil, SD = Sediment Point,		-

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
FNerrem	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
Airbill Number:		

McClellan Lab: EMA Sample Date	Samı Subn	e: McClellan Field ode (circle): Grab(G) Com Undiscrete (U), pling Technique (circle): E nersible Pump (SU), Encore(E	posite (C), Discrete(D), Disturbed(	COC Station S), Station QCCode (C) Matrix:	: MATERIAL014 Type: WQ e: EB Water
Contractor: Sampler Sigr	MES nature(s):	FN Erem	TBLot: 73/106/306 EBLot: 73/106/306 ABLot: 1/8/106/306	SampleTop:	SampleBottom (Units):
Time:	Label#:	Bottle, Preservative:	Method:		
14:00	1	2 x 40 mL VOA viał, HCł	8260 VOCs (no TICs)		
Blank, TB = StationType SS = Surfac	Trip Blank, : MW = Mor e Soil	WQ = Water Quality, WS = S nitoring Well, BH = Bore Hole,	icate, <b>MS</b> = Matrix Spike, MSD = M ource Water, SP = Seep DS = IDW Soil, SD = Sediment Po Office) - Pink <b>C</b> OC (Data Managr	int, SW = Surface	

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McClellan	Sit	e: McClellan Field	1 QC	of Custody	COC# Station:	
Lab: EMAX Sample Date:	Sam Subn	ode (circle): Grab(G), Son Undiscrete (U) pling Technique (circle): nersible Pump (SU), Encore(E rr(HA), Stainless Bucket(SS),	), Unknow Bailer(B <b>)</b> EN), Hydro	n(z) Bladder Pump(BP), Core(C) opunch(HP), Spoon(SN), Har	QCCode Matrix:	: TB Water 05.094.054.000
Contractor: Sampler Signa	MES iture(s):	farren	EBL	TBHOGIZOG BHOGIZOG	SampieTop:	SampleBottom (Units):
Time:	Labei#:	Bottle, Preservative:		Method:		
15:00	1	2 x 40 mL VOA vial, HCl	8260 VC	DCs (no TICs)		
QCCode: NS Blank, TB = T	≃ Investiga rip Blank, ∕IW = Mor	with Motor Pool Area 3100 ative Sample, FD = Field Dup WQ = Water Quality, WS = S bitoring Well, BH = Bore Hole,	Source Wa	iter, SP = Seep		
White Original	COC (La	b Copy) - Yellow COC (Field	Office) -	Pink COC (Data Managme	nt)	

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Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature) :	
Relinquished by (Signature) :	Date/Time:	Received by (Signature) :	
Airbill Number:			<b>.</b>

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<del></del>			CI	hain of Custody	COC#	: 2342	
Sample	llan EMAX e Date: 3/06	Samp Subr	ode (circle): Grab(G) Compos Undiscrete (U), Un oling Technique (circle): Bail	site (C), Discrete(D), Disturbed(S), nknown(z) er(B) Bladder Pump(BP) Core(C) Hydropunch(HP), Spoon(SN), Har	(BP) Core(C) poon(SN), Hand rab(G) Matrix: Ground Water Task#: 05.094.054.000 CoolerID:		
Contrac Sample	r Signatu	MES Jre(s):	FNEVERN	TBLot: <b>TBM061306</b> EBLot: <b>EB N061306</b> ABLot: <b>MBM061306</b>	SampleTop: 20.0	SampleBottom (Units): 40.0 FL	
Time:	I	_abei#:	Bottle, Preservative:	Method:			
09	:01	1	3 x 40 mL VOA vial, HCl 82	260 BTEX		'	
Blank, Statior SS = S	TB = Trip Type: M Surface S	o Blank, ' V = Mon oil	WQ = Water Quality, WS = Sour itoring Well, BH = Bore Hole, DS	te, MS = Matrix Spike, MSD = Matr ce Water, SP = Seep 5 = IDW Soil, SD = Sediment Point fice) - Pink COC (Data Managmen	, SW = Surface		

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Relinquished by (Signature) :	Date/Time: 6/14/06 0930	Received by (Signature)
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Airbill Number:		

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		C	hain of Custo	ody	COC#	
McClellan	Sit	e: Motor Pool Area	3100	·		FTA-146-MW02
Lab: EMAX	SMC	ode (circie): Grab(G), Compo		Disturbed(S)	' QCCode	<b>Type:</b> MW : NS
Sample Date:	Sam Subn	Undiscrete (U), Unknown(z) Dling Technique (circle): Bailer(B) Bladder Pump(BP) Core(C) nersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand r(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)				Ground Water 05.094.054.000
Contractor: Sampler Signa	MES	INerem	TBLot: 78M04 EBLot: EBN06 ABLot: HBM0	1306	SampleTop: 20.5	SampleBottom (Units)
Time:	Label#:	Bottle, Preservative:	Method:			
09:36	1	3 x 40 mL VOA vial, HCl	260 BTEX			
QCCode: NS	= Investig	ative Sample, FD = Field Duplic WQ = Water Quality, WS = Sou	ate, MS = Matrix Spik	e, MSD = Mati	rix Spike Duplic	ate, EB = Equipment

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Airbill Number:		

	С	hain of Custody	06F170 COC#: 2345
	ode (circle): Grab(G)Compo	osite (C), Discrete(D), Disturbed(S),	Station: FTA-146-MW09 StationType: MW QCCode: NS
Subr	pling Technique (circle): Ba nersible Pump (SU), Encore(EN	ailer(B) Bladder Pump(BP) Core(C) ), Hydropunch(HP), Spoon(SN), Hand	Matrix: Ground Water Task#: 05.094.054.000 CoolerID:
MES ure(s):	filerem)		SampleTop: SampleBottom (Units) (62.7 72.7 FL
Label#:	Bottle, Preservative:	Method:	
1	3 x 40 mL VOA vial, HCl {	8260 BTEX	
ip Blank,	WQ = Water Quality, WS = Sou	urce Water, SP = Seep	
	SMC Samı Subr Auge MES ure(s): Label#: 1	Site:       Motor Pool Area         SMCode (circle):       Grab(G) Computing Computer Computing Computing Computer Computing Computer Computer Computer Computer Computer Computer Computer Computer Computer Compu	SMCode (circle):       Grab(G) Composite (C), Discrete(D), Disturbed(S), Undiscrete (U), Unknown(z)         Sampling Technique (circle):       Bailer(B) Bladder Pump(BP) Core(C)         Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)         MES       TBLot: TBN 06 1306         ure(s):       Wertern         Label#:       Bottle, Preservative:

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
FNerem	6/13/06 16:00	FEDEX
Relinquished by (Signature) :	Date/Time: 6/14/04 09(30	Received by (Signature) :
Relinquished by (Signature) :	Date/Time:	Received by (Signature)
Airbill Number:		

			Chain of Custody		: 2339
McCiellan	Sit		······································	Station	FTA-146-MW01 <b>Гуре:</b> MW
Lab: EMAX			nposite (C), Discrete(D), Disturbed(S) ), Unknown(z)	QCCode	NS
Sample Date:	Sam Subn	pling Technique (circle): nersible Pump (SU), Encore( rr(HA), Stainless Bucket(SS),	Matrix: ) Task#: Ind CoolerID	Ground Water 05.094.054.000 :	
Contractor: Sampler Signa	MES ature(s):	Weren	TBLot: 784061306 EBLot: 084061306 ABLot: 084061306	SampleTop: 20.0	SampleBottom (Units): 35.0 ft
Time:	Label#:	Bottle, Preservative:	Method:		
10:31	1	3 x 40 mL VOA vial, HCl	8260 BTEX		
Blank, TB = 1	rip Blank, MW ≃ Moi	WQ = Water Quality, WS =	plicate, MS = Matrix Spike, MSD = Ma Source Water, SP = Seep e, DS = IDW Soil, SD = Sediment Poin		

White Original COC (Lab Copy) - Yellow COC (Field Office) - Pink COC (Data Managment)

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Airbill Number:	· · · · · · · · · · · · · · · · · · ·	

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Site						
, эне				n of Custody	COCi Station	
	-	Motor Pool Ar Grab(G), Co	mposite (	Station	: FTA-146-MW05 <b>Type: M</b> W	
Sampi Subme	ling Techniq ersible Pump	Undiscrete (L Iue (circle): (SU), Encore(	J), Unkno Bailer(B) (EN) Hyd	Bladder Pump(BP) Core(C)	Accode Matrix: Task#:	Ground Water 05.094.054.000
ES e(s):	Neres	$\sim$	TBL EBL	ot: TBM041306	sampleTop: 29.0	SampleBottom (Units): 44.0 ft
ibei#:	Bottle, Prese	ervative:		Method:		
	3 x 40 mL VC	DA vial, HCI	8260 B	TEX		
= Monito	oring Well, B	H = Bore Hole,	, DS = ID	W Soil, SD = Seep W Soil, SD = Sediment Point,	SW = Surface	tte, EB ≃ Equipment Water, SE = Seep,
	Samp Subme Augern ES e(s): bel#: bel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbel#: sbb	Sampling Techniq Submersible Pump Auger(HA), Stainles ES e(s): Bottle, Prese 3 x 40 mL VC Vestigative Sample, F Blank, WQ = Water Q = Monitoring Well, Bl	Sampling Technique (circle):         Submersible Pump (SU), Encore(Auger(HA), Stainless Bucket(SS)         ES         e(s):         Abel#:         Bottle, Preservative:         3 x 40 mL VOA vial, HCl         Vestigative Sample, FD = Field Dup         Blank, WQ = Water Quality, WS = S         = Monitoring Well, BH = Bore Hole	Undiscrete (U), Unknow         Sampling Technique (circle): Bailer(B)         Submersible Pump (SU), Encore(EN), Hyd         Auger(HA), Stainless Bucket(SS), Peristalt         ES         e(s):         Abel#:         Bottle, Preservative:         3 x 40 mL VOA vial, HCl         8260 B         Vestigative Sample, FD = Field Duplicate, MS         Blank, WQ = Water Quality, WS = Source Wa         Monitoring Well, BH = Bore Hole, DS = ID	Sampling Technique (circle):       Bailer(B) Bladder Pump(BP) Core(C)         Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Ha         Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)         ES         e(s):         #Method:         Bottle, Preservative:         Method:         3 x 40 mL VOA vial, HCl         8260 BTEX         Vestigative Sample, FD = Field Duplicate, MS = Matrix Spike, MSD = Matrix         Blank, WQ = Water Quality, WS = Source Water, SP = Seep         = Monitoring Well, BH = Bore Hole, DS = IDW Soil, SD = Sediment Point,	Ondiscrete (U), Unknown(z)         QCCode         Sampling Technique (circle): Bailer(B), Bladder Pump(BP) Core(C)         Submersible Pump (SU), Encore(EN), Hydropunch(HP), Spoon(SN), Hand         Auger(HA), Stainless Bucket(SS), Peristaltic Pump(PP), Grab(G)       CoolerID         ES       TBLot: TBM 061306       SampleTop:         e(s):       Bottle, Preservative:       Method:       29.0         abel#:       Bottle, Preservative:       Method:       20.0         abel#:       Bottle, Preservative:       Method:       20.0         <

Relinquished by (Signature) :	Date/Time:	Received by (Signature) :
INEVEN	6/13/06 16:00	FEDEN
Relinquished by (Signature) :	Date/Time:	Received by (Stgngure) :
		$\sim \sim$
Relinquished by (Signature) :	Date/Time:	Received by (Signature):
Airbill Number:		

APPENDIX D VALIDATED DATA SHEETS, JUNE 2006

SW 50 VOLATILE OR	308/82608 Ganics by GC/MS			
Client : MATRIX ENVIRONMENTAL SER Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: CWM-514-MW12 Lab Samp ID: F170-01 Lab File ID: RF0606 Ext Btch ID: V005F50 Calib. Ref.: RF0286	% Mois	Collected: Received: Extracted: Analyzed: on Factor:	06/14/06 06/21/06 14:33 06/21/06 14:33 1 WATER NA	
PARAMETERS	RESULTS (ug/L)	RL (ug/l)	MDL	Reportable Results
1, 1 - TRICHLOROETHANE 1, 2, 2 - TETRACHLOROETHANE 1, 2, 2 - TRICHLOROETHANE 1, -DICHLOROETHANE 1, -DICHLOROETHANE 1, -DICHLOROETHANE 1, -DICHLOROPROPANE 2, 3 - TRICHLOROBENZENE 2, 4 - TRICHLOROBENZENE 2, 2 - TRICHLOROBENZENE 2, 2 - DIBROMO-3 - CHLOROPROPANE 2, 2 - DICHLOROETHANE 1, 2 - DICHLOROETHANE 2, 2 - DICHLOROPROPANE 2, 2 - DICHLOROPROPANE 3, 5 - TCHOROTOLUENE BROMOCHLOROMETHANE BROMOMETHANE CARBON TETRACHLORIDE CHLOROFORM CHLOROBENZENE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE DIBROMOCHLOROPENE DIBROMOCHLOROPENE DIBROMOCHLOROMETHANE 0 - XYLENE MEXACHLOROBUTADIENE 1 SOPROPYL BENZENE N P. XYLENE MEXACHLOROBUTADIENE 1 SOPROPYL BENZENE N P. XYLENE MEXACHLOROBUTADIENE 1 SOPROPYL BENZENE N P. TSOPROPYL BENZENE N P. TSOPROPYL BENZENE N P. TSOPROPYL DLUENE SEC - BUTYLBENZENE N P. TSOPROPYL DLUENE SEC - BUTYLBENZENE N P. TSOPROPYL DLUENE SEC - BUTYLBENZENE N PROPYLBENZENE N PROPYLBENZENE N P. TSOPLOFUCHLOROFTHANE 1 TACHLOROFLOROFTHANE 1 TACHLOROFLOROFTHANE 1 TACHLOROFLOROFTHANE 1 TACHLOROFLOROFTHANE 1 TACHLOROFTHANE 1 TACHLOROFLOROFTHANE 1 TACHLOROFLOROFTHANE 1 TACHLOROF			ระ สุด สุด สุด สุด มาการการการการการการการการการการการการการ	Nesurts
SURROGATE PARAMETERS	% RECOVERY	QC LIMIT	.,	А
TOLUENE-D8 4-BROMOFLUOROBENZENE	103 107 112	63-132 75-122 73-129		

SR -119/06 QC'd 7/24/06 gm

	308/82608 GANICS BY GC/MS			
Client : MAIRIX ENVIRONMENTAL SER Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: CWM-514-MW13 Lab Samp ID: F170-02 Lab File ID: RFQ609 Ext βtch ID: NC05F50 Calib. Ref.: RF0286	VICES Date Date Date Diluti Matrix % Mois	Collected: Réceived: Extracted: Analyzed: on Factor: ture	06/13/06 06/14/06 06/21/06 16:24 06/21/06 16:24 1 WATER NA NA NA	
PARAMETERS	RESULTS (ug/L)	ŘĹ (ug/L)	MDL (ug/l)	
1,1,1-TRICHLOROETHANE 1,1,2,2-TETRACHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE	ND 59E J	× 1		Y N
1 - 1 - 2 - TRICHLOROETHANE 1 - DICHLOROETHANE 1 - DICHLOROETHANE 1 - DICHLOROPTHANE 2 - JICHLOROPTOPENE 2 - 3 - TRICHLOROPROPANE 2 - 3 - TRICHLOROPROPANE 2 - 4 - TRIMETHYLBENZENE 2 - 4 - TRIMETHYLBENZENE 2 - DICHLOROPROPANE 2 - CHLOROTOLUENE BROMOENZENE BROMOBENZENE BROMOBICHLOROMETHANE BROMODICHLOROMETHANE BROMODICHLOROMETHANE BROMODICHLOROMETHANE BROMODICHLOROMETHANE BROMODICHLOROMETHANE BROMOFORM BROMODICHLOROMETHANE BROMOFORM BROMODICHLOROMETHANE BROMOFORM BROMODICHLOROMETHANE BROMOFORM BROMODICHLOROMETHANE BROMOHETHANE CARBON TETRACHLORIDE CHLOROFORM CHLOROBENZENE CIS - 1 - 2 - DICHLOROPTHENE CIS - 1 - 2 - DICHLOROPTHENE DIBROMOETHANE DIBROMOETH		X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	งหมู่หน่างหน่างการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับ การรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการรับการ	
ACRYLONITRILE IODOMETHANE	ND ND ND	10	1 5 .5	Ţ
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 106 107 111	QC LIMIT 63-132 75-122 73-129		- -

SR -119/06

	8/82608 NICS BY GC/M	S		
Client : MATRIX ENVIRONMENTAL SERVIC Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: CWM-514-MW13DL Lab Samp ID: F170-02T Lab File ID: RFQ715 Ext Btch ID: V005F58 Catib. Ref.: RFQ286	% Mo Inst	Received: 06 Extracted: 06 Analyzed: 06 tion Factor: 5 ix WA isture : NA	/14/06 /24/06 11:17 /24/06 11:17 FER 005	
PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)	
1,1,1-TRICHLOROETHANE 1,1,2,2-TETRACHLOROETHANE 1,1,2-TRICHLOROETHANE	ND 57	55	1 N 1.5 Y	
1, 1-DICHLOROETHANE 1, 1-DICHLOROETHANE 1, 2, 3-TRICHLOROPROPENE 1, 2, 3-TRICHLOROPROPANE 1, 2, 4-TRICHLOROPROPANE 1, 2, 4-TRICHLOROBENZENE 1, 2, 4-TRIMETHYLBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROETHANE 1, 2-DICHLOROETHANE 1, 3-DICHLOROPROPANE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 4-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 1, 4-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 1, 4-DICHLOROBENZENE 2, 2-DICHLOROBENZENE 2, 2-D	ND ND ND ND ND ND ND ND ND ND ND ND	C C C C C C C C C C C C C C	2.5	
2-CHLOROTOLUENE 4-CHLOROTOLUENE BENZENE BROMODENZENE BROMODICHLOROMETHANE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROBENZENE CHLOROBETHANE CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CIS-1,2-DICHLOROETHENE CIS-1,2-DICHLOROETHENE CIS-1,2-DICHLOROPENE DIBROMOCHLOROMETHANE DIBROMOCHLOROMETHANE		55555555055055055	1.5	
DICHLORODIFLUOROMETHANE ETHYLBENZENE HEXACHLOROBUTADIENE	ND ND ND	10	2.5	
ISOPROPYL BENZENE M.P-XYLENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE	ND ND ND ND ND	- 5 10 10 5	2.5	
NAPHTHALENE O'XYLENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE TTERT-BUTYLBENZENE TERTACHLOROETHYLENE TOLUENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPROPENE TRICHLOROETHENE TRICHLOROFLUOROMETHANE VINYL CHLORIDE ACETONE 2-BUTANONE (MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE (MIBK) CARBON DISULFIDE VINYL ACETATE 12TRICHLORO122TRIFLUOROETHANE 1,1,2-TETRACHLOROETHANE TANS'1,4-DICHLORO-2-BUTENE ACETYLONITRILE		50 50 50	2.5 2.5 2.5 2001 2001 2001 2001 2001 2001 2001 200	
112TRICHLORO122TRIFLUOROETHANE 1,1,2-TETRACHLOROETHANE TRANS-1,4-DICHLORO-2-BUTENE ACRYLONITRILE IODOMETHANE	NĎ ND ND ND ND ND	50 5 10 5 10 50 50	2.5	
SURROGATE PARAMETERS % 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	RECOVERY 104 106 111	GC LIMIT 63-132 75-122 73-129	1	

SR 7/19/06

	D30B/8260B RGANICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SEF Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: DUP067 Lab Samp ID: F170-03 Lab File ID: RF0610 Ext Btch ID: V005F50 Calib. Ref.: RF0286	VICES Date Date Date Date Dilut Matrij % Moi; Instri	Collected: Received: Extracted: Analyzed: ion Factor: Sture : 1 Jment ID :	06/13/06 06/14/06 06/21/06 17:01 06/21/06 17:01 1 06/21/06 17:01 WATER NA T-005	
PARAMETERS	RESULTS (ug/L)	RL (ug/l)	MDL (ug/L)	
1, 1 - TRICHLOROETHANE 1, 2, 2 - TETRACHLOROETHANE 1, 2 - TRICHLOROETHANE 1, DICHLOROETHANE 1, DICHLOROETHANE 1, DICHLOROBENZENE 1, 2, 3 - TRICHLOROBENZENE 1, 2, 3 - TRICHLOROBENZENE 1, 2, 4 - TRICHLOROBENZENE 1, 2, 4 - TRICHLOROBENZENE 1, 2, 4 - TRICHLOROBENZENE 1, 2, 4 - TRICHLOROBENZENE 1, 2, 0 I CHLOROBENZENE 1, 2, 0 I CHLOROBENZENE 1, 2, 0 I CHLOROBENZENE 1, 2, 0 I CHLOROBENZENE 1, 2, 0 I CHLOROPENANE 1, 2, 0 I CHLOROPENANE 1, 2, 0 I CHLOROPENZENE 1, 3, 5 - TRIMETHYLBENZENE 1, 3, 5 - TRIMETHYLBENZENE 1, 3, 0 I CHLOROPROPANE 1, 4 - 0 I CHLOROPROPANE 1, 4 - 0 I CHLOROPROPANE 2, 2 - D I CHLOROPROPANE 3, 0 - D I CHLOROPROPANE 4, - C - C - D I CHLOROPT HANE 5, 1, 3 -	ND 57E 42J ND ND ND ND ND ND ND ND ND ND ND ND ND	J.C.		
2-BUTANONE (MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE (MIBK) CARBON DISULFIDE VINYL ACETATE 112TRICHLORO122TRIFLUOROETHANE 1 1, 1, 2-TETRACHLOROETHANE TRANS-1, 4-DICHLORO-2-BUTENE ACRYLONITRILE IDDOMETHANE			งว่าร่างร่างเราะบร	
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 101 106 113	QC LIMIT 63-132 75-122 73-129		Y

SR 7/19/06 ্রী চ্রিচ

VOLATILE	5030B/8260B ORGANICS BY GC/MS
Client : MATRIX ENVIRONMENTAL S Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: DUP067DL Lab Samp ID: F170-03T Lab File ID: RFQ716 Ext Btch ID: V005F58 Calib. Ref.: RFQ286	ERVICES Date Collected: 06/13/06 Date Received: 06/14/06 Date Extracted: 06/24/06 11:54 Date Analyzed: 06/24/06 11:54 Dilution Factor: 5 Matrix : WATER % Moisture : NA Instrument ID : T-005
PARAMETERS	RESULTS RL MDL (ug/L) (ug/L) (ug/L)
1,1,1-TRICHLOROETHANE 1,2,2-TETRACHLOROETHANE	$\frac{ND}{ND} = \frac{5}{5} = \frac{1.5}{1.5} \times \frac{1}{5}$
1, 1, 2-TRICHLOROETHANE 1, 1-DICHLOROETHANE 1, 1-DICHLOROETHANE 1, 1-DICHLOROPENENE 1, 2, 3-TRICHLOROBENZENE 1, 2, 3-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2, 4-TRICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBENZENE 1, 2-DICHLOROBETHANE 1, 2-DICHLOROPETHANE 1, 2-DICHLOROPETHANE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 3-DICHLOROBENZENE 1, 4-DICHLOROBENZENE 1, 4-DICHLOROBENZENE	ND ND ND ND ND ND ND ND ND ND
2'2-DICHLOROPROPANE 2'CHLOROTOLUENE 4-CHLOROTOLUENE BENZENE BROMOBENZENE BROMODENZENE BROMODICHLOROMETHANE BROMODICHLOROMETHANE CARBON TETRACHLORIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM	ND 5 ND 5 ND 5 ND 5 ND 5 ND 5 ND 5 ND 5
CHLOROMETHANE CIS-1,2-DICHLOROETHENE CIS-1,3-DICHLOROPROPENE DIBROMOCHLOROMETHANE DIBROMOMETHANE DICHLORODIFLUOROMETHANE	1.8J 5 1 ND 10 2.5 ND 5 1 ND 5 1 ND 5 1 ND 5 1 ND 5 1 ND 5 1 ND 2.5
ETHYLBENZENE HEXACHLOROBUTADIENE ISOPROPYL BENZENE M.P-XYLENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE	ND 5 1 ND 5 1 ND 5 1 ND 10 2.5 ND 10 5 1 ND 5 1
NAPHTHALENE O-XYLENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE TERT-BUTYLBENZENE TERT-BUTYLBENZENE TETRACHLOROETHYLENE TOLUENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPTOPENE TRICHLOROFLUBROETHANE	ND 10 17 ND 5 ND 5 ND 43 C 10 2.5 ND 5 ND 5
VINYL CHLORIDE ACETONE 2-BUTANONE (MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE (MIBK) CARBON DISULFIDE VINYL ACETATE 112TRICHLORO122TRIFLUOROETHANE 1,1,2-TETRACHLOROETHANE TRANS-1,4-DICHLORO-2-BUTENE ACRYLONITRILE IODOMETHANE	ND ND ND SO ND SO ND SO ND SO ND SO ND SO ND SO ND SO ND SO SO SO SO SO SO SO SO SO SO
SURROGATE PARAMETERS 1.2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY QC LIMIT 104 63-132 106 75-122 110 73-129

SR 7/19/06 V 

Client : MATRIX ENVIRONMENTAL SERVI Project : MCCLELLAN, AL Batch No. : OGF170 Sample ID: FTA-146-MW03 Lab Samp ID: FTA-146-MW03 Lab Samp ID: FTA0-04 Lab Sile ID: RF0607 Ext Btch ID: V005F50 Calib. Ref: RF0286	CES Date Colle Date Rece Date Extra Date Ana Dilution Fe Matrix % Moisture Instrument	: WATER : NA
PARAMETERS 1, 1, 1-TRICHLOROETHANE 1, 2, 2-TETRACHLOROETHANE 1, 2, 7 TRICHLOROETHANE 1, 10 CHLOROETHANE 1, 10 CHLOROETHANE 1, 2, 5 TRICHLOROETHANE 1, 2, 5 TRICHLOROPENE 1, 2, 5 TRICHLOROPROPANE 1, 2, 5 TRICHLOROPROPANE 1, 2, 5 TRIMETHYLBENZENE 1, 3, 5 TRIMETHYLBENZENE 1, 4, 5 TRIMETHYLBENZENE 2, 2, 5 TRIMETHYLBENZENE 2, 2, 5 TRIMETHYLBENZENE 2, 2, 5 TRIMETHYLBENZENE 2, 2, 5 TRIMETHYLBENZENE 4, CHLOROTOLUENE BENZMCHLOROMETHANE BROMOBENZENE BROMOBENZENE BROMOBENZENE BROMOBENZENE BROMOMETHANE CARBON TETRACHLORIDE CHLOROBIZENE HENZENE BROMOCHLOROMETHANE CIS - 1, 2, 5 TOICHLOROPENE DIBROMOCHLOROMETHANE DICHLORODIFLUOROMETHANE DICHLORODIFLUOROMETHANE DICHLORODIFLUOROMETHANE DICHLORODIFLUOROMETHANE DICHLORODIFLUOROMETHANE DISCHOMOCHLOROMETHANE DICHLOROBUTADIENE 1000METHANE DICHLOROBUTADIENE 1000RETHANE 0, 2, 2, 2, 5 TOICHLOROPENE 1100ROPYLBENZENE N-PROPYLBEN	ND ND ND ND ND ND ND ND ND ND ND ND ND N	RL     MDL       ug/L)     (ug/L)       ug/L)
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	100 6	11011 3-132 5-122 3-129

SR 7/19/06 

VOLATILE ORGANIC	CS BY	GC/MS			
Client : MATRIX ENVIRONMENTAL SERVICES Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: EB036 Lab Samp ID: F170-05 Lab File ID: RFQ604 Ext Btch ID: V005F50 Calib. Ref.: RFQ286		Date Date Date Diluti Matrix % Mois	iture : ment ID :	06/13/06	
PARAMETERS		y/L) ND	(ug/L)	9	MDL (ug/L) .2
1 1 2 2 - TETRACHLOROETHANE 1 1 2 TRICHLOROETHANE 1 1 - DICHLOROETHANE 1 - DICHLOROETHANE 1 1 - DICHLOROETHENE 1 1 - DICHLOROROPENE					NNNN
1,1-ĎICHLOROPROPENE 1,2,3-TRICHLOROBENZENE 1,2,3-TRICHLOROPROPANE 1,2,4-TRICHLOROBENZENE 1,2,4-TRICHLOROBENZENE	1 1 1	4D 4D 4D	بالسالية المحاطية		2002
1,2-DIBROMO-3-CHLOROPROPANE 1,2-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,2-DICHLOROETHANE 1,2-DICHLOROPROPANE			2		
1, 2 - D I BROMOËTHANE 1, 3, 5 - TRIMETHYLBENZENE 1, 3 - DI CHLOROBENZENE 1, 3 - DI CHLOROPROPANE 1, 4 - DI CHLOROBENZENE	•		-		๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛
1 3 , 5 - TRIMETHYLBENZENE 1 3 - DICHLOROBENZENE 1 3 - DICHLOROBENZENE 1 4 - DICHLOROBENZENE 2 - Z - DICHLOROPROPANE 2 - CHLOROTOLUENE 4 - CHLOROTOLUENE BENZENE BENZENE BENZENE BROMOBENZENE BROMOBENZENE BROMOBENZENE	ł			FFOLGENE and GANAGE of Const. Production	2000
BROMODICHLOROMETHANE			1		22222
BRÖMÖMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM	1 1 1		1 1 2 1		42222
CHLOROMETHANE CIS-1,2-DICHLOROETHENE CIS-1,3-DICHLOROPROPENE DIBROMOCHLOROMETHANE	h h h		2 1 1 1	·	5222
DIBROMOMETHANE DICHLORODIFLUOROMETHANE ETHYLBENZENE HEXACHLOROBUTADIENE ISOPROPYL_BENZENE	r 1		121		25222
ISOPROPYL BENZENE M.P.AYVENE MÉTHYLENE CHLORIDE N.BUTYLBENZENE N.PROPYLBENZENE	N N		221		251222
NAPHTHALENE O-XYLENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE			2 1 1 1		5222
STYRENE TERT-BUTYLBENZENE TETRACHLOROETHYLENE TOLUENE TOLUENE	h h h				2222
TOLUENE TRANS-1,2-DICHLOROETHENE TRANS-1,3-DICHLOROPROPENE TRICHLOROETHENE TRICHLOROFLUOROMETHANE VINTL_CHLORIDE	N N N	10 10 10 10			งหังหม่อยจากจากจากจากจากจากจากจากจากจากจากจากจากจ
ACETONE	N N N		10 10 1		เมษาณร
2-BUIANONE(MEK) MTBE 2-HEXANONE 4-METHYL-2-PENTANONE(MIBK) CARBON DISULFIDE VINYL ACETATE 112TRICHLORO122TRIFLUOROETHANE 1,1,1,2-TETRACHLOROETHANE TRANS*1,4-DICHLORO-2-BUTENE ACRYLONITRILE			10 1 2 1		52720
1, 1, 2-TETRACHLOROETHANE TRANS-1, 4-DICHLORO-2-BUTENE ACRYLONITRILE IODOMETHANE	N N N		1 10 2		.21
1,2-DICHLOROETHANE-D4 TÓLUENE-D8	RECOV	99  08	QC LIMI1 63-132 75-122 73-129	[	
4-BROMOFLUOROBENZENE	1	109	73-129		

SR 7/19/06 

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

VOLATILE ORGANIC	S BT 66/295		
Client : MATRIX ENVIRONMENTAL SERVICES Project : MCCLELLAN, AL Batch No. : 06F170 Sample IO: MATERIAL014 Lab Samp ID: F170-06 Lab File ID: RFQ608 Ext Btch ID: V005F50 Calib. Ref.: RFQ286	Diluti Matrix % Mois Instru	ument ID :	06/13/06 06/14/06 06/21/06 15:47 06/21/06 15:47 16/21/06 15:47 WATER NA NA T-005
Lab File ID: Krugvo Ext Btch ID: V005F50 Calib. Ref.: RFQ286 	Matriy % Mois Instru RESULTS (ug/L) ND ND ND ND ND ND ND ND ND ND ND ND ND	sture	WATER NA T-005
ISOPROPYL BENZENE M.P-XYLENE CHLORIDE N-BUTYLENE CHLORIDE N-PROPYLENZENE N-PROPYLENZENE O-XYLENE O-XYLENE SEC-BUTYLBENZENE SEC-BUTYLBENZENE TERT SUTYLBENZENE TERT SUTYLBENZENE TERT SUTYLBENZENE TEATS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE TRANS-1,2-DICHLOROPENE ACETONE 2-BUTANONE(MEK) MTBE 2-HEXANONE 2-HEXANONE 2-HEXANONE 2-HEXANONE 1,1,2-TETRACHLOROF1ANE 1,1,2-TETRACHLOROF2-BUTENE ACRYLONITRILE IODOMETHANE	ND NDD NDD NDD NDD NDD NDD NDD NDD NDD	1 22 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

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

RL: Reporting Limit

SR 7/19/06 V ZELI

SW 5030 VOLATILE ORGA	B/8260B NICS BY GC/I	MS	
Client : MATRIX ENVIRONMENTAL SERVI Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: TB152 Lab Samp ID: F170-07 Lab File ID: RFQ605 Ext Btch ID: V005F50 Calib. Ref.: RFQ286	CES Dat Dat Dat Dat Dit Mat Ins	e Received: e Extracted: e Analyzed: ution Factor:	06/13/06 06/14/06 06/21/06 13:56 06/21/06 13:56 06/21/06 13:56 WATER NA T-005
PARAMETERS	RE\$ULTS (ug/L)	RL (ug/L)	MOL (ug/L)
1 1. 1 - TRICHLOROETHANE 1 2. 2 - TETRACHLOROETHANE 1 2. 7 FICHLOROETHANE 1 2. 7 FICHLOROETHANE 1 - DICHLOROETHANE 1 - DICHLOROETHANE 2 3 - TRICHLOROBENZENE 2 3 - TRICHLOROBENZENE 2 4 - TRIMETHYLBENZENE 2 4 - TRIMETHYLBENZENE 2 - DICHLOROETHANE 1 2 - DICHLOROETHANE 2 - DICHLOROETHANE 1 2 - DICHLOROETHANE 1 3 - 5 - TRIMETHYLBENZENE 1 3 - DICHLOROPENZENE 1 3 - DICHLOROPENZENE 1 4 - DICHLOROBENZENE 2 - DICHLOROPENZENE 2 - DICHLOROPENZENE 3 - DICHLOROPENZENE	ND ND ND ND ND ND ND ND ND ND ND ND ND N		
4 - CHLOROTOLUENE BENZENE BROMOBENZENE BROMODELDROMETHANE BROMODICHLOROMETHANE BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROBENZENE CHLOROBENANE CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROFORM CHLOROBITHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DIBROMOMETHANE DICHLOROBITENE ISOPROPYL BENZENE M P-XYLENE M P-XYLENE M P-YLENE D-ISOPROPYLTOLUENE SEC-BUTYLBENZENE NAPHTHALENE D'ISOPROPYLTOLUENE SEC-BUTYLBENZENE TERTACHLOROETHYLENE TOLUENE TRANS-1, 2-DICHLOROETHENE TRANS-1, 2-DICHLOROETHENE TRANS-1, 2-DICHLOROPROPENE TRICHLOROFLUARME VINYL CHLORIDE ACETONE 2-BUTANONE (MEK) MTBE 2-BUTANONE (MEK) MTBE 2-TETRACHLOROIZZTRIFLUOROETHANE 1, 1, 2-TETRACHLOROZ-BUTENE ACRYLONITRILE IODOMETHANE	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		ะการกับรับการกับกับกับกับการการการการการการการการการการการการการก
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	6 RECOVERY 102 106 109	QC LIMIT 63-132 75-122 73-129	

SR 7/19/06 

SW 50 Volatile of	0308/82608 RGANICS BY GC/MS		
Client : MATRIX ENVIRONMENTAL SEF Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: FTA-146-MW04 Lab Samp ID: F170-08 Lab File ID: RFQ670 Ext Btch ID: V005F55 Calib. Ref: RFQ286	% MOIS	Collected: 06, Received: 06, Extracted: 06, Analyzed: 06, on Factor: 1 Wature : NA ture : NA ment ID : T-(	IER
PARAMETERS BENZENE ETHYLBENZENE M,P-XYLENE O-XYLENE TOLUENE	RESULTS (ug/L) ND ND ND ND ND	RL (ug/L) 1 2 1 1	MDL (ug/L) -22 -52 -22
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE RL: Reporting Limit	% RECOVERY 100 108 110	QC LIMIT 63-132 75-122 73-129	

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## SW 50308/82608 VOLATILE ORGANICS BY GC/MS

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Client : MATRIX ENVIRONMENTAL SERVIC	ES Date	Collected:	06/13/06	
Project : MCCLELLAN, AL	Date	Received:		
Batch No. : 06F170	Date	Extracted:	06/23/06 09:46	
Sample ID: FTA-146-MWO2	Date	Analyzed:	06/23/06 09:46	
ab Samp ID: F170-09	Dilu	tion Factor:	5	
ab File ID: RFQ674	Matr	ix :	WATER	
xt Btch ID: VO05F55	% Mo	isture :	NA	
Calib. Ref.: RFQ286	Inst	rument ID :	T-005	
· = = = = = = = = = = = = = = = = = = =	**********	=======================================	862252525333335	
			KOL	
	RESULTS	RL	MDL	
ARAMETERS	(ug/L)	(ug/L)	(ug/L)	
ENZENE	14	5	••••••	Y
THYLBENZENE		JX 5	1	k/
I.P. XYLENE		J× 10	2.5	area an Antonio en area N
-XYLENE	610E		1	N
OLUENE	210	5	1	Y
URROGATE PARAMETERS	% RECOVERY	QC LIMI	r	
, 2 - DICHLOROETHANE - D4	112	63-132		
DLUENE-D8	109	75-122		

RL: Reporting Limit

SR 7/19/06

SW 50 VOLATILE OR	308/82608 GANICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SER Project : MCCLELAN, AL Batch No. : O6F170 Sample ID: FTA-146-MW02DL Lab Samp ID: FTA-097 Lab File ID: RFQ714 Ext Btch ID: V005F58 Calib. Ref.: RFQ286	% Mois	Collected: 06/ Received: 06/ Extracted: 06/ Analyzed: 06/ on Factor: 50 c : WAT sture : NA ment ID : T-C	<b>F</b> V	
PARAMETERS BENZENE ETHYLBENZENE M, P-XYLENE O-XYLENE TOLUENE	RESULTS (ug/L) 17J 400 1400 730 230	RL (ug/L) 50 100 50 50	MDL (ug/L) 10 25 10 10	N N N N
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 102 107 104	QC LIMIT 63-132 75-122 73-129		

SR 7/19/06

SW 5030 VOLATILE ORGA	B/8260B NICS BY GC/MS		
Client : MATRIX ENVIRONMENTAL SERVI Project : MCCLELLAN, AL Batch No. : 06F170 Sample ID: FTA-146-MW09 Lab Samp ID: F170-10 Lab File ID: RFQ671 Ext 8tch ID: V005F55 Calib. Ref.: RFQ286	CES Date ( Date E Date E Date E Dilutic Matrix % Moist Instrum	Collected: 06/ Received: 06/ Extracted: 06/ Analyzed: 06/ On Factor: 1 WAT ture: NA ment ID: T-0	13/06 14/06 23/06 07:55 23/06 07:55 ER 05
PARAMETERS BENZENE ETHYLBENZENE M,P-XYLENE O-XYLENE TOLUENE	RESULTS (Ug/L) 1.2 3.6 1.7 .6J	RL (ug/L) 1 2	MDL (ug/L) -22 -5 -5 -22 -22
SURROGATE PARAMETERS 1,2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE RL: Reporting Limit	% RECOVERY 104 101 108	QC LIMIT 63-132 75-122 73-129	

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SW 5030 Volatile orga	DB/8260B NICS BY GC/MS			
Client : MATRIX ENVIRONMENTAL SERVI 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	CES Date Date Date Diluți Matrix % Mois Instru		6/13/06 6/14/06 6/23/06 08:32 6/23/06 08:32 6/23/06 08:32 ATER A -005	
PARAMETERS BENZENE ETHYLBENZENE M, P-XYLENE O-XYLENE TOLUENE	RESULTS (ug/L) ND .44J 2J .71J ND	RL (ug/L) 1 2 1 1	MDL (ug/L) 	¥ ↓
SURROGATE PARAMETERS 1,2-0ICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 103 108 105	QC LIMIT 63-132 75-122 73-129		

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## SW 50308/82608 VOLATILE ORGANICS BY GC/MS

Client : MATRIX ENVIRONMENTAL SEP Project : MCCLELLAN, AL Batch No. : O6F170 Sample ID: FTA-146-MW05 Lab Samp ID: FTA-146-MW05 Lab Samp ID: F170-12 Lab File ID: RFQ673 Ext Btch ID: V005F55 Calib. Ref.: RFQ286	Matrix % Moist	ollected: 06/ Received: 06/ Analyzed: 06/ in Factor: 1 ure WATI	EK	
Calib. Ref.: RFQ286 PARAMETERS BENZENE ETHYLBENZENE M.P-XYLENE O'XYLENE TOLUENE	Instrum RESULTS (ug/L) ND ND ND ND ND ND ND	RL (ug/L) 1 2 2 1	05 MDL (ug/L) .2 .2 .2 .2	7
SURROGATE PARAMETERS 1, 2-DICHLOROETHANE-D4 TOLUENE-D8 4-BROMOFLUOROBENZENE	% RECOVERY 102 107 103	QC LIMIT 63-132 75-122 73-129		

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RL: Reporting Limit